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# SZÉKESFEHÉRVÁR DEFENCE BARRIERS FROM THE ÁRPÁD ERA

Efforts to reconstruct the fortification that once surrounded the city centre of Székesfehérvár began as early as the turn of the 20<sup>th</sup> century. The first clues were the early modern written and pictorial sources, since the walls were gradually demolished, in many places almost to the ground, from the turn of the 19<sup>th</sup> century. In recent decades, a number of research projects have been carried out to determine the layout, structure and period of construction of the fortification.<sup>1</sup> Thanks to the (re)processing of the material from these salvage excavations expanded with natural scientific investigations, and the recent excavations in Jókai utca conducted by the Szent István Király Museum<sup>2</sup>, significant new evidence was unearthed connected to the subject, especially concerning the early Árpád-era history of the city (image 1).

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1 More details on the research history background available in: Horváth et al. 2018, pp. 169–170; Szücsi et al. 2019, p. 10; Szöllősy 2020, pp 371–373

2 Horváth et al. 2018; Szücsi et al. 2019; 2020.



Photo 1. Black dashed line: the trace of the 11th century stone wall of the lower castle (= medieval city wall) (1: Jókai street 20, 2: Jókai street 14, 3: Jókai street 12, 4: Lakatos street 7). Grey dashed line: the trace of the stone wall of the 11th century inner castle (= early royal castle? / castle of comes?)

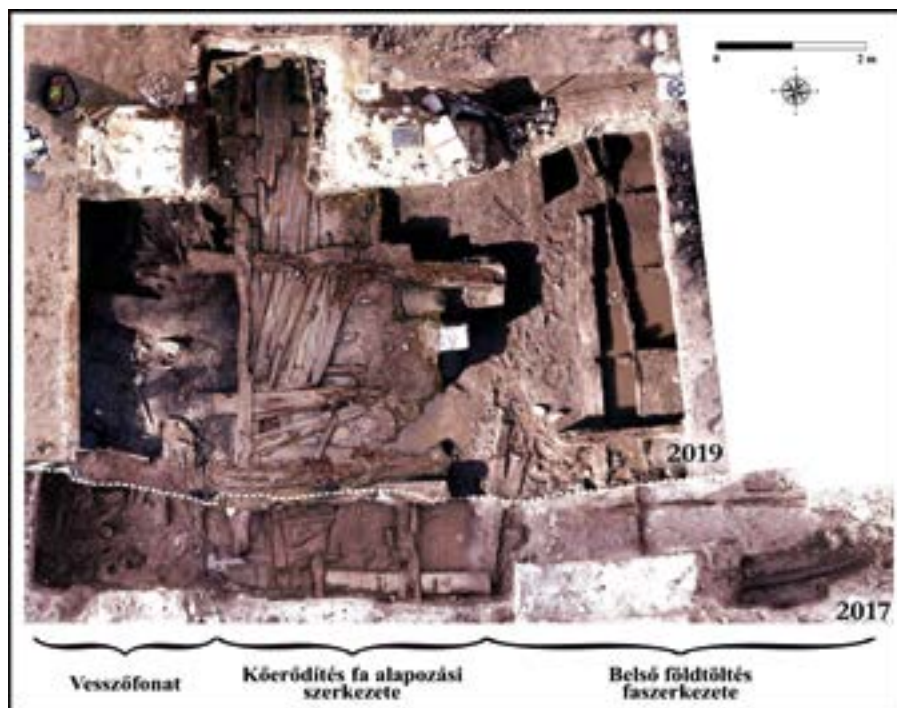
## Structure of the town/castle wall

The excavations at Jókai utca 14 in 2017 and 2019 provided evidence of the foundation structure made of wood, earth and stone – as known from some earlier salvage excavations – coupled with the stone town wall.

