STAKEHOLDES IN REALISATION OF THE PROJECT OF MOTORWAY RIJEKA-RUPA-ŽUTA LOKVA

GOVERNMENT OF THE REPUBLIC OF CROATIA MINISTRY OF THE SEA, TOURISM, TRANSPORT AND DEVELOPMENT

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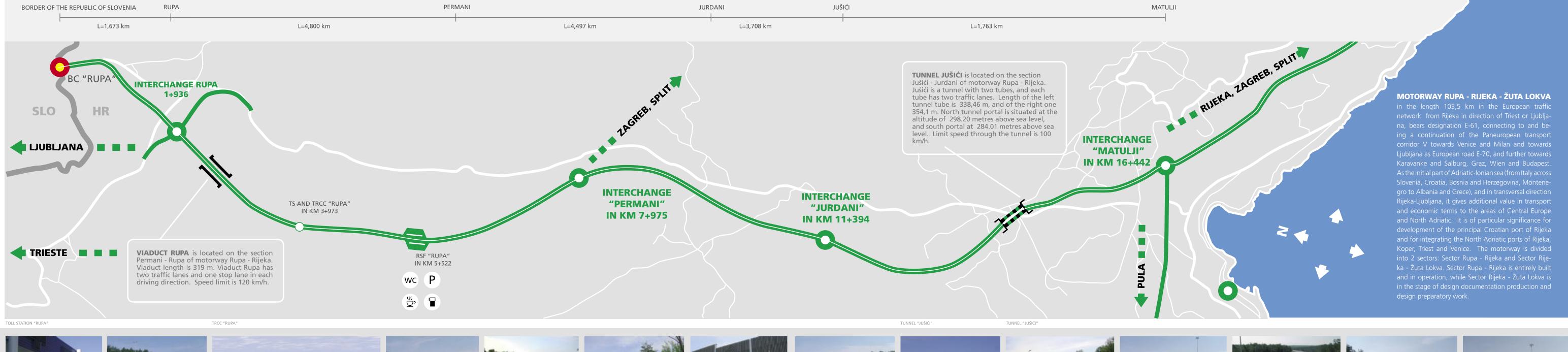
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ENVIRONMENTAL PROTECTION MEASURES

For Rupa - Rijeka sector, the environmental protection measures have been enforced in conformity with the Environmental impact assessment study conducted by the Ministry of environmental protection and physical planning. The majority of safeguard measures enforced is related to the following fields:

1) SAFEGUARD MEASURES RELATED TO FAUNA

In order to render possible migration of animals, and on grounds of movement corridors established by the Environmental impact studies, three passages for game have been constructed: -game passage 13+080,00 (span I = 8,6 m); -passage beneath viaduct "Rupa" 16+875 to 17+175; -game passage 18+860,00 (span I = 8,6 m).

2) WATER PROTECTION MEASURES

Water protection measures enforced along the entire motorway course are aligned with the Environmental impact studies and special construction requisites issued by Croatian waters (Hrvatske vode). Accordingly, the enclosed watertight system of water drainage from carriageway and all ancillary areas within the system of motorway was built with the aim of protecting waters of the region along the entire route extending over total length of 16.4 km,. Described drainage system consists of side ditches, gulleys, inspection manholes and sewerage collectors, by which water is transported to water protection facilities - oil and fat separators in which they are treated prior to controlled discharge into the environment.

For ancillary service facility (ASF) and the traffic regulation arranged for the infiltration facilities. and control centre (TRCC), envisaged are separate drainage distribution systems: conditionally pure roof waters are freely discharged into the environment, oily waters from traffic surfaces are collected by enclosed watertight drainage system and treated in oil and fat separator, while sanitary-faecal wastewaters are collected separately in an enclosed watertight drainage system and prior to discharge into environment they are additionally treated in the biological treatment plant.

Within the internal motorway drainage system described and built as above, in one direction of a motorway, the following facilities are built: 14 separators, 1 biological treatment plant

3) NOISE PROTECTION MEASURES

One of the negative impacts of motorway construction is increase of the noise level in the immediate surroundings. In Environmental impact studies, corridors of abt. 350-400 m are considered (depending on average annual daily traffic, on design speed on the motorway, on the road rank, type of pavement structure, and longitudinal inclination thereof), defining locations where in higher stages of design documentation production and on the basis of calculations, a need for constructing noise protection barriers has been ascertained. Design docu-- biodisc, 5 seepage trenches, and 13 sinkholes in total are mentation defines the need for constructing noise protection

barriers on the following sections: Jušići - Jurdani (4 sites), Jurdani - Permani (3 sites) and Rupa - Slovenian border (1 site). Noise protection barriers are constructed in entirety in the total area of 4.503 m², and for the sake of landscape integration, wood and transparent protection panels have been used.

TRAFFIC CONTROL AND REGULATION SYSTEM

The automatic traffic control and regulation system has been established consisting of measuring, control and signalling

At all the sites of possible variations of driving conditions: at interchanges, in front of tunnels, in zones of viaducts and bridges, in the zones with frequent incidence of fog or strong wind, variable circulation fixtures and measuring devices have been installed. Measuring stations have been installed which measure meteorological characteristics of the environment and state of the carriageway, rendering possible the immediate reaction of the maintenance service and automatic information dispatch in the form of warnings or restrictions for the drivers through the system of variable light circulation fixtures. Variable circulation fixtures and measuring devices are in-

stalled at all the points of possible changes of driving conditions; at interchanges, in front of tunnels, in the zones of viaducts and bridges, in the zones of frequent incidence of fog or strong wind, etc. Also fitted are video cameras rendering possible the display of situation on monitors in the traffic regulation and control centre (TRCC), and having also the possibility of automatic detection of congestion, driving in opposite direction, reading off the number, type and driving speed of the vehicle. Detector loops, with the data from automatic video system, provide complete data to the traffic centre with the aim of preventing congestion. Users also have at disposal the system of telephone call posts along the entire motorway by means of which the TRCC

operator may be notified and sought assistance from in the

case of breakdown or accident.

