

# **RAILWAY BRIDGES UNDER VYŠEHRAD**

## **Verbal evaluation of Concepts**

### **CONCEPT NO. 2**

#### **TRANSPORT SOLUTION**

Less suitable design of platforms, platform edges and track layout of the Výtoň stop with an unseparated non-boarding edge of one of the platforms and a more distant location of the island platform in the curve means worse public transport transfer links. At the place of the stop, it does not follow the proposed GPK solution – a consequence of the 3+0 bridge layout and the necessity to move the platform. The bicycle and pedestrian transport in the direction of Smíchov and Výtoň is designed appropriately, being connected to the street network in a barrier-free way. There is no direct connection between the platform and the footbridge.

#### **ARCHITECTURAL AND URBAN DESIGN**

From an architectural point of view, it is a too robust structure, which does not have a very urbanising effect in the given location. The design of the sloping footbridges is also debatable in the views of the bridge. From an urban perspective, it does not develop the wider area too much, which thus preserves the character of the railway connection, and therefore it is necessary to finalise and display the design of the bridgehead in the entire area under consideration. The effort to use the current bridge structure, which is proposed to be moved two blocks to the north, is perceived positively, but it is not very convincing from a traffic and urban planning perspective.

#### **FUTURE OPERATION**

Standard and functional design of the contactless track – track bed. The track bed with an anti-vibration mat reduces noise, which is perceived positively. The functional and robust structure with good operational safety in an emergency situation is evaluated very positively. The three-track layout on a single bridge structure may be less suitable for maintenance during closures. Overall, the design looks very appropriate in terms of future operation, with the partial reservation above.

#### **TECHNICAL PARAMETERS**

A trio of identical bridge structures with the advantage of repeatability of elements is a prerequisite for simpler construction and easier subsequent maintenance. Standard and proven construction details are also a prerequisite for low maintenance requirements. The girder with reinforced arch is a proven and effective technical solution. The existing pillars that have been used have a new storage threshold.

#### **RESTRICTIONS DURING CONSTRUCTION**

One three-track structure with the option of using the displaced existing bridge structure, where the zero-track traffic condition is for a relatively short period of time and is therefore preferable to the other Concepts in the 3+0 layout.