HEM NO     REFERS     DESCRIPTION     UNIT     CIV     MATE     AMOUNT I       AM     SABS 1200     SECTION 1: PRELIMINARY AND GENERAL		PRELIMINAR	Y AND GENERAL				INARY & GENERA
ASECTION 1: FRELINITIANT AND GENERAL1.1.16.3FIXED - CHARGE AND VALUE. RELATED TEMS1.1.16.3.2FixED - CHARGE AND VALUE. RELATED TEMS1.1.26.3.2Establishment of facilities on the site.1.1.28.3.2.1Facilities for EngineerPS 13.4a) Furnished officesSum1.1.28.3.2.1Facilities for EngineerPS 13.5b) Telecommunication ServicesSumPS 13.6b) Telecommunication ServicesSum11.1.28.3.2.2Facilities required by Contractora) Offices and Storage ShedsSumb) WorkshopsSumc) LaboratoriesSumc) Ablution and latine facilitiesSumi) Tools and equipmentSumi) AccessSumi) NotesSumi) AccessSumiii A.3.3General Responsibilities and Other fixed charge obligationsiii A.3.4Removal of site establishment on completioniii A.3.5Full compliance with the Offs Act and the latest construction regulationsiii A.3.6Full compliance with the Offs Act and the latest construction regulationsiii A.3.7PS 14.3Resolution and sizeway trawing of all new services, readvorts with the Cortex Charge obligationsiii A.4.7PS 14.3Size security measures for the Engineer's facilitiesiii A.4.7PS 14.3Size security measures for the Engineer's facilitiesiii A.4.7PS 14.3Size security measures for the Engineer's facilitiesiii A.4.7PS 14.3Size sec	TEM NO		DESCRIPTION	UNIT	QTY	RATE	AMOUNT (F
N.1.18.3.1Contractual RequirementsSum1M.1.28.3.2Establishment of facilities on the site.1M.1.28.3.2Facilities for Engineer51PS 13.4a) Furnished officesSum1PS 13.5b) Telecommunication ServicesSum1PS 13.1c) Name boards (2No.)Sum1A1.1.2Facilities required by ContractorSum1PS 13.1c) Name boards (2No.)Sum1A1.1.2Facilities required by ContractorSum1a) Offices and Storage ShedsSum1b) WorkshopsSum1c) LaboratorizesSum1c) JacoratorizesSum1c) JacoratorizesSum1d) AccessSum1Jacoratic Supplies, electric power and communicationsSum1M.1.38.3.3General Responsibilities and Other fixed charge obligationsSum1M.1.4RS4Ronxuir	41		SECTION 1: PRELIMINARY AND GENERAL				
N.1.28.3.2Eablishment of facilities on the site.N.1.218.3.21Facilities for EngineerSum1PS 13.3a) Furnished officesSum1PS 13.5b) Telecommunication ServicesSum1PS 13.1o) Name boards (2No.)Sum1N.1.228.3.22 <u>Facilities required by Contractor</u> Sum1a) Offices and Storage ShedsSum1b) WorkshopsSum1c) LaboratoriesSum1c) AboratoriesSum1c) AboratoriesSum1c) AboratoriesSum1c) NorkshopsSum1c) AboratoriesSum1c) NorkshopsSum1c) AboratoriesSum1c) AboratoriesSum1c) NorkshopsSum1c) AboratoriesSum1c) AboratoriesSum1c) NorkshopsSum1c) AboratoriesSum1c) AboratoriesSum1c) NorkshopSum1c) NorkshopSum1Att.138.3.3General Responsibilities and Other fixed charge obligationsSum1Att.48.3.4Removal of site establishment on completionSum1Att.5PS 105Full compliance with the OHS Act and the latest construction regulationsSum1Att.48.3.4Removal of site establishment or source of the ordinated, core eraderinated,	A1.1	8.3	FIXED - CHARGE AND VALUE- RELATED ITEMS				
A1.1.2.18.3.21Facilities for EngineerImage: second	A1.1.1	8.3.1	Contractual Requirements	Sum	1		
PS 13.4a) FurnishedSum1PS 13.5b) Telecommunication ServicesSum1PS 13.6b) Telecommunication ServicesSum1PS 13.11c) Name boards (2No.)Sum1A1.12.28.3.2.2Facilities required by ContractorImage: Contractora) Offices and Storage ShedsSum1b) WorkshopsSum1c) LaboratoriesSum1e) Ablution and latrine facilitiesSum1j) Tools and equipmentSum1g) Water supplies, electric power and communicationsSum1h) Dealing with waterSum1j) PlantSum1A1.138.3.3General Responsibilities and Other fixed charge obligationsSum1A1.148.3.4Removal of site establishment on completionSum1A1.15PS 10.5Full compliance with the OHS Act and the latest construction regulationsSum1A1.148.3.4Removal of site very of services to be co-ordinated, cover level and invert level. Roadway to have certific tip, and and particular specificationSum1A1.17PS 14.3Site security measures for the Engineer's facilitiesSum1A1.17PS 14.3Site security measures for the Engineer's facilitiesSum1A1.148.14Contractual RequirementsSum1A1.15Site security measures for the Engineer's facilitiesSum1A1.16Site security measures for the Engineer's fa	A1.1.2	8.3.2	Establishment of facilities on the site				
PS 13.5       b) Telecommunication Services       Sum       1         PS 13.11       c) Name boards (2No.)       Sum       1         PS 13.11       c) Name boards (2No.)       Sum       1         A1.12.2       8.3.2.2       Facilities required by Contractor       1         a) Offices and Storage Sheds       Sum       1         b) Workshops       Sum       1         c) Laboratories       Sum       1         c) Abution and latrine facilities       Sum       1         g) Water supplies, electric power and communications       Sum       1         h) Dealing with water       Sum       1         j) Plant       Sum       1         A1.14       8.3.3       General Responsibilities and Other fixed charge obligations       Sum       1         A1.14       8.3.4       Removal of site establishment on completion       Sum       1         A1.14       8.3.4       Removal of site establishment on completion       Sum       1         A1.15       PS 10.5       Full compliance with the CMS Act and the latest construction regulations       Sum       1         A1.14       8.3.4       Removal of site establishment on completion       Sum       1         A1.15       PS 10.5	A1.1.2.1	8.3.2.1	Facilities for Engineer				
PS13.11       c) Name boards (2No.)       Sum       1         A1.122       8.3.22       Facilities required by Contractor       Sum       1         a) Offices and Storage Sheds       Sum       1         b) Workshops       Sum       1         c) Laboratories       Sum       1         c) Abbutton and latrine facilities       Sum       1         c) Abbutton and latrine facilities       Sum       1         g) Water supplies, electric power and communications       Sum       1         g) Water supplies, electric power and communications       Sum       1         i) Access       Sum       1         i) Access       Sum       1         i) Plant       Sum       1         A1.1.3       8.3.3       General Responsibilities and Other fixed charge obligations       Sum       1         A1.1.4       8.3.4       Removal of site establishment on completion       Sum       1         A1.1.5       PS 10.5       Full compliance with the OHS Act and the latest construction regulations and particular specification divers within this contract. Survey of services to be co-ordinated, cover level and invert tevel. Roadway to have certer line, to pand bottom and surve level and invert level. Roadway to have certer line, to pand bottom and surve level and invert level. Roadway to have certer line, to pand bottom and surve leve		PS 13.4	a) Furnished offices	Sum	1		
A1.1.2.2       8.3.2.2       Eaclifies required by Contractor       Sum       1         a) Offices and Storage Sheds       Sum       1         b) Workshops       Sum       1         c) Laboratories       Sum       1         c) Laboratories       Sum       1         c) Laboratories       Sum       1         c) Laboratories       Sum       1         c) Ablution and latrine facilities       Sum       1         d) Mater supplies, electric power and communications       Sum       1         h) Dealing with water       Sum       1         i) Access       Sum       1         i) Access       Sum       1         i) Plant       Sum       1         A1.1.3       8.3.3       General Responsibilities and Other fixed charge obligations       Sum       1         A1.1.4       8.3.4       Removal of site establishment on completion       Sum       1         A1.1.5       PS 10.5       Full compliance with the OHS Act and the latest construction regulations       Sum       1         A1.1.6       PS 9.7       Full compliance with the Enviromental Management Plan       Sum       1         A1.1.7       PS 14.3       State security measures for the Engineer's facili		PS 13.5	b) Telecommunication Services	Sum	1		
A) Offices and Storage Sheds       Sum       1         b) Workshops       Sum       1         c) Laboratories       Sum       1         c) Ablution and latrine facilities       Sum       1         g) Water supplies, electric power and communications       Sum       1         h) Dealing with water       Sum       1         i) Access       Sum       1         j) Plant       Sum       1         A1.14       8.3.3       General Responsibilities and Other fixed charge obligations       Sum       1         A1.15       PS 10.5       Full compliance with the OHS Act and the latest construction regulations       Sum       1         A1.14       8.3.3       General Responsibilities and survey and survey arraying of all new services, readworks within this contract. Survey of services to be co-ordinated, coordinated, coo		PS13.11	c) Name boards (2No.)	Sum	1		
NumberNumberNumberNumberNumber0LaboratoriesSum10Ablution and latine facilitiesSum10Notes and equipmentSum10Water supplies, electric power and communicationsSum11)Dealing with waterSum11)AccessSum11)AccessSum11)PlantSum1A1.138.3.3General Responsibilities and Other fixed charge obligationsSum1A1.1483.4Removal of site establishment on completionSum1A1.15PS 10.5Full compliance with the OHS Act and the latest construction regulationsSum1A1.16PS 97Full compliance with the Environmental Management PlanSum1A1.17PS 14.3Fordivide side side side side fractifiesSum1A1.17PS 14.3Side side side side side fractifiesSum1A1.17PS 14.3Side side walk, edge of road if no kerbsSum1A1.18Supply and installation of all required security measures at the Engineer's facilitiesSum1A1.128.4Immet Charter Side side security measures at the Engineer's facilitiesSum1A1.128.4.1Contractual RequirementsMonth15A1.28.4.2Operation and maintenance of facilities on site, for duration of constructionMonth15	41.1.2.2	8.3.2.2	Facilities required by Contractor				
A1.1.3R.3.3Contractual RequirementsSum1A1.1.4R4.1.4S.3.4Removal of site setabilisment on completionSum1A1.1.7PS 14.3Full compliance with the Environmental Management PlanSum1A1.1.7PS 14.3Provision of As-Built survey and survey of samices the Engineer's site offices and laboratoriesSum1A1.1.8Survey and installation of all required security measures at the Engineer's site offices and laboratoriesSum1A1.1.8Survey and installation of all required security measures at the Engineer's site offices and laboratoriesSum1A1.1.4Site security measures for the Engineer's site offices and laboratoriesSum1A1.1.8Survey and installation of all required security measures at the Engineer's site offices and laboratoriesSum1A1.1.8Survey and installation of all required security measures at the Engineer's site offices and laboratoriesSum1A1.1.8Survey and installation of all required security measures at the Engineer's site offices and laboratoriesSum1A1.1.8Survey and installation of all required security measures at the Engineer's site offices and laboratoriesSum1A1.1.4Survey and survey and survey for			a) Offices and Storage Sheds	Sum	1		
NoNoNoNo(a) Ablution and latrine facilitiesSum1(b) Ablution and quipmentSum1(c) Water supplies, electric power and communicationsSum1(c) NaccessSum1(c) PlantSum1A1.1.38.3.3General Responsibilities and Other fixed charge obligationsSum1A1.1.48.3.4Removal of site establishment on completionSum1A1.1.5PS 10.5Full compliance with the OHS Act and the latest construction regulationsSum1A1.1.6PS 9.7Full compliance with the Enviromental Management PlanSum1A1.1.7PS 14.3Provision of As-Built survey and survey drawing of all new services, readworks within this contract. Survey of services to be co-ordinated, cover level and invert level. Roadway to have centre line, top and bottom and kerb, and back of sidewalk, edge of road if no kerbs.Sum1A1.1.8Site security measures for the Encineer's facilities sult offices and laboratoriesSum1A1.28.4IIME-RELATED ITEMSMonth15A1.28.42Operation and maintenance of facilities on site, for duration of constructionMonth15			b) Workshops	Sum	1		
A1.1.38.3.3General Responsibilities and Other fixed charge obligationsSum1A1.1.38.3.3General Responsibilities and Other fixed charge obligationsSum1A1.1.48.3.4Removal of site establishment on completionSum1A1.1.5PS 10.5Full compliance with the OHS Act and the latest construction regulations and particular specificationSum1A1.1.48.3.4Removal of site establishment on completionSum1A1.1.5PS 10.5Full compliance with the OHS Act and the latest construction regulations and particular specificationSum1A1.1.6PS 9.7Full compliance with the Enviromental Management PlanSum1A1.1.7PS 14.3readworks within this contract. Survey of services to be oc-ordinated, cover level and invert level. Roadway to have centre line, top and bottom and kerb, and back of sidewalk, edge of road if no kerbsSum1PS 11.1Site security measures for the Engineer's facilities. Supply and installation of all required security measures at the Engineer's site offices and laboratoriesSum1A1.28.4IJME-RELATED ITEMSMonth15A1.28.4.2Operation and maintenance of facilities on site, for duration of construction15			c) Laboratories	Sum	1		
g) Water supplies, electric power and communicationsSum1h) Dealing with waterSum1i) AccessSum1j) PlantSum1A1.1.38.3.3General Responsibilities and Other fixed charge obligationsSum1A1.1.48.3.4Removal of site establishment on completionSum1A1.1.5PS 10.5Full compliance with the OHS Act and the latest construction regulations and particular specificationSum1A1.1.6PS 9.7Full compliance with the CHS was and survey of all new services, revel and invert level. Roadway to have centre line, top and bottom and kerb, and back of sidewalk, edge of road if no kerbsSum1A1.1.8Site security measures for the Engineer's facilities. Supply and installation of all required security measures at the Engineer's site offices and laboratoriesSum1A1.28.4.1Contractual RequirementsMonth15A1.28.4.2Operation and maintenance of facilities on site. for duration of constructionMonth15			e) Ablution and latrine facilities	Sum	1		
A1.1.3B.3.3General Responsibilities and Other fixed charge obligationsSum1A1.1.38.3.3General Responsibilities and Other fixed charge obligationsSum1A1.1.48.3.4Removal of site establishment on completionSum1A1.1.5PS 10.5Full compliance with the OHS Act and the latest construction regulationsSum1A1.1.6PS 9.7Full compliance with the OHS Act and the latest construction regulationsSum1A1.1.6PS 9.7Full compliance with the Enviromental Management PlanSum1A1.1.7PS 14.3Provision of As-Built survey and survey drawing of all new services, roadworks within this contract. Survey of services to be co-ordinated, cover level and invert level. Roadway to have centre line, top and bottom and kerb, and back of sidewalk, edge of road if no kerbsSum1PS 11.3Site security measures for the Engineer's facilitiesSum1A1.1.8Supply and installation of all required security measures at the Engineer's surveSum1A1.28.4TIME-RELATED ITEMSMonth15A1.2.18.4.1Contractual RequirementsMonth15			f) Tools and equipment	Sum	1		
No.Sum1i) Accessj) PlantSum1j) PlantSum1A1.1.38.3.3General Responsibilities and Other fixed charge obligationsSum1A1.1.48.3.4Removal of site establishment on completionSum1A1.1.5PS 10.5Full compliance with the OHS Act and the latest construction regulations and particular specificationSum1A1.1.6PS 9.7Full compliance with the Environmental Management PlanSum1A1.1.7PS 14.3Provision of As-Built survey and survey drawing of all new services, roadworks within this contract. Survey of services to be co-ordinated, cover level and invert level. Roadway to have centre line, top and bottom and kerb, and back of sidewalk, edge of road if no kerbsSum1A1.1.8Site security measures for the Engineer's facilities site offices and laboratoriesSum1A1.28.4TIME-RELATED ITEMSMonth15A1.2.18.4.2Operation and maintenance of facilities on site, for duration of construction15			g) Water supplies, electric power and communications	Sum	1		
A1.1.3S.3.3General Responsibilities and Other fixed charge obligationsSum1A1.1.48.3.4Removal of site establishment on completionSum1A1.1.48.3.4Removal of site establishment on completionSum1A1.1.5PS 10.5Full compliance with the OHS Act and the latest construction regulations and particular specificationSum1A1.1.6PS 9.7Full compliance with the Enviromental Management PlanSum1A1.1.7PS 14.3Provision of As-Built survey and survey drawing of all new services, roadworks within this contract. Survey of services to be co-ordinated, cover level and invert level. Roadway to have centre line, top and bottom and kerb, and back of sidewalk, edge of road if no kerbsSum1A1.1.8Supply and installation of all required security measures at the Engineer's site offices and laboratoriesSum1A1.28.4TIME-RELATED ITEMSMonth15A1.28.4.2Operation and maintenance of facilities on site, for duration of constructionMonth15			h) Dealing with water	Sum	1		
A1.1.3       8.3.3       General Responsibilities and Other fixed charge obligations       Sum       1         A1.1.4       8.3.4       Removal of site establishment on completion       Sum       1         A1.1.5       PS 10.5       Full compliance with the OHS Act and the latest construction regulations and particular specification       Sum       1         A1.1.6       PS 9.7       Full compliance with the Enviromental Management Plan       Sum       1         A1.1.7       PS 14.3       Provision of As-Built survey and survey drawing of all new services, readworks within this contract. Survey of services to be co-ordinated, cover level and invert level. Roadway to have centre line, top and bottom and kerb, and back of sidewalk, edge of road if no kerbs       Sum       1         A1.1.8       Supply and installation of all required security measures at the Engineer's site offices and laboratories       Sum       1         A1.2       8.4       TIME-RELATED ITEMS       Month       15         A1.2.1       8.4.2       Operation and maintenance of facilities on site, for duration of construction       Month       15			i) Access	Sum	1		
A1.1.4       8.3.4       Removal of site establishment on completion       Sum       1         A1.1.5       PS 10.5       Full compliance with the OHS Act and the latest construction regulations and particular specification       Sum       1         A1.1.6       PS 9.7       Full compliance with the Enviromental Management Plan       Sum       1         A1.1.7       PS 14.3       Provision of As-Built survey and survey drawing of all new services, readworks within this contract. Survey of services to be co-ordinated, cover level and invert level. Roadway to have centre line, top and bottom and kerb, and back of sidewalk, edge of road if no kerbs       Sum       1         A1.1.8       Site security measures for the Engineer's facilities       Sum       1         A1.1.8       Supply and installation of all required security measures at the Engineer's state offices and laboratories       Sum       1         A1.2       8.4       TIME-RELATED ITEMS       Month       15         A1.2.1       8.4.2       Operation and maintenance of facilities on site, for duration of construction       Month       15			j) Plant	Sum	1		
A1.1.5PS 10.5Full compliance with the OHS Act and the latest construction regulations and particular specificationSum1A1.1.6PS 9.7Full compliance with the Enviromental Management PlanSum1A1.1.7PS 14.3Provision of As-Built survey and survey drawing of all new services, roadworks within this contract. Survey of services to be co-ordinated, cover level and invert level. Roadway to have centre line, top and bottom and kerb, and back of sidewalk, edge of road if no kerbsSum1PS 11Site security measures for the Engineer's facilities site offices and laboratoriesSum1A1.2.28.4TIME-RELATED ITEMSMonth15A1.2.18.4.1Contractual RequirementsMonth15	A1.1.3	8.3.3	General Responsibilities and Other fixed charge obligations	Sum	1		
A1.1.3       PS 10.3       and particular specification       Sum       1         A1.1.6       PS 9.7       Full compliance with the Enviromental Management Plan       Sum       1         A1.1.7       PS 14.3       Provision of As-Built survey and survey drawing of all new services, roadworks within this contract. Survey of services to be co-ordinated, cover level and invert level. Roadway to have centre line, top and bottom and kerb, and back of sidewalk, edge of road if no kerbs       Sum       1         PS 11       Site security measures for the Engineer's facilities.       Supply and installation of all required security measures at the Engineer's site offices and laboratories       Sum       1         A1.1.8       Supply and installation of all required security measures at the Engineer's site offices and laboratories       Sum       1         A1.2.1       8.4.1       Contractual Requirements       Month       15         A1.2.2       8.4.2       Operation and maintenance of facilities on site, for duration of construction       1	A1.1.4	8.3.4	Removal of site establishment on completion	Sum	1		
A1.1.7       PS 14.3       Provision of As-Built survey and survey drawing of all new services, roadworks within this contract. Survey of services to be co-ordinated, cover level and invert level. Roadway to have centre line, top and bottom and kerb, and back of sidewalk, edge of road if no kerbs       Sum       1         PS 11       Site security measures for the Engineer's facilities       Sum       1         A1.1.8       Supply and installation of all required security measures at the Engineer's site offices and laboratories       Sum       1         A1.2       8.4       TIME-RELATED ITEMS       Month       15         A1.2.1       8.4.2       Operation and maintenance of facilities on site, for duration of construction       Month       15	A1.1.5	PS 10.5		Sum	1		
A1.1.7       PS 14.3       roadworks within this contract. Survey of services to be co-ordinated, cover level and invert level. Roadway to have centre line, top and bottom and kerb, and back of sidewalk, edge of road if no kerbs       Sum       1         PS 11       Site security measures for the Engineer's facilities       Sum       1         A1.1.8       Supply and installation of all required security measures at the Engineer's site offices and laboratories       Sum       1         A1.2       8.4       TIME-RELATED ITEMS       Month       15         A1.2.1       8.4.2       Operation and maintenance of facilities on site, for duration of construction       Month       15	A1.1.6	PS 9.7	Full compliance with the Enviromental Management Plan	Sum	1		
A1.1.8       Supply and installation of all required security measures at the Engineer's site offices and laboratories       Sum       1         A1.2       8.4       TIME-RELATED ITEMS       Month       15         A1.2.1       8.4.1       Contractual Requirements       Month       15         A1.2.2       8.4.2       Operation and maintenance of facilities on site, for duration of construction       16	A1.1.7	PS 14.3	roadworks within this contract. Survey of services to be co-ordinated, cover level and invert level. Roadway to have centre line, top and bottom and	Sum	1		
A1.1.0       site offices and laboratories       Sum       1         A1.2       8.4 <u>TIME-RELATED ITEMS</u> Month       15         A1.2.1       8.4.1       Contractual Requirements       Month       15         A1.2.2       8.4.2       Operation and maintenance of facilities on site, for duration of construction       10		PS 11	Site security measures for the Engineer's facilities				
A1.2.1 8.4.1 Contractual Requirements Month 15	A1.1.8			Sum	1		
A122 842 Operation and maintenance of facilities on site, for duration of construction	A1.2	8.4	TIME-RELATED ITEMS				
	A1.2.1	8.4.1	Contractual Requirements	Month	15		
	A1.2.2	8.4.2					
		ARRIED FOF					