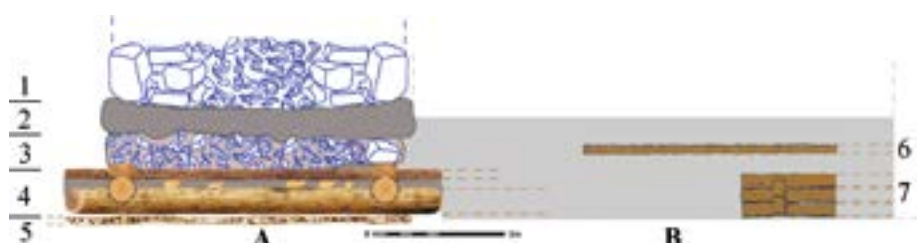
The work on the largest contiguous area thus far allowed for a fairly good reconstruction of the structure of the town wall (images 2-4).



Picture 2. Digitised surface plan of the wooden structures based on orthophotos (digitised by Gábor Molnár, Emese Csoltkó). The research trenches are marked with dashed lines.



Picture 3. The excavated foundation structure with the wooden structure of the inner earth filling and the wickerwork at the outer side of the fortification (orthophoto by Tamás Belegrai, Krisztián Pokrovenszki)



Picture 4. The castle wall and foundation structure (A): 1. Stone wall with mortar. 2. Black clay-silt layer. 3. Crushed stone layer bound with black clayey silt. 4. Bar grid foundation with black clay-silt infill. 5. Evenly distributed wood waste layer. Earthen bank (B) with two types of timber framing along the inner side of the castle wall: 6. Fibrous (?) wood structure. (7) Coffered wood structure

A beam grid was laid on the bottom of the foundation lined with waste wood that is necessary on marshy land. Planks were laid on top of the beam grid and a layer of black clay-silt was used to fill the crevices, forming a homogenous layer on top. On top of this was a layer of crushed rocks bound by mud, followed by an evenly applied layer of black silt. This provided the foundation for a wall made of large ashlar on both sides and smaller stones fixed in mortar in the middle. To the east of the foundation of the stone fortification, another much less robust wooden structure was found with beams and planks arranged in several layers, parallel and perpendicular to each other. At the lowest level, the planks were laid flat to form coffers. This structure made of wood and earth can be interpreted as the inner earth filling of the stone fortification. The dendrochronological analysis of the unearthed pottery fragments and wood samples prove the simultaneous construction of the two structures, thus confirming the hypothesis.

## Construction period of the town/castle wall

The considerable amount of wood excavated in Jókai utca was examined by two dendrochronology laboratories, independent of each other<sup>3</sup>, and they produced similar dating results: they estimated the construction of this section of the town wall at around 1045–1050.<sup>4</sup> This was also confirmed by the radiocarbon dating carried out on the selected timber<sup>5</sup>, as the last (latest) growth ring could be dated back to somewhere between 998 and 1057 with

3 The investigations were conducted by Emil Horváth, András Morgós and András Grynaeus (Morgós et al. 2020, pp. 85–109; Grynaeus 2020, pp. 111–121).

4 It is important to emphasise that the two investigations were based on different references, which confirms the age determination. Since bark or bark remains were also observed on the piece of wood whose last growth ring was dated back to 1049–1050, the wood must have used relatively quickly after felling (Morgós et. al. 2020, p. 103).

5 During the calibration via wiggle matching of the radiocarbon dating carried out with AMS technology at the ATOMKI (Institute for Nuclear Research) in Debrecen, in addition to the samples previously excavated under number 14, pieces of timber unearthed from under/near the western section of the town wall (Jókai utca 12, 20) were also examined: Morgós et al. 2020, pp. 99–101.

93% certainty. The pottery fragments collected from the foundation could also be dated to the 11<sup>th</sup> century.<sup>6</sup>

Based on all this, it seems likely that the section of the town/castle wall under and near number Jókai utca 14 was built during the reign of King András I. The dendrochronology dating of the three beam fragments from the foundation of the stone wall under Lakatos utca 7 in the northern section of the eastern town wall<sup>7</sup> salvaged in 2019 – during archaeological monitoring for earthworks and thus unfortunately not well documented – raises the possibility that the construction of the town wall may have already begun during the reign of King Saint Stephen in the 1010s, but further research is necessary to prove this hypothesis.

