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STIBADIUM B OF VILLA WITH PERISTYLE AT MEDIANA*

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Abstract. – In the course of archaeological investigations of the villa with peristyle in 2010 and 2011, a room of circular plan in the north-western segment of the villa and to the north of room w-24, was discovered. The room had annexes in the east and west and is analogous to the stibadium A discovered in the north-eastern section of the villa. Further investigations of the room called stibadium B revealed that the stibadium walls were decorated with a facing of marble slabs and the floor was covered with exceptionally well preserved high quality mosaic. Archaeological excavations in 2015 defined completely the system of floor and wall heating. The mosaic floors in stibadium B are conserved. The area to the west of the stibadium has also been explored and a channel with the remains of a lead water pipe was discovered there. The terrain to the north of the northern wall of the villa with peristyle was also levelled.

Key words. – Mediana, villa with peristyle, stibadium, mosaic, Late Antiquity.

Archaeological investigation of the villa with peristyle at Mediana, particularly excavations in 2010 and 2011, confirmed some earlier assumptions and raised new questions concerning the architecture, decoration and function of the residential complex. Three main periods covering the time span from the end of 3rd to the mid 4th century have been distinguished as well as sporadic settling and use of that area in the Middle Ages.¹ Besides the definition of three main periods of villa life, areas between the *thermae* and the great audience hall, the area to the south and east of the museum building and the south-western corner of the structure have been investigated. The chronology of construction and remodelling of certain parts of the structure during the second building horizon have been

distinguished.² The representative character of the villa with peristyle has been unambiguously confirmed and the direction of proceeding along the ceremonial way through the peristyle to the great audience hall was also clearly distinguished. Two smaller stibadia, A and B, were constructed east and west of the audience hall

¹ First period is dated from the origin of complex at Mediana, from the end of 3rd century to the beginning of the 4th century, second period is dated between around AD 330 and AD 337 and third period around AD 383–441, Васић, Милошевић, Гавриловић 2014, 231–263. For literature concerning the problem of investigation and interpretation of Late Roman complex at Mediana see in: Васић и др. 2016.

² Milošević 2011, 174; Milošević 2013, 118–125.

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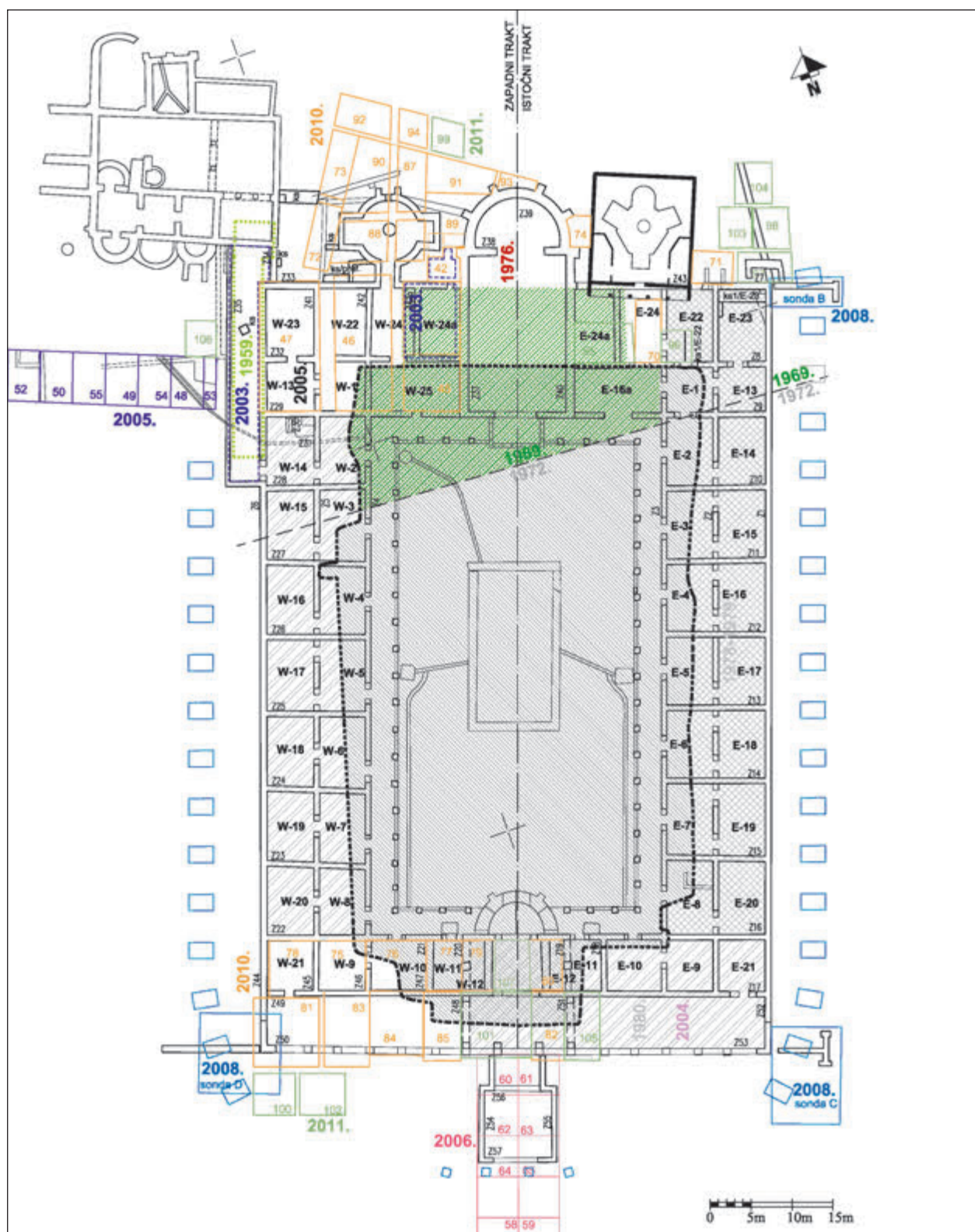


Fig. 1. Mediana, plan of the villa with peristyle:

1) stibadium B; 2) stibadium A (Васић, Милошевић, Гавриловић 2014, 232)

Сл. 1. Медијана, план виле са перистилом:

1) стибацијум Б; 2) стибацијум А (Васић, Милошевић, Гавриловић 2014, 232)

and they, as well as some rooms in the north section and the *thermae* in the northwest, emphasise the privacy and representativeness of the imperial villa (fig. 1).³ Numerous finds of marble and porphyritic sculptures of Roman gods and demigods, bronze railings with herms of Asclepius and Luna, decoration of floors with mosaics and walls with marble facing, and mosaics of glass tesserae represent a segment of the architectural program of Constantine I where he was aiming to create a dynastic ideology in art and architecture of his native Naissus and Mediana.⁴

Stibadia A and B are two representative formal areas of a central position, added on to the north part of the villa during the second building phase, between AD 330 and AD 378.⁵ Stibadium A is of a complex ground plan with an octagonal central area with three independent smaller rooms leading onto it. The two lateral ones are of a square plan and one to the north is of a semi-circular plan. The museum building was built on top of the investigated segment of stibadium A in 1936, and, thus, the connection between the north part of the villa and this structure has been negated.⁶

Stibadium B is a smaller independent structure of a complex ground plan. It was built in the open area between the great audience hall and the *thermae* and was leaning against the north-western part of the villa with peristyle.⁷ The central room is of an almost circular shape, around 7 meters in diameter. The two smaller side rooms (annexes) are in the east and west. The size of the east annex is 2.10 x 2.9 m, while the west annex is 2.15 x 3.2 m. To the south and toward the villa room w-24a was discovered a corridor 1.65 m wide and 2.60 m long, along with a rather small added room, 2.20 x 2.80 m in size.