	PAYMENT	RY AND GENERAL			TION 1 : PRELIMI	
ITEM NO	REFERS	DESCRIPTION DUGHT FORWARD	UNIT	QTY	RATE	AMOUNT (F
A1.2.2.1	8.4.2.1	Facilities for Engineer				
	PS 13.4	a) Furnished offices	Month	15		
	PS 13.5	b) Telecommunication Services	Month	15		
	PS13.11	c) Name boards (2No.)	Month	15		
	PS 13.10	d) Survey euipment and assistants	Month	15		
A1.2.2.2	8.4.2.2	Facilities required by Contractor				
		a) Offices and Storage Sheds	Month	15		
		b) Workshops	Month	15		
		c) Laboratories	Month	15		
		e) Ablution and latrine facilities	Month	15		
		f) Tools and equipment	Month	15		
		g) Water supplies, electric power and communications	Month	15		
		h) Dealing with water	Month	15		
		i) Access	Month	15		
		ý j) Plant	Month	15		
A1.2.3	8.4.3	Supervision for duration of the construction	Month	15		
A1.2.4	8.4.4	Company and head office overhead costs for the duration of the contract	Month	15		
A1.2.5	8.4.5	Other time related obligations	Month	15		
A1.2.6	PS10.5	Full compliance with the OHS Act and the latest construction regulations	Month	15		
A.1.2.7	PS 9.7	Monitoring of compliance with and reporting on the EMP	Month	15		
A.1.2.8	PS 9.8	Environmental Control Officer (ECO)	Month	15		
A.1.2.9	PS 11	Provision of security guards / watchmen and an armed response service at the Supervisor's site offices	Month	15		
A1.2.10		Provision of a safety officer: a) Part time	pd	10		
		b) Full time	pm	15		
			person			
A1.2.11		Health and safety training, including daily subsistence allownace	/ pd	160		
A1.2.12		Provision of personal protective clothing and equipment for visitors and Employer's Staff (safety boots, hard-hat and reflective vest)	р	30		
A1.2.13		Provision of safety fences, signs and barricades	Sum	1		
A1.2.14		Community liaison officer:				
		(a) Monthly Wage, including R 600 cell phone allowance, R 120 4G Data allowance and computer and printing facilities	Prov Sum	1	250 000.00	250 000.00
A1.2.15		Percentage on item A1.2.14 for charges and profit	%	250 000		
		RWARD				