There is not yet enough data on the completion date of the town/castle wall, or when the building of the Budai and Palotai gates – opening to the north and southwest respectively and already known in the late medieval period – can be dated to.<sup>8</sup> The rectangular and horseshoe-shaped towers dissecting the town wall were first known about from the Italian layout plan of 1601, the French engraving depicting the 1601 siege of the town, then from 17<sup>th</sup>–18<sup>th</sup> century surveys and town plans.<sup>9</sup> According to the results of an as yet unpublished radiocarbon survey, the wall was either originally sectioned by horseshoe-shaped towers when constructed in the 11<sup>th</sup> century, or the towers were added sometime before the end of the 12<sup>th</sup> century.<sup>10</sup> Based on a 13<sup>th</sup> century pot found at the tower foundation at Jókai utca 20, the construction of the rectangular towers – together with the demolition of the wall – could have taken place no earlier than in the 13<sup>th</sup> century.

Therefore, the line of the late medieval and Ottoman-era town wall outlined based on the sources and smaller salvage excavations was certainly identical

6 Szücsi et al. 2020, pp. 61–63

7 Romát and Pokrovenszki, 2019, p. 72

8 Feld, 2011, p. 12; Siklósi, 1999, Fig. 65; 2013, p. 12.

9 Siklósi, 1999, Fig 2, 4, 5, 10, 12.

10 The referenced radiocarbon dating was carried out at ATOMKI in Debrecen on behalf of the Szent István Király Museum. The sampled beam comes from the foundation of the object identified by Gyula Siklósi as a horseshoe-shaped tower in the area of the Music School (Szabadságharcos út 3, today: Mátyás király körút 3). Previously, Gyula Siklósi had suggested that the construction of the horseshoe-shaped towers was likely to be in the late 13<sup>th</sup>/ early 14<sup>th</sup> century (Siklósi 1999, p. 59; 2013, p. 12).

to the line of the 11<sup>th</sup>-century stone fortification on the northern side of the western (Jókai utca 12,<sup>11</sup> 14, 20<sup>12</sup>) and eastern sections (Lakatos utca 7<sup>13</sup>) already mentioned. However, there are still no wood samples from the foundation of the southern part of the defence barrier, so we cannot establish with certainty whether here too the lines of the two walls ran in the same place. If so, the stone fortification examined by us encompassed an area of around 17 hectares, i.e. the entire medieval core of the city.

The question is of great importance for interpreting the smaller (around 0.8–1.2 ha) and earlier (?) square stone fortress, which stood at the highest point of the city, today II. János Pál pápa tér and its surroundings (image 1).<sup>14</sup> This is because the two fortresses could have co-existed for nearly two and a half centuries, between roughly 1050 and 1300. Although we have no evidence of the construction date for the small stone fortress inside the large stone fortification we have been researching, which probably surrounded the entire medieval town centre, indirect data points to an earlier construction than in the case of the fortification protecting the larger area.<sup>15</sup> Based on the data available today, we can presume that the purpose of the smaller stone fortress

11 Szücsi et al., 2019, pp. 20–25

12 Horváth et al. 2018; Szücsi et al., 2019, pp. 11–18

13 Romát and Pokrovenszki, 2019, p. 72; Morgós et al., 2020, p. 86

14 Dimensions of the fortress: Siklósi 1999, p. 13, p. 16. Most of the researchers who have taken a position on the issue assumed an early construction of the fortress, in the last quarter of the 10<sup>th</sup> century (Kralovánszky 1984a, pp. 197–198; Siklósi 1999, pp. 10–17; 2013, p. 12), while others doubted this idea, because “it was fundamentally based on an interpretation of the city’s name” (Feld 2011, p. 91). Siklósi considered the remains of the wall to be part of the early royal palace, István Feld questioned this interpretation, Attila Zsoldos went as far as to recognise the ispan castle in them (Zsoldos 2010, p. 10).

15 Examples of such indirect data seem to include *Alba Civitas*, i.e. “Fehérvár”, the name of the town known from 1009, which according to the most accepted view was given to the settlement based on its stone wall (Siklósi 1999, p. 15; 2013, p. 6; Zsoldos et al. 2016, p. 25). However, since we have no (wood) findings from the southern parts of the town wall to determine the date from, we cannot rule out the possibility that it was constructed earlier, in which case the name could also refer to it. Another piece of indirect data is the location of the Basilica of the Assumption of the Blessed Virgin Mary established by King Stephen, as this church of outstanding significance was not built at the highest point of the city, most probably because another building of great importance was already standing there (see in more detail: Szücsi et al. 2020).