The floor of this room is paved with tiles 0.5 x 0.5 m in size and is at the same level as the floor mosaic in the central area. Traces of frescoes in white, blue and red are preserved on the lower sections of the walls. In the northern zone of stibadium B was a *praefurnium*, 1.05 m long and 0.5 m wide. The ceremonial character of stibadium B is confirmed by the discovery of glass tesserae with golden foils and marble facing that embellished the ceiling and walls of the room, while the floor was covered with high quality mosaic with geometric and floral patterns.

Investigation activities in 2010 and 2011 defined completely the size and shape of stibadium B and the archaeological stratigraphy has been published in detail.⁸ Before presenting archaeological results from the year 2015 we will deal briefly with the available con-

clusions concerning the archaeological stratigraphy of stibadium B.

The latest stratigraphic layer, denoted as layer A, is the result of removing walls of the villa with peristyle.⁹ In other trenches in the north-western part of the villa with peristyle (trenches 42, 89, partially 90 and possibly trenches 86 and 87) that layer is mixed with humus and it is around 30 cm thick. The mixing of recent and antique material as well as the sporadic occurrence of brick and stone fragments has been noticed.¹⁰

The earlier layer, layer B, is the horizon of demolishing of stibadium B's walls and consists of loose grey soil with building rubble, including stones, whitish mortar, pebbles, bricks and fragments of marble facing slabs. A large amount of mosaic cubes and dislocated segments of mosaic floor were discovered in the south-east section of the stibadium. In the lower segments of layer B, a concentration of many fragments of flat window glass was also encountered.¹¹ The average thickness of layer B is around 25 cm.¹²

Layer C consists of lighter brown soil mixed with fragments of stone and roof debris (*imbrices* and *tegulae*), a substantial amount of pottery and animal bones was also recorded, as well as the traces of burning.

A large quantity of mosaic and glass cubes and fragments of mortar foundation with traces of wall mosaic were also found. The thickness of layer C is around 25 cm.¹³

³ Milošević 2013, 118–125.

⁴ Milošević, Gavrilović 2013, 907–922

⁵ Milošević 2013, 118–125.

⁶ Братанић 1938, 199–202. In 2013, The Office for the Protection of Cultural Monuments, in Niš, organised archaeological investigations in the zone of the museum building and its immediate vicinity. The results of the investigations have not yet been published.

⁷ The ground plan of stibadium B was investigated in trenches 86, 88 and 90, during archaeological campaigns in 2010 and 2011, Васић, Милошевић, Гавриловић 2014, 231–263.

⁸ Васић, Милошевић, Гавриловић 2014, 231–263.

⁹ Above this layer were the remains of brown, tightly packed, compact soil; the substruction of the surface of the recently built road to the village Donja Vrežina and to the premises of the Documentation Centre of The National Museum in Niš.

¹⁰ Median value is between ± 200.10 m and ± 199.80 m, Васић, Милошевић, Гавриловић 2014, 239.

¹¹ At 199,03 m.

¹² Between points ± 199.51 m and ± 199.25 m. The final arbitrary layer in horizon B (before layer C) is brown in colour. Васић, Милошевић, Гавриловић 2014, 239.

¹³ Altitude of layer C is from 199.24 m to 199.00 m.

ARCHAEOLOGICAL INVESTIGATIONS OF STIBADIUM B IN 2015

Despite significant results obtained in the course of earlier investigations of stibadium B (in 2010 and 2011), some important segments could not be explored due to the necessity of coordinating works on the reclamation and conservation of the mosaics on the stibadium floor. Thus, in the course of earlier archaeological campaigns, the external zone of the praefurnium was partially cleaned, but not thoroughly explored. Significant damage (0.6 m wide) in the north-south direction within the central area of the circular room was encountered, resulting in a decision being reached to stop archaeological investigations because of possible damage and destabilisation of the substructure and the hypocaust system.¹⁴

Archaeological works in 2015 were aimed towards investigations of the heating system and the degree of



Fig. 2. Stibadium B, damage of floor in central zone of circular room (Photo documentation in the Institute of Archaeology in Belgrade)

Сл. 2. Сџџбадијум Б, ошџећење пода у средишњем делу кружне просторије (фото-документација Археолошког инџтитута у Београду)

preservation of floor decoration in stibadium B. Special attention was paid to the completion of works in the area between the western annex of stibadium B and the eastern wall of the *thermae*, where numerous pieces and fragments of porphyritic and marble sculptures had been found in 2011.¹⁵ Work was also undertaken on the restoration and denivelation of the archaeological layers in the immediate surroundings of stibadium B (to the north of stibadium B), damaged in the process of the construction of the protective structure above the villa with peristyle.

After removing the protective structure and layers of sand and also after the preliminary conservation works on the mosaic, investigation started on the damage in the central area of circular room (figs. 2, 3). Large quantities of stone and glass cubes, fragments of bricks, mortar and stone mixed with dark brown soil were encountered in the debris filling the damaged space. It was concluded after cleaning was completed that there was a slightly curved masonry channel, 0.5 m wide and 0.65 m deep (from the level of the mosaic). The channel, of a north-south orientation (with a slight deviation towards the south-east), was running from the praefurnium in the north to the eastern edge of the entrance to stibadium B. The lower channel level was at the virgin soil level, i.e. at 198.32 m above sea level (fig. 4). In the north section and near the praefurnium, a bifurcation of two channels running east and west was discovered. The channels run along the circular wall of the central room and finish at the point where the northern wall of central room joins the northern walls of the west and east annex (fig. 5).

While cleaning the western channel, similar kind of debris as in the central channel was recorded: a considerable amount of crumbled mortar from the walls and floors but also fragments of the marble facing slabs which had covered the walls. Also found were larger and smaller pieces of bricks used as a cover for the western channel. Also discovered was a rather large quantity of stone and glass tesserae with golden foil, a few pottery fragments as well as two fragments of quartz stone (rock crystal?) similar in structure to the finds from pit A, investigated in the extension of trench 72/2010, to the west of stibadium B.

¹⁴ During archaeological investigations in 2010 and 2011, the mosaic was protected by geocloth and sacks with sand and a temporary timber protective structure was constructed above stibadium B.

