Route II/502

Nová Bystrica – Oravská Lesná

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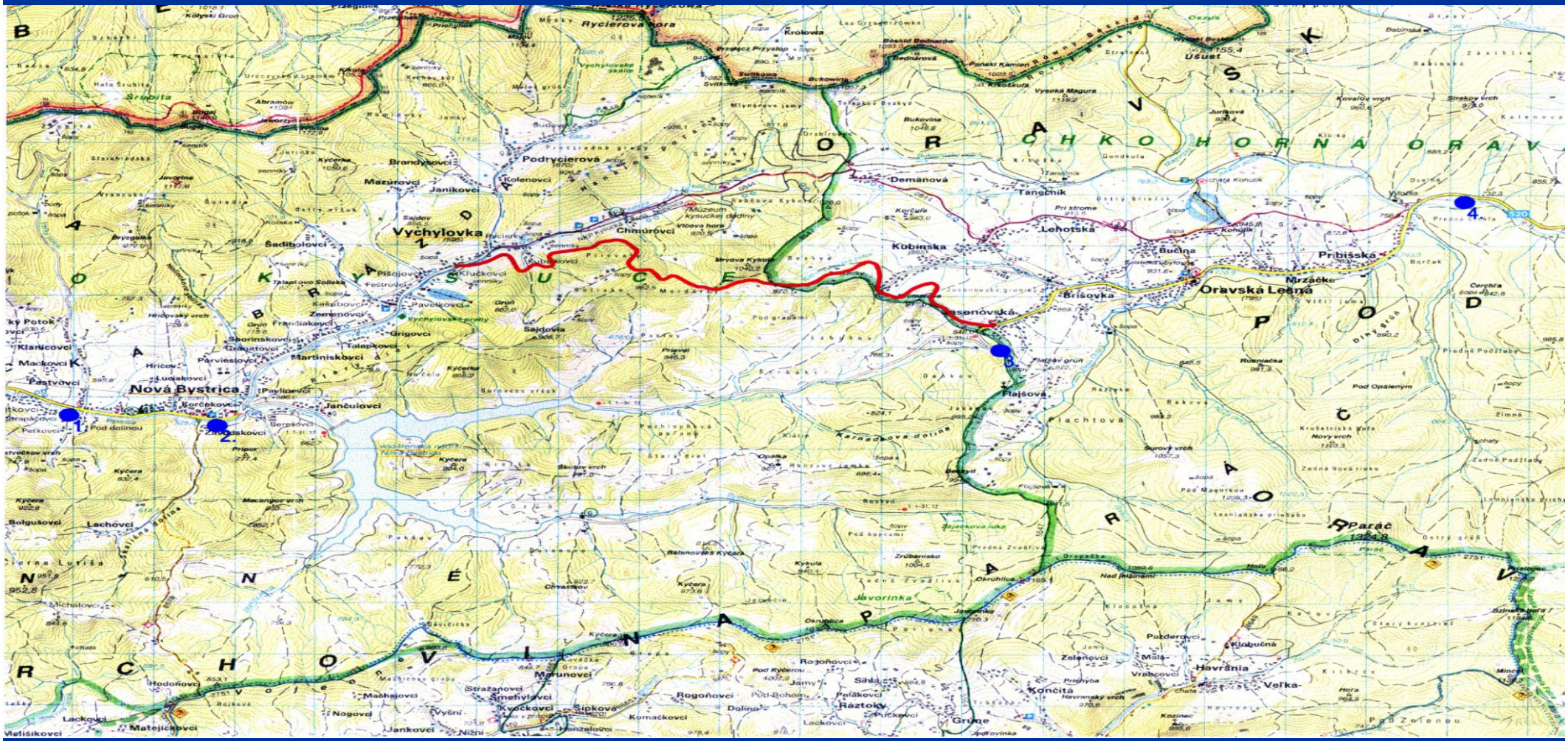
Geotechnical excursion, 19.-21.04.2012

