ARCHAEOLOGICAL EXCAVATIONS IN NARVA IN 2008–2009

ALEKSANDR NIKITJUK
Gradiens OÜ, Tallinna mnt 31–67, 20501 Narva, Estonia; gradiens.narva@gmail.com

INTRODUCTION

The archaeological studies of the historic city centre of Narva started in the 1950s. The archaeological excavation of the Stone Age settlements and the early Iron Age hill fort in the Joaorg area were carried out in the 1950s, 1960s and 1990s (Jaanits 1959; Jaanits 1994; Nikitjuk 1997; 1998a). Rescue excavations on the site of the Narva old town were conducted in 1991, 2004–2005 and 2009 (Dubovik *et al.* 1992; Kriiska & Lõhmus 2006). Investigations on the territory of Narva stronghold of the 13th–19th centuries were carried out in 1984–1987 and 1997 (Alttoa *et al.* 1986; Alttoa *et al.* 1987; 1988; Nikitjuk 1998b).

In 2008–2009 archaeological studies were conducted at the defense fortifications of Narva stronghold of the 17th–18th centuries, Victoria, Honor, Gloria and the 5th ravelin by the author of the present article (Fig. 1). The work was commissioned by the city government of Narva. The aim of the studies was to devise projects for monuments' preservation and restoration and their usage as tourist objects. Also some fieldwork was carried out at the Narva Joaorg area and in the old town.

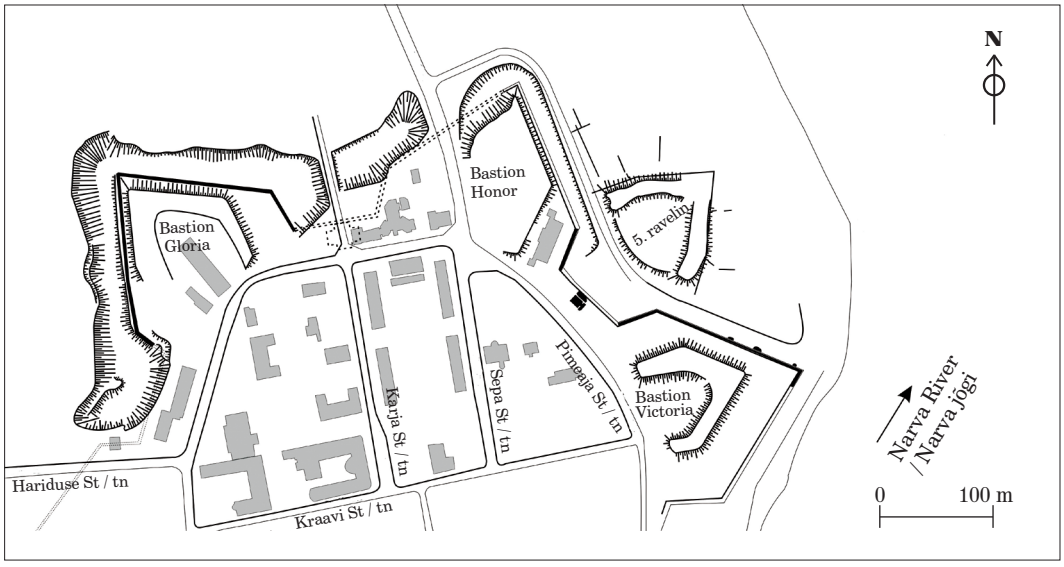

Fig. 1. Research of Narva Castle bastions.
Jn 1. Narva kindluse bastionide uuringud.
Drawing / Joonis: Aleksandr Nikitjuk

RESEARCH OF BASTIONS

Archaeological excavations on the bastions of the Narva stronghold carried out in 2008–2009 aimed at finding solutions to stop the intensive decay of the monuments and fix the monuments' present state, reveal the areas in danger and establish causes of the decay. The reasons behind the present alarming state of the monuments include the dislocation of the historical layer of clay hydro isolation at the ramparts above the scarp wall, the uncontrolled growth of trees and bushes on the bastions' walls, and the disruption of the historical ground water drainage system due to the damages of the drainage channels and partial backfilling of the ditches. The historical data received during the archaeological research is of a preliminary nature. It is expected to continue the archaeological studies during the preservation and restoration process of the monuments.