¹⁵ Васић, Милошевић, Гавриловић 2014, 254.

The infill of the eastern channel of stibadium B has identical characteristics and contents as the rubble from the central and western channels in the room – darker brown soil with fragments of mortar, marble facing, pottery, stone and gilded glass tesserae. Of particular interest was a small leaf-like marble plate, which is assumed to have been used for decoration of the furniture or as fragment of a wall decoration motif in the *opus sectile* technique.

Also, numerous fragments of marble wall facing, a smaller amount of pottery fragments and a few frag-

ments of window glass were found while cleaning the praefurnium opening of stibadium B. It is recorded that the praefurnium floor was slightly sloping from the south to the north, i.e. toward the outside. The floor of the praefurnium in stibadium B was made of hydrostatic mortar with pebbles sporadically impressed into the mortar.

Because of the instability of one mosaic segment in the south-eastern section of the mosaic floor in the central room of stibadium B, the conservators made the decision to remove that segment (1.5 x 2.36 m) which,



Fig. 3. Stibadium B, archaeological investigations in 2015: 1) mosaic; 2) heating channels; 3) praefurnium; 4) control unit (segment of dislocated and conserved mosaic); 5) room 25a
(Field documentation in the Institute of Archaeology in Belgrade)

Сл. 3 Сџџбадијум Б, археолошка истраживања 2015: 1) мозаик; 2) канали за грејање; 3) префурнијум; 4) контролна сонда (део измењеној и конзервираној мозаика); 5) просторија 25а
(Теренска документација Археолошкој институџи у Београду)



Fig. 4. System of heating channels in the central zone of stibadium B: 1) central channel running north-south 2) west channel 3) east channel 4) praefurnium in the north stibadium wall, view from the north (Photo documentation in the Institute of Archaeology in Belgrade)

Fig. 5. Detail of central heating channel after reclamation and conservation works, view from the south (Photo documentation in the Institute of Archaeology in Belgrade)

Сл. 4. Систем канала за грејање у централном делу стибацијума Б: 1) централни канал правца север-југ; 2) западни канал; 3) источни канал; 4) ложиште у северном зиду стибацијума, снимак са севера (фото-документација Археолошког института у Београду)

Сл. 5. Детаљ централног канала за грејање, после изведених санационих и конзерваторских радова, снимак са југа (фото-документација Археолошког института у Београду)

thus, made possible the archaeological exploration of that area (figs. 3, 6).¹⁶ The removed segment of the mosaic floor in stibadium B was lying on top of dark brown, compacted soil, which contained no archaeological finds. Excavations continued until 198.32 meters above sea level, i.e. to the floor level of the central praefurnium channel in stibadium B.

We would recollect briefly that archaeological material discovered in the area of stibadium B during excavations in 2010 and 2011 consisted mostly of iron wedges and glass, but there were also found two fragmented flat iron arrowheads of triangular shape, a fragmented bronze scraper, a bone antler with traces of red colour, an iron ring, a bronze buckle, probably for foot-

wear, fragments of black and yellow glass bracelets, a small two-piece glass bead of a dark blue colour, pincers and a bronze handle shaped as a bust of a female deity (most probably the goddess Minerva) with an inserted iron spatula. Archaeological material discov-

¹⁶ In order to prevent any possible cracking of the mosaic left *in situ* in the process of lifting of the south east segment of the mosaic floor of the central room in stibadium B, the mortar base of the mosaic was cut with a grinding machine. After lifting, there followed the retrieval of mortar fragments from that section, during which time a large quantity of brick and stone fragments used as the foundation for the mosaic floor were recovered.



Fig. 6. Excavations in south eastern zone of central room after removing the segment of mosaic, view from the southeast (Photo documentation in the Institute of Archaeology in Belgrade)

Fig. 7. South wall of the west annex, detail of preserved marble facing slabs (Photo Vesna Crnoglavac, National Museum Niš)

Сл. 6. Ископ у југоисточном делу кружне просторије, после скидања дела мозаика, снимак са југоистока (фото-документација Археолошког института у Београду)

Сл. 7. Јужни зид западне анекса, детаљ сачуваних обложних мермерних плоча (фото: Весна Црноглавац, Народни музеј Ниш)

ered during excavations in 2015 mainly consisted of a rather large amount of floor mosaic tesserae of stone, and glass tesserae with gold foil, fragments of window glass, fragments of marble wall facing, a few pottery fragments and a small amount of animal bones. Also, it is important to mention the discovery of an iron ring found together with a large quantity of window glass, gathered in a small area near the praefurnium opening, that might indicate the existence of windows in the wall of the room immediately above the praefurnium (the ring could have been part of the device for opening the outer window pane).

MATERIAL AND CONSTRUCTION

The degree of preservation of the architecture of the villa with peristyle is negligible in comparison with the floor mosaic decoration. Above ground sections of the building are sporadically preserved up to a height of 0.8 m, particularly underneath the mentioned modern road, which was overlaying the western rooms of the villa. The lower level of the first course of bricks in the *opus mixtum* technique was preserved in the north-western rooms toward the *thermae* which made possible the analysis of the construction and the total appearance of

the villa with peristyle. It was possible to supplement the architectural analyses by taking into account the preserved segments of the architecture of the south porch and the remains of the architectural decoration in the peristyle.¹⁷ Unfortunately, the state of preservation of the architecture of stibadium A and stibadium B does not currently offer sufficient data for detailed architectural analysis.¹⁸ Only after a complete examination and study of the preserved building material, in particular the wall facing marble slabs and the frescoes, will a detailed interpretation of the architecture be possible. We will present at this time evidence related to the building techniques materials used for the construction of stibadium B.

The central circular room with two annexes in the west and east and the approaching corridor in the south represent the integral interior of stibadium B. All the walls had been built continually in the same way and

¹⁷ Васић и др. 2016., *cf.* Milošević 2011; Milošević 2013.

¹⁸ Results of the investigation of stibadium A in 1938 are published, although not extensively, in the comprehensive text of P. Братанић, 1938, 199–204, and results from rescue excavations in 2013 have not been published so they are still not available to the academic audience.

