

Most Hipodrom

country: Czech Republic

realization: 2005

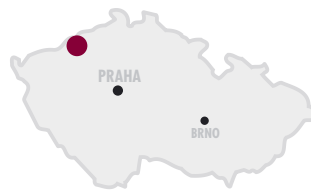
material: Kortex® GTPP 60/60

..... 29.700 m²

KORTEX® GTP P

woven geotextile from PP tapes or strings for soil reinforcement, separation and filtration

purpose of usage:
soil reinforcement to improve the bearing-capacity to levelling irregular settlement



The project of Hipodrom Most was prepared on the basis of appeal for removal of damages in Ústecký and Karlovarský regions caused in connection with mining activities of the state brown coal mining companies. The area of interest is situated within the area of horse racecourse which is situated in the north up to north-west part of external Velebudická discharging hopper. Rectification of defects resulting from settling of the surface of the discharging hopper by replacement of the structural layers of the training course is assumed within the framework of this project.

The training course is situated in the south from the main racecourse within the area of approximately 43 ha. The total length of the racecourse is 4,885 metres, its width is 6 m.

The existing structural layers will be removed and replaced by new layers (see the composition). Reinforcing polypropylene geotextile **Kortex® GTPP 60/60** was spread and stretched over soil. Crushed gravel (grain size of 0-63) with thickness of 450 mm was spread and compacted on it in two layers. Screened quarry material (approx. 15 kg/m²) was applied in order to seal the surface. Sand layer with thickness of approximately 100 mm was applied between it and rubber crump layer.

Composition:

- Rubber crump preventing in sand freezing in winter (top layer)
- Sand (100 up to 120 mm)
- Screened quarry material 15 kg/m² (to seal the surface)
- Crushed gravel 0-45 (200 mm)
- Crushed gravel 32-63 (250 mm)
- Geotextile **Kortex® GTPP 60/60**
- Pre-compacted formation



Kordárna, a.s.

696 74 Velká nad Veličkou 890

Czech Republic

tel.: +420 518 312 400

+420 518 312 407

+420 518 312 433

fax: +420 518 329 240

email: sales@kordarna.cz

internet: www.kordarna.cz



Factory Production Control
Certificate 0799-CPD-19



Engineering-geological conditions:

The foundation conditions of the object of interest are represented by Velebudická discharging hopper of the North Bohemian brown coal mining district. The hopper was built between 1955 and 1995, in the area of the racecourse then in the 60s and the 70s. The hopper was founded without survey as well as without base preparation. Mainly top neogenous clays of a piece character from removing cuts formed founding material.

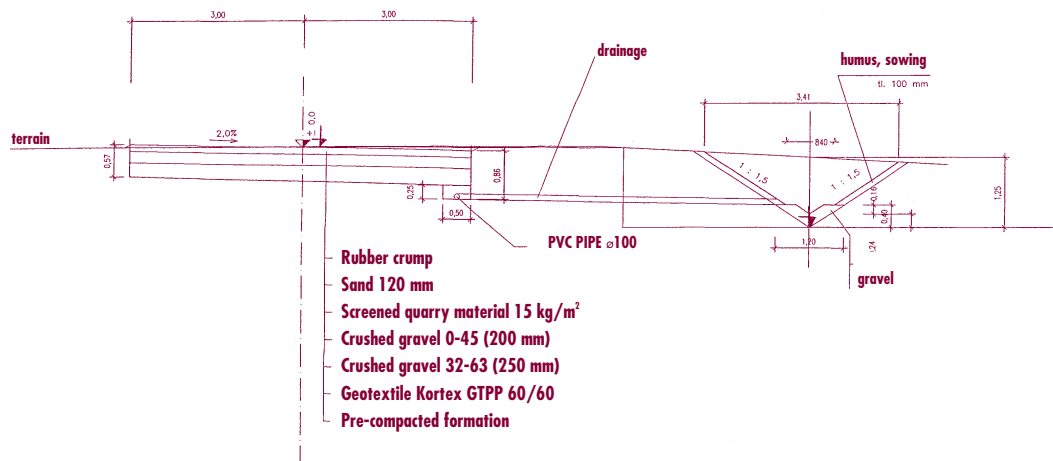
It is deduced from the assessment of the results of the monitoring survey of the discharging hopper that the locality is conditionally suitable up to unsuitable with respect to assumed secondary horizontal deformations, the construction site belongs to the category of constructions with complicated foundation conditions and geo-technical quality of soils in the sub-base of the future construction is very low. As this is a relatively consolidated hopper, heterogeneous area of fading out deformations is concerned.

Benefits of implementation:

The reinforcing polypropylene geotextile **Kortex® GTPP** with strength of 60/60 spread on the ground after removal of the top layer increased soil load bearing capacity and reduced uneven settling resulting from unfavourable geological conditions in a sufficient extent.

Modification and improvement of the technical condition of the training course resulted in improvement of conditions for horse training especially thanks to increased safety of both horses and jockeys.

The modification allowed also to organize a broader range of activities throughout the year regardless of weather conditions (treatment of the top layer of the racecourse with rubber crump) and in increasing number when operation need not to be limited because of poor technical condition of the racecourse.



investor:

Hipodrom Most a.s.

designer:

Báňské projekty Teplice a.s.

contractor:

DTS Vrbenský a.s., Most

realization:

2005