The Victoria, Honor and Gloria bastions were studied earlier in 1963 (Buldas *et al.* 1965) and in 2007 (Uuetalu 2007). The work included architectural measurements, geodesic surveying and partial engineering survey of the monuments. However, these works were carried out on the basis of visual studies of the monuments without any archaeological investigation. The archaeological excavations of the bastions were for the first time carried out in 2008–2009 (Nikitjuk 2009a).

The research methodology was based on the following:

1) The use of low impact methods to study the monuments: surface cleaning and stratigraphy with the use of ground-penetrating radar;
2) exploratory excavations in small volumes on the ramparts and in the bastions' ditches;
3) studies of stratigraphy with the help of geological examination;
4) ground-penetrating radar and archaeological surveying data was compared with historic drawings (Swedish Military Archives, Russian State Military History Archives, Russian State Military Naval Archives).

During the works a full engineering survey of all preserved parts and elements of the monuments was made. The floors of dungeons, staircases and ceilings were surveyed. In additon, exploration, engineering and geodesic surveys of remote (flooded) dungeons were initiated (Figs. 2–3). The total length of the dungeons' corridors under investigation was 750 m. 92 loopholes, 20 wall niches, 14 flights of steps were found and recorded during the research. Also damages caused by the siege and assault of Narva by the Russian troops in 1704 as well as the evidence of follow-up repair work on the bastions were found.

In order to examine the foundations under the bastions three test pits at the basis of the left face of the Victoria bastion were made. The excavations revealed a solid layer of inland clay at the basis of the bastion. In the layer wooden log constructions used as the basis for rock fill (granite stones) were found. This was the basis used for the erection of a quarry stone masonry of the bastion's scarp wall. The wooden structures are well preserved in the inland clay, and annual rings of the logs are clearly seen at the cross-section. The age of the wood is dated back to the time when the foundations of the Victoria bastion were laid (1684 or 1685) and it is precisely recorded in historical written sources; this information can be used to complement the dendrochronological scale.

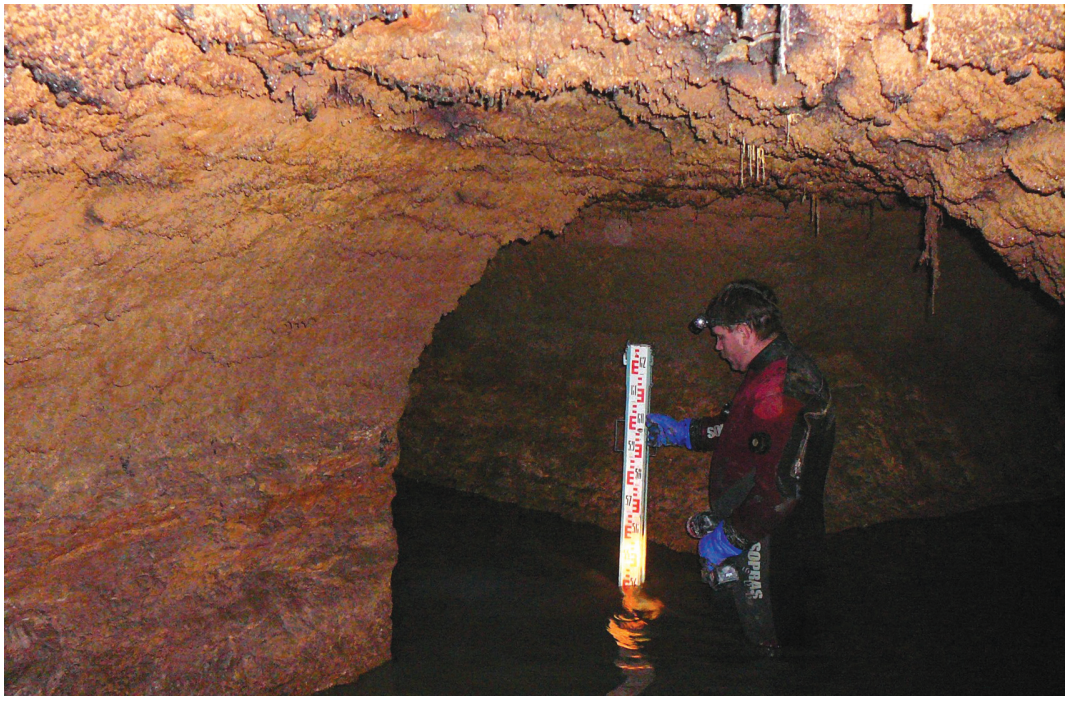

Fig. 2. Investigations of flooded Victoria bastion dungeons.
Jn 2. Victoria bastioni üleujutatud kasemati osa uurimine.
Photo / Foto: Aleksandr Nikitjuk

