



Main Sewer West, Heidelberg (D) Compensation Grouting

Employer	Abwasser Zweckverband Heidelberg (Intermunicipal Sewage Utility)
Client	Sonntag Baugesellschaft mbH & Co. KG
Execution of works	Renesco GmbH, Abt. Marti Geotechnik
Construction Period	April – June 2015
Contract Sum (grouting only)	€ 300.000

Project Description

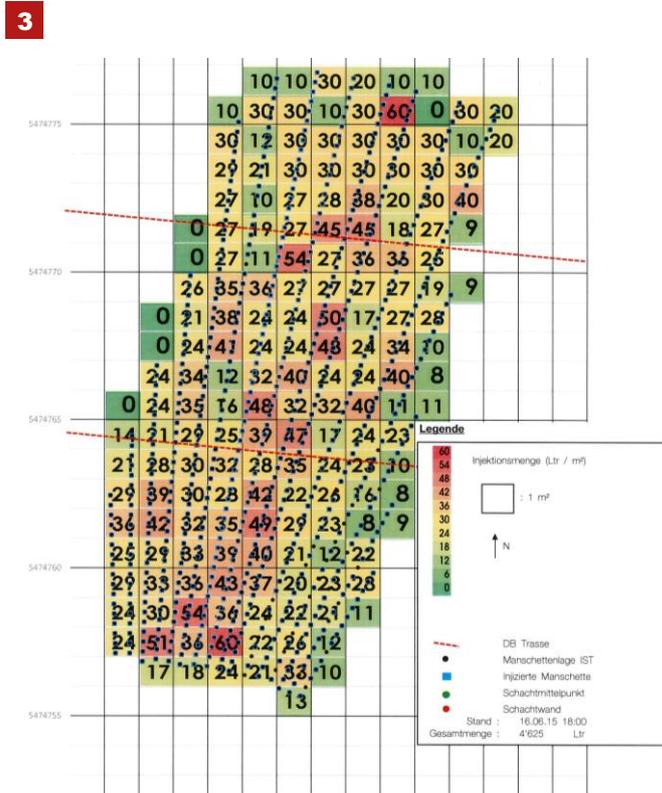
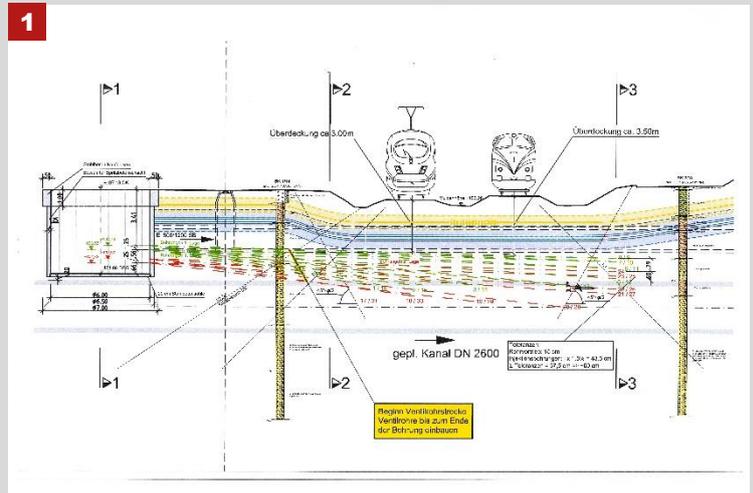
A new main sewer is under construction in Heidelberg. The pipe jacking drive for the DN 2600 sewer crosses below the railway line bound for Frankfurt/Main. To counteract the volume loss settlement resulting from the jacking operations, grouted umbrellas were installed below the track.

Compensation Grouting

The project involves the performance of compensation injections to eliminate the risk of damage due to jacking-related settlement. The systematic injection of special grout formulations serves to consolidate the ground and allow the controlled lifting of the overlying structures. The use of measurement systems to monitor deformation is imperative. Grout injections can be performed both during and after the pipe jacking operations to ensure prompt compensation for any occurring settlement.

Scope of works

700m injection drillings from a shaft, Installation of a grouted umbrella with microcement, compensation grouting under railway track using special grout.



1. Longitudinal section of grouted umbrella
2. Grouting shaft
3. Diagram of grouting results