

**Brief scope of work**

**Project Name: Construction of Water Distribution Network and House Connection in AL-Mahaj & Various pockets in AL-Amirat Wilayat of Muscat Governorate**

**SUMMARY OF SCOPE FOR WORK:**

The scope of work includes civil works, procurement, construction and testing of water network with all related accessories ,installing house connections, hydraulic study, surveying, detailed design, profile drawing , engineering, manufacture, inspection and testing at the maker's works and at site, packing for export shipment, insurance, delivery to site, unloading, complete erection, site testing, start up, commissioning, performance testing, putting into operation; training of the Employer staff (or others) assigned to operate the Works; and maintenance support during the defects liability period, which expires one year after the completion of the whole of the works.

The Construction of water distribution network & house connections in AL-Mahaj & various pockets in AL-Amirat wilayat of Muscat Governorate comprises the principal components distribution network with all necessary accompanying equipment& the main Scope of Work for Contractor shall comprise some of the following:

1. Construction of distribution network, total length of 22,200 m
  - HDPE pipe with fittings, OD 110mm – 8000 m
  - HDPE pipe with fittings, OD 160mm – 4000 m
  - HDPE pipe with fittings, OD 225mm– 5000 m
  - HDPE pipe with fittings, OD 315mm – 1500 m
  - DI pipe with fittings, DN 300mm – 1500 m
  - DI pipe with fittings, DN 200mm – 200 m
  - DI pipe with fittings, DN 150mm – 300 m
  - DI pipe with fittings, DN 100mm – 1700 m
2. Construction/installation of (50 no.) of Fire hydrant
3. Construction/installation of (4 no.) of Pressure Reducing Valve
4. Construction/installation of (1 no.) of Small Booster pump
5. Construction/installation of (4 no.) of Flow meters
6. Construction of required isolation valves (60 no.)
7. Construction of Washout chamber (10 no.)
8. Construction of Air release valves (26 no.)
9. Construction of house connections (410 no.)

**Summary:**

**The key components of the project are summarised in the table below:**

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Locations	Description	Class	Approximate length of main required
In AL-AL-Mahaj& various pockets at AL-Amirat wilayat of Muscat Governorate project	110mm OD HDPE Pipe	PN 16	8000 m
	160mm OD HDPE Pipe	PN 16	4000 m
	225mm OD HDPE Pipe	PN 16	5000 m
	315mm OD HDPE Pipe	PN 16	1500 m
	300mm DN DI Pipe	Class 40	1500 m
	200mm DN DI Pipe	Class 40	200 m
	150mm DN DI Pipe	Class 40	300 m
	100mm DN DI Pipe	Class 40	1700 m
	Pressure Reducing valve chamber	PN 16/Dual stage type	4 no.
	Flow Meter including Data loggers	PN 16 /Electro-Magnetic type	4 no.
	Booster Pump	Vertical Centrifugal pump DN 100mm	1 no.
	100mm DN Fire Hydrants	Pillar type Anti-Theft protection	50 no.
	80mm DN Air release valve	Double orifice kinetic	26 no.
	Washout chamber	on HDPE pipe	10 no.
	Gate valves	DN 100mm	26
DN 150mm		12	
DN 200mm		13	
DN 300mm		9	

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<b>Locations</b>	<b>Description</b>	<b>Class</b>	<b>Approximate length of main required</b>
	<b>Thrust boring/Road crossing</b>	<b>Horizontal Direction Drilling</b>	<b>400m</b>
	<b>Wadi crossing</b>	<b>Major wadi Protection</b>	<b>200m</b>

**Time for Completion of the Works**

The whole Contract period for completion the works is *Eighteen (18) calendar month from commencement Date.*