		RY AND GENERAL		520	CTION 1 : PRELIMI	NANT & OLIVEINA
TEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R
		DUGHT FORWARD		[[		
.1.3	PSA 8.5.2	PROVISIONAL SUMS	Prov			
.1.3.1		Additional tests required by the Engineer	Sum	1	300 000.00	300 000.0
1.3.2		Overheads and profit on item A1.3.1	%	300 000		
1.3.3	PS14.4	Allowance for additional survey	Prov Sum	1	200 000.00	200 000.0
1.3.4		Overheads and profit on item A1.3.3	%	200 000		
1.3.5		Allowance for relocation of services	Prov Sum	1	2 000 000.00	2 000 000.0
1.3.6		Overheads and profit on item A1.3.5	%	2 000 000		
1.3.7		Allowance for payment of third party quality inspection	Prov Sum	1	100 000.00	100 000.0
1.3.8		Overheads and profit on item A1.3.7	%	100 000		
1.3.9		Allowance for design, supply and install and commissioning temporary and permanent cathodic protection during the contract, including for specialist design and investigations as needed	Prov Sum	1	1 500 000.00	1 500 000.
1.3.10		Overheads and profit on item A1.3.9	%	1 500 000		
1.3.11		Allowance for repair to prestressed concrete pipe including fittings, valves, gaskets and specials required.	Prov Sum	1	1 000 000.00	1 000 000.
.3.12		Overheads and profit on item A1.3.11	%	1 000 000		

	PAYMENT	AND GENERAL		SEC	B	
EM NO	REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (
	TOTAL BRO	DUGHT FORWARD				
1.4	8.8	TEMPORARY WORKS				
1.4.1	8.8.1	Maintain main access roads to the Works	Sum	1		
.4.2	8.8.2	Dealing with traffic	Sum	1		
.4.3	8.8.4	Existing services				
		a) Supply or hire specialist equipment for the detection of a particular service - Ground penetrating radar for a width of 10m	m	1 000		
		b) The use of equipment referred to in item (a) above	Day	50		
		c) Excavate by hand in soft material to expose service	m <sup>3</sup>	800		
		<ul> <li>d) Temporary protection, as required in terms of the project specification, of service</li> </ul>	Sum	1		
.4.4		Provision of construction record information	Sum	1		
.4.5		Provision of temporary access to buildings and adjacent parking areas, including for moving system as needed for construction programming.	No.	20		
4.6		Provision of Pedestrian Access ramps	No.	30		
.4.7		Moving of pedestrian ramps	No.	30		
.4.8		Provision of vehicle access ramps	No.	75		
.4.9		Moving vehicle access ramps	No.	75		

	PAYMENT	ANCE				
TEM NO	REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (F
31	SABS 1200 C	SECTION 2: SITE CLEARANCE				
81.1	8.2.1	Clear & grub 15m wide along the pipeline routes	m	1 980		
1.2	8.2.7	Dismantle and remove to approved spoil site				
		a) sewer pipelines of diameter not greater than 300mm including manholes	m	300		
		b) Stormwater pipelines of diameter up to 600mm including manholes	m	300		
		<li>c) water pipelines of diameter not greater than 1000mm including specials and fittings; valves and chambers.</li>	m	2 000		
1.3	8.2.8	Demolish and remove to approved spoil site				
		a) kerb and channel	m	2 500		
	PSC 8.2.14	b) Asphalt (in existing paved areas) up to 40mm thick, by means of milling or saw cutting and breaking up	m³	280		
		c) Existing Base and Subbase layers	m³	1 500		
		<ul> <li>d) Carriageway crossings in all layers including concrete, paving and premix with existing layerworks</li> </ul>	m³	120		
		e) Concrete walkway	m³	200		
		f) Road signs	No	15		
8.1.4	PSC 8.2.3	Remove and grub all trees and tree stumps regardless of girth	На	2.00		
5.1.5	8.2.5	Take down existing hedges, fences and walls	m	2 000.00		
31.6		Break up and remove existing underground concrete or brick elements (reinforced or unreinforced)				
		a) Concrete elements (unreinforced)	m³	400		
		b) Concrete elements (reinforced)	m³	350		
8.1.7	8.2.10	Remove topsoil to a nominal depth of 150mm and stockpile fore reuse	m <sup>3</sup>	1 500		
8.1.8	8.2.9	Transport materials and debris to unspecified sites and dump	m <sup>3</sup> .km	150 000		

