

Feasibility Study for the construction of Metro Station “AUA Station”

Athens, Greece

Project

Feasibility Study for the construction of Metro Station “AUA Station” at the existing Metro Line 3 (Agia Marina – Doukissis Plakentias) of Athens Metro, located at the Agricultural University of Athens

Construction Cost

Total cost (estimated): approx. € 85 m

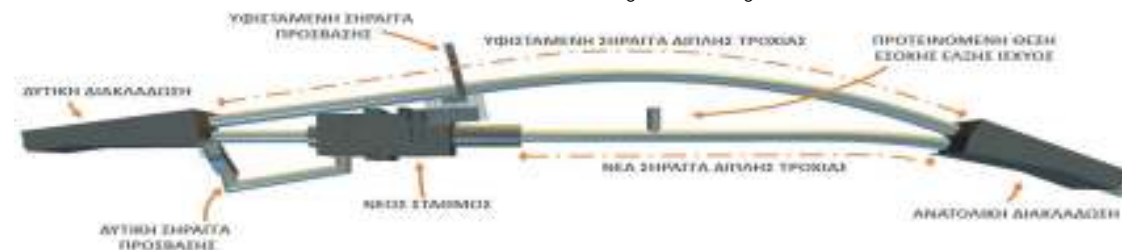
Project Schedule

Design: 2019
Construction (estimated): 2022 - 2025

Project Description

The proposed project consists of the following structures:

- Metro Station “AUA Station” including:
 - Five-level Main station
 - Platform NATM Tunnels on both sides of the Main station
 - Access NATM Tunnel
 - Access pits
- Two (East and West) Three-level Crossovers, One level on each Crossover will be used for exhibition purposes of underground findings
- Double Track NATM Tunnel for the connection of the existing line, through Crossovers, with the new station



Main Station's Pit

Dimensions: 66m length, 31m width
Excavation Depth: 29m
Temporary retaining measures: Secant pilewall, Cut & Cover Excavation Method including steel struts and pre-stressed anchors as temporary support measures.

Crossovers

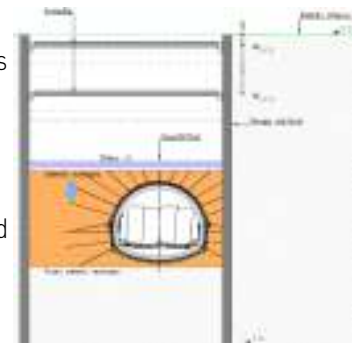
Dimensions: 85m length, ranging width from 15m to 27m
Excavation Depth: 24m
Temporary retaining measures: Diaphragm Walls and secant pilewall, Cover & Cut Excavation Method including steel struts as temporary support measures.

Platform NATM Tunnels

Effective cross section: approx. 140m², Excavation: 44m length / 16m width / 11.5m depth

Double Track NATM Tunnel

Effective cross section: approx. 50m², Excavation: 280m length / 9.5m width / 8m depth



Final Lining

Concrete C30/37 for the permanent structures. Steel Reinforcement B500c

Geology

Artificial Deposits, Conglomerates, Upper & Lower Formation of Athens Schist

Our Services

- Design of a feasible technical solution, considering the limitations deriving from the existing metro line and the requirement for the reduction of the downtime of the existing metro line
- Geotechnical & Structural feasibility studies, including drawings
- Elaboration of BIM/Revit models for Bill of Quantities calculation

Client

Agricultural University of Athens