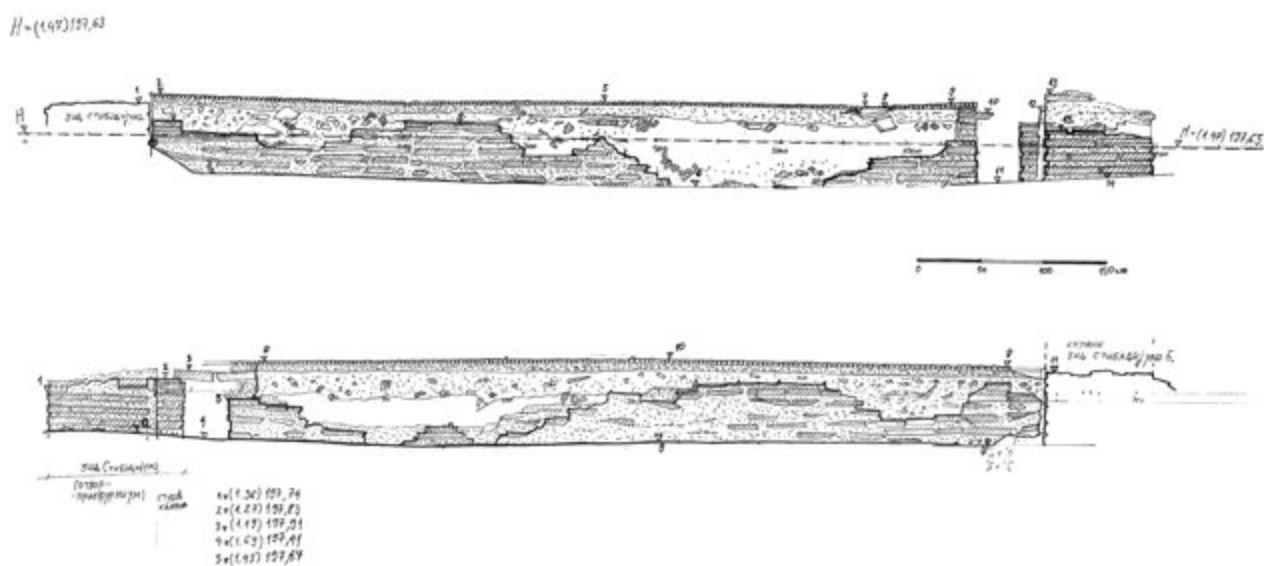


Fig. 8. Central channel of the heating system, west and east wall
(Field documentation in the Institute of Archaeology in Belgrade)

Сл. 8. Централни канал система за грејање, изглед западне и источне зида
(пољска документација Археолошког института у Београду)



Fig. 9 and 10. East and west channel of the heating system
(Photo documentation in the Institute of Archaeology in Belgrade)

Сл. 9 и 10. Источни и западни канал система за грејање
(фото-документација Археолошког института у Београду)

had foundations dug to the same depth.¹⁹ The walls are preserved at the foundation level or at the level of the floor mosaics, except in the north-western corner of the access corridor, where the average preserved height of the walls is 0.5 m. Also preserved at the same level are the north and west walls of the smaller room marked in the field documentation as w 26. Walls of the accessing corridor of stibadium B are leaning against the north wall of room w 24a.

The foundation wall, 0.75 to 0.85 m thick and 0.90 m high, was made of stone rubble, river pebbles and fragments of bricks laid in lime mortar with an admixture of sand and river gravel. The average thickness of the above ground section of the wall is between 0.68 and 0.70 m. It has been established, judging by the impressions of bricks in the mortar at the socle level and finds of bricks in the layers of destruction in this part of structure, that bricks 0.40 x 0.30 m and 0.40 x 0.20 m in size and between 4 and 5 cm thick had been used. The lime mortar with an admixture of sand and broken bricks that had been used was of relatively good quality. Traces of plastering are visible on the external sections of the wall. The interior of stibadium B was lavishly decorated. The walls were decorated on their lower zones with white marble facing slabs with shades of light yellow ochre (fig. 7).²⁰ It could be assumed with some certainty, judging by the remains of the frescoes on the walls of room w 26, that the upper zones of the walls were decorated using the fresco technique. The dominant element in the internal and external appearance of stibadium B was, according to the general concept of organisation, a semi-dome covered with gilded mosaic executed with glass tesserae. The representativeness of the central area was also emphasised by the specially modelled circular motifs connected with spirals, depicted on the floor mosaic. How interior decoration of circular room looked is open to hypothesis. It could be assumed that wooden benches, *klinai*, were placed in the side annexes. A similar organisation of the space could also be expected in stibadium A. The arrangement of use and furnishing of the representative rooms for receptions and banquets, where places for the highest officials and guests were directly opposite the entrance, had been established very early in the Roman residential complexes and was particularly observed and repeated in the time of tetrarchy. The system for heating the central circular area of stibadium B, in particular its north section, raises the question of the possible interior concept and the arrangement of the furnishing.²¹



Fig. 11. Reconstruction of the cross-section of central and east channel of the heating system (drawing I. Bjelić)

Сл. 11. Реконструкција пресека централног и источног канала система за грејање (цртеж: И. Бјелић)

The position, construction and arrangement of the central (1) and lateral channels (2 and 3) for heating suggest a partial heating of the area and a rational use of fuel (fig. 3). A central channel (1) of gently rounded shape was built, judging by the preserved remains, of bricks of diverse shape and size or broken bricks. The thickness of the wall was 0.20 m, and the greatest preserved height of the western channel wall (five rows of bricks) is 0.45 m. The channel was completely covered with bricks of a larger size (0.60 x 0.60 x 0.06 m), at a level of 198.73 m, with the substructure of mosaics

¹⁹ Bottom level of foundations is at 198.92 m. Foundations of stibadium B were dug into layer D whose median value of altitude was ± 198.7 m, Васић, Милошевић, Гавриловић 2014, 254–257.

²⁰ Detailed analysis of marble and other building material from the layers of destruction of stibadium B and room w 26 will indicate possible appearance and execution of walls and calotte in *opus sectile* and *opus tessellatum* techniques.

²¹ Dunbabin 2003; Dunbabin 1991, 121–148; Lavin 1962, 1–27; Vasić 2006, 69–75.



Fig. 12. Detail of channel and praefurnium, view from the east
(Photo documentation in the Institute of Archaeology in Belgrade)

Сл. 12. Детаљ канала и префурнијума, снимак са истока
(фото-документација Археолошког института у Београду)