	WATER				SECTION 3: WATE	R - EARTHWORK
IEM NC	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (F
:1	SABS 1200 D	SECTION 3: EARTHWORKS				
1.1	8.3.8	Existing services				
	8.3.8.1	a) Excavate by hand in soft material to expose service.	m³	1 500		
1.2	8.3.8.2	Dealing with service that are at risk because of the construction of earthworks				
		a) Cables	No.	200		
		b) Permanent protection of service	No.	200		
		c) Temporary protection of service.	No.	200		
1.3	8.3.12	Road traffic signs and Markings	No.	100		
2	SABS 1200 DB	EARTHWORKS (PIPE TRENCHES)				
2.1	8.3.2	Excavation				
		a) Excavate between lateral support structures in all materials for trenches backfill, compact, and dispose of surplus material, for pipes not exceeding 700 mm nominal diameter in the following depth categories. (up to ND700)				
		i) 0,0 m - 1,0 m	m	Rate Only		
		ii) 1,0 m - 2,0 m	m	Rate Only		
		iii) 2,0 m - 3,0 m	m	Rate Only		
2.1.1		b) Excavate between lateral support structures in all materials for trenches backfill, compact, and dispose of surplus material, for pipes over 700 mm nominal diameter and not exceeding 1200 mm nominal diameter in the following depth categories. (ND700 to ND1200)				
		i) 0,0 m - 1,0 m	m	Rate Only		
		ii) 1,0 m - 2,0 m	m	Rate Only		
		iii) 2,0 m - 3,0 m	m	Rate Only		
2.1.2		c) Excavate between lateral support structures in all materials for trenches backfill, compact, and dispose of surplus material, for pipes over 1000 mm nominal diameter and not exceeding 2000 mm nominal diameter in the following depth categories. (ND1600)				
		i) 0,0 m - 1,0 m	m	20		
		ii) 1,0 m - 2,0 m	m	54		
		iii) 2,0 m - 3,0 m	m	300		
		iv) 3,0 m - 4,0 m	m	1 550		
		v) 4,0 m - 5,0 m	m	150		
		vi) 5,0 m - 6,0 m	m	100		

	PAYMENT	DESCRIPTION		OTV	DATE	
TEM NO	REFERS	DESCRIPTION DUGHT FORWARD	UNIT	QTY	RATE	AMOUNT (F
204.0	TOTAL DIG					
22.1.3		b) Extra-over (a) above for	2			
		<ol> <li>i) Intermediate material (includes all road and paved areas)</li> </ol>	m³	8 300		
		ii) Hard rock material	m³	450		
C2.1.4		<ul> <li>c) Excavate and dispose of unsuitable material from trench bottom (Provisional)</li> </ul>	m³	900		
2.1.5	8.3.3.3	Compact in road reserve	m³	5 000		
	SABS 1200 DB	Particular Items				
C2.1.6	8.3.4 (a)	i) Shore trenches to both sides of all excavations to a depth of 5.0m	m	2 000		
		ii) Extra Over for trench or excavation depths greater than 5.0m	m	30		
2.1.7	8.3.4(b)	Temporary works : Control water inflow from groundwater to pipe trenches				
		i) Provision, installation and removal of equipment	Sum	1		
		ii) Operation and maintenance of equipment	days	300		
		<li>iii) Extra Over for installation and removal of additional set (pump, pipes, suction points etc.) of equipment if so instructed</li>	Sum	1		
22.2		EXISTING SERVICES				
2.2.1	8.3.5(a)	Existing Services that intersect a pipe trench:				
		a) Communication/Electric cable (HT) & (LT)	No	50		
		b) Pipes up to 200mm diameter	No	30		
		c) Pipe or culvert greater than 200mm diameter up to 600mm diameter	No	30		
		d) Pipe or culvert greater than 600mm diameter up to 1100mm diameter	No	10		
C2.2.2	8.3.5(b)	<u>Existing Services that adjoin a pipe trench:</u> a) Communication/Electric cable (HT) & (LT)	m	600		
		b) Pipes up to 200mm diameter	m	350		
		c) Pipe or culvert greater than 200mm diameter up to 600mm diameter	m	350		
		d) Pipe or culvert greater than 600mm diameter up to 1100mm diameter	m	3 500		
C2.3	8.3.6	FINISHING				
C2.3.1	8.3.6.1	Reinstate road surfaces complete with all courses				
		a) Premix surfacing up to 80mm thick (2 x 40mm layers)	m²	5 000		
		b) G2 Base course 150mm thick	m <sup>2</sup>	5 000		
		c) G5 Subbase up to 150mm thick	m <sup>2</sup>	5 000		
		d) G7 SSG up to 300mm thick (provisional)	m²	5 000		
		Reinstate kerbs and channels including concrete bedding and backing to		0.000		
2.3.2		standard details	m	1 000		

	VATER PAYMENT				SECTION 3: WATE	
EM NO	REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (
	TOTAL BRO	UGHT FORWARD				
2.3.3		Reinstate carraigeway crossings in all courses				
		a) Paved driveways and walkways	m²	500		
		b) Concrete driveways and walkways	m²	700		
		c) Premix driveways and walkways	m²	700		
2.3.4		Reinstate boundary walls and fences	m	250		
.3.5		Reinstate gardens	m <sup>2</sup>	500		
.3.6		Reinstate traffic signs complete as per standard details	No	10		
2.3.7		Reinstate road markings Retro-reflective road-marking paint, including for reflective beads, to eThekwini Roads Department Specifications				
		a) White lines (broken or unbroken) 100mm wide	km	1		
		b) Yellow lines (broken or unbroken) 100mm wide	km	1		
		c) White lettering and symbols	m²	50		
		d) Yellow lettering and symbols	m²	50		
.3.8	SANS 1200 D	Topsoiling from temporary stockpiles	m <sup>2</sup>	14 000		

PART C: V	VATER				SECTION 4:	WATER - BEDDING
TEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R
C3	SABS 1200 LB	SECTION 4: BEDDING (PIPES)				
C3.1	SABS 1200LB	Pipe Bedding				
	8.2.1	Provision of bedding from trench excavations, including for passing through a sieve of no greater dimension than 10mm:				
	PSLB 3.1	a) Selected granular material	m <sup>3</sup>	300		
	PSLB 3.2	b) Selected fill material	m <sup>3</sup>	950		
	8.2.2.3	Provision from commercial or off-site sources:				
	PSLB 3.1	a) Selected granular material	m <sup>3</sup>	2 000		
	PSLB 3.2	b) Selected fill material	m <sup>3</sup>	6 500		
	8.2.4	Encasing of pipes in concrete	m <sup>3</sup>	500		
0741 61		RWARD TO SUMMARY				

PART C: V	PAYMENT			SECTION 5:	WATER - MEDIUM	PRESSURE PIPE
TEM NO	REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (F
24	SABS 1200 L	SECTION 5: PRESSURE PIPELINES				
24.1	8.2.1	WATER MAINS Supply, lay, bed & test pipes complete with all field welds and repairs to coating and lining for the following grade X42 Steel Pipes including the manufacture, coating, lining, repair, installation and testing complete of all bends up to 5 deg. (All ends prepared for field welding):				
	PCS 7 PSL 3	Plate thickness as specified, ends finished for butt welding, Visco-elastic Polyisobutene Coating (Two Layer Polyethylene Coating System) and solvent free epoxy lined				
		a) 1600mm dia, 12mm plate thickness	m	1980		
		b) 1400mm NB, 11.1mm plate thickness	m	Rate only		
		b) 1200mm NB, 9.5mm plate thickness	m	Rate only		
C4.1.2	8.2.2	Extra over item C4.1.1 for supplying, laying & bedding of the following 2LPE coated Grade X42 special bends and reducers including welding and repairs to coatings and linings, (All ends prepared for field welding):				
		1600mm dia. (solvent free epoxy lined)				
		a) up to 45° medium radius 2 segmented bend to BS_534	No	12		
		b) 45 to 61°medium radius 3 segment bend to BS 534	No	6		
		c) 61 to 90° medium radius 4 segment bend to BS 534	No	6		
24.1.3		Additional Special and Fittings in Steel (to include equal tees, reducing tees, reducers, blank flanges, flanges, couplings, universal flange adaptors and other up to and including 1600mm dia)	Prov Sum	1	10 000 000.00	
C4.1.4	8.2.2	WATER MAINS Supply, lay, bed & test pipes complete with all field welds and repairs to coating and lining for the following Steel Pipes including the manufacture, coating, lining, repair, installation and testing complete of all bends up to 5 deg. (All ends prepared for field welding) :				
		a) 150mm diameter	m	100		
		b) 300mm diameter	m	500		
4.1.5	8.2.11	ANCHOR AND THRUST BLOCKS				
		Grade 25/19 mass concrete				
		a) Anchor Blocks	m <sup>3</sup>	50		
		) b) Thrust Blocks	m <sup>3</sup>	100		
		Extra over items C4.2.1 a) and b) for rough formwork to anchor and thrust				
24.1.6		blocks	m²	120		
	ARRIED FOR					

