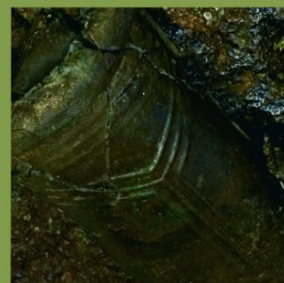


# DISSERTATIONES ARCHAEOLOGICAE

ex Instituto Archaeologico Universitatis de Rolando Eötvös nominatae



Ser. 3. No. 2. | 2014

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## BIBLIOGRAPHY

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*Bibliography of the excavations in Brigetio (1992–2014)*

# A new Roman bath in the canabae of Brigetio

## Short report on the excavations at the site Szóny-Dunapart in 2014

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### **Abstract**

*The present article deals with the excavations in the canabae of Brigetio preceding the construction of a flood control dam between the modern cities of Komárom and Almásfüzitő. Most important results of the excavation is the discovery of the first Roman bath in Brigetio and a bronze workshop. Since the original construction plans were altered after the discovery of the bath to avoid the destruction of the site, excavations will continue in 2015 with the main objective of unearthing the whole Roman bath and the bronze workshop. Our future plans include the complete excavation and presentation of the site as an archaeological parc, which could be the first of its kind in Brigetio.*

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### **Introduction**

The canabae of Brigetio is a lesser-known part of the ancient town, since no systematic excavations were carried out in this territory, in contrast with the civil town where annual excavations have started in 1992 with outstanding results.<sup>1</sup> Although some small-scale excavations made in the first part of the 20th century were bringing to light very important buildings (e. g. the Mithraeum and Dolichenum) and burials in the canabae,<sup>2</sup> detailed informations on the settlement structure were provided only by the recently began project on the comprehensive topographical research of the canabae and legionary fortress.<sup>3</sup>

In the summer of 2014, the long-planned construction work of the new flood control dam between Komárom and Almásfüzitő has started, which, according to its only possible location close to the Danube, crosses the northest part of the Roman canabae (*Fig. 1*). Since the affected area is a well-known and highly protected site, archaeological impact assessment made prior to the construction indicated the obvious necessity of full-scale preventive excavations in

1 See the bibliography of the excavations and research in the present volume: BORHY 2014.

2 On the early excavations in Brigetio see SZÁMADÓ 1997.

3 BARTUS ET AL. 2014.

the territory of an approximately one hectare. The excavations were started in August, 2014 in the cooperation of the Klapka György Museum of Komárom and the Department of Classical and Roman Archaeology of Eötvös Loránd University.

## **Results of the excavations**

### ***The western edge of the site***

Shortly after the removal of topsoil all previous expectations were surpassed by the extraordinary intensity of the site, where huge parts of terrazzo-floors, traces of walls, massive layers of bricks and stones were visible in literally the whole surface (*Fig. 2–3*). These features already indicated that full excavation of the site is impossible within the given time frame of two months, however, we started to open trenches and sections from west to east and tried to gather as many data as possible.

In the western edge of the site, part of a stone building (approximately 30 m<sup>2</sup>) with massive terrazzo-floor and at least two periods were found. Three Late Roman graves were cut into the floor (*Fig. 4*), obviously without the intention of choosing deliberately the thick, hard terrazzo of an earlier building instead of the nearby soft soil, which indicates that buildings in this part of the canabae had been already collapsed and covered (at least the floors) before the remaining population started to use it as a cemetery. The phenomenon of moving to nearby forts in Late Roman times while using the abandoned settlement as a cemetery is well-known in numerous sites, however, this is the most obvious evidence in the case of Brigetio so far.<sup>4</sup> Two of the three burials were completely robbed while the third one was intact but without any grave goods, therefore closer datation of the graves is not possible.

About 20 metres east of the graves, part of another building was found (approximately 60 m<sup>2</sup>) with a terrazzo-floor of three periods and a hypocaustum (*Fig. 5–6*). A total of 18 metres of heating tunnels with rectangular pilae stacks were uncovered. The walls of the building were constructed of adobe bricks on stone foundation. We did not find the closing walls of the buildings, therefore it was probably much larger than the excavated part of it. A coin of Antoninus Pius found in the foundation layer of the earliest terrazzo-floor indicates that the building was erected in the second half of the 2nd century AD, probably after the Marcomannic wars and were in use until the Late Roman period according to the coins found in the topmost layers of the building.