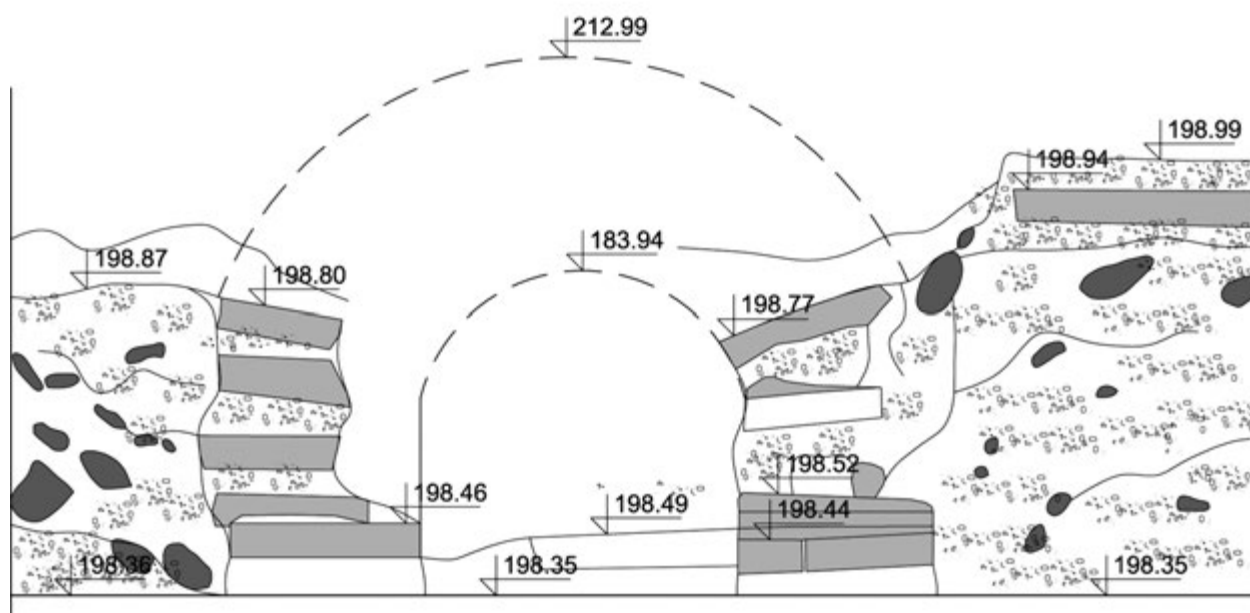


Fig. 13. Praefurnium, view from the nord, elevation and section of praefurnium, investigations in 2011
(Photo documentation in the Institute of Archaeology in Belgrade)

Сл. 13. Префурнијум, северни изглед, истраживања 2011. године
(Фото документација Археолошког института у Београду)



*Fig. 14. Detail of the structure of mosaic floor in stibadium B
(Photo documentation in the Institute of Archaeology in Belgrade)*

Fig. 15. Stibadium B, east annex, marble wall facing and detail of impression of marble slabs (photo G. Milošević)

*Сл. 14. Депољ констїрукције пога мозаика у стїбадијуму Б
(фото-документација Археолошкої инстїтута у Београду)*

*Сл. 15. Стїбадијум Б, источни анекс, мермерна зидна оїлаїта и депољ оїиска мермерних пїлоча
(фото: Г. Милошевић)*

resting on them (fig. 8). In the south section of the central channel there is no trace of a vertical vent for hot air.

The width of the east (2) and west channel (3) is also 0.50 m (figs. 9, 10). The south wall of both channels is around 0.20 m thick and was built of bricks 0.40 x 0.19 x 0.05 m in size. The north perimeter wall of the circular room was also the north wall of both channels. On the inside of the room's perimeter wall, in the west and east channel, were arranged small pillars of brick at around 0.25 m from each other. The lower segment of the pillars is 30 x 15 x 44–45 cm. The upper segment of the pillars is 5 cm narrower and is preserved to a height of two to three bricks (around 15 cm in total). The hypocaust system was constructed in such a way that made possible the laying of bipedal bricks on the lower segment of the pillars and the south wall of the channel (around 45 cm high), but also the placing of vertical marble facing slabs between the mosaic and the upper, narrower section of the hypocaust. The hypocaust was used to heat the floor and walls of the northern area of circular room (fig. 11).

The praefurnium opening in the north wall of the central room tapers slightly, from 46 to 42 cm. Two parallel walls 50 cm long and 30 cm thick were leaning on the outside and the distance between them was 42–43 cm. In such a way, the channel of praefurnium was increased in length by up to 1.20 meters. The praefurnium was barrel vaulted. The total height of the channel (50 cm) can be reconstructed on the basis of the

preserved parts of the vertical wall (30 cm) and the beginning of the vault. The channel vault was built of bricks 30 x 30 x 4 cm in size (figs. 12, 13).

The archaeological investigations of stibadium B completed the previous knowledge regarding the use of a heating system in the complex of the villa with peristyle, and a few different approaches were encountered: classic heating of the whole room using a hypocaust system (thermae), a selective hypocaust system (rooms w 22, e 24) and heating using channels (stibadium B, room e 24).²²

The floor in stibadium B was made of an exceptionally fine mosaic. The difference in the mosaic level in the circular room is around 5 cm and was due to a variety of instances of damage. The floor level in the side rooms is around 5 cm higher and the floor in the whole of stibadium B was consistently laid. First the area was levelled using pieces of stone and broken bricks (*rudus*), whose thickness is 10 to 20 cm. On top of that layer was laid a mortar layer (*nucleus*), 6 to 8 cm thick. Mosaic cubes, 1–1.2 x 1–1.2 cm are inlaid in a layer of fine mortar based on a previously marked design and drafted motifs (fig. 14). At the junction of the floor in central room with the floors in the side rooms, a denivelation of mosaics was achieved by placing vertical

²² Kretschmer 1953, 8–41; Brödner 1983; Adam 1992; Yegül 1992.

