

1. Istanbul airport express line: Design and built of the new strategic mass transit underground connection system

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Abstract: The growth of the Turkish infrastructures continues its ascent. In this scenario the Gayrettepe–Istanbul New Airport line covers the role of main strategic public transportation link under construction. The main purpose of this line, located on the European side of Istanbul, is to provide direct and quick connection from the city center to the largest hub airport in the world under construction, with 200 million annual passengers. The 38 km long twintube line, other than service/emergency stations and crossover structures, includes underground stations located in urban, suburban context and terminals area. Among several complexities which have been successfully solved during design and construction stages, the attention is mainly focused on Kaithane station, a cut & cover box excavated in sensitive geomorphological area in heterogeneous grounds and on the rectification design for M10 crossover cavern, developed to minimize the impacts on the construction schedule of the new airport. © 2019 Taylor & Francis Group, London. (2 refs)

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