Building the SBB Diameter Line in Zurich

Zurich's Diameter Line will help to secure sufficient railway capacity at Zurich Central Station and throughout the city of Zurich for the next several decades. The expansion and renovation work at the Diameter Line's Oerlikon Cut represents one of the most complex site-specific railway construction projects in all of Switzerland. After assuming responsibility for overseeing the project on behalf of the commissioned engineering consortium, EBP played a leading role in the planning and development of Segment 4 (Oerlikon Cut).

Segment 4 of the Diameter Line (Oerlikon Cut) is the location at which the two tracks of the new Weinberg Tunnel were linked to the existing track system in front of Zurich's Oerlikon Station. The scope of the work included the realization of numerous auxiliary structures (including a rescue and technical building, the tunnel portal, underground support structures, retaining walls and replacement bridges) and the complete renovation of the track yards and their drainage systems over the course of more than 20 construction phases – and this without interrupting the daily schedules of around 800 trains. The Zurich Oerlikon Station was also expanded through the addition of two new platforms (7 & 8). In Segment 4, thisThis also included the installation of the corresponding access tracks in Segment 4.
Progress at the site of the Oerlikon Cut from the beginning of 2007 included the realization of a micro-tunnel for the 132-kV power lines, several support walls (one measuring up to 100 feet), the replacement of a pedestrian bridge and a road bridge, the portal for the Weinberg Tunnel and the 8-story rescue and technical building. The interior of the rescue and technical building and the 1,500-foot underground support structure

Client

Swiss Federal Railways (SBB),
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Facts

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Project Country	Switzerland

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were completed by the end of April 2013.

Development enabled by comprehensive track renovation and relocation

All of the tracks at the Oerlikon Cut were completely renovated or relocated to create space for the construction of the numerous support walls and the new track yard.
The realization of all of the auxiliary structures and the renovation of the track system took place over more than 20 construction and operation phases. Most of the work on the auxiliary structures was completed by the end of 2013.
The track yard (between Regensberg Bridge and Oerlikon Station) was renovated in 2014 and 2015, with the tracks themselves being lined up with the two additional platforms at Oerlikon Station.
Playing a lead role in the INGE LHL+ engineering consortium, EBP assumed responsibility for the project's planning and execution.
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