



GRANDE VIABILITA' DI TRIESTE

II Stretch – III Lot - Italy, 1996

PROJECT CHARACTERISTICS

Works: Motorway extension including a 4 lanes, 240 m long artificial tunnel, 2 curved viaducts 340 m long with 5 spans 50 and 80 m in length, 1 two lanes and 1 three lanes tunnel each 2700 m long in karstic rock. Three intersections including various structures such as artificial tunnels, soil reinforced slopes, concrete flyovers, anchored walls.

Purpose: connection between the A4 motorway and the freeway reaching the port of Trieste.

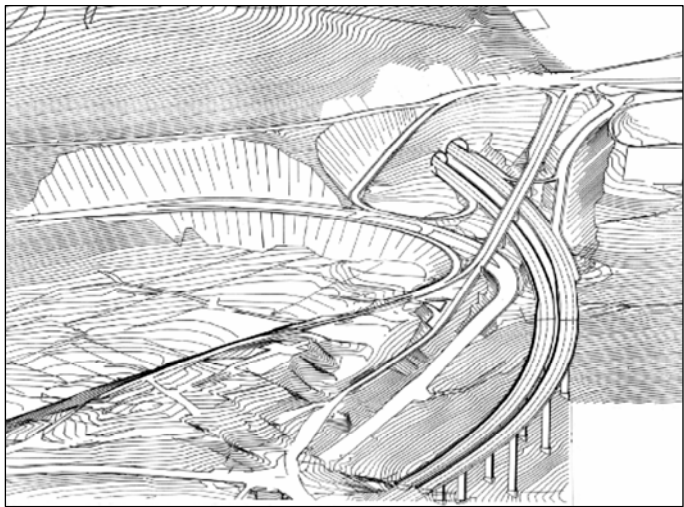
Dimensions:

- *Cross width:* 10.0 ÷ 12.75 m
- *overall length:* 4800 m for the upward carriageway and 4750 m for the downward carriageway

Project costs: 85 000 000 US \$

PROFESSIONAL SERVICES PERFORMED

In association with Scott Wilson and Kirkpatrick. Preliminary design for tender including quantities take-off and detailed cost estimate. Impact evaluation and landscape blending study.



The Trieste Municipality, in 1996, tendered the design of a stretch of the Grande Viabilità Triestina to connect the A4 Motorway to the Freeway descending from Cattinara to the port of Trieste and the sea front.

The area object of the preliminary design is part of an environmentally valuable karstic region. Intense traffic on the existing roads, mountain morphology and the need to safeguard built-up areas and landscape posed many restrictions to the layout. Soil reinforced slopes were adopted, where possible, to minimise the environmental impact, to limit expropriation and to reuse tunnel muck. An incremental casting viaduct was designed with 80 m long spans and intermediate temporary supports. A computer assisted 3D rendering of all major intersections was used for impact study and define attenuation measures.