(inner castle) was to protect the royal palace and the seat of the ispan,<sup>16</sup> while the larger fortress (lower castle) was built primarily to protect the Provostry and Church of the Virgin Mary. There are military considerations in favour of erecting walls on the boundaries of dry land, but this way there were initially still large uninhabited areas within the walled area. So the medieval town core of Székesfehérvár was developed on the territory of the castle (lower castle) built within the boundaries of the dry land.<sup>17</sup>

## **The importance of the early stone fortification of Fehérvár**

Generally speaking, stone castles and town walls in the Kingdom of Hungary, with a few exceptions, started to be built in the second half of the 13<sup>th</sup> century,<sup>18</sup> and walls became widespread only in the 14<sup>th</sup> century. Among the early exceptions are the stone castles of Esztergom and Veszprém, which can be compared to the inner castle of Fehérvár.<sup>19</sup> While the latter belongs to the smaller castles of ispans (county heads), the lower castle of Fehérvár far exceeds the size of the largest ispan castles in the Kingdom of Hungary with its area of 17 hectares, provided the line of the town wall south of the inner castle is in the same place as that of the 11<sup>th</sup>-century lower castle.<sup>20</sup> The stone wall surrounding the medieval town centre can also be considered the earliest newly built town

16 Reich 2020, pp. 47–48

17 Zsoldos 2010, pp. 10–11; Zsoldos et al. 2016, p. 214. On the terminology (royal castle, *civitas*, *castrum*), see Mordovin 2016, pp. 77–81

18 Janeš, 2019, p. 230, Fig. 6. For a very long time, the Mongol invasion was considered the main reason for building stone walls (Sándorfi 1979, p. 248), however, the transformation of medieval society, the rise of the nobility, the development of estates, and the threats the Kingdom of Hungary faced from its western neighbours played an equally important role (Janeš 2019, p. 235).

19 Similarly small ispan castles were Hont (0.75 ha) and Borsod (1.7 ha) (Szende 2013, p. 128; Mordovin 2016, Catalog, Hont, Borsod).

20 Larger ispan castles included Abaújvár (3.9 ha), Moson (4.5 ha), Pozsony (today: Bratislava, Slovakia) (5.5 ha) and the largest in Sopron (8.7 ha) (Szende 2013, pp. 128–129).



wall (i.e. without any links from the Roman era) in the Kingdom of Hungary, due to its similarity to the 11<sup>th</sup> century castle wall.

In Central Europe, in the 9<sup>th</sup>-10<sup>th</sup> centuries, fortresses were mostly constructed of wood and earth.<sup>21</sup> In Italy and north of the Alps, the first stone walls enclosing entire urban settlements appeared around 1000 following the collapse of the Holy Roman Empire. However, most stone town walls, replacing castles and residential towers, were built throughout Europe only in the 12<sup>th</sup>-13<sup>th</sup> centuries.<sup>22</sup>

By the mid-11<sup>th</sup> century, the building of the wall around Fehérvár was most certainly ordered by the king, given the expenses and the fact that in the 10<sup>th</sup>-12<sup>th</sup> centuries building stone walls around settlements was a royal prerogative throughout Europe.<sup>23</sup> In addition to defence considerations, wall building was also justified by the prestige a respectable stone wall carried, which was further reinforced by the fact that the pilgrimage route to the Holy Land that opened in 1018 passed by here.



St. Jacob shell (pilgrim badge) Szent István Király Museum , Székesfehérvár

21 The castle of Stará Boleslav in Bohemia can be mentioned as the only exception (Charvát 2010, p. 158; Mordovin 2016, p. 90, p. 146; Szücsi et al. 2020, p. 70)

22 Gerő 1975, p. 25; Peyer 1995, p. 10.

23 Peyer 1995, p. 10; Janeš 2019, p. 229.

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