

ARCHEOLOGICAL TUNNEL DETECTION GROUND PROBING RADAR

Project: Construction of the new underground railway station of Porta Susa (TO)

Site: Torino urban area (2008)

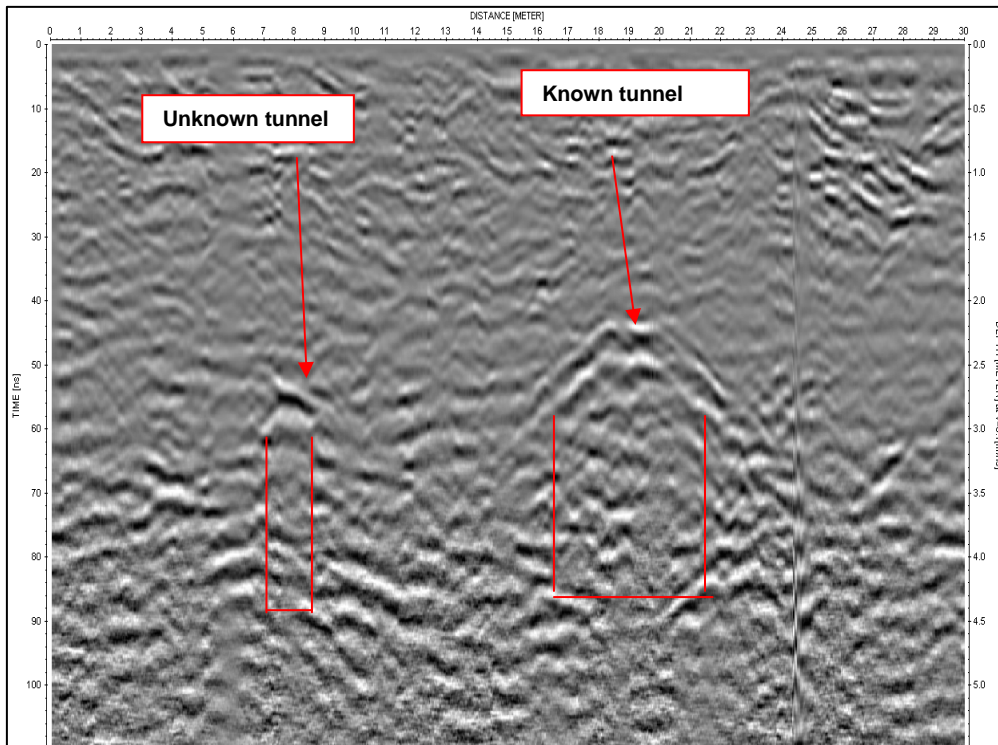
The purpose of the survey: The survey was conducted to verify the presence of a network of tunnels of historical interest in the site, to avoid damage to underground structures, as well as ensure proper design of the foundational elements of the future building .

Design Survey: The survey methodology was designed with a 270 MHz GPR antenna (grid lines 1 x 1 m) over an area of 600 m².

Results: The survey has confirmed the position of a tunnel known by historical sources but not more localizable, has also highlighted the presence of an additional tunnel unknown. The reconstruction of the tunnels was made possible by 3D processing, and this has greatly limited the risk of damage during the subsequent excavation of the station.



Radar section



3D time slice -3.5 m from ground surface.

