



NEURON 4 CONSULT ZT
PELIKANSTR.18, 4061 LINZ-PASCHING, AUSTRIA

PELJESAC BRIDGE, CROATIA **STRAIT CROSSING MAINLAND- PENINSULA PELJESAC**



CLIENT : CROATIAN ROADS LTD. / HRVATSKE CESTE DOO

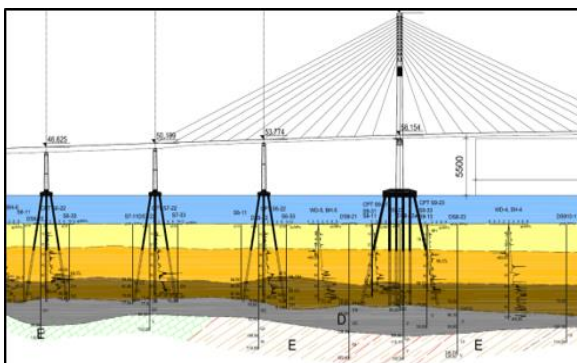


3 D VIEW

PROJECT DESCRIPTION

The 2,440 km long bridge crossing from mainland to peninsula Peljesac is the road project that secures the territorial integrity and connection of two parts territory in Croatia. The bridge is located on a state road from Split to Dubrovnik and enables direct connection to the southern border of Croatia toward Montenegro, avoiding a break of border due to the approach to the Adriatic sea of the Bosnia and Herzegovina, in vicinity of the city Neum. The entire project is in the amount of 85% financed by the European Union funds.

The bridge is planned as a multi span extrados cable-stayed bridge with 5 middle spans of 285 m length each. The bridge deck girder is designed as trapezoidal steel hollow box, more than 55 m above the sea level, average sea depth is about 27 m and in cross section carries 4 traffic lanes. The location of crossing is in the zone with highest average temperatures, strongest seismicity level and highest wind speeds in the country. Foundations are designed for 12 columns whereas 10 columns are to be constructed on deep steel piles with max. length of 125 m and with 2.0 m steel casings diameter. Geological profile of the sea bed shows layers of soft sediments down to the depth of 90 meters below the sea bed and afterwards the start of limestone formations. Construction costs : 270 mill. EUR.



LONGITUDINAL SECTION OF ONE PYLON



STEEL CASINGS OF PILES DOWN TO 120 M DEPTH

SERVICES PROVIDED

"Independent Checking Engineer" activities included checking of the main design of the project including superstructure, substructure and foundations with respect to the mechanical and stability resistance of the entire structure, materials and technologies described within design. Checking has included development of parallel numerical models of entire bridge structure as well as partial numerical models for some parts.

Period of activity : 04.2015 – 03.2016