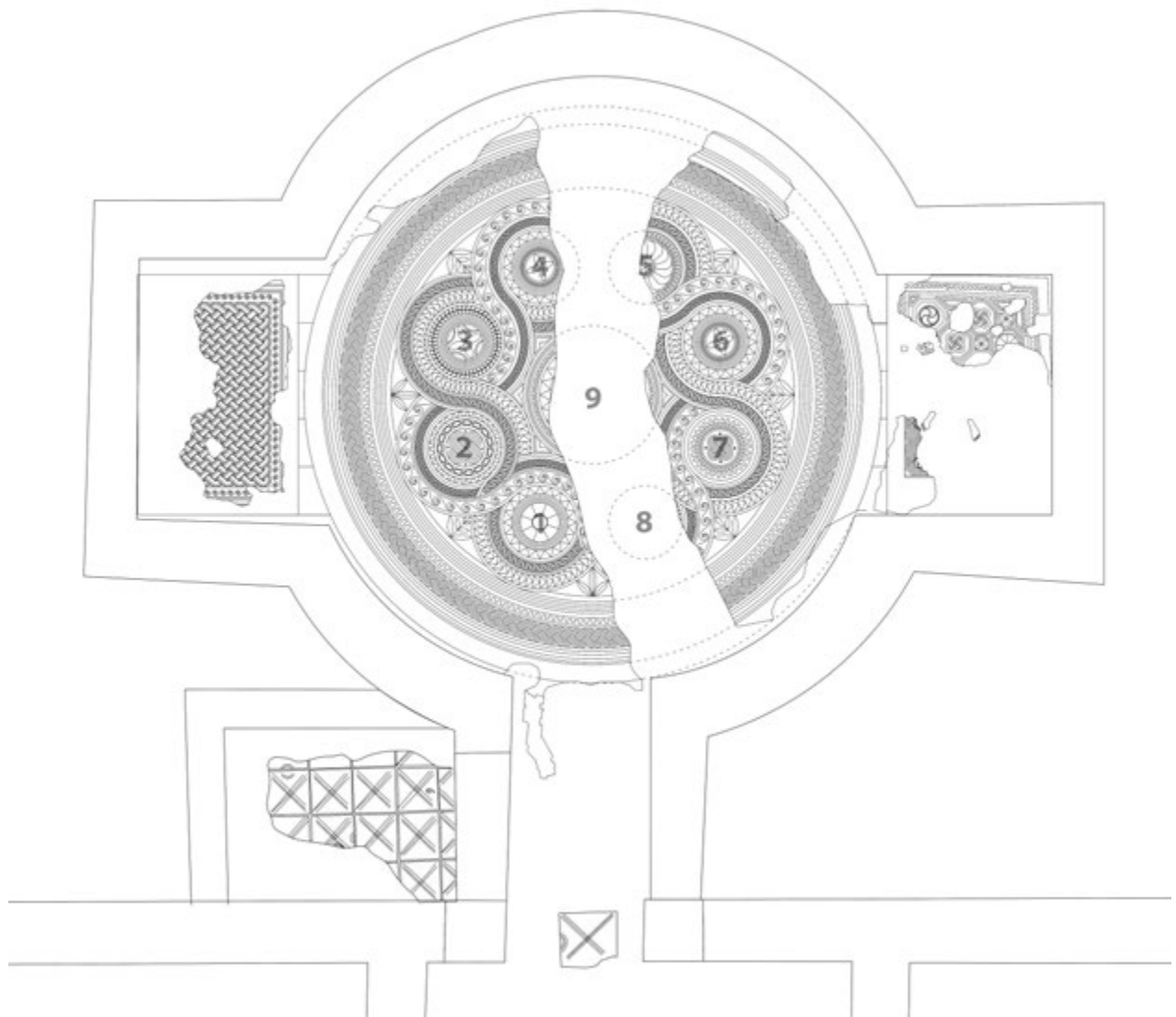


Fig. 16. Foundation of mosaic in stibadium B, drawing G. Jerinkić and I. Bjelić (Documentation in the Institute of Archaeology in Belgrade)

Сл. 16. Основа мозаика стибацијума Б, цртеж са означеним медаљонима (цртеж: Г. Јеринкић и И. Бјелић, документација Археолошког института)

bands of white marble and white with nuances of light gray and white with nuances of light yellow ochre, along with one horizontal row of rounded slabs, whose impressions are preserved in the mortar foundation (fig. 15).

DESCRIPTION OF MOSAICS IN STIBADIUM B

The floor mosaic decoration is, despite central damage, well preserved and of exceptional aesthetic value

with many details which appear at Mediana for the first time. In the entrance area of the stibadium and in west and east annex, the mosaic floors are destroyed to a considerable extent. Holes for wooden poles are visible on their surface. Those holes are damaged, particularly in the central and south segment of the floor in east annex of the stibadium's central area. Many smaller holes of around 8 cm in diameter were recorded, some of which were arranged at intervals of around 0.3 to 0.4 m, making a straight line running approximately in a north-south direction. Those holes for wooden poles date probable from the Middle Ages and possibly sup-



Fig. 17. Entrance room, detail of mosaic (Photo V. Crnoglavac, National Museum Niš)

Fig. 18. Central room, view from the south (Photo V. Crnoglavac, National Museum Niš)

Сл. 17. Улазна просторија, детаљ мозаика (фото: В. Црноглавац, Народни музеј Ниш)

Сл. 18. Централна просторија, снимак са југа (фото: В. Црноглавац, Народни музеј Ниш)

ported some light wall structure. Additional evidence of human activity could be the finds of animal bones and fragments of pottery vessels recorded on the floor of the east annex of stibadium B.

As in the central room of stibadium B, the mosaic floor in the annexes was framed by vertically placed pieces of white marble facing and an admixture of light yellow ochre, and was sporadically preserved in its original position, with around a 4–5 cm thick layer of mortar between the wall and the marble facing. It was important to carry out conservation of the mosaic floors in stibadium B as quickly as possible and at the same time it was possible to complete archaeological investigations of that area.

The floor of stibadium B was decorated with four mosaic carpets covering a total area of 45 square meters that were entirely subordinated to the circular ground plan with two side annexes, in the east and west (fig. 16). The mosaics were executed in the *opus tessellatum* technique, using stone cubes of various nuances of white, red, black, gray and ochre and their size was 1–1.2 x 1–1.2 cm. The *opus sectile* technique was employed only for decorating a portion of the floor in the entrance room.

Entrance Room

The entrance to stibadium B was in the south side and was decorated with a mosaic executed in a combination of the *opus tessellatum* and *opus sectile* techniques, as indicated by the preserved part of the framing

border in the west side (dim. 115 x 15 cm) and fragments of marble tiles discovered in the course of investigation of the central zone of that room (fig. 17). The outer border was a rather wide white zone with the inner border made of thinner bands of grey, red, white and black (DÉCOR 1i).²³

Central Room

The mosaic composition in the central room consisted of a circular and border zone (figs. 16, 18). The circular zone is shaped like a wreath made of plait with set apart strands, within which are eight medallions, creating a central panel shaped like a concave octagon (DÉCOR 307). The plait consists of bands with different motives: wave-crest (DÉCOR 101b), isosceles triangles in a row (DÉCOR 11d), double plait (DÉCOR 70d) and a symmetrically nuanced band (DÉCOR 6b).

Medallion 1

The medallion consists of eight sectors of a circle alternately coloured red and white and with their tips inscribed in a smaller inner circle (fig. 19). The framing border consists of alternately arranged two white and one red band (DÉCOR 1i) and a band with a wolf tooth motif (DÉCOR 10c).

²³ The mosaics were studied in accordance with the referent catalogues: DÉCOR I 1985 and DÉCOR II 2002.



Fig. 19 and 20. Medallions 1 and 2 (Photo V. Crnoglavac, National Museum Niš)

Сл. 19 и 20. Медаљони 1 и 2 (фото: В. Црноглавац, Народни музеј Ниш)

Medallion 2

Within the medallion are a Solomon's knot and four small crosses in the field (fig. 20). The border consists of a band with a motif of horizontally placed spindles in a row (DÉCOR 21g), a denticulated band (DÉCOR 3b) and a thin grey band (DÉCOR 1i)

Medallion 3

Medallion 3 is a quatrefoil within a concave octagon (fig. 21). The framing border consists of alternating two white and one red band (DÉCOR 1i) and a band with a laurel wreath (DÉCOR 87c).

Medallions 4 and 6

Medallion 4 (fig. 22) is partially preserved and medallion 6 is complete (fig. 23). The medallions are shaped like a quatrefoil rosette (DÉCOR 255e). The border consists of a band with a chessboard motif (DÉCOR 1n), an alternately arranged two white and one red band (DÉCOR 1i) and a band with a wolf tooth motif (DÉCOR 10c).

Medallion 5

The medallion consists of eight sectors of a circle alternately coloured red and white and with their tips

inscribed in a smaller inner circle (fig. 24). The border is executed as a band with a laurel wreath (DÉCOR 87c).

Medallion 7

The medallion contains a Solomon's knot and four denticulated small squares in the field (fig. 25). The border consists of a band with motif of vertically arranged spindles in a row (DÉCOR 21e), a denticulated band (DÉCOR 3b) and a thin grey band (DÉCOR 1i).