PART C: W		1		SECTION 5:	WATER - MEDIUM	PRESSURE PIPE
TEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (F
OTAL BR						
24.2		VALVES AND FITTINGS CROSS CONNECTIONS (X2)				
24.2.1	8.2.5	Supply and install complete assemblies including, valves, pipework, fittings, as per typical details:				
		a) 1600NB Epoxy coated and lined, flanged / puddle flanged / flanged pipes 1600mm long	No	4		
		b) Epoxy coated and lined, 1600 x 450 Tee, plain ended / flanged pipe, including 300mm wide, 8mm thick grade 300W steel collar plate, 1300mm long c/f 450 NB stub to be flanged	No.	4		
		c) 1600 NB Restrained Dismantling coupling	No.	4		
		d) 1600NB amri isoria butterfly valves (EPDM liner coated ductile iron disc) or equally approved F.B.E	No.	4		
		e) 1200NB Epoxy coated and lined, flanged / puddle flanged / flanged pipes 1600mm long	No	4		
		f) Epoxy coated and lined, 1200 x 450 Tee, plain ended / flanged pipe, including 300mm wide, 8mm thick grade 300W steel collar plate, 1100mm long c/f 450 NB stub to be flanged	No.	4		
		g) 1200 NB Restrained Dismantling coupling	No.	6		
		h) 1200NB amri isoria butterfly valves (EPDM liner coated ductile iron disc) or equally approved F.B.E	No.	6		
		i) Epoxy coated and lined, 1600 x 1200 NB steel tee, F.B.E, 1200NB Stub plain end	No.	2		
		j) Epoxy coated and lined, 1200 x 1200 NB steel tee, F.A.E	No.	2		
		k) Epoxy coated and lined 250NB F.B.E steel pipe, 100mm long including 4 No gusset plates	No.	8		
		l) 250mm Epoxy coated and lined, flanged, resilient seal gate valve with hand wheel	No.	8		
		m) 250NB Anti-shock air valves (Vent-o-Mat RBX) or similar approved	No.	8		
		n) Epoxy coated and lined 200NB F.O.E steel pipe, 586mm long pipe	No.	8		
		o) 200NB standard 90° flanged steel bend L.R = 152.4mm	No.	8		
		<ul> <li>p) Epoxy coated and lined 200NB F.O.E steel pipe, 1259mm long including 4 No gusset plates</li> </ul>	No.	12		
		<ul> <li>q) Epoxy coated and lined 200NB steel pipe, palin ends, 1259mm long including 4 No gusset plates</li> </ul>	No.	4		
		r) 200mm Epoxy coated and lined, flanged, resilient seal gate valve with hand wheel	No.	4		
		s) 200 NB Restrained Dismantling coupling	No.	4		
4.3		VALVES AND FITTINGS AIR VALVES (X8)				
4.3.1	8.2.5	Supply and install complete assemblies including, valves, pipework, fittings, as per typical details:				
		a) Epoxy coated and lined, 1600 x 500 Tee (2500mm length), Plain ended / puddle flanged / puddle flanged / plain ended pipe, including 300mm wide, 8mm thick grade 300W steel collar plate, 500 NB tee section to be flanged	No.	8		
OT 41 - C	RRIED FOF		1	1	<u> </u>	

ART C: W				SECTION 5:	WATER - MEDIUN	I PRESSURE PIPE
TEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (I
OTAL BR						
		e) 300mm Epoxy coated and lined, flanged, resilient seal gate valve with hand wheel	No.	4		
		f) 250mm Epoxy coated and lined, flanged, resilient seal gate valve with hand wheel	No.	1		
		g) 200mm Epoxy coated and lined, flanged, resilient seal gate valve with hand wheel	No.	3		
		h) 300NB Anti-shock air valves (Vent-o-Mat RBX) or similar approved	No.	4		
		i) 250NB Anti-shock air valves (Vent-o-Mat RBX) or similar approved	No.	1		
		j) 200NB Anti-shock air valves (Vent-o-Mat RBX) or similar approved	No.	9		
4.4		VALVES AND FITTINGS SCOUR VALVES (X4)				
4.4.1	8.2.5	Supply and install complete assemblies including, valves, pipework, fittings, as per typical details:				
		a) Epoxy coated and lined, 1600 x 500 Scour Tee (2500mm length), Plain ended / puddle flanged / puddle flanged / plain ended pipe, including 300mm wide, 8mm thick grade 300W steel collar plate, 500 NB tee section to be flanged	No.	4		
		<li>b) 500mm NB amri isoria butterfly valves (EPDM liner coated ductile iron disc) or equally approved F.B.E</li>	No.	4		
		c) 500mm NB Epoxy coated and lined steel pipe flanged / plain ended (2m length)	No.	4		
	RRIED FOF					

PART C: W				SECTION 5:	WATER - MEDIUM	PRESSURE PIPES
TEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
OTAL BR	REFERS					
ORWARD	)					
24.5		VALVE CHAMBERS				
		AIR VALVE CHAMBERS (X8)				
24.5.1	SANS 1200 D	Excavation for Structure				
	1200 D					
	8.3.2	a) Excavate in all material and dispose of surplus material for air valve chambers	m3	500		
	8.3.2	b) Excavate in all material to temporary stockpile material to be used as fill	m3	1 600		
	0.0.2	around air valve chambers	1110	1 000		
24.5.2	8.3.2.b	Extra-over (a&b) above for				
		i) Intermediate material (includes all road and paved areas)	m³	700		
		ii) Hard rock material	m <sup>3</sup>	300		
24.5.3	8.3.7	Additional lateral support between excavations and existing structures	Prov	1	500 000.00	500 000.00
4.0.5	0.3.7	(Provisional)	Sum		500 000.00	500 000.00
24.5.4	SANS 1200 G	Formwork class F1 surface finish				
		e) Creative vertical		2 500		
	8.2.2	a) Smooth, vertical	m²	2 500		
	8.2.2	b) Smooth Horizontal to Soffit of Chamber	m²	200		
	8.2.6	Box out holes / Form Voids				
24.5.5	8.2.6a	Small, circular up to and including 0.35m				
		Over and Up to 3.5m 4.0m	No	14		
		4.0m 4.5m	No	2		
		4.5m 5.0m	No	-		
24.5.6	8.2.6c	Large, circular of diameter 750mm				
		In cover slabs	No	32		
4.5.7		Large, circular of diameter over 1400mm and up to 1600mm		02		
4.3.7						
		Over and Up to 3.5m 4.0m	No	30		
		4.0m 4.5m 4.5m 5.0m	No No	3		
24.5.8	8.3	Reinforcement				
94.0.0	0.0					
		High-tensile steel bars				
		a) Bars with 12mm, 16mm or 20mm diameter	ton	35		
	8.4	Concrete				
24.5.9		Blinding layer 50mm thick	m²	210		
24.5.10		Grade 25/19 concrete, including "Penetron" agent or similar for water- retaining concrete for:				
		a) Base	m <sup>3</sup>	80		
		b) Walls	m <sup>3</sup>	300		
		c) Cover Slab	m <sup>3</sup>	40		
		d) Pipe support	m³	13		
OTAL CA	RRIED FOF	RWARD				

	VATER PAYMENT				VATER - MEDIUM F	
TEM NO OTAL BR	REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R
		Ancillary Items				
24.5.11		Mentis grating, RS40, heavy duty galvanised, complete with supports and guard-rail as shown on the drawings	No.	16		
24.5.12		Heavy duty manhole covers for road traffic application				
		a) Circular, 760mm diameter, with ventilation openings	No.	32		
		b) GRP access ladder	No.	32		
4.5.13		Spacer Rings to circular manhole covers				
		a) 500mm high	No.	40		
		b) 250mm high	No.	40		
24.6		VALVE CHAMBERS SCOUR VALVE CHAMBERS (x4)				
4.6.1	SANS 1200 D	Excavation for Structure				
	8.3.2	<ul> <li>a) Excavate in all material and dispose of surplus material for air valve chambers</li> </ul>	m³	90		
	8.3.2	<ul> <li>b) Excavate in all material to temporary stockpile material to be used as fill around air valve chambers</li> </ul>	m³	350		
4.6.2	8.3.2.b	Extra-over (a&b) above for				
		i) Intermediate material (includes all road and paved areas)	m <sup>3</sup>	80		
		ii) Hard rock material	m <sup>3</sup>	40		
4.6.3	8.3.7	Additional lateral support between excavations and existing structures (Provisional)	Prov Sum	1	500 000.00	500 000.
4.6.4	SANS 1200 G	Formwork class F1 surface finish				
	8.2.2	a) Smooth, vertical	m²	220		
	8.2.2	b) Smooth Horizontal to Soffit of Chamber	m²	15		
4.6.5	8.2.6	Box out holes / Form Voids				
	8.2.6a	Small, circular over 0.35m and up to 0.75m				
		Over and Up to				
		3.0m 3.5m	No	3		
		3.5m 4.0m	No	2		
		4.0m 4.5m	No	3		
		4.5m 5.0m	No	1		
4.6.6	8.2.6c	Large, circular of diameter 750mm				
		In cover slabs	No	3		

	ATER			SECTION 5:		PRESSURE PIPE
TEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (F
OTAL BRO						
24.6.7		Large, circular of diameter over 1200mm and up to 1400mm				
		Over and Up to				
		3.0m 3.5m	No	1		
		3.5m 4.0m	No	3		
		4.0m 4.5m	No	2		
		4.5m 5.0m	No	2		
4.6.8	8.3	Reinforcement				
		High-tensile steel bars				
		a) Bars with 12mm, 16mm or 20mm diameter	ton	10.0		
	8.4	Concrete				
24.6.9		Blinding layer 50mm thick	m²	25		
		Grade 25/19 concrete, including "Penetron" agent or similar for water- retaining concrete for:				
		a) Base	m <sup>3</sup>	7		
		b) Walls	m <sup>3</sup>	35		
		c) Cover Slab	m <sup>3</sup>	5		
		d) Pipe support	m <sup>3</sup>	4		
		Ancillary Items				
C4.6.10		Mentis grating, RS40, heavy duty galvanised, complete with supports and guard-rail as shown on the drawings	No.	2		
24.6.11		Heavy duty manhole covers for road traffic application				
		a) Circular, 760mm diameter, with ventilation openings	No.	4		
		b) GRP access ladder	No.	4		
24.6.12		GMS diffuser plate, as per detail.	No.	4		
24.6.13		Spacer Rings to circular manhole covers				
		a) 500mm high	No.	3		
		b) 250mm high	No.	3		