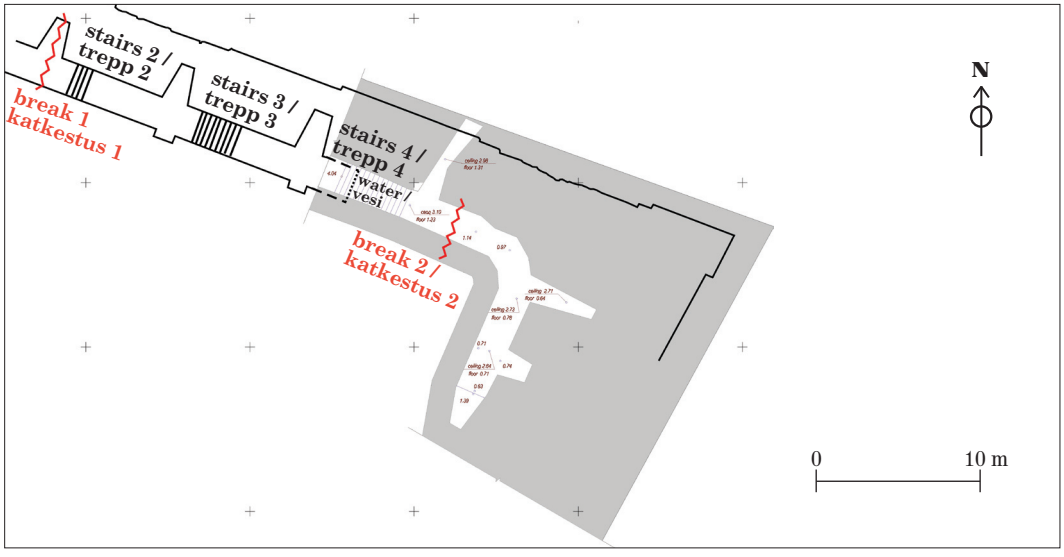

Fig. 3. Geodetic plan of flooded Victoria bastion dungeon.
Jn 3. Victoria bastioni üleujutatud kasemati geodeetiline plaan.
Drawing / Joonis: Aleksandr Nikitjuk

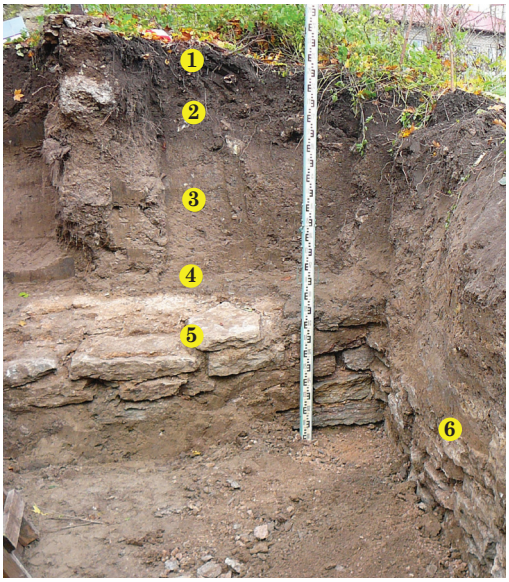

Fig. 4. Test pit in a curtain between Victoria and Honor bastions. 1 – turf; 2 – mixed layer; 3 – loam; 4 – clay; 5 – counterfort; 6 – curtain wall (scarp).
Jn 4. Šurf Victoria ja Honori bastionite vahelisel kurtiinil. 1 – mättakiht; 2 – segatud pinnas; 3 – liivsavi; 4 – savi; 5 – kontraforss; 6 – eskarpsein.
Photo / Foto: Aleksandr Nikitjuk

Fig. 5. Breast-wall foundation in the test pit of the 5th ravelin.
Jn 5. Tugimüüri alus 5. raveliini šurfis.
Photo / Foto: Aleksandr Nikitjuk

During rescue conservation works in 2008 called for the partial collapse of the curtain wall mount one more test pit in the upper part of the scarp wall between the Victoria and Honor bastions was made. The inner part of the scarp wall with wall piers (Fig. 4) was opened. The excavation revealed a cross-section of the rampart along the edge of the curtain wall and the upper part of the body of the curtain wall filling. The core material of the preserved part of the rampart is sandy clay, the wall piers' battlements and on their lateral surfaces as well as the inner setting of the scarp wall were covered with a clay layer 20–30 mm in thickness. The clay is identical to the clay found in the ditches and at the basis of the bastion. The clay layer covering the scarp wall setting and the wall piers battlements was used by the construction workers to create a hydro isolation layer for the protection of the stone masonry. Nearby the excavation site a well preserved underground vault was found. According to the historical documents it was used as a gun powder storage.

