

# Technical Plan for the Realization of Five Footbridges in the Ring Road of Catania

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## Summary

In this article we want to analyse the design of five footbridges in functional adjustment of the ring road of Catania, in Sicily. In case of earthquake are necessary planned interventions: for this reason some flyover will be demolished to restore the road system with the creation of ring junctions. However, when the project will be ended, the city will be divided in two areas for the lack of pedestrian links between the south and the north of the road system. The goal of our study is to create a link between this two areas of the city, that will be separated with the creation of the new ring road.

**Keywords:** footbridge, conceptual design, structural design, aesthetics, landscape

## 1. The place

To attain this goal, some areas of the city was picked out like ideal sites where create the footbridges, that will insure the improvement of the road system and that will characterize the town, becoming the symbol of contemporaneity.

The areas find out to construct these structures are: the “Nesima” quarter; the “University City”, near the church “Nostra Signora di Lourdes”; in the junction of “Doca degli Abruzzi” way, the “Vagliasindi” way and the Vittorio Veneto” way; and the commercial area “Nodo di Ognina”.

The following architectonic structures, that will be presented, will create the new kind of way of communication.




*Fig. 2: local landscape*

## 2. Footbridge Nesima

The footbridge in the “Nesima” quarter will be an element of street furniture, an intervention with the goal of characterize the site and to become a symbol. The project follow the guide-lines for the rehabilitation of the pedestrian urban area in the rest of Europe, using ramp to avoid the used of every kind o mechanics equipment, removing the consequent problem caused by the expensive cost of their maintenance. Moreover, it has been thought a system of parapets that allow the creation of spaces appointed for advertisement, city occurrence and the application of solar panels. It is a over bridge, supported by a system of ropes linked of a spindle-shape pole and the lateral limbs of the deck. The shape of the deck become a dynamic helical footbridge that enclosed the existing rocky outcrop making a trajectory of 360°, pointing out this natural element, respecting also the characteristics and the historical aspects of the site.

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