PART C: V				SECTION 5:		PRESSURE PIPES
ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT		RATE	AMOUNT (R)
TOTAL BF FORWAR						
C4.7		VALVE CHAMBERS INTERCONNECTING CHAMBERS (x2)				
	SANS					
C4.7.1	1200 D	Excavation for Structure				
	8.3.2	<ul> <li>a) Excavate in all material and dispose of surplus material for air valve chambers</li> </ul>	m3	1 500		
	8.3.2	<ul> <li>b) Excavate in all material to temporary stockpile material to be used as fill around air valve chambers</li> </ul>	m3	1 500		
C4.7.2	8.3.2.b	Extra-over (a&b) above for				
		i) Intermediate material (includes all road and paved areas)	m <sup>3</sup>	700		
		ii) Hard rock material	m <sup>3</sup>	250		
C4.7.3	8.3.7	Additional lateral support between excavations and existing structures (Provisional)	Prov Sum	1	100 000.00	100 000.00
C4.7.4	SANS 1200 G	Formwork class F1 surface finish				
	8.2.2	a) Smooth, vertical	m²	900		
	8.2.2	b) Smooth Horizontal to Soffit of Chamber	m²	270		
	8.2.6	Box out holes / Form Voids				
C4.7.5	8.2.6c	Large, circular of diameter 750mm				
		In cover slabs	No	12		
C4.7.6		Large, circular of diameter over 1200mm and up to 1400mm				
		Over and Up to		10		
		4.0m 4.5m	No			
		4.5m 5.0m	No	3		
C4.7.7	8.3	Reinforcement				
		High-tensile steel bars				
		a) Bars with 12mm, 16mm or 20mm diameter	ton	45		
	8.4	Concrete				
C4.7.8		Blinding layer 50mm thick	m²	300		
C4.7.9		Grade 25/19 concrete, including "Penetron" agent or similar for water- retaining concrete for:				
		a) Base	m <sup>3</sup>	120		
		b) Walls	m <sup>3</sup>	160		
		c) Cover Slab	m <sup>3</sup>	100		
		d) Pipe support	m <sup>3</sup>	10		
		Ancillary Items				
C4.7.10		Mentis grating, RS40, heavy duty galvanised, complete with supports	No.	4		
.4.7.10		and guard-rail as shown on the drawings	NO.	4		
TOTAL CA	ARRIED FOR	RWARD				

