# FRÄNKISCHE

Case study

## Harrislee, B 200 reconstruction

- Kupfermühle border crossing



RigoCollect® stormwater retention with SediPipe® XL 600/12 as a pretreatment system



Agrar GaLa-Bau Industrie Umwelt

#### Products: -

RigoCollect system consisting of:

- 805 Rigofill inspect
- 5 QuadroControl
- Impermeable plastic geomembrane 2 mm thickness
- 1 SediPipe XL 600/12



### Harrislee, B 200 reconstruction – Kupfermühle border crossing

Following the dismantling of the old customs yard at the Kupfermühle/Kruså border crossing point, the extensive redesign of the border crossing area had been planned.

In the course of this rearrangement, it was necessary to create a retention volume of approx. 300 m³ by means of a predetermined discharge volume limitation to 25.0 l/s for the stormwater.

The local space conditions did not allow the implementation of this volume above ground. For this reason, an underground retention system was opted for. RigoCollect stormwater retention basins constitute a flexible alternative to traditional retention facilities such as concrete tanks. Advantages regarding confined spaces, short construction times, construction effort, accessibility, and costs made the decision to go with the RigoCollect system an easy one.

SediPipe XL 600/12 was installed as a pretreatment step to clean the polluted stormwater runoff. The sedimentation system was structurally arranged upstream of the RigoCollect basin. The system is very user-friendly in terms of maintenance intervals and implementation – this can be done completely from outside.

#### RigoCollect stormwater retention basin:

The design was implemented as a RigoCollect system consisting of Rigofill inspect storage blocks and QuadroControl shafts, wrapped in impermeable plastic geomembrane. The throttled discharge is controlled via RigoLimit V, a downstream vortex throttle shaft.

Due to the inspection tunnel integrated in the blocks as well as access via the system shafts, the complete system can be accessed and inspected by means of CCTV inspection equipment. There is no need to enter the basin for inspection and cleaning.

For the customer, this means: One contact partner and compatible systems for the tasks of stormwater "treatment – storage – discharge".

#### Facts & figures

- Basin size approx. 300 m³ net volume 64.80 m x 8.00 m x 0.66 m
- Stormwater pretreatment with SediPipe XL 600/12 Throttling 25 I/s with RigoLimit V
- Execution September 2016 Construction period: 3 days

#### Organisation & execution -

#### Customer/builder

Regional road construction and transport authority *Landesbetrieb Straßenbau und Verkehr Schleswig Holstein* Schleswiger Str. 55, 24941 Flensburg/Germany

#### **Planning**

Regional road construction and transport authority *Landesbetrieb Straßenbau und Verkehr Schleswig Holstein* Schleswiger Str. 55, 24941 Flensburg/Germany

#### **Building company**

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