Medallion 8

The medallion is mostly destroyed and only a border fragment shaped like a band with a laurel wreath is preserved (DÉCOR 87c). Considering the rhythm of the repeating ornaments on other medallions, it is possible to assume that medallion 8 repeats the motifs of medallion 2 (fig. 21, 26).

Central octagonal field

The central field of the octagonal shape with concave sides is damaged to a considerable extent (fig. 16, 27). Sections of the border consisting of a band with a wolf tooth motif (DÉCOR 10c), a denticulated band (DÉCOR 3b) and alternating two white and red and one grey band (DÉCOR 1t) are preserved. The triangular fields are filled with denticulated triangles.

Fig. 21–26. Medallions 3 and 4; 6 and 5; 7 and 8 (Photo V. Crnoglavac, National Museum Niš)

Сл. 21–26. Медаљони 3 и 4; 6 и 5; 7 и 8 (фото: В. Црноглавац, Народни музеј Ниш)



21, 22



23, 24



25, 26



Fig. 27. Central panel (Photo V. Crnoglavac, National Museum Niš)

Сл. 27. Средишње поље (фото: В. Црноглавац, Народни музеј Ниш)



Fig. 28 and 29. Trefoil (above), hexafoil with one flower (left) and with two flowers (right)
(Photo V. Crnoglavac, National Museum Niš)

Сл. 28 и 29. Тролистї (горе), шестїолїстї са једним цвѣтом (лево) и са два цвѣта (десно)
(фото: В. Црноглавац, Народни музеј Ниш)



Fig. 30 and 31. East and west room (Photo V. Crnoglavac, National Museum Niš)

Сл. 30 и 31. Источна и западна просторија (фото: В. Црноглавац, Народни музеј Ниш)

Fields of triangular shape with two concave sides

Within the eight fields of triangular shape with two concave sides that were situated between the medallions are depicted motifs of branches with three or more leaves, with and without flowers (fig. 28, 29).

East room

The mosaic in the east room is mostly destroyed, probably due to the subsequent insertion of poles for a light roof structure, as is suggested by ten holes (fig. 30). It is interesting that we encountered the imprints of human feet in the mortar in the southeast section of the room (perhaps of the artisan who laid the mosaic?). It is possible to conclude, on the basis of the preserved mosaic fragments, that the rectangular composition consisted of a network of octagons interlinked by squares (DÉCOR 163b). The octagonal fields are decorated with motifs of a Solomon's knot and circles consisting of four sickle-like or eight triangular sectors, filled alternately with red and white. The square fields were decorated with quatrefoil motifs. The framing border comprised a white band (DÉCOR 1t), a denticulated band (DÉCOR 21, 3b), a grey band (DÉCOR 1i) and a somewhat wider external white band. Repairs to the mosaic made in the Roman times could be clearly noticed in few places, which were filled with mosaic cubes, but care was not taken in that process to observe the distinct motif and colour.

West room

The mosaic in the west room is considerably damaged in the western segment and traces of three post-

holes are also visible (fig. 31). The rectangular composition is decorated with the motif of multiple plaits (DÉCOR 140e), which is surrounded by a band with a motif of a wave-crest (DÉCOR 101b), a white band (DÉCOR 1t), a grey band (DÉCOR 1i) and a wide external white band. Investigations of the complex of the villa with peristyle have so far confirmed that the area, covering around 1000 square meters, was decorated with mosaics executed using variegated stone, pottery and glass cubes. The complexity of the composition and the selection of motifs are in accordance with the function of each room, so the most sophisticated and most expensive mosaics were reserved for the decoration of those rooms which had a ceremonial character (*audience hall, stibadium A and B*).²⁴

Without doubt stibadium B totally surprised investigators because of the fact that entirely new motifs unknown in the corpus of Mediana mosaics had been chosen for the central compositions. Certainly, the most interesting is the composition in the central room that belongs to the compositions shaped as wreaths consisting of eight intertwining circles, which thus create a central field shaped like a concave octagon (DÉCOR 307). Despite the fact that the mosaic is damaged in the middle (medallions 4, 6, 8 and the central octagonal field), the preserved segments make it possible to almost completely reconstruct the composition. Only medal-

²⁴ Васић и др. 2016, 21 For more details about Mediana mosaics see: Trovabene 2006, 127–144; Јерemiћ 2006, 145–158; Kolarik 2006, 158–178.

lions 4 and 6 have identical ornaments, while in the others various combinations have been recorded. The additional decoration is a sumptuous wide border consisting of a few diverse bands and triangular fields filled with motifs of branches (trefoil, five-foil, six-foil with and without flowers).

The composition in the central room (DECOR 307) resembles six, known specimens from Tunisia (*Bulla Regia, Sfax*), Lebanon (*Baalbek–Heliopolis*), Rome (*Vatican Museum*) and two mosaics from Turkey (*Zeugma*).²⁵ All the mentioned specimens have variously selected decorative motifs of strands of plait, as well as various motifs within the medallions (geometric, floral or figurative motifs).

Also of great interest is the motif in the octagonal fields of the mosaic in the east room of stibadium B. The motif consists of a circle composed of four sickle-like sectors alternately coloured red and white. An identical motif has been discovered in the floor mosaic of the synagogue at the site of Sardis in Turkey, dating from the 4th century.²⁶

All the above mentioned confirm the fact that demand for the quick building and decoration of the villa at Mediana required the attendance of a large number of skilled artisans from diverse artistic workshops of the Empire. Thus, in the Mediana mosaics one can recognize the influence of the most important mosaic schools of the Late Antiquity from the time of the tetrarchy.²⁷

INVESTIGATIONS OF THE AREA BETWEEN STIBADIUM B AND THE THERMAE

Archaeological investigations in 2015 also included an area of a trapezoidal shape next to the west side of stibadium B, denoted as an extension of trench 72/2010. The archaeological stratigraphy in that area is very complex, with very prominent architectural interventions in the third building phase of the complex of the villa with peristyle, dating from the period after AD



Fig. 32 and 33. Extension of trench 72/2010 with pit A and empty channel in the extension of trench 72/2010 (Photo N. Gavrilović, documentation in the Institute of Archaeology in Belgrade)

Сл. 32 и 33. Проширење сонде 72/2010 са јамом А и исцрпљен канал из проширења сонде 72/2010 (фото: Н. Гавриловић, документација Археолошког института)



Fig. 34. Fragment of lead water pipe discovered in the extension of trench 72/2010
(Photo N. Gavrilović, documentation in the Institute of Archaeology in Belgrade)

Сл. 34. Део водоводне оловне цеви откривен у проширењу сонде 72/2010
(фото: Н. Гавриловић, документација Археолошког института)

380. In the course of excavations in the years 2010 and 2011, such archaeological stratigraphy in trench 72/2010 was identified. The latest horizon, around 0.70 m thick, consisted of a humus layer mixed with recent deposits (considering also that the modern road runs over trench 72/2010). Under it is layer A, around 20 cm thick and consisting of light brown compact soil with a small amount of mortar. Layer B is an approximately 25 cm thick stratum of demolition, consisting of lime mortar rubble with sporadic (in the central section of the trench) lenses of loose grey soil with fragments of brick and small pieces of stone and mortar. Layer C consists of brown soil yielding fragments of broken roof tiles, stone, pebbles and also marble facing.

