



# LINE 4<sub>A</sub>

## VOLUME 15

## SEPTEMBER- OCTOBER 2023



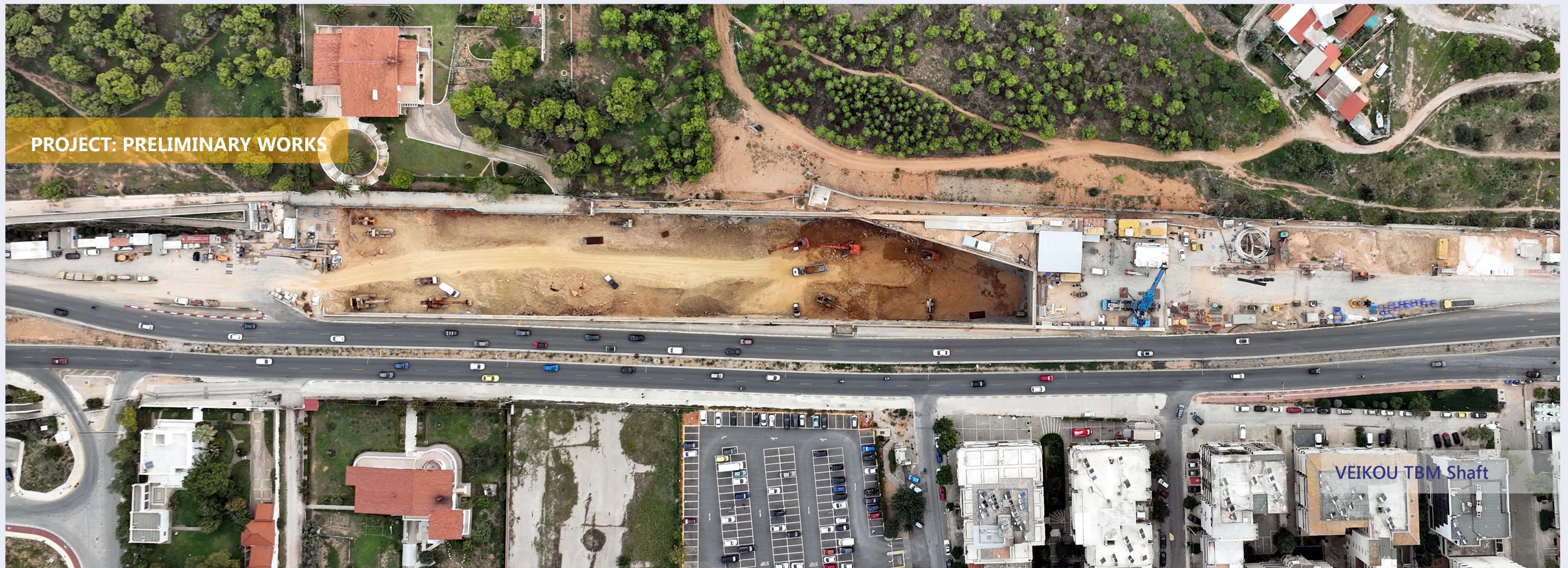
Co-funded by the  
European Union



MINISTRY OF  
INFRASTRUCTURE  
AND TRANSPORT



## PROJECT: PRELIMINARY WORKS



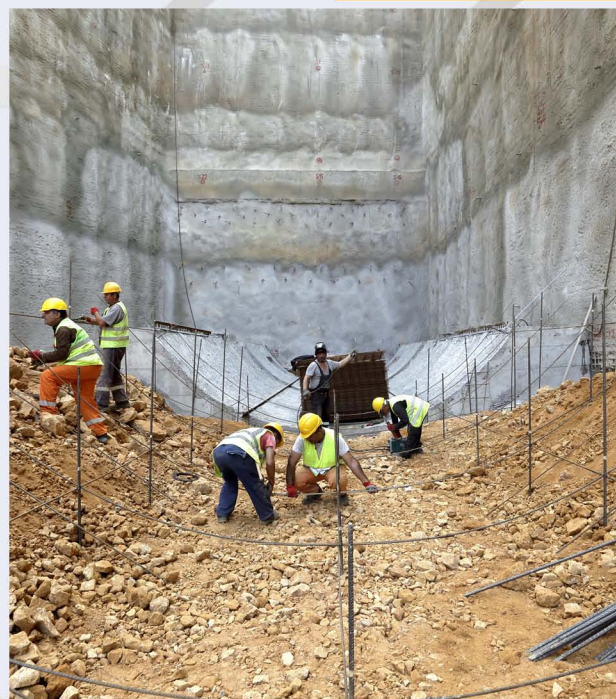
### VEIKOU TBM SHAFT

Page 2

The construction percentage in VEIKOU TBM Shaft (excavation, temporary support, drainage) is now 54%.

Moreover, all the parts of the cutterhead of TBM "NIKI" arrived at the worksite in September. In order to proceed with the assembly of the cutterhead and ensure its protection, a