### ***The Roman bath***

The most important result of the excavations was the discovery of the first Roman bath in Brigetio, which was situated some 40 metres east of the above-mentioned building (*Fig. 7–8*). Approximately 900 m<sup>2</sup> of the bath were excavated without reaching the end of the building in any direction, which indicates that the original size of the bath was at least 1000 m<sup>2</sup>, maybe more. The rooms of the bath were covered with terrazzo-floors of good quality, one of them was preserved in more than 100 m<sup>2</sup>, which is the largest terrazzo ever found in Brigetio (*Fig. 9*). Traces of underfloor heating were found in four rooms. In the westernmost room some of the circular pilae stacks were preserved in original place and condition with the covering tiles and terrazzo-floor in situ (*Fig. 10–13*). The floor of the central, apsidal

<sup>4</sup> See BARKÓCZI 1951, 22.



room (presumably a *caldarium*) of the bath was supported with more than 100 rectangular pillars (Fig. 14). The praefurnium was located next to the “caldarium”, where a lot of ash and burnt layers were found. The imprints of the two lower stones or bricks of an arched opening in the apse were also found, which connected the praefurnium with the apsidal room (Fig. 15). The bath was supported with numerous drains (Fig. 16–17), one of them could be traced under the heating system of the apsidal room. The bath had at least two periods, it can be observed in one place that the wall of the earlier period was taken down and the new wall was built next to it, while the floor of the room was built on the top of the earlier wall, using it as a foundation (Fig. 18). The pebbly floor of the earlier phase was found in some places, however, the function of the earlier building as a bath can not be confirmed as yet. The chronology of the bath is doubtful, because it seems the building was completely and systematically cleaned before abandonment, which is indicated also by the scarce find material from the upper layers, without almost any datable objects. That the earlier layers also provided very few finds is the evidence of the involvement of military troops in the construction works of the canabae. The main difference of the military architecture of the canabae comparing with the buildings excavated in the civil town is that in the latter a lot of debris were used as filling material, which produces a lot of finds – especially pottery – during the excavations, while soldiers in the canabae used actual building materials. Therefore – at least for the time being – the building time of the bath can not be securely confirmed, however, the chronology of the above-mentioned neighbouring buildings can possibly be extended to the bath. The abandonment of the bath is also indicated by two Late Roman graves cut into the hypocaustum of the central apsidal room. Functions of the rooms are also uncertain except for the praefurnium and the so-called caldarium.

### ***Other features and the find material***

Some other buildings with terrazzo floors and additional burials were unearthed during the excavations, moreover, traces of a bronze workshop were found in the yet unexcavated part of the site, where during the removal of the topsoil numerous bronze objects (including a figurine of Lar, Fig. 19), half-finished products and fragments of crucibles, as well as remains of furnaces with metal slags in situ were found.

At the eastern end of the site several pits, trenches and burials were found datable to the Early Iron Age and the Roman Period.

The find material was very scarce, especially in the western part of the site. Noticeable is the very large quantity (about 500 pieces) of brick stamps, almost exclusively made by the legio I adiutrix, however, some other troops (e. g. cohorts VII Breucorum, legio XXX Ulpia Victrix) are also presented. Most of the coins were found in the upper layers with metal detector, an interesting assemblage of 103 Late Roman coins came to light at the western edge of the site from a pit which also contained modern objects.

### **The alteration of the construction plans: the protection and future of the site**

After two months of excavations and continuous negotiations with the construction project leaders, politicians and the local government, the plans of the construction were changed to avoid the destruction of the site. An area of about 7000 m<sup>2</sup> – most of it still unexcavated – were covered temporarily after the complete documentation of the site by low-altitude

aerial photography and 3D laser scanning. Excavations will continue in 2015 with the main objective of unearthing the whole Roman bath and the bronze workshop. Our future plans include the complete excavation and presentation of the site as an archaeological parc, which could be the first of its kind in Brigetio.