In 2008 a preliminary archaeological research was carried out in the area of the 5th ravelin with a number of archaeological test pits and trenches (Nikitjuk 2008a–b). The excavation was aimed at getting a number of cross-sections to locate historical places of the system of ditches going along the Honor and Victoria bastions and the 5th ravelin. During the field work it became clear that under the turf layer there was a

solid layer of bluish-grey clay where the ditches were made; that is why the historical location of the ditches can be seen on the cross-section of trenches and test pits, which makes the restoration of the monuments easier. In the rampart of the 5th ravelin a stone (scarp) wall (quarry stone in calcareous base) was found which most probably served as a support wall for the rampart mount (Fig. 5). Besides, in the stratigraphic cross-section of one of the test pits traces of glacis filling were spotted. Finally, not far from the Honor bastion a pit for lime production (7 × 3.5 m) was found, which may be connected with the period of construction and repair works on the bastion.

RESEARCH AT THE OLD TOWN

In 2008 the archaeological supervision (Nikitjuk 2009b) which was performed during the earth works at the gas pipe line in the historical old town (the area near residential blocks number 10 and 12 in Vestervalli street), revealed the foundation of the medieval

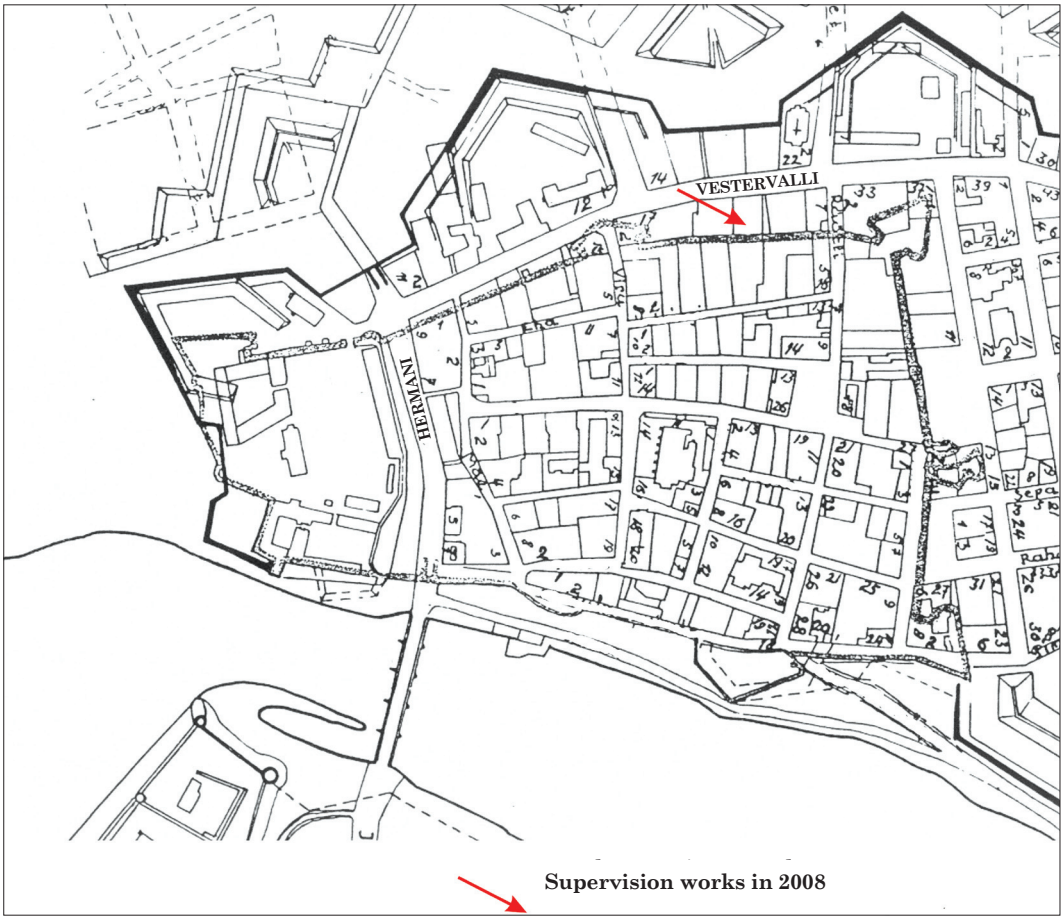

Fig. 6. View of Narva in 1930's with a medieval stronghold.
Jn 6. 1930. aastate Narva plaan koos keskaegse kindlustusega.
Compiled by / Koostaja: Enn Kaar (after Karling 1936)