shed was constructed and the relevant welding works commenced immediately. The first 20 meters of the TBM bed were concreted at the bottom of the shaft.

At ground surface, the new lattice boom crane is currently being assembled. At the same time, the parts of the TBM shield and back-up gantry no. 2 are also at an assembly stage.

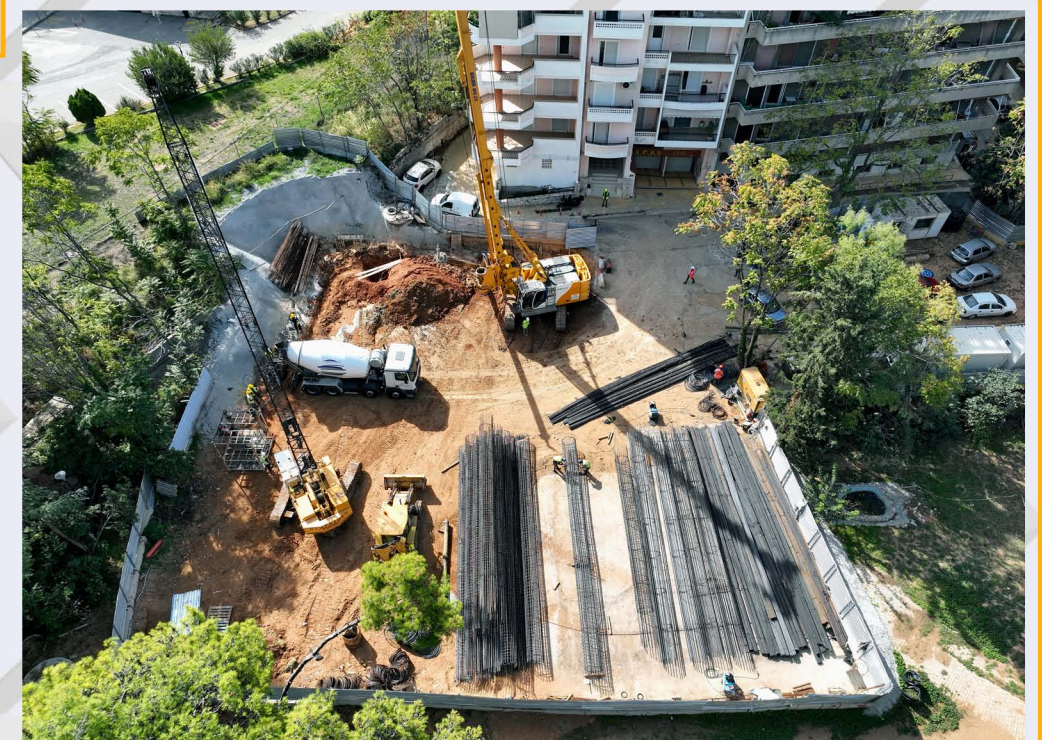


Excavation works in Veikou TBM Shaft.

### DIKAIOSYNIS SHAFT

Page 3

The first ventilation shaft that TBM "ATHENA" will meet is Dikaiosynis Shaft. Currently, 32 out of 64 piles have been bored.



