

Long-Lasting Pipes for the Eternal City

HOBAS® Pipes Help Protect Veio Regional Natural Park from Pollution, IT

The Veio Regional Natural Park stretches over 15,000 hectares in the north of Rome. Typical for this recreation-area is the dense network of water ditches that run into the Tiber. Uncontrolled wastewater disposal due to the increasingly urbanized area has however become a threat to the watercourses. In order to maintain the natural park's integrity, the basin of the largest ditch, the Fosso della Crescenza, would have to be rehabilitated and protected from further pollution. The municipality of Rome decided to take action and launched an extensive project: A pipeline would be installed along the ditch to collect the wastewater from the settlements in the area and bring it to the treatment plant in the north of Rome.

Well-Considered Material Choice

The sewage collector needs to meet strict requirements. Since the line is installed in a protected area with high ground water levels the selected pipe system (pipes, fittings and manholes) has to meet high technical standards and be hydraulically leak-tight. The internal as well as external tightness of the line is requisite: wastewater should by no means leak into the environment and no ground-water should infiltrate the pipe to avoid a surplus of water burdening the treatment plant.

The municipal engineers in charge of the project decided for a HOBAS GRP Pipe System. Convincing factors were not only the wide product range but also the installation possibilities by open trench or trenchless, the long product life, outstanding hydraulic properties and leak-tightness. The pre-mounted HOBAS FWC Couplings connecting the pipes, fittings and manholes along the complete system have been produced to withstand the required internal working pressure of 1 bar and an external pressure of an 8 m water column. A resin rich liner on the products' interior provides excellent hydraulic performance and corrosion as well as abrasion resistance.

Efficient Pipe Installation

The first part of the installation consisted of an open trench and a trenchless section. A total of 1,200 m DN 1400, 1800 and 2000, SN 10000 was laid in open trench and 1,320 m De 2047,





Year of construction
2009 - 2011

Total length of pipeline
2,510 m

Diameter
DN 1400 - 2000

Pressure class
D_e 2047

Stiffness class
PN 1

Installation method
**Open trench,
Jacking**

Client
City of Rome

Contractor
ATI Seli SpA

Subcontractor Jacking
GE.CO.P. SpA

Advantages
Pato Srl

**Complete system (pipes,
manholes, fittings) from
one source; various
trench as well as trench-
less installation possi-
bilities; leak-tight; long
product life; excellent
hydraulic properties**

SN 32000 CC-GRP Jacking Pipes were installed by microtunneling. This latter trenchless section was constructed in two drives of 520 m and 790 m respectively. Thanks to the six-meter-long jacking pipes, the installation progressed very efficiently at an installation rate of 9 pipes per day and could be finalized within 145 days only.

Particular attention was paid to the quality of the inspection manholes of the collector and the inlets: Traditional GRP manholes were utilized for the pipeline laid in open trench whereas manholes equipped with a saddle piece were chosen for the jacking pipes. Both ensure a tight and durable pipe system.

The unobstructed implementation of the first construction stage of the Crescenza collector - not least thanks to the fast and professional work of the subcontractor Pato Srl - convinced the municipal engineers to employ HOBAS GRP Pipe Systems for the second stage as well. Works are already under way and with a product life up to 100 years HOBAS Pipe Systems will also here be in worthy service to the Eternal City.

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