



SITE REPORT



TERRA-MIX

CARRIED OUT: JANUARY – APRIL 2008
PROJECT: S33 KREMSER SCHNELLSTRASSE
OWNER: ASFINAG BAU MANAGEMENT GMBH.
GEOTECHNICS: GEOTECHNIK ADAM ZT GMBH.
AREA: 25.000 m²

Job Definition:

For the construction project S33 Kremser Schnellstraße an alternative concept to the planned soil improvement scheme of vibro compaction with stone columns was to be sought.

The soil improvement as planned required to reduce the anticipated settlements of the bridge abutments and the adjoining sections of the road embankments to a minimum. The subsoil consisted mainly of sandy silt. The groundwater level is about 1 to 2m below formation level.

Solution:

Univ. Doz. DI. Dr. Tech. Dietmar Adam worked out an alternative concept of soil improvement using Rapid Impact Compaction. After the construction of a trial area for the purpose of calibration the grid pattern and the number of compaction passes for the work was established.

In this way an optimum transition from the bridge abutments to the adjoining sections of the road embankments could be achieved.


Results:

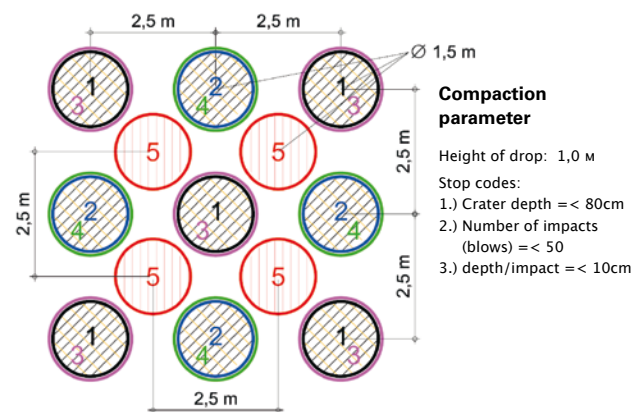
This alternative soil improvement scheme using the low resource Rapid Impact Compaction was classified in this case to be technically equivalent to a deep vibro compaction with stone columns.

The settlements due to consolidation could be fore-stalled to a great extent. Accordingly smaller and more uniform settlements and settlements gradients will be experienced and thereby the serviceability of the relevant bridges and road sections will be assured.

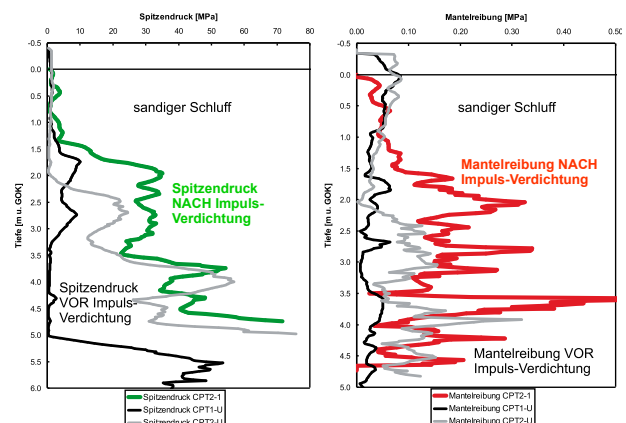


Working steps:

- ①... 1. Transition filling in  ⑤... Finish filling in 
- ③... 2. Transition filling in  Drum compaction



Donaubrücke Traismauer BL Nord – Probefeld 2, CPT



WE COMPACT SOILS

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