

1. Major works between Main Canal , at 6+000 to Lengwe.

The scope of works under this bidding document covers the construction of Main Canal 1 from Station 6+000 up to 32+788 (Bifurcation point), and part of MC2 from Station 0+000 (bifurcation point) up to Station 18+024, (Lengwe national park). Major works will include construction of two inverted siphons on MC1, three inverted siphons on MC2, Bridges, box culverts, Canal Crossing structures, Concrete lined canal and wire fencing around populated areas.

Major Works	Item	Quantity	Unit
3.1 Earth Work, L=45 km	Wood-cutting & Roots Removal	1785909.0	m ²
	Earth Cutting	2940225.0	m ³
	Excavation	110,001	m ³
	Weathering Rock Cutting	67,698	m ³
	Embankment (portorage & Compact)	285,957	m ³
	Embankment (Dump Truck 15 ton)	1,476,070	m ³
	Waste Soil	1,427,489	m ³
3.2 Canal Structures - Lining, L=43 km - Siphon, 3 Nos., L=1795 m	Lining Canal		
	Lining Machine (Con'c B180)	124,268	m ²
	Wire Mash (#5 150*150)	884,874	m ²
	Backfill	128,585	m ³
	Siphon		
	Con'c B180	1,788	m ³
	Con'c B240	19,906	m ³
	Reinforcing steel (SD30)	1,766	Tonne
	Diversion Gate (5.0*3.0)	6	Ea
	Diversion Gate (3.0*3.0)	3	Ea
3.3 Canal Crossing Structures	Con'c B160	3,136	m ³
	Con'c B210	13,734	m ³
	Con'c B240	29,693	m ³

	Reinforcing steel (SD30)	6,253	Tonne
Water supply	PE pipe SDR 26 150mm	4,600	m
	PE pipe SDR 26 125mm	9,500	M
	Excavation works	25,316	m ³
	Backfill	27,905	m ³