Fig. 7. Medieval town wall.
Jn 7. Keskaegne linnamüür.
Photo / Foto: Aleksandr Nikitjuk

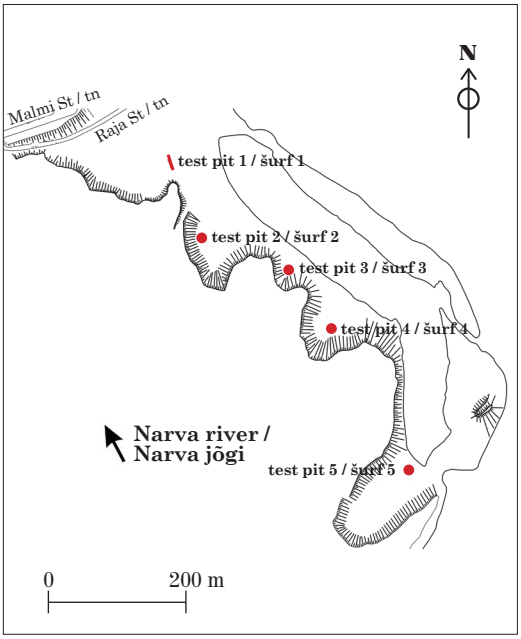

Fig. 8. Archaeological excavations at the Joaorg area.
Jn 8. Narva-Joaoru arheoloogilised uuringud.
Drawing / Joonis: Aleksandr Nikitjuk

town wall of the 14th century (Figs. 6–7). The wall was still there on the territory of the old town in the 1930s (Karling 1936, 78). The wall was demolished during the post-war construction work on the territory of the old town and till the present day it was not known whether its foundation has been preserved. With this new evidence it can be considered as a proved fact. A part of the medieval town wall was traced for more than 30 m, with the upper part of the quarry stones being almost at the level of modern day surface (under the layer of the top soil). The stone wall can be seen at the depth of more than 3 m.

RESEARCH IN THE JOAORG AREA

In 2009 the first preliminary archaeological survey was carried out in the historical area of Joaorg, outside the preservation zone of the archaeological monuments of the Stone Age and the Early Metal Age.

The preliminary archaeological study was conducted in connection with the plans of the Narva city government to develop a recreational area in Joaorg. Several archaeological test pits were dug in which the cultural layer of the 17th–19th centuries and the foundations of stone structures (supposedly used for industrial purposes) were found (Fig. 8). According to the historical drawings (Russian State Military Naval Archives 349-19; Russian State Military Naval Archives 3-l-25) there was a quarry stone pit and furnaces for lime burning on this site in the 17th–18th centuries.