Pile boring and construction in Dikaiosynis Shaft.



## KATEHAKI TBM SHAFT - TBM "ATHENA" & GNA SHAFT

Page 4



Arrival of tunnel segments in Kاتهaki TBM Shaft.



Completion of excavation works in GNA Shaft.

In KATEHAKI TBM Shaft, TBM "ATHENA" continues its journey having bored 176.23m out of 736.21m of the 1st Interstation (Kاتهaki – Dikaosynis Shaft) with the excavation progress percentage reaching 24%.

Moreover, back-up gantry no. 3 was connected to back-up gantry no. 2 inside the TBM tunnel. Once assembly works were completed, preparation works for the lowering of back-up gantry no. 4 at the bottom of the shaft commenced. When the works for the connection of back-up gantry no. 4 with TBM "ATHENA" were completed (electrical and hydraulic), testing resumed along with the preparation works necessary for the recommencement of the excavation works.

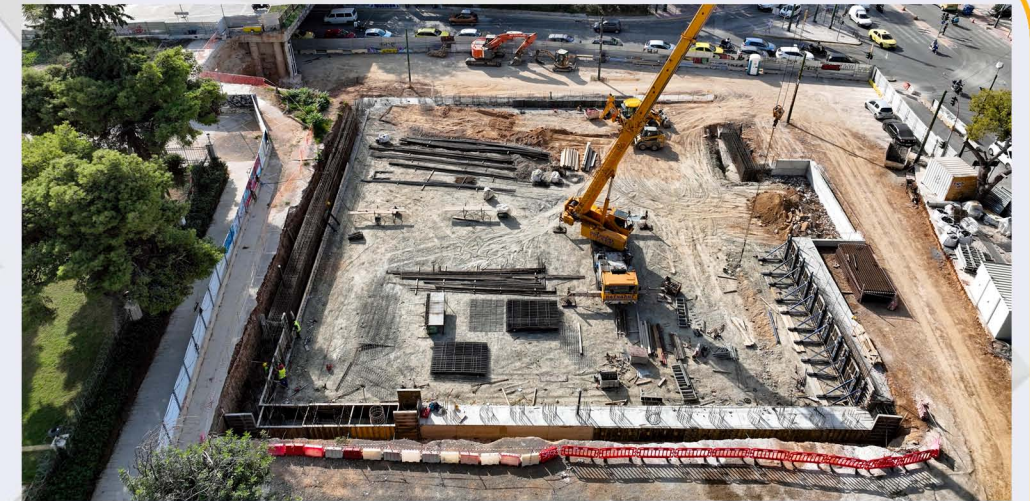
The belt in the conveyor belt was extended and works for the foundation of the overhead crane are in progress, while a walkway was constructed in the tunnel.

In GNA Shaft, the excavation using a hydraulic hammer was completed.

## DIKASTIRIA – AKADIMIA – KOLONAKI STATIONS

Page 5

In DIKASTIRIA Station, piling works have been completed. Works for the construction of the pile cap beam are currently under construction.



Construction of pile cap beam in DIKASTIRIA Station.



Configuring the work level in AKADIMIA Station.

In AKADIMIA Station, works for the construction of piles at the perimeter of the central trench have been completed.

Moreover, EYDAP manhole was cleaned and the section of the pipe damaged during pile concreting works was reinstated.

Preparatory works for the configuration of the excavation level and the construction of a pile cap beam are in progress.



Excavation of the 1st level in KOLONAKI Station.

In KOLONAKI Station, the excavation of the 1st level has commenced and preliminary works for the boring of the 1st series of anchors have commenced.

At the same time, works for the installation of geomechanical and structural monitoring instruments for monitoring the project, the buildings and the installations are in progress.





Aghios Therapontas Shaft



MINISTRY OF  
INFRASTRUCTURE AND  
TRANSPORT



WITH CO-FINANCING OF GREECE AND THE EUROPEAN UNION

## RELOCATION OF NETWORKS

Page 6



Works for the diversion of DEDDHE network in ELIKONOS St.