M         PARTER         DESCRIPTION         UNIT         RATE         AMOUNT (6 AMOUNT (6 Commonstructure)           17.11         Intervelop         ready day manabase constructure         ready day ready re	PART C: V	VATER			SECTION 5:	WATER - MEDIUN	I PRESSURE PIPES
17.1.1 Biologicity     Image: state in the second staffic application     Image: state in the second staffic application       17.1 1     a) (Incular, Followin diameter, With verillation openings     No.     12       17.1 2     a) GRO manipulation in the second staffic application     No.     12       17.1 2     a) GRO manipulation in the second staffic application     No.     12       17.1 2     a) GRO manipulation     No.     12       17.1 3     a) Stomm high     No.     12       18.1 4     Could estaffic application openings     No.     12       18.3 8.2.12     CONCRETE CASING     main     main       18.4 5     Could estaffic application openings     No.     12       19.3     PRECAST ANCILLARES     main     main       19.4     PRECAST ANCILLARES     No.     14       19.2     Value makers     No.     14       19.3     Value makers     No.     14       19.4     COMINSSIGNMA AND TESTING     No.     14       10.1     Hydraulic Pressure Testing - pressure test the complete pipeline and all though approton of mains and a biblication of another and Semilation.     Sum     1       11.01     Hydraulic Pressure Testing - pressure test the complete pipeline and all though and a difficiencial and all though and a difficiencin of another and Semilation.     Sum	ITEM NO	PAYMENT	DESCRIPTION	UNIT			AMOUNT (R)
1.7.11     Heavy duty manhole covers for road traffic application     No.     12       1.7.12     Cracelar, 760mm diamater, with ventilation oponings     No.     12       1.7.12     Spacer Rings to circular manhole covers     No.     12       1.7.12     Spacer Rings to circular manhole covers     No.     12       1.7.12     Spacer Rings to circular manhole covers     No.     12       1.8     8.2.12     CONCRETE CASING     No.     12       1.8.1     Crade 25/19 controle pipe encasement of pipe as instructed by the graneer     m3     120       1.8.1     CRECAST ANCILLARIES     Spacer Rings of councel base and the conta approximate interment have marking paint complete with lettering, as detailed on drawings for the following:     No     50       1.8.2     Valve markers     No     50     14       1.9.2     COMMISSIONIG AND TESTING     No     14       1.9.1     Entraction - Distriction - Distriction complete pipeline inducting fitting, valves and anial apportation and all apportation and advalue dispectification     Sum     1       1.1.0.2     Commetacion - Distriction - Distroci and a Distriction of the Engeneer	TOTAL BR	ROUGHT					
1.0.     a) Circular, 780mm diameter, with ventilation openings     No.     12       47.12     b) GRP access ladder     No.     12       47.12     Spoor, Rings to circular, manhole covers     No.     12       a) S00mm high     No.     12       1.8     8.2.12     CONCRETE CASING     Mo.     12       1.8.1     Grade, 25/10 concole, pipe encasement of pipe as instructed by the ongineser     m3     120       1.9.1     PRECAST ANCILLARIES     Mo.     50       1.9.2     Diply and positive with lettering, as detailed on drawings for the following:     No.     50       1.9.2     Valve markers     No.     16       1.9.2     Valve markers     No.     50       1.0.1     CommissionNot AND TESTINO     No.     16       1.0.2     Outdristion Contact the complete pipeline induling fitting , pressure test the complete pipeline and all fitting , valves and apporteamose, to apportant of the Engineer and EThekken     Sum     1       1.0.2     Disinfection - Disinfect the complete of pressure testing, to the and apportant of the Engineer and EThekken Water and Sanitation     Sum     1	FORWARI	0					
A.7.12     No.     12       A.7.12     Spacer Rings to circular mambele covers     No.     12       a) S00mm high     No.     12       b) 250mm high     No.     12       control     Concrete CASING     Mo.     12       control     PRECAST ACILLARIES     Mo.     12       control     Supply and positive introl letting, as delated on drawings for the following: provide base and two costs approved numerit Yoad     Mo.     16       control     Standard Pipe markers     No     16     50       control     Commission Mont Couples with lettering, as delated on drawings for the following: provide parameters, to approval of figureer and eThelwini     Sum     1       control     Commission Mont Scaling Control     Sum     1     1       control     Most control     Sum     1     1       control     Commission Mont Scaling Control     Sum     1       control     Commission Mont Scaling Control     Sum     1       control     Commission Mont Scaling Control     Sum     1       contro     Control     Control     Sum	C4.7.11		Heavy duty manhole covers for road traffic application				
47.12       Spacer Rings to circular mathele covers       No.       12         a) 500mm high       No.       12         b) 250mm high       No.       12         4.8       8.2.12       CONCRETE CASING       No.         4.8.1       Grade 25/10 concrete pipe encasement of pipe as instructed by the ingineer, precast concrete hise and how coatls approval memory to administry industry coarter bias and how coatls approval memory to administry industry indu			a) Circular, 760mm diameter, with ventilation openings	No.	12		
1     a 500m high     No.     12       10     b) 250mm high     No.     12       16     6.2.12     CONCRETE CASING     m3     120       16.1     Gradu 25/19 concrete pipe encasement of pipe as instructed by the m3 piner, preval concrete pipe encasement of pipe as instructed by the m3 piner, preval concrete pipe encasement of pipe as instructed by the m3 piner, preval concrete pipe encasement of pipe as instructed by the m3 piner, preval concrete pipe encasement of pipe as instructed by the m3 piner, preval concrete pipe encasement of pipe as instructed by the m3 piner, preval concrete pipe encasement of pipe as instructed by the m3 piper.       19.1     Commission main instructed by the Enpipeer, preval concrete pipeline and and piper pipeline and and piper and pipeline pipeline and and piper and pipeline pipeline including filting, values and pipeline the complete pipeline and all approxial of the Engineer and eThekvini Water and Santiation     Sum     1       4.10.2     Distribution of the Engineer and eThekvini Water and Santiation     Sum     1			b) GRP access ladder	No.	12		
1.8.1     b) 250mm Mgh     No.     12       1.8.8     8.2.12     CONCRETE CASING     m3     120       4.8.1     Grado 25/19 concrete pipe encasement of pipe as instructed by the regimeer.     m3     120       4.8     PRECAST NOLLLARES     m3     120       5.0     Standard Pipe markers     No     50       4.9.1     Standard Pipe markers     No     50       4.0     COMMISSIONING AND TESTING     No     14       4.10.1     COMMISSIONING AND TESTING     No     14       4.10.2     Desinetion - Disinfect the complete pipeline and all supportances, to approval of Engineer and EThekwini Vater and Sanitation Specification     Sum     1       4.10.2     Desinetion - Disinfect the complete pipeline and all apportances and eth value and Sanitation     Sum     1       4.10.2     Desinetion - Disinfect the complete pipeline and all apportances and eth value and Sanitation     Sum     1	C4.7.12		Spacer Rings to circular manhole covers				
1.8       8.2.12       CONCRETE CASING         1.8.1       Grade 75/19 concrete pipe encasement of pipe as instructed by the mail regimeer instructed by the Engineer, precast concrete manufactor pipeline concrete base and the context paper provide ename trade marking joint complete with lettering, as detailed on drawings for the totolowing.       No       50         1.0.1       Standard Pipe markers       No       50         1.9.2       Valve markers       No       14         1.0.1       COMMISSIONING AND TESTING       No       14         1.0.1       Hydraulic Pressure Testing - pressure test the complete pipeline and all fittings, valves and appurtenances, to approval of fittings, valves and appurtenances, to approval of the Engineer and Thetwini Water and Sanitation       Sum       1         4.10.2       Distinction - Distinct the complete pipeline including fittings, valves and a suppurtenance, to approval of The Engineer and eThetwini Water and Sanitation       Sum       1         4.10.2       approval of the Engineer and eThetwini Water and Sanitation       Sum       1			a) 500mm high	No.	12		
48.1       Grade 25/19 concrete pipe encasement of pipe as instructed by the engineer       m3       120         4.8       PRECAST ANCILLARES       supply and position as instructed by the Engineer, precast concrete marking paint couplete with lettering, as detailed on drawings for the following:       No       50         4.9.1       Standard Pipe markers       No       50         4.9.2       Valve markers       No       14         4.10       COMMISSIONING AND TESTING       No       14         4.10.1       Hydraulic Pressure Teating - pressure test the complete pipeline and all fittings, valves and eppathemance, us paproval of Engineer and Talwing       Sum       1         4.10.2       Disinfection - Disinfect the complete pipeline including fittings, valves and all apprutemances after satisfactory completion of pressure testing, to the approval of the Engineer and Thekwini Water and Santation       Sum       1         4.10.2       Disinfection - Disinfect the complete pipeline including fittings, valves and all apprutemances after satisfactory completion of pressure testing, to the approval of the Engineer and Thekwini Water and Santation       Sum       1         4.10.2       Disinfection - Disinfect the complete pipeline including fittings, valves and all apprutemances after satisfactory completion of pressure testing, to the approval of the Engineer and Thekwini Water and Santation       Sum       1			b) 250mm high	No.	12		
48.1       Grade 25/19 concrete pipe encasement of pipe as instructed by the engineer       m3       120         4.8       PRECAST ANCILLARES       supply and position as instructed by the Engineer, precast concrete marking paint couplete with lettering, as detailed on drawings for the following:       No       50         4.9.1       Standard Pipe markers       No       50         4.9.2       Valve markers       No       14         4.10       COMMISSIONING AND TESTING       No       14         4.10.1       Hydraulic Pressure Teating - pressure test the complete pipeline and all fittings, valves and eppathemance, us paproval of Engineer and Talwing       Sum       1         4.10.2       Disinfection - Disinfect the complete pipeline including fittings, valves and all apprutemances after satisfactory completion of pressure testing, to the approval of the Engineer and Thekwini Water and Santation       Sum       1         4.10.2       Disinfection - Disinfect the complete pipeline including fittings, valves and all apprutemances after satisfactory completion of pressure testing, to the approval of the Engineer and Thekwini Water and Santation       Sum       1         4.10.2       Disinfection - Disinfect the complete pipeline including fittings, valves and all apprutemances after satisfactory completion of pressure testing, to the approval of the Engineer and Thekwini Water and Santation       Sum       1							
4.5.1       engineer       IIIIS       120         4.9       PRCAST ANCILARES       Supply and position as instructed by the Engineer, present concrete maters including concrete base and two costs approved enume house maters including concrete base and two costs approved enume house maters including concrete bases       No       50         4.9.1       Standard Pipe markers       No       50         4.9.2       Valve markers       No       14         4.10.1       COMMISSIONING AND TESTING       Sum       1         4.10.1       Edition - Disinfect the complete pipeline and all fittings, valves and all apportenances, to approval of Engineer and eThekizin       Sum       1         4.10.2       Disinfection - Disinfect the complete pipeline including fittings, valves and all apportenances after salistactor completion of pressure testing, to the approval of the Engineer and eThekizin       Sum       1         4.10.2       Disinfection - Disinfect the complete pipeline including fittings, valves and all apportenances after salistactors (completion of pressure testing, to the approval of the Engineer and eThekizin Water and Sanitation       Sum       1         4.10.2       Disinfection - Disinfect the complete pipeline including fittings, valves and all apportenances is threas satistation       Sum       1         4.10.2       Disinfection - Disinfect the complete pipeline including fittings, valves and all apportenances is the satistacton distributin distres aprovide the Engineer and eThekizin	C4.8	8.2.12	CONCRETE CASING				
Supply and position as instructed by the Engineer, precast concrete markers including concrete base and two coats approved ename! Yoad marking pant complete with lettering, as detailed on drawings for the following:       No       50         49.1       Standard Pipe markers       No       14         1.9.2       Valve markers       No       14         4.10       COMMISSIONING AND TESTING       No       14         4.10.1       Hydraulic Pressure Testing - pressure test the complete pipeline and altring. tables and apputenances, to approval of Engineer and eThekwini Sum       1         4.10.2       Disinfect:       Disinfect:       Disinfect:       Sum       1         4.10.2       Disinfect:       Disinfect:       Disinfect:       Sum       1         4.10.2       Disinfect:       Disinfect:       Sum       1         4.10.2       Disinfect:       Disinfect:       Sum       1         4.10.2       Disinfect:       Disinfect:       Disinfect:       Sum       1         4.10.2       Disinfect:	C4.8.1			m3	120		
Imarking pair to including concrete base and two coats approved enamel road marking pair to complete with lettering, as detailed on drawings for the following:       No       50         49.1       Standard Pipe markers       No       14         10.2       Valve markers       No       14         11.0       COMMISSIONING AND TESTING       No       14         1.10.1       COMMISSIONING AND TESTING       Sum       1         1.10.1       Editions, avia and apput-famore, to approval of Engineer and eThekwini Sum       Sum       1         1.10.2       Diainfect the complete pipeline including fittings, valves and all appurfamore, after statisticity completion of Engineer and eThekwini Sum       Sum       1         1.10.2       Diainfect the complete pipeline including fittings, valves and all appurfamore after statisticity completion of the Engineer and eThekwini Water and Sanitation       Sum       1         1.10.2       Diainfect the complete pipeline including fittings, valves and all appurfamore after statisticity completion of the Engineer and eThekwini Water and Sanitation       Sum       1         1.10.2       Diainfect the complete pipeline including fittings, valves and all appurfamore after statisticity completion of the Engineer and eThekwini Water and Sanitation       Sum       1         1.10.2       Diainfect the complete pipeline including fittings, valves and all appurfamore and eThekwini Water and Sanitation       Sum       1	C4.9		PRECAST ANCILLARIES				
19.2     Valve markers     No     14       1.10     COMMISSIONING AND TESTING     Ittings, valves and appurtenances, to approval of Engineer and eThekwin     Sum     1       4.10.1     Disinfection - Disinfect the complete pipeline including fittings, valves and all appurtenances after satisfactory completion of pressure testing, to the approval of the Engineer and eThekwini Water and Sanitation     Sum     1       4.10.2     Disinfect the complete pipeline including fittings, valves and all appurtenances after satisfactory completion of pressure testing, to the approval of the Engineer and eThekwini Water and Sanitation     Sum     1			markers including concrete base and two coats approved enamel 'road marking' paint complete with lettering, as detailed on drawings for the				
4.10       COMMISSIONING AND TESTING         4.10.1       Hydraulic Pressure Testing - pressure test the complete pipeline and all fittings, valves and appurchances, to approval of Engineer and eThekwini       Sum       1         4.10.2       Disinfection - Disinfect the complete pipeline including fittings, valves and all appurchances after satisfactory completion of pressure testing, to the approval of the Engineer and eThekwini Water and Sanitation       Sum       1         4.10.2       Disinfection - Disinfect the complete pipeline including fittings, valves and all appurchances after satisfactory completion of pressure testing, to the approval of the Engineer and eThekwini Water and Sanitation       Sum       1         4.10.2       Disinfection - Disinfect the complete pipeline including fittings, valves and all appurchances after satisfactory completion of pressure testing, to the approval of the Engineer and eThekwini Water and Sanitation       Sum       1         4.10.4       Hydraulic Pressure testing - Disinfect the complete pipeline including fittings, valves and all approval of the Engineer and eThekwini Water and Sanitation       Sum       1         4.10.2       Hydraulic Pressure testing - Disinfect the complete pipeline and the pipeline including fittings, valves and all approval of the Engineer and eThekwini Water and Sanitation       Sum       1         Hydraulic Pressure testing - Disinfect - Disinfect - Disinfect testing - Disinfect - Disi	C4.9.1		Standard Pipe markers	No	50		
4.10.1       Hydraulic Pressure Testing - pressure test the complete pipeline and all fittings, values and appurtenances, to approval of Engineer and eThekwini       Sum       1         4.10.2       Disinfect the complete pipeline including fittings, values and all appurtenances after satisfactory completion of pressure testing, to the approval of the Engineer and eThekwini Water and Sanitation       Sum       1         4.10.2       Disinfect the complete pipeline including fittings, values and all appurtenances after satisfactory completion of pressure testing, to the approval of the Engineer and eThekwini Water and Sanitation       Sum       1	C4.9.2		Valve markers	No	14		
4.10.1       Hydraulic Pressure Testing - pressure test the complete pipeline and all fittings, values and appurtenances, to approval of Engineer and eThekwini       Sum       1         4.10.2       Disinfect the complete pipeline including fittings, values and all appurtenances after satisfactory completion of pressure testing, to the approval of the Engineer and eThekwini Water and Sanitation       Sum       1         4.10.2       Disinfect the complete pipeline including fittings, values and all appurtenances after satisfactory completion of pressure testing, to the approval of the Engineer and eThekwini Water and Sanitation       Sum       1							
4.10.1       fittings, values and appurtenances, to approval of Engineer and eThekwini Water and Sanitation Specification       Sum       1         1       Disinfect the complete pipeline including fittings, values and all appurtenances after satisfactory completion of pressure testing, to the approval of the Engineer and eThekwini Water and Sanitation       Sum       1         1       Sum       1         1       approval of the Engineer and eThekwini Water and Sanitation       Sum       1	C4.10		COMMISSIONING AND TESTING				
4.10.2       all appurtenances after satisfactory completion of pressure testing, to the approval of the Engineer and eThekwini Water and Sanitation       Sum       1         4.10.2       approval of the Engineer and eThekwini Water and Sanitation       Sum       1	C4.10.1		fittings, valves and appurtenances, to approval of Engineer and eThekwini	Sum	1		
	C4.10.2		all appurtenances after satisfactory completion of pressure testing, to the	Sum	1		
DTAL CARRIED FORWARD TO SUMMARY	TOTAL CA		RWARD TO SUMMARY		1	1	

