



Integral approach to the design of stormwater drainage in the town of Pula

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ABSTRACT

The Town of Pula is one of the largest coastal towns in Croatia. Compared to similar towns in the region it has the lowest average amount of annual precipitations, but has the most problems with stormwater drainage. There are several reasons for this – starting with the complex terrain topography that was overlooked in the creation of spatial and planning documents, the unplanned construction of urban facilities in the town areas that would, in their natural conditions be flooded and long ago overloaded town sewer network. Expansion of the town of Pula, wasn't followed by the development of its infrastructural systems for reception, drainage and the disposal of its stormwaters, resulting in ever growing stormwater drainage problem. The new drainage concept of the analysed area of Pula, in accordance with modern world trends, has radically changed its existing approach – stormwaters tend to be kept and, in as large quantities as possible, treated in the place they appear in the watershed. As well as this, the project will present the results of analysis of natural influences that have a dominant importance for the stormwater drainage procedure – initially the characteristics of the phenomenon of short-duration yet heavy rainfall and sea level movements as well as their trends. Above all, we have tended to minimise the quantity of stormwaters by holding and further infiltrating them in the terrain. Special emphasis is placed on dislocated solutions of stormwater drainage in natural depressions of suburban areas and special measures have been taken with regard to the organisation of these areas as well as the need to allocate such an area by means of spatial planning of their provisional retention.

KEYWORDS

town of pula, flooding, infiltration, local government regulations, urban stormwater system, wsud