In ALSOS VEIKOU STATION, works for the diversion of DEDDHE, EYDAP and Natural Gas networks are in progress.

In ELIKONOS STATION, works for the diversion of DEDDHE network are at a completion stage.

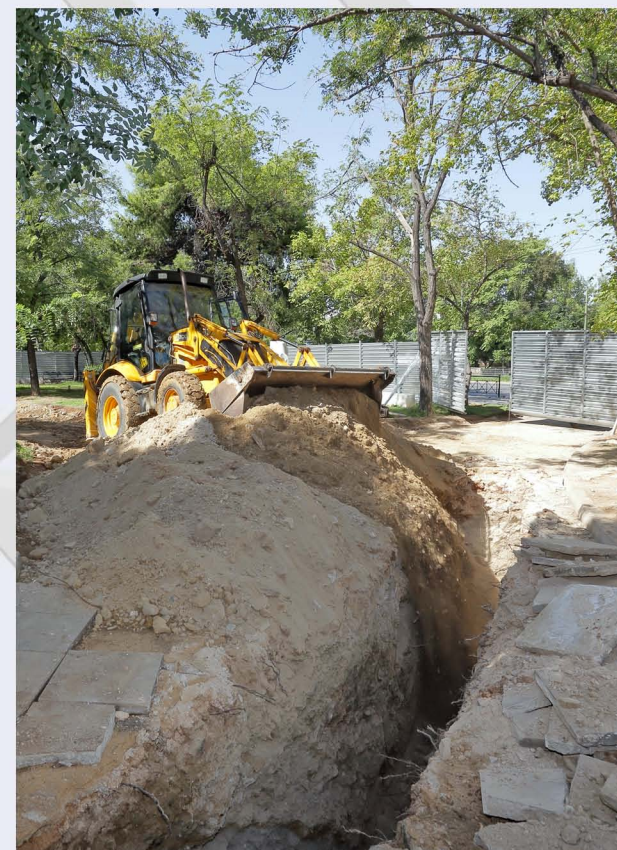
In ALEXANDRAS Station, works for the diversion of DEDDHE and OTE networks are in progress.

In addition, in Formionos Shaft works for the diversion of DEDDHE network were completed.

Finally, in KESSARIANI Station, works for the relocation of the Natural Gas, EYDAP, DEDDHE and telecommunication networks have commenced.

## ARCHAEOLOGICAL WORKS

Page 7



Completion of archaeological investigation works in the Trumpet Shaft.



Archaeological works in KIPSELI Station.

Archaeological investigation works were completed in Ippokratous Street, in the ventilation shaft of GALATSI Station. Archaeological works in KIPSELI, EXARCHIA, AKADIMIA, KESSARIANI, PANEPISTIMIOUPOLI and ZOGRAFOU Stations are in progress. Archaeological investigation works have commenced in the worksite area of Aghios Therapontas Ventilation shaft in ZOGRAFOU Station. Archaeological investigation works have been completed at the Trumpet Shaft, located at Naiadon Park, adjacent to EVANGELISMOS Station.



Archaeological works in KESSARIANI Station.



# ELLINIKO METRO S.A.



## LINE

### A LANDMARK PROJECT BECAMES REAL!

[www.emetro.gr/grammi4](http://www.emetro.gr/grammi4)

#### NEWSLETTER ΓΡΑΜΜΗΣ 4Α

##### CONTRIBUTORS

- EDITING  
**Despoina Papastamatiou**
- LINE 4<sub>A</sub> PHOTOS  
**Savvas Spyridonos**

\*All photos used have been taken from the archives of ELLINIKO METRO S.A. (unless stated otherwise).  
Cover page photo: Excavation of Veikou TBM Shaft.

Contact us on: **210-6792065, 210-6792060** | E-mail: **info@emetro.gr**



Co-funded  
by the  
European  
Union



MINISTRY OF  
INFRASTRUCTURE  
AND TRANSPORT