REFERENCES

Alttoa, K., Aus, T. & Tamm, J. 1986. Die bauarchäologischen Untersuchungen der Burg Narva in den Jahren 1984–1985. – TATÜ, 35: 4, 402–406.
Alttoa, K., Aus, T., Lange, K. & Tamm, J. 1987. Neue Angaben zur Baugeschichte der Burgen in Rakvere, Paide und Narva. – TATÜ, 36: 4, 391–398.
Alttoa, K., Aus, T., Lange, K. & Tamm, J. 1988. Über Untersuchungen der Burgen in Rakvere, Paide und Narva. – TATÜ, 37: 4, 390–397.
Buldas, V., Potti, H. & Üprus, H. 1965. Narva bastionide remontkonserveerimistööde tehniline dokumentatsioon. (*Manuscript in MA.*)
Dubovik, B., Tamm, J. & Rüütel, T. 1992. Narva Börsihoone arhitektuuri-arheoloogilised uurimistööd. (*Manuscript in MA.*)
Jaanits, K. 1994. Excavations at Narva. – TATÜ, 43: 1, 18–21.
Jaanits, L. 1959. = Янитс Л. Ю. 1959. Поселения эпохи неолита и раннего металла в приустье р. Эмайыги (Эстонская ССР). Таллин.
Karling, S. 1936. Narva. Eine baugeschichtliche Untersuchung. Tartu.
Kriiska, A. & Lõhmus, M. 2006. Narva Suur tn. 22 ja 24 kruntide ehituslugu 2004.–2005. aasta arheoloogiliste välitööde andmetel. – Linnas ja linnuses. Uurimusi Narva ajaloost. Ed. by A. Kriiska & M. Ivask. *Narva Muuseumi toimetised, 6.* Narva, 9–37.
Nikitjuk, A. 1997. = Никитюк А. 1997. Предварительные ресультаты раскопок городища Нарва-Йоаорг. – AVE, 1996: Stilus, 7, 68–78.
Nikitjuk, A. 1998a. Archaeological investigations of the hill-fort of Narva Joaoru. – AVE, 1997, 78–80.
Nikitjuk, A. 1998b. Archäologische Aufsichtsarbeiten in Narva auf dem Territorium der Bastei "Triumph". – AVE, 1997, 165–175.
Nikitjuk, A. 2008a. 5. raveliini ja Sepa tn vahel "Mini Narva" platsi aluse arheoloogilise eeluuringu aruanne. Narva. (*Manuscript in MA.*)
Nikitjuk, A. 2008b. 5. raveliini arheoloogia eeluuringute aruanne. Narva. (*Manuscript in MA.*)
Nikitjuk, A. 2009a. Narva linnas asuvate bastionide "Gloria", "Honor" ja "Victoria" ning bastionide müürides olevate kasemattide kindlustamise, restaureerimise ja konserveerimise ehitusprojekti koostamine töö raames. Arheoloogiliste uuringute aruanne. Narva. (*Manuscript in MA.*)
Nikitjuk, A. 2009b. Kaevetööde Narva linna muinsuskaitse alal, krundil aadressiga Vestervalli tn 10–12, teostatud arheoloogilise järelevalve all. Narva. (*Manuscript in MA.*)
Nikitjuk, A. 2009c. Narva Joaoru arheoloogiliste eeluuringute aruanne. Narva. (*Manuscript in MA.*)
Russian State Military Historical Archives. 349-19. Plan of Narva Castle. 1743.
Russian State Military Naval Archives. 3-1-25. Plan of Narva Castle. 1748, 1757, 1762, 1765, 1770, 1778, 1789.
Uuetalu, H. 2007. Narva linna Victoria, Honor, ja Gloria bastionide ehitise ekspertiis ja muinsuskaitselised eritingimused. Tallinn. (*Manuscript in MA.*)

ARHEOLOOGILISED UURINGUD NARVAS 2008–2009. AASTAL

Aleksandr Nikitjuk

2008–2009 teostati Narva linnas 17.–19. sajandi kaitseehitiste (bastionid Victoria, Honor, Gloria, ja 5. raveliin, vt jn 1) arheoloogilisi uuringuid. Uuringute eesmärgiks oli arhitektuurimälestiste restaureerimise ja konserveerimise projektide ettevalmistus, samuti nende mälestiste kasutamine turismiobjektina. Uuriti bastionide kasematte, bastioni Gloria eskarpseina vundamenti, bastionide Victoria ja Gloria vahelist valli ja kurtiini eskarpseina ülemist osa, 5. raveliini piirkonnas ka kraavide ja vallide süsteemi profiile (jn 2–5). Uurimuse tulemusel täienesid teadmised Narva kaitserajatiste ehituslikest iseärasustest. Leiti ka jälgi bastionide sõjategevusest tulenevatest kahjustustest, mis on saadud aastal 1704, mil Vene väed linna piirasid. Samuti tuvastati bastionide remonditööde jälgi.

2008. a gaasitrassi järelevalve käigus leiti Vestervalli tänava piirkonnas 30 m ulatuses keskaegse linnamüüri jäänused (jn 6–7). Paekivimüüri ülemine osa asub praktiliselt maapinnaga ühel tasandil, mättakihi all ning on jälgitav üle 3 m sügavusena. 2009. a uuriti seoses plaanitava puhkeala rajamisega ka Joaoru piirkonna ajaloolist territooriumi (jn 8). Välitööde käigus tuvastati lisaks kultuurkihile ka 17.–19. sajandi tööstusehitiste vundamendid. Ajalooliste andmete põhjal asusid 17.–18. sajandil antud territooriumil paekivikarjäär ja lubjaahjud.