### **Acknowledgements**

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### **References**

- BARKÓCZI, L. 1951: *Brigetio*. Dissertationes Pannonicae Ser. 2. No. 22. Budapest.
- BARTUS, D. – BORHY, L. – CZAJLIK, Z. – HOLL, B. – PUSZTA, S. – RUPNIK, L. 2014: Topographical research at the canabae of Brigetio (2013–2014). *Dissertationes Archaeologicae Ser. 3. No. 2*, 451–457.
- BORHY, L. 2014: Bibliography of the excavations in Brigetio (1992–2014). *Dissertationes Archaeologicae Ser. 3. No. 2*, 565–580.
- SZÁMADÓ, E. 1997: Brigetio kutatástörténete. *Komárom-Esztergom Megyei Múzeumok Közleményei* 5, 149–174.

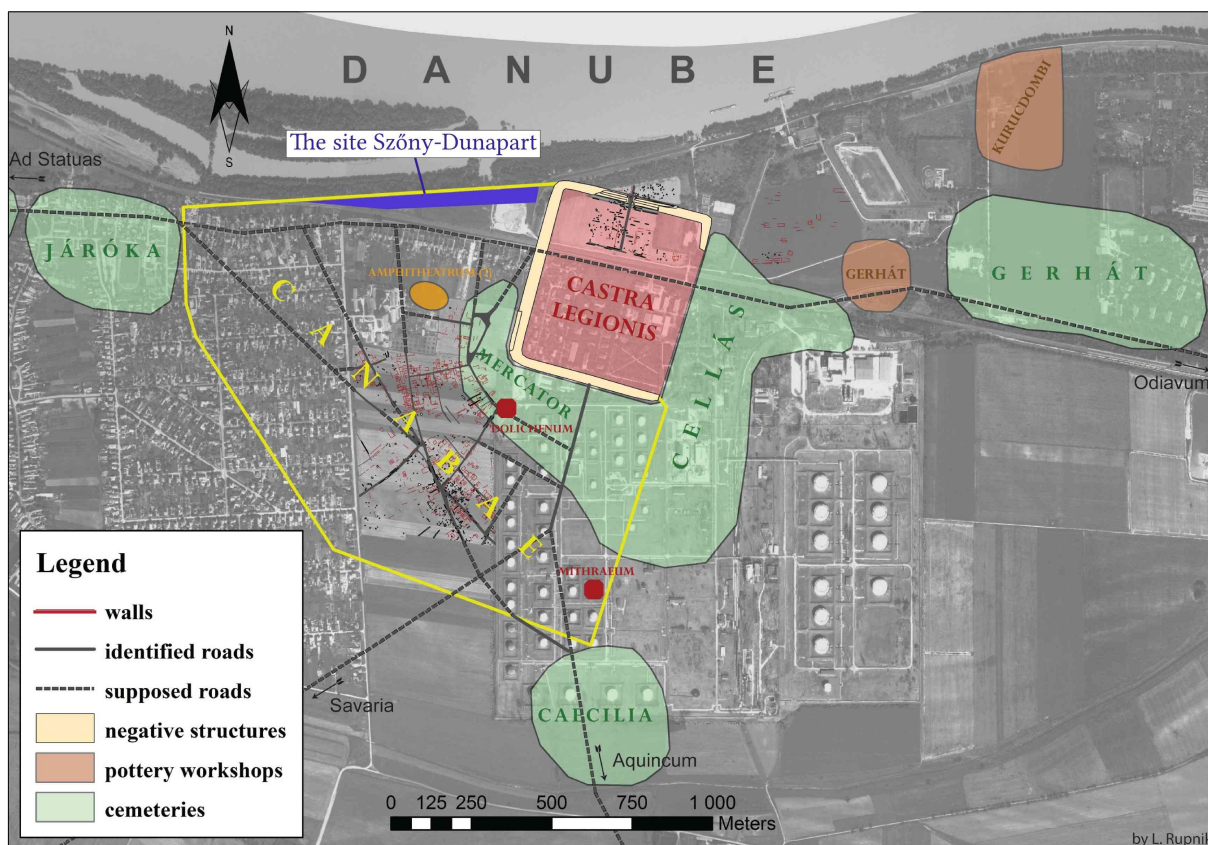


Fig. 1. The topography of the canabae of Brigetio with the site Szőny-Dunapart marked blue.



Fig. 2. The site after the removal of topsoil.



*Fig. 3.* The site after the removal of topsoil.



*Fig. 4.* Late Roman graves cut into the terrazzo-floor of a building.



