

CONSTRUCTION OF WATER DISTRIBUTION NETWORK & HOUSE CONNECTIONS IN VARIOUS POCKETS IN QURAYAT WILAYAT OF MUSCAT GOVERNORATE

T-2453295-2022

SCOPE OF WORK

Brief

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 various pockets in Qurayat wilayat of Muscat Governorat comprises the principal components distribution network with all necessary accompanying equipment

The scope of the contractor's work includes the following:

1. Construction of distribution network, total length of 37,800 m
 - i. HDPE pipe with fittings, OD 110 – 18,000 m
 - ii. HDPE pipe with fittings, OD 160 – 5000 m
 - iii. HDPE pipe with fittings, OD 225 – 14,000 m
 - iv. DI pipe with fittings, DN 100mm – 100 m
 - v. DI pipe with fittings, DN 150mm – 100 m
 - vi. DI pipe with fittings, DN 200mm – 100 m
 - vii. DI pipe with fittings, DN 300mm – 500 m
2. Construction/installation of (55 no.) of Fire hydrant
3. Construction/installation of (6 no.) no. of Pressure Reducing Valve
4. Construction/installation of (6 no.) no. of DMA Flow meters
5. Construction of required isolation valves (56 no.)
6. Construction of Washout chamber (7 no.)
7. Construction of Air release valves (21 no.).
8. Construction of house connections (800 no.)

Summary:

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

Locations	Description	Class	Approximate length of main required
in Qurayat wilayat of Muscat Governorate project	110mm OD HDPE Pipe	PN 16	18,000 m
	160mm OD HDPE Pipe	PN 16	5000 m
	225mm OD HDPE Pipe	PN 16	14,000 m
	100mm DN DI Pipe	PN 16	100 m

Locations	Description	Class	Approximate length of main required	
	200mm DN DI Pipe	PN 16	100 m	
	150mm DN DI Pipe	PN 16	100m	
	300mm DN DI Pipe	PN 16	500 m	
	Pressure Reducing valve chamber	PN 16/Dual stage type	6 no.	
	Flow Meter including Data loggers	PN 16 /Electro-Magnetic type	6 no.	
	100mm DN Fire Hydrants	Pillar type Anti-Theft protection	55 no.	
	80mm DN Air release valve	Double orifice kinetic	21 no.	
	Washout chamber	on HDPE pipe	7 no.	
	Gate valves	DN 100mm		26
		DN 150mm		7
		DN 200mm		14
		DN 300mm		9
	Thrust boring/Road crossing	Horizontal Direction Drilling		800m
	Wadi crossing	Major wadi Protection	200m	