Main data

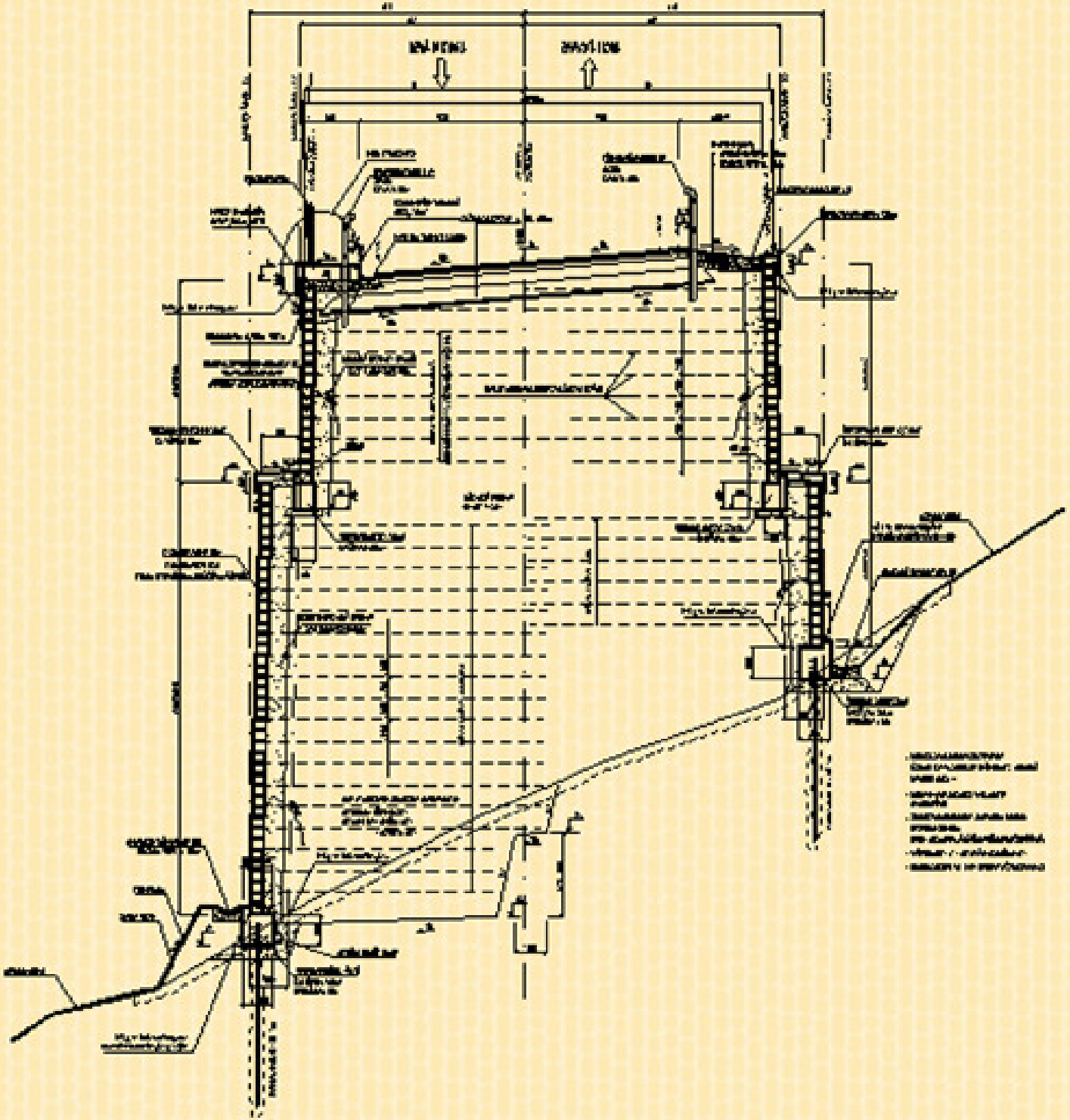
Length:	9,445 km
Kategory of the route:	C 8,5/500
Exceeding:	330 m
Altitude:	600 – 930 m.s.l.
Design speed:	40 km/h
No. of bridges:	11
No. of objects:	60
Construction period:	2004 - 2008