*Fig. 5. Terrazzo floors and hypocaustum of the western building.*



*Fig. 6. Terrazzo floors and hypocaustum of the western building.*



*Fig. 7. Aerial view of the bath.*



*Fig. 8. Aerial view of the bath.*



Fig. 9. The largest preserved terrazzo-floor of the excavation.



Fig. 10. Hypocaustum pillars and terrazzo-floor in the bath *in situ*.



Fig. 11. Pilae stacks from the bath.



Fig. 12. Pilae stacks from the bath.



Fig. 13. Hypocaustum pillars and terrazzo-floor in the bath *in situ*.



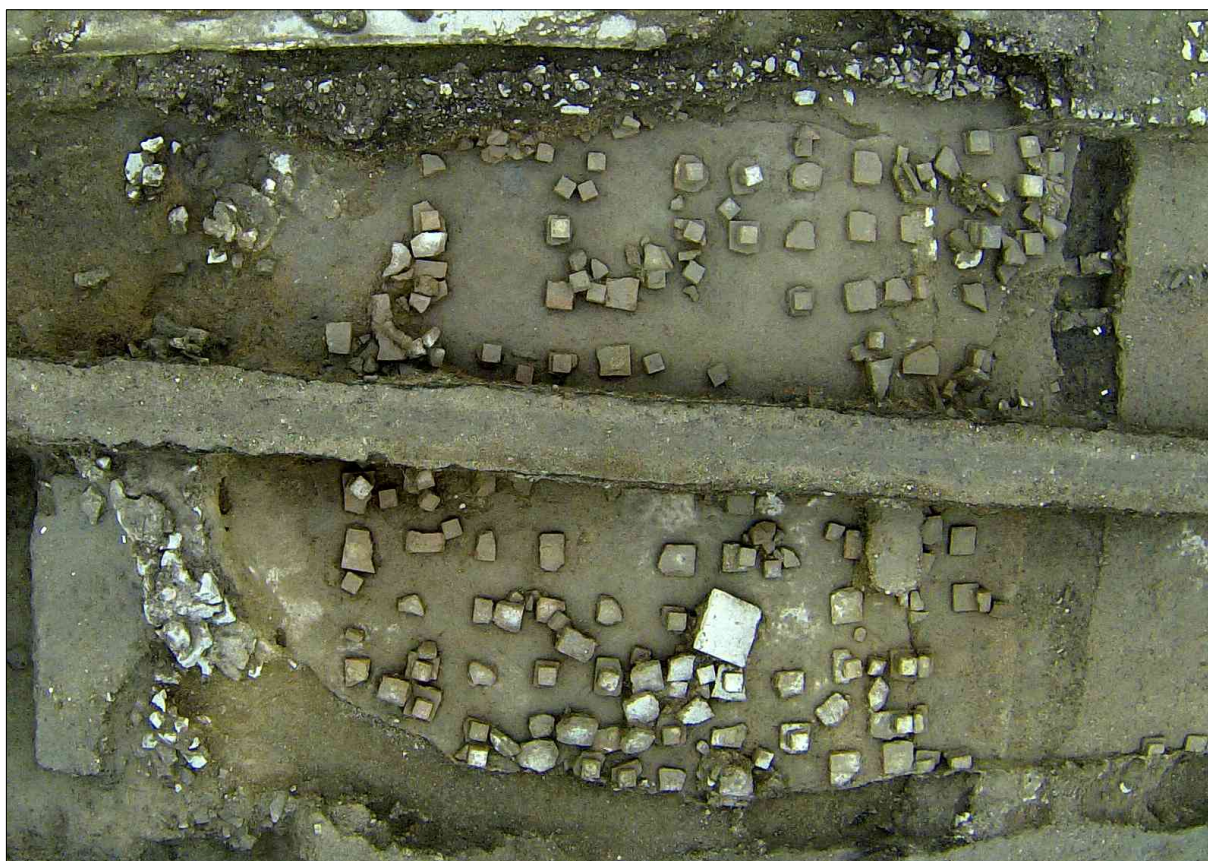


Fig. 14. The central apsidal room.



Fig. 15. The *praefurnium* beside the apse.



*Fig. 16–17. Drains in the bath.*



Fig. 18. Construction periods of the bath.



Fig. 19. Bronze figurine of Lar from the bronze workshop.