	PAYMENT			<u></u>		CTION 6: SEWERS
TEM NO	REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R
01	SABS 1200 LD	SECTION 6: SEWERS (PROVISIONAL)				
	SABS 1200 DB	EARTHWORKS (PIPE TRENCHES)				
1.1	8.3.2	Excavation				
		<ul> <li>a) Excavate between lateral support structures in all materials for trenches backfill, compact, and dispose of surplus material, for pipes not exceeding 250mm NB</li> </ul>				
		i) 0,0 m - 1,0 m	m	400		
		ii) 1,0 m - 2,0 m	m	300		
		iii) 2,0 m - 3,0 m	m	300		
01.2	SABS 1200 LB	SECTION 4: BEDDING (PIPES)				
01.2.1	SABS 1200LB	Pipe Bedding				
	8.2.1	Provision of bedding from trench excavations, including for passing through a sieve of no greater dimension than 10mm;				
	PSLB 3.1	a) Selected granular material	m <sup>3</sup>	-		
	PSLB 3.2	b) Selected fill material	m³	50		
1.2.2	8.2.2.3	Provision from commercial or off-site sources:				
	PSLB 3.1	a) Selected granular material	m³	150		
	PSLB 3.2	b) Selected fill material	m³	400		
	8.2.1	Supply, lay, joint, test . The following pipes, pipe fittings, specials etc.				
1.3		NON PRESSURE uPVC SEWER PIPES				
		a) 160mm dia. HD uPVC class 34	m	250		
		b) 200mm dia. HD uPVC class 34	m	250		
		c) 250mm dia. HD uPVC class 34	m	250		
		d) 300mm dia. HD uPVC class 34	m	250		
1.4	8.2.3	Excavate for, supply , install and mark 1050mm dia. precast concrete manholes with heavy duty cover and lid. Complete with channels, Type A benching, etc., as per Metro standard details drw No. 38570 & 38574. Including backfill, compaction etc.				
		a) 2.00m - 2.50m	No	7		
		b) 2.50m - 3.00m	No	7		
		c) 3.00m - 3.50m	No	6		
		d) New manhole at Property Connections	No.	2		
		e) Tie-in to existing reticulation with new manhole complete with temporary measures.	No.	20		
1.5	8.2.4	Extra over for ramp manholes complete. Depth measured as invert difference on manhole centreline in the following categories Straight connection:				
		a) 0.40 to 0.70m	No.	4		

PART D: S	SEWER				SE	CTION 6: SEWER
ГЕМ Ю	PAYMENT REFERS	DESCRIPTION	UNIT		RATE	AMOUNT (F
OTAL BR	ROUGHT					
ORWAR	8.2.4	Extra over for drop manholes complete_Depth measured as invert				
/1.0	0.2.4	difference on manhole centreline in the following categories Straight connection:				
		a) 1,5 to 2,0	No.	2		
		b) 2,0 to 2,5	No.	4		
01.7		Heavy Duty Cast Iron lids	No	20		
	8.2.2	Specials in manhole.				
	8.2.7	Concrete encasing of pipes.				
01.8		1) Class 20/19 concrete	m3	10		
01.9		Testing of manholes				
		a) Water Tightness	No	6		

	STORMWAT PAYMENT					17: STORMWATER
TEM NO	REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (F
1	SABS 1200 LE	SECTION 7: STORMWATER				
	SABS 1200 DB	EARTHWORKS (PIPE TRENCHES)				
1.1	8.3.2	Excavation				
		<ul> <li>a) Excavate between lateral support structures in all materials for trenches backfill, compact, and dispose of surplus material, for pipes not exceeding 600mm NB</li> </ul>				
		i) 0,0 m - 1,0 m	m	300		
		ii) 1,0 m - 2,0 m	m	300		
		iii) 2,0 m - 3,0 m	m	150		
		iv) 3,0 m - 4,0 m	m	50		
1.2	SABS 1200 LB	SECTION 4: BEDDING (PIPES)				
1.2.1	SABS 1200LB	Pipe Bedding				
	8.2.1	Provision of bedding from trench excavations, including for passing through a sieve of no greater dimension than 10mm;				
	PSLB 3.1	a) Selected granular material	m <sup>3</sup>	-		
	PSLB 3.2	b) Selected fill material	m <sup>3</sup>	20		
1.2.2	8.2.2.3	Provision from commercial or off-site sources:				
	PSLB 3.1	a) Selected granular material	m <sup>3</sup>	140		
	PSLB 3.2	b) Selected fill material	m <sup>3</sup>	550		
		<li>c) Supply and lay class B bedding for 500mm NB steel pipes (pipes measured elsewhere)</li>	m³	300		
1.2.3	SANS 1200 LE 8.2.2	Supply and lay concrete pipe culverts on class B bedding				
		a) 375mm ND	m	500		
		b) 450mm ND	m	200		
		c) 525mm ND	m	100		
1.2.4	8.2.4	Extra over E1.2.2 and E1.2.3 for cutting end units on site	No	50		
		Supply and install Manholes and Catchpits				
E1.2.5	8.2.3	Excavate for, supply, install and mark 1050mm dia. precast concrete manholes with heavy duty cover and lid. Complete with channels, Type A benching, etc., as per Metro standard details drw No. 38570 & 38574. Including backfill, compaction etc.				
		a) 2.00m - 2.50m	No	2		
		b) 2.50m - 3.00m	No	2		
		c) 3.00m - 3.50m	No	2		
1.2.6		Construct complete concrete headwalls on stormwater pipes and water scour pipes as per standard details	No	35		
		WARD TO SUMMARY		II		

	AYWORKS				OLOIN	ON 8: DAYWORK
EM NO	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (I
	PAA	SECTION 8: DAYWORKS				
		Labour				
5.1		(a) Unskilled workers	Hr	100		
		(b) Skilled workers	Hr	100		
		(c) Operators and drivers	Hr	200		
		(d) Foreman	Hr	200		
5.2		Construction Plant				
		(a) Lowbed transport of plant to and from the site	hr	20		
		(b) Bulldozer and ripper				
		(i) D6 of similar	hr	20		
		(e) Back-acting excavators				
		i) 50kW case 580 or similar	hr	20		
		(g) Compactors				
		i) Pedestrian vibrating roller	hr	20		
		ii) Plate Compactor	hr	20		
		(h) Compressor - 7m³/min	hr	20		
		(i) Trucks				
		i) 7t or similar	hr	20		
		ii) 10m3 tipper truck or similar approved	hr	20		
		9k) Water Tanker	Hr	20		
		,				

ARTG	ROAD CROS	SSINGS			SECTION 9: F	ROAD CROSSING
TEM NO	REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R
G		SECTION 9: ROAD CROSSINGS				
	SANS					
	1200 LG	Jacking Establishment				
G1.1	8.2.1	Fixed charges	Sum	1		
G1.2		Time related charges	Sum	1		
	8.2.4	Excavation for jacking				
G2.1	PSD 8.3.3	Excavate for pipe at the drilling face (including removal and disposed of surplus excavated material). Rate shall include any shoring that is required	m³	200		
	PSD 8.3.3	Extra over for Excavation for jacking above:				
G2.2		Hard rock excavation	m³	50		
G2.3		Excavate by hand in soft material to expose existing services	m³	50		
	8.2.6	Supply and install pipes by means of jacking for the following pipes:				
	PSLG 8.2.6					
G3.1		1800mm diameter, Class 100D Type SC reinforced concrete pipes	m	65		
		Miscellaneous			-	
G4.1	1200 A PSA 8.10	Lay, joint, fix and test DN 1200 steel pipes in the pipe sleeves complete with a manufactured steel and bar skid as detailed on the drawings	m	65		
G4.2	8.2.9	Stabilization of unstable areas or grouting of voids where ordered				
		a) Establishment of equipment and removal on completion	Sum	1		
		b) Operation of equipment	Day	7		
		c) Materials used	m³	5		
G4.3	PSLG 8.2.10	Standing time for pipe jacking	Day	7		
G4.4	PSLG 8.2.11	Recording of movements	Sum	1		
G4.5	PSLG 8.2.12	Brick-up ends of pipe sleeve	No	2		
G4.6	PSLG 8.2.13	Pipe Markers	No	2		
G4.7.1	PSLG 8.2.13	Modify Existing Pipe Jacking Channel under the M19 asper Drawing Removal of existing and disposal (900mm Pipe)	m	80		Rate on
G4.7.2		Modify existing stormwater channel in accordance with detail	m	80		Rate or
G4.7.2		Install the Steel Pipe in accordance with detail	m	80		Rate or
G4.7.2						i tai

RT	SECTION	DESCRIPTION	AMOUNT
Α	1	PRELIMINARY AND GENERAL	
в	2	SITE CLEARANCE	
С		WATER	
	3	EARTHWORKS (PIPE TRENCHES)	
	4	BEDDING (PIPELINES)	
	5	MEDIUM PRESSURE PIPELINES	
D	6	SEWER	
Е	7	STORMWATER	
F	8	DAYWORKS	
G	9	ROAD CROSSINGS	
SUB TOT	AL 1 (SUM C	JF PARTS A TO F)	
ADD: CO	NTINGENCIE	ES (10% OF SUB TOTAL 1)	
SUB TOT	AL 2		
ADD: CO		ICE ADJUSTMENT (PROVISIONAL ALLOWANCE 8% OF SUB TOTAL 2)	
SUB TOT			
ADD: VAI	LUE-ADDED	TAX (15% OF SUB TOTAL 3)	

I/We, the undersigned, do hereby declare that these are the properly priced Bill / Schedules of Quantities forming part of this Contract Document containing Pages in consecutive order upon which I/we have tendered for.

My/our total Contract Price for this work and above items (Total 4) is (in words): -

SIGNED BY THE TENDERER