Nová Bystrica
Vychylovka
Oravská Lesná
Javorinka
Parač
1
2
3
4


Increasing the stability of slope by stone ribs


Supporting the route by retaining structure from the air side

Supporting the natural slope by reinforcement and anchoring

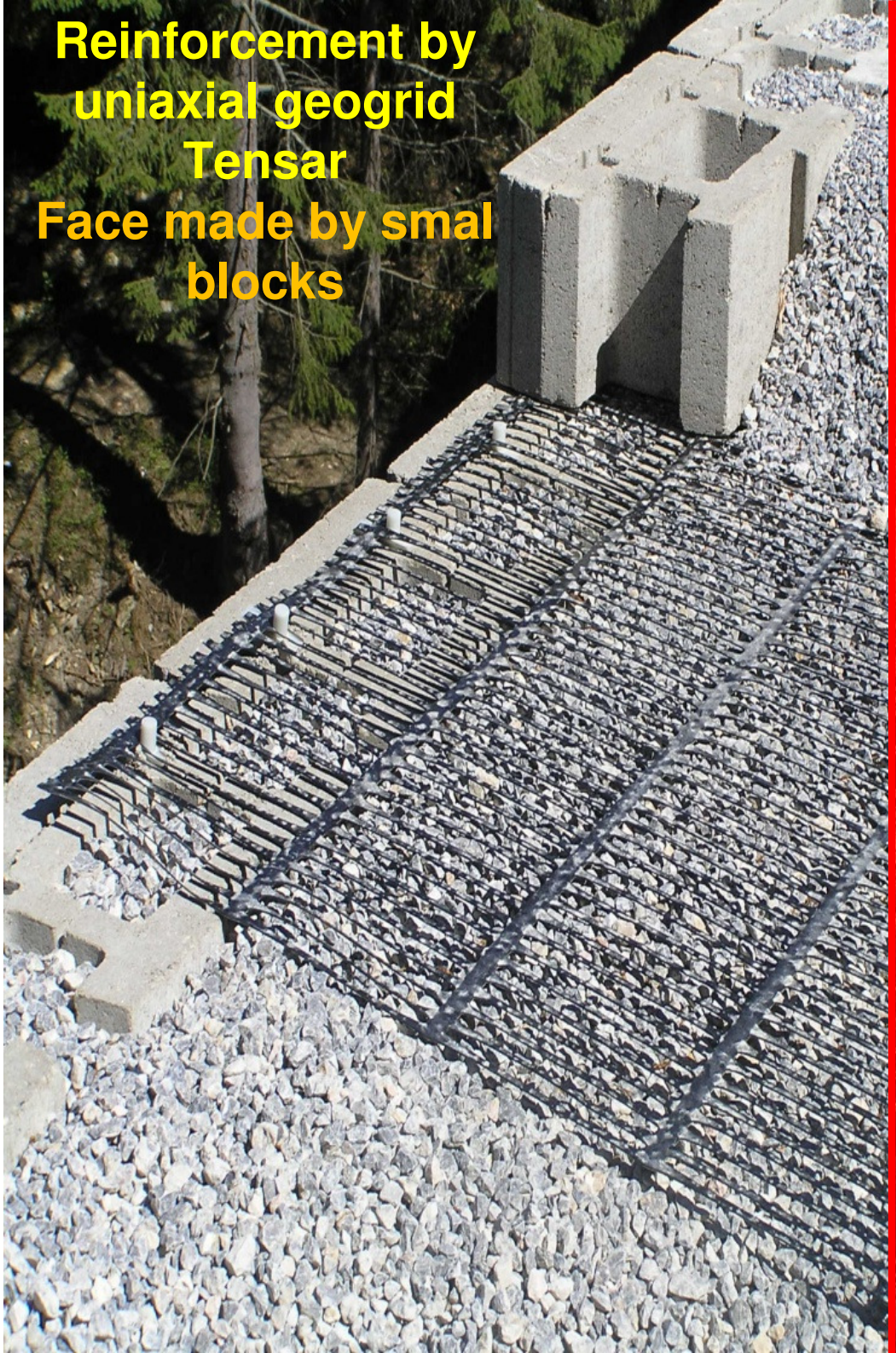


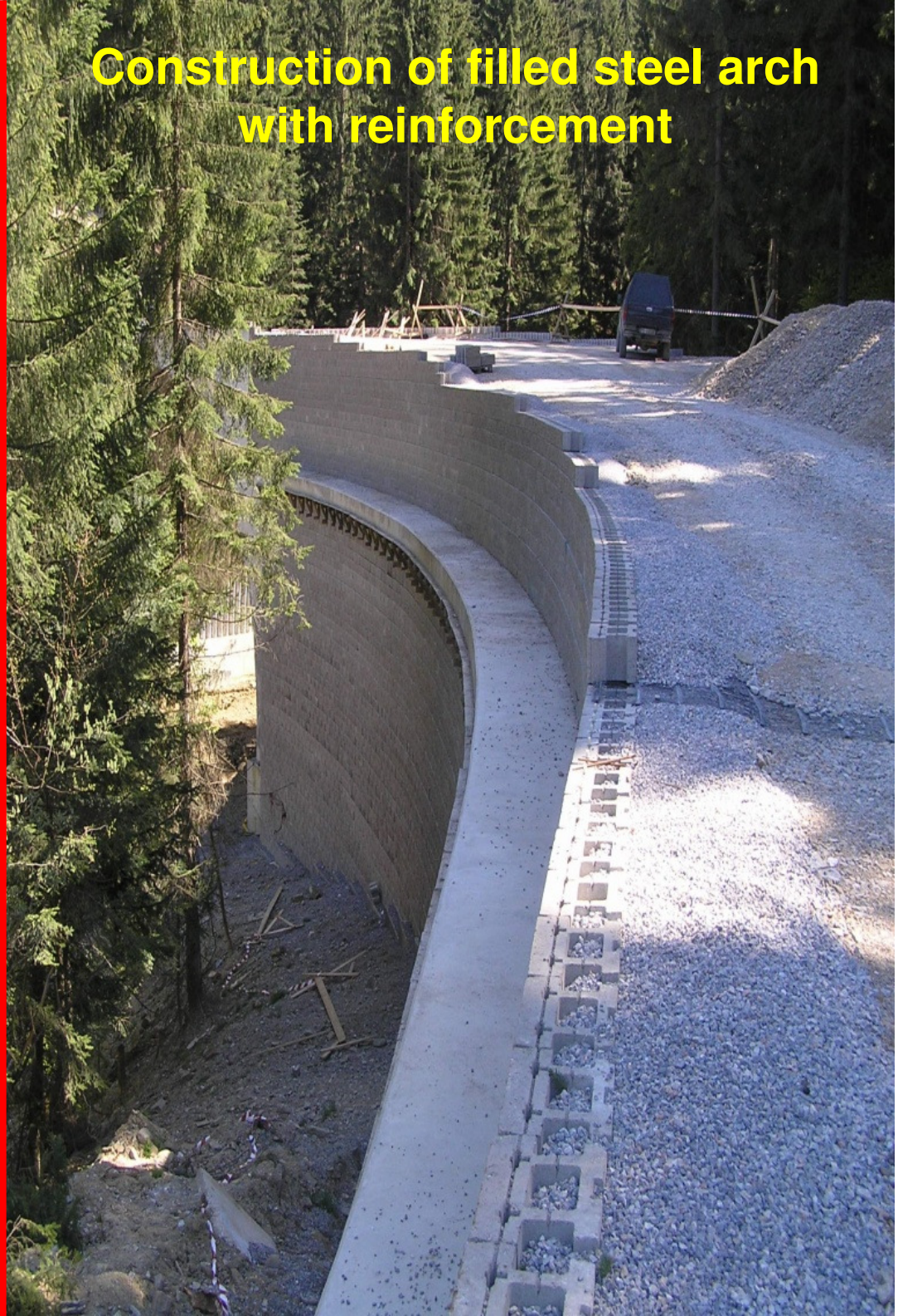
Cross section of filled steel arch with reinforcement using geogrids

