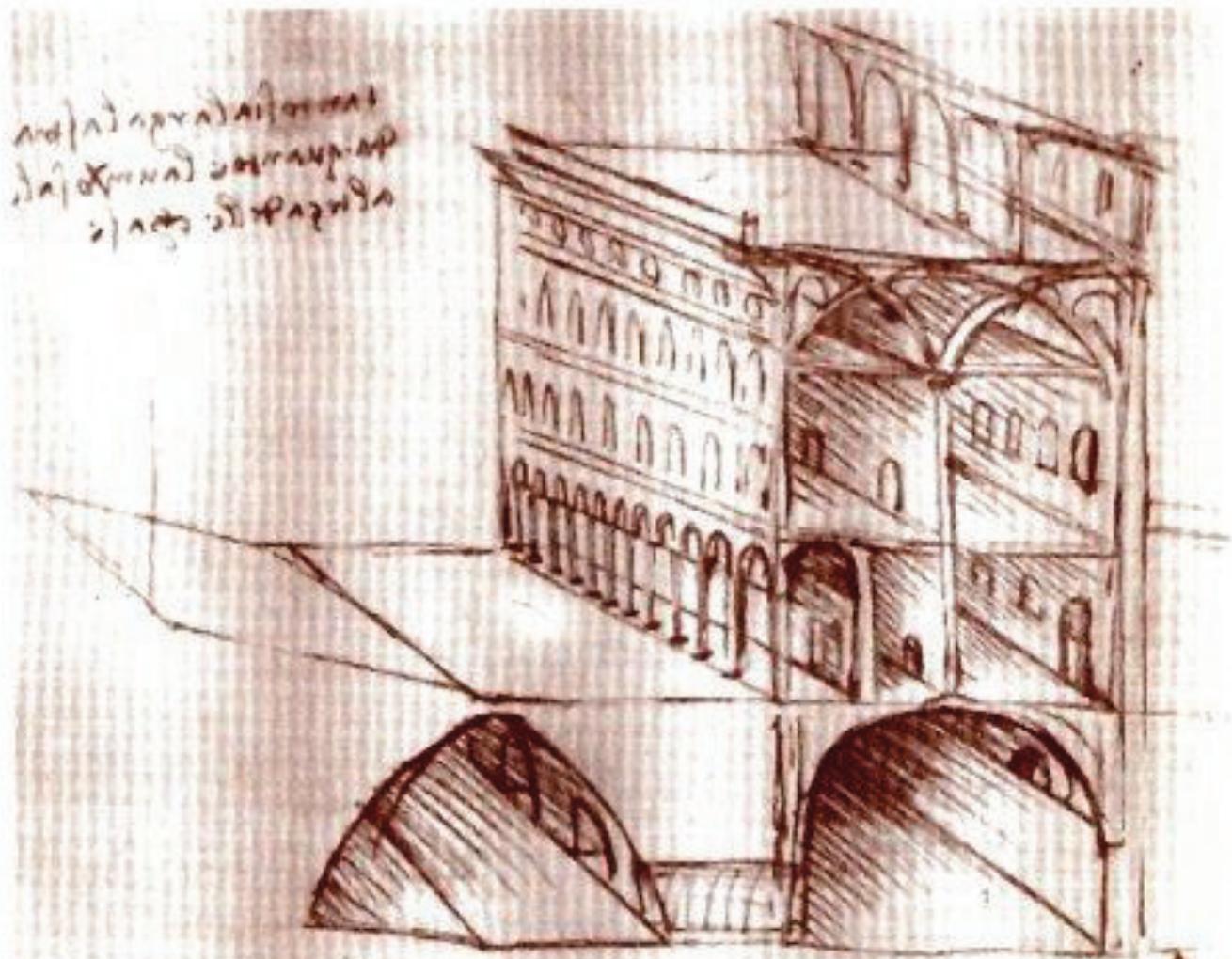




# 1. PROPOSED CITY LOCATION





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## WHY WTC 2019 IN NAPLES

### A UNIQUE LOCATION FULLY IN LINE WITH THE ITALIAN LIFESTYLE

Naples presents important underground works which were recently constructed in unique and complex geological situations, and which serve as impressive examples of the manner in which important and attractive underground works can be built.



### NEAPOLITAN UNDERGROUND STRUCTURES HAVE BEEN DEVELOPED SINCE 470 BC

First transformations of the ground morphology were carried out by the Greeks in 470 BC, paving the way to the today's fascinating underground Naples.

These transformations consisted in the creation of underground cisterns for the collection of rainwater. They were also used for the recovery of construction material for the Naples' buildings (Naples Yellow Tuff).

During the centuries the expanding city brought about the construction of a proper aqueduct for the collection and distribution of drinking water using several reservoirs connected by a tunnel network .

During the Roman domination the aqueduct was enlarged and finalized; furthermore, in the period between the civil war of Octavian and Pompei (37 BC) and the Augustan age, "new generation" tunnels were also built. Underground road engineering had innovative features when compared to previous





operations, further developing technique consolidated in the past underground hydraulics. For example, tunnels for military use built between Portus Iulius and the Cumaean Port were later converted to civilian use. The sheer number of tunnels excavated in these areas enabled almost standard design and executive methods which were only superseded by the innovations in the modern era.

During the Angevin dynasty (13<sup>th</sup> century) the city expanded further and this resulted in increased quantity of tuff extracted from the ground for the construction of new buildings. This confirmed one of Naples' defining characteristics: a city born from its own soil, where buildings are built directly above the cavities where the construction material was supplied from. Delving into its underground we can admire the ancient cisterns of the Carmignano aqueduct and we can almost relive the sensations of those who sought refuge there during the WW2.

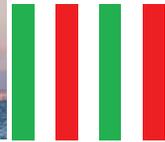
#### **AND NOW DAYS IS BECOME TUNNELLING COMBINED WITH ARCHAEOLOGY, ARCHITECTURE AND ART**

Building underground works in Naples, with all the complexity arising from the situation above and below the ground, the hydro-geomorphology and geotechnical behaviour of the pyroclastic ground, has always undoubtedly been both challenging and fascinating.

SIG is therefore proud to showcase an experience matured over the decades and show you the details of underground works designed and built, as well as those that are still under construction which, we are sure, will leave participants astonished.

The Naples Metro Line 1 has been assigned in part to the company MN (Metropolitana di Napoli SpA.). The current line extends from the Piscinola neighbourhood to piazza Garibaldi and has been





fully operational since December 2013. At the time of writing, Municipio station has been in full revenue service since June 2, 2015 and at the Duomo station construction is underway and important archaeological findings have been made. The underground line is 18 kilometres long, with 17 stations. Line 1, once completed, will link the Capodichino airport and offer a convenient interchange with Line 6 at Municipio. Line 6 has been assigned to the company Ansaldo Trasporti STS and extends for 2.3 km from Mostra to Mergellina, with 4 stations: Mostra, Augusto, Lala and Mergellina. Construction is currently underway on the extension towards the city centre from Mergellina to Municipio, including 3 intermediate stations: Arco Mirelli, S. Pasquale and Chiaia-Monte di Dio; the line will be completely operating before 2019.

