Toulouse builds on HOBAS®

Cancéropôle Realized with CC-GRP Stormwater System, FR

Year of Construction
2008
Total Length of Pipe
4,550 m
Pressure Class
PN 1
Stiffness Class
SN 10000
Diameter
DN 400 - DN 1500
Installation Method
open cut
Application
SewerLine®
Developer
Le Grand Toulouse
Client
SCAM TP (GIESPER, SOGEA, EXEDRA as sub-contractors)
Advantages
chemical resistance, absolute leak tightness, long life

Cancéropôle, an exceptional center of excellence dedicated to cancer research and treatment is erected on the grounds devastated by a chemical explosion on September 21st 2001. The stormwater network of such is realized with HOBAS CC-GRP Pipe Systems.

The French city Toulouse is famous for being one of the world's top aerospace centers and home to the headquarters of aircraft manufacturer Airbus. On September 21st 2001, however, it gained notoriety when a large-scale chemical incident occurred in the southern outskirts of the city: Several hundred tons of ammonium nitrates stored in a warehouse for chemical waste exploded at a fertilizer factory. After the event, politicians, local experts and investors decided to create a medical center dedicated to both research and treatment against cancer on the former plant site. The project, that was launched in 2004, reflects modernity in its architecture and conforms with the country's current considerations such as sustainable development and environmental responsibility.

Great effort went into the clean-up operations from 2004 to 2007 to remove the hydrocarbons and other chemicals as far as possible from the contaminated soil at the site. Due to the remaining substances in the groundwater, the selection of the right material for all buried water networks was naturally extremely important. Le Grand Toulouse, as Technical Project Manager in agreement with SETOMIP, Design Engineer, decided to implement the stormwater network with one system only, namely a HOBAS CC-GRP Pipe System. Being from one source only, consistent high quality and leak tightness is guaranteed over the complete network including all involved items such as piping, fittings as well as manholes.

HOBAS Products have a wide range of advantages, which are rarely required altogether at once, as for this challenging project. Indeed their resistance to aggressive substances was particularly important.

The pipes were furthermore equipped with special nitrile rubber (NBR) couplings to ensure and maintain absolute and long term leak tightness of the complete system despite the given groundwater conditions. The light weight of the HOBAS GRP Pipe Systems was a facilitating feature considering necessary installation depths of up to 6 m. With a decline of only 2 to 3 mm per meter to the preliminary treatment facilities, the unique hydraulic properties of HOBAS products prove to be highly advantageous preventing sedimentation and optimizing the global system efficiency. Their high mechanical resistance is no surprise considering that for every project the products are designed to last a minimum of 50 years. This also guarantees a safe and reliable stormwater discharge for the Cancéropôle.

A total of 4.6 km of HOBAS Pipe DN 400 to DN 1500 were laid and no fewer than 148 different tailor made manholes were installed. On the construction site, managed by the French company SCAM TP, 5 different contractors such as SOGEA, GIESPER and EXEDRA simultaneously worked in five different places. The entire logistics were coordinated by MTP. It was the quality of their service that created a smooth workflow between all involved parties from June right through to October and therefore contributed significantly to the project's success. HOBAS Manholes are usually delivered including a ladder. Special requirements such as adapting the fixations in manhole production to fit locally provided ladders as well as extra access pipes to elongate the manholes to ground level were organized efficiently and with ease.

Once completed in 2012, Canceropôle will provide around 4,000 jobs and supported by the infrastructure from HOBAS, hopefully develop promising innovations in this field.

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