Construction stages of reinforcement steel arch

Joining of concrete panel to steel arch

Starting reinforcement geogrids


Reinforcement by
uniaxial geogrid
Tensar
Face made by smal
blocks

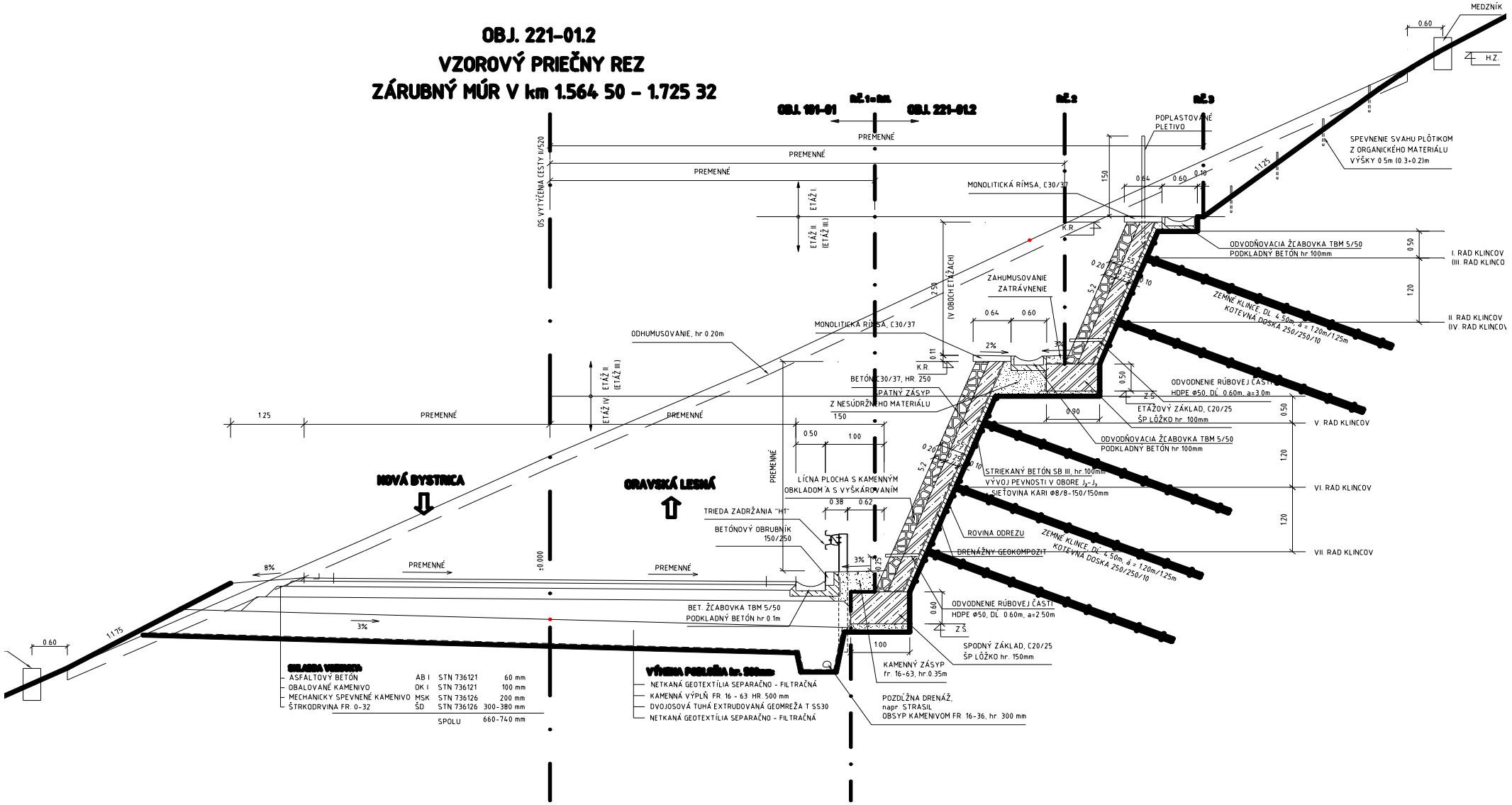

Construction of filled steel arch
with reinforcement


The „bridge“ structure

Filled steel arch with geosynthetic reinforcement

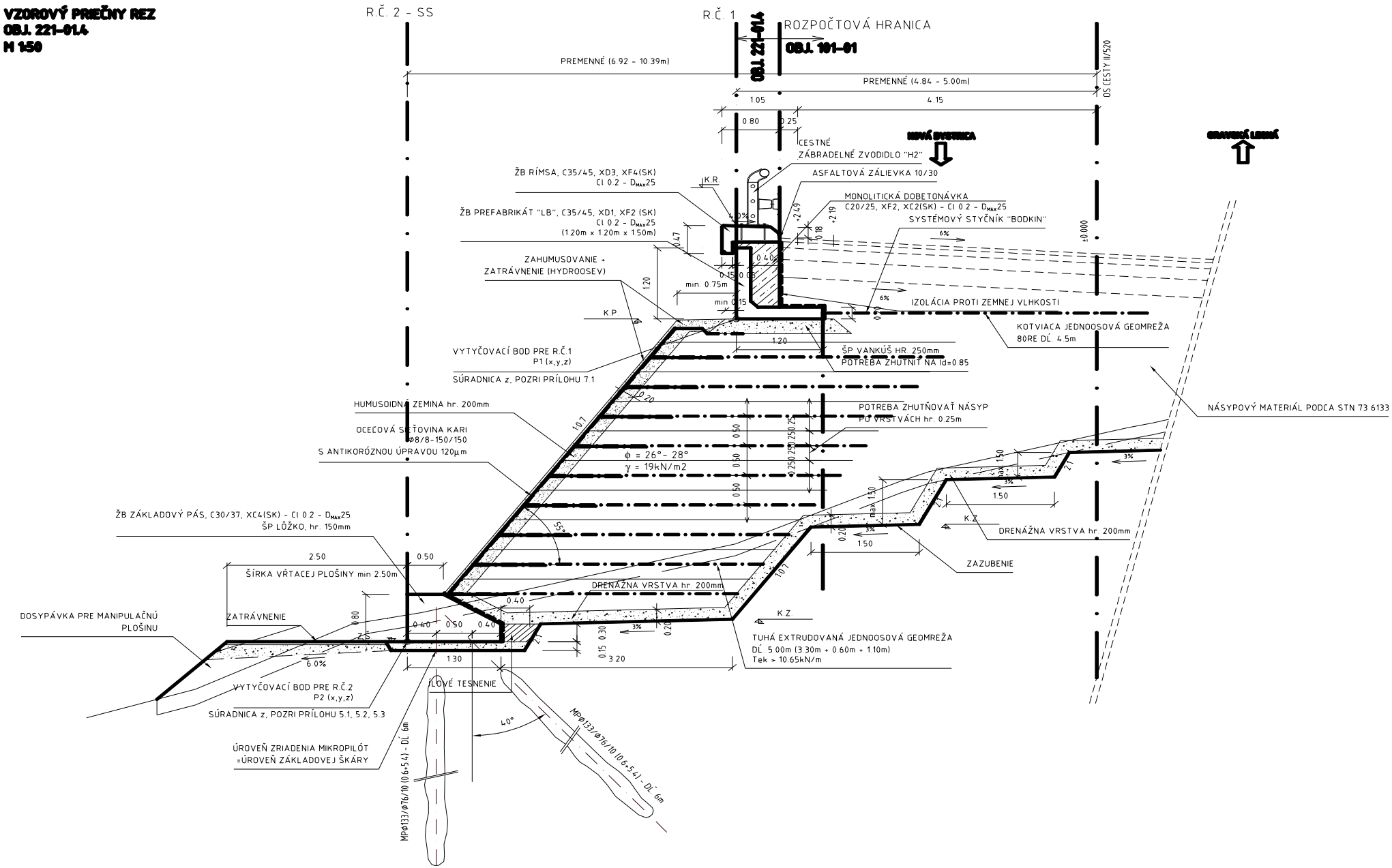

Below the „bridge“

Typical cross section of soil nailing



The slope supported by soil nailing

Typical cross section of reinforcement embankment



Reinforcement of slope by geogrigs and anchoring above

Multi level retaining wall

Rock ribs and anchoring

Anchoring of the slope parallel to bridge


Dewatering of the slope

Km 8.0 – 9,45: subgrade of the route created by soft clays

Improving the subsoil by geogrids

Km 8.0 – 9,45: Dewatering ribs

Finishing of the route