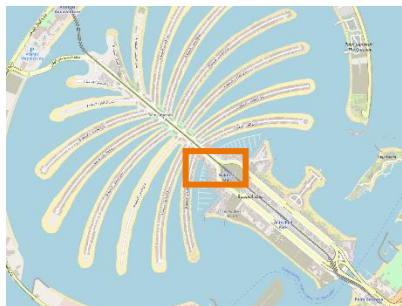


 **Project**



Rehabilitation of a DN 400 GRP irrigation pipe under the main road towards Palm Jumeirah

Situation:

An existing GRP DN 400 irrigation pipe was leaking due to soil settling. This water main is crossing one of the major roads towards the Palm Jumeirah road in Dubai with two 45 degree bends. Traditional open trench excavation was not feasible. Moreover, the water main is only accessible via small maintenance chambers – one located directly in the road, the other at an adjacent parking lot. The fittings in the chambers were removed and the host pipe was cut flush with the wall of the chamber to create the necessary working space. After cleaning the host pipe, a CCTV inspection was performed. The pre-folded DN 400 Primus Liner was inserted in 15 minutes and re-rounded. Due to the confined space situation, the connectors were specifically produced for this project and equipped with a wall-mounting plate to fix to the chamber’s wall. A hydrostatic pressure test was successfully performed after the renovation works. The entire rehabilitation was completed in two night shifts.

Technical Details:

Transported Fluid:	Irrigation water
Diameter of Host Pipe:	DN 400
Material of Host Pipe:	GRP
Operating Pressure:	6 bar
Primus Line® System:	DN 400 PN 18
Total Length:	140 m in one section
Bends:	Two 45-degree bends
Number of Sections:	One section

Client: Dubai Municipality
Construction: May 2019

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