It is very important to mention that many fragments of porphyritic and marble sculptures were found in 2011 in the south section of trench 72, in the area around 1.00 m from wall Z3 and 1.3 m from wall Z33. Some of these fragments were parts of porphyritic sculptures discovered earlier.

Investigations in 2015 of the extension of trench 72/2010, i.e. the area between the west edge of trench 72/2010 and the east wall of the *thermae* (the border

line in the south is wall Z 33), started from layer C. These investigations are presented here in brief, with the most important conclusions:

As in trench 72/2010, its extension layer C also consists of brown soil with a great concentration of roof rubble (fragments of bricks, tegulae, imbrices), mortar, pebbles and pieces of stone. Within an area of 2 square meters in the north section of the extension of trench 72/2010, remains of a later mortar floor at 198.67 m ASL and, at 198.65 m ASL, traces of an earlier mortar floor have been recorded. In the northern third of the extension a zone of intensive soot was discovered that was later identified as a rather large pit (1.30 m in diameter), whose contour was clearly visible at the level of the breached mortar floor (fig. 32). Pit emptying revealed that it had mostly been filled with building rubble – rather large stones and a smaller amount of brick fragments. Among the archaeological material a few fragments of pottery, glass and animal bones were identified. In the rubble from the pit, two fragments of quartz stone shaped into an irregular trapeze with worked top and bottom surfaces and traces of carving that could identify them as being fragments of architectural decoration were also discovered. The bottom of the pit was at 197.58 m and it could be assumed that it had originally been a storage pit, which was later used as a rubbish pit.

A channel extending from the wall made of pebbles, Z3 parallel to the west wall of *stibadium* B, and

²⁵ Four mosaics are quoted in the catalogue DÉCOR II 2002: Bulla Regia, 307a; Rome, 307b; Sfax, 307c; Baalbeck-Soueidie, 307d. The mosaics in Turkey were discovered in the course of rescue archaeological investigations in 2000 and 2014. In the available literature and sources of information, precise dating of the mentioned Roman mosaics is not quoted. The mosaic from Rome, on display in the Vatican Museum, is dated to the 3rd century: http://www.maa.org/sites/default/files/images/upload_library/4/vol1/architecture/Italy/Vatican_City/vat_museum.html, as well as the mosaic from Lebanon from the site of Baalbeck-Soueidie: http://www.livius.org/ba-bd/baalbek/baalbek_history.html. The mosaic depicting nine muses, from the site of Zeugma in Turkey, is dated to the 2nd century BC: <http://www.sci-news.com/archaeology/science-mosaics-ancient-city-zeugma-02307.html>; <http://twistedstifter.com/2014/11/2200-year-old-mosaics-discovered-in-ancient-greek-city/>.

²⁶ The synagogue had been in use from the year 200 to the year 616, while the construction of the mosaic is dated to the 4th century: <http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.04.0006%3Aalphabetic+letter%3D%3Aentry+group%3D4Survey+of+motifs:+DÉCOR+I+1985,+179d>; <http://www.mvnu.edu/images/turkey-greece/album/slides/Mosaic%20Detail%20at%20Sardis.html>.

²⁷ Васић и др. 2016, 56.

running diagonally toward the east wall of the *thermae*, was also discovered in the extension of trench 72/2010 (fig. 33). The channel was filled with roof rubble, including fragments of bricks, tegulae, imbrices, pebbles and mortar, with virgin soil at the bottom.

At the same time, while emptying the channel, a lead water pipe was discovered near the bottom in the south-western section. The pipe was 0.53 m long and entering the west profile of trench 72/2010 extension, i.e. the foundations of column 1/C3 (northwest) of the protective structure, which was, at that time, being constructed in the area of the villa with peristyle at *Mediana* (fig. 34). A fragment of the same lead pipe was confirmed while excavating the foundations inside which it was located (when setting the foundation in concrete, a fragment of the lead pipe was included). The lead pipe runs toward stibadium B, but the connection between the fragment of lead pipe in the extension of trench 72/2010 and the lead pipe in trench 91, also excavated in the 2010 campaign, has not been archaeologically confirmed.

* * *

The archaeological investigations of stibadium B in 2015 provided all the necessary data to establish a complete picture of the stratigraphy, architecture and decoration of this very important room of ceremonial character in the villa with peristyle at *Mediana*. Certainly unexpected, although not unknown in the architecture of the *Mediana* complex, was the method of heating the room using channels and not hypocaust pillars. The completion of conservation works on the mosaics from stibadium B made it possible to comprehend in full the mosaics of the central circular room and the east and west annex, which stand out by virtue of their exceptional quality and meticulous execution. Analysis of the motifs of the mosaics from stibadium B, despite being unknown so far in the existing corpus of the *Mediana* mosaics, points to their resemblance to mosaics from North Africa, Turkey and Rome and confirm once again the influence of the most remarkable mosaic schools from the time of the tetrarchy.

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Резиме:

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СТИБАДИЈУМ Б ВИЛЕ СА ПЕРИСТИЛОМ НА МЕДИЈАНИ

Кључне речи. – Медијана, вила са перистилом, стибодијум, мозаик, касна антика.

Приликом археолошких кампања у 2010. и 2011. години када је истраживана вила са перистилом на Медијани, у потпуности је откривен простор стибодијума Б у северозападном делу комплекса. Стибадијум Б се састоји од прилазног ходника и кружне просторије, са два бочна анекса на истоку и на западу, чији су подови били прекривени мозаицима различитих концепција.

Археолошким истраживањима у 2015. години је у целисти истражен простор стибодијума Б, а мозаички теписи су конзервирани, чиме је омогућен јасан увид у њихову геометријску и вегетабилну орнаментуку.

Нов податак у истраживањима стибодијума Б представља систем грејања каналима – од префурнијума на северној страни кружне просторије се рачвају централни канал и два бочна (источни и западни) канала, који се пружају до

половине просторије. Такав начин грејања, који указује на рационалност загревања и потрошње горива за грејање, потврђен је и у просторији е 24 виле са перистилом. Осим стибодијума Б, археолошким ископавањима у 2015. години је обухваћен и простор сонде 72/2010, уз западни део стибодијума Б, у којој су откривени трагови две малтерне поднице (старије и млађе), отпадна јама А и канал са остацима водоводне оловне цеви.

Оно што свакако представља врло важан податак јесте разноликост орнамената мозаичких подова стибодијума Б, као и чињеница да овакви мотиви нису до сада били познати са других мозаика комплекса у Медијани. Ипак, попут осталих медијанских мозаичких концепција, и мозаици из стибодијума Б указују на јасан утицај најважнијих мозаичких школа из периода касне антике.