

ARHEOLOOGILISED
VÄLITÖÖD
EESTIS

ARCHAEOLOGICAL
FIELD WORKS
IN ESTONIA

1999

Koostanud ja toimetanud
Ülle Tamla

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Cover: strap-divider from Harmi grave in Harjumaa

Tagakaas: kaelavõru fragment Harjumaalt Harmi kalmest
Back cover: fragment of neck-ring from Harmi grave in Harjumaa

Toimetuskolleegium:

Ants Kraut
Valter Lang
Anneli Randla
Jaan Tamm
Toomas Tamla
Ülle Tamla
Heiki Valk

Uus 18, Tallinn 10111, Eesti
e-mail: info@muinas.ee

Kujundus ja makett:

Jaana Kool

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THE ARCHAEOLOGICAL INVESTIGATIONS IN VILJANDI, TARTU AND KÄRKNA

Andres TVAURI

Tartu Ülikool (University of Tartu) Lossi 3, Tartu 50090, Eesti (Estonia)

tvauri@ut.ee

In 1999 Arheoloogiateenistus Ltd. carried out archaeological investigations and supervisions in Viljandi, Tartu and in the ruins of Kärkna monastery, close to Tartu. The activities were co-ordinated by archaeologists Andres Tvauri (at Viljandi; at Vallikraavi Street in Tartu, at Kärkna), Tõnno Jonuks (at Vallikraavi Street in Tartu); Marge Konsa and Heiki Valk (at *Toomemägi* in Tartu).

The castle of Viljandi was one of the most powerful strongholds of the medieval Livonian Order. Its construction started in the 13th century. It was seriously damaged in the Livonian Wars in the second half of the 16th century, as well as in the wars between Poland and Sweden in the beginning of the 17th century. In the Great Northern War in the beginning of the 18th century the castle was completely destroyed and from then on the ruins were used as a stone-quarry.

In the remains of the castle, the conservation work of the castle wall, begun already in 1998, continued. Because of that, the upper part of the wall remains of the southwestern corner of the convent building was cleared of debris. The results of the excavations, carried out by the outer wall of the convent building in 1998 (Tvauri 1998), show that the wall continues 2,5 metres below the level cleared out for the conservation work.

An excavation of 17 square metres was made in order to examine the current condition of the wall. It was situated by the northern side of the southern wall of the convent building, 6,8 metres south from the inner southeastern angle of the convent. Less than 1 m below the present level of the castle yard, brick walls and granite cobbles appeared almost in the full range of the excavation. A cultural layer characterised by ash and charcoal, rich in animal bones, covered the ruins of buildings. In a canal between the walls a trough hollowed out from a tree trunk was found. It had been installed with a noticeable slope to the south and its end passed through an opening in the southern wall of the convent building, to the southern side of the wall. The find material included a coin of Tallinn (*killling*) dating from 1549. On the basis of the stratigraphy, the layer can be dated to the second half of the 16th century.

The city of Viljandi was established in front of the castle of the Livonian Order in

the 13th century, after the German conquest. Although a small city, Viljandi was a member of the medieval Hanseatic League and the city was surrounded by a town wall, the construction of which is yet to be dated. Just as the castle, the town wall was most likely destroyed in the great wars of the 16th and 17th centuries and it was later used as a source of building material. At present, the low remains of the wall can be seen above ground level in a few places only.

In order to find out the location and condition of the town wall, excavations were carried out at ten sites, at different reaches of the wall. The lower layers of stones had usually preserved underground. It was surprising to find out that the section of a wall, which can be seen in the greenery situated just behind the City Hall, also originates from the Town Wall. In the southern and southeastern part of the Old Town, by the bank of the lake, the remains of the wall have in some places fallen down the slope. The excavations showed that a street was situated on the inner side of the same part of the wall. The street was paved with cobbles, presumably in the first half of the 16th century.

The hypothesis that the whole town wall was erected similarly, that the same kind of construction was used and the wall was of the same width everywhere, found some evidence. The lowest one or two layers of stones, grouted with clayish sand between the stones, were situated on natural ground, without a foundation; only the layer of humus had been removed. The lowest part of the wall had a width of 2 metres. The higher layers of stones were grouted with lime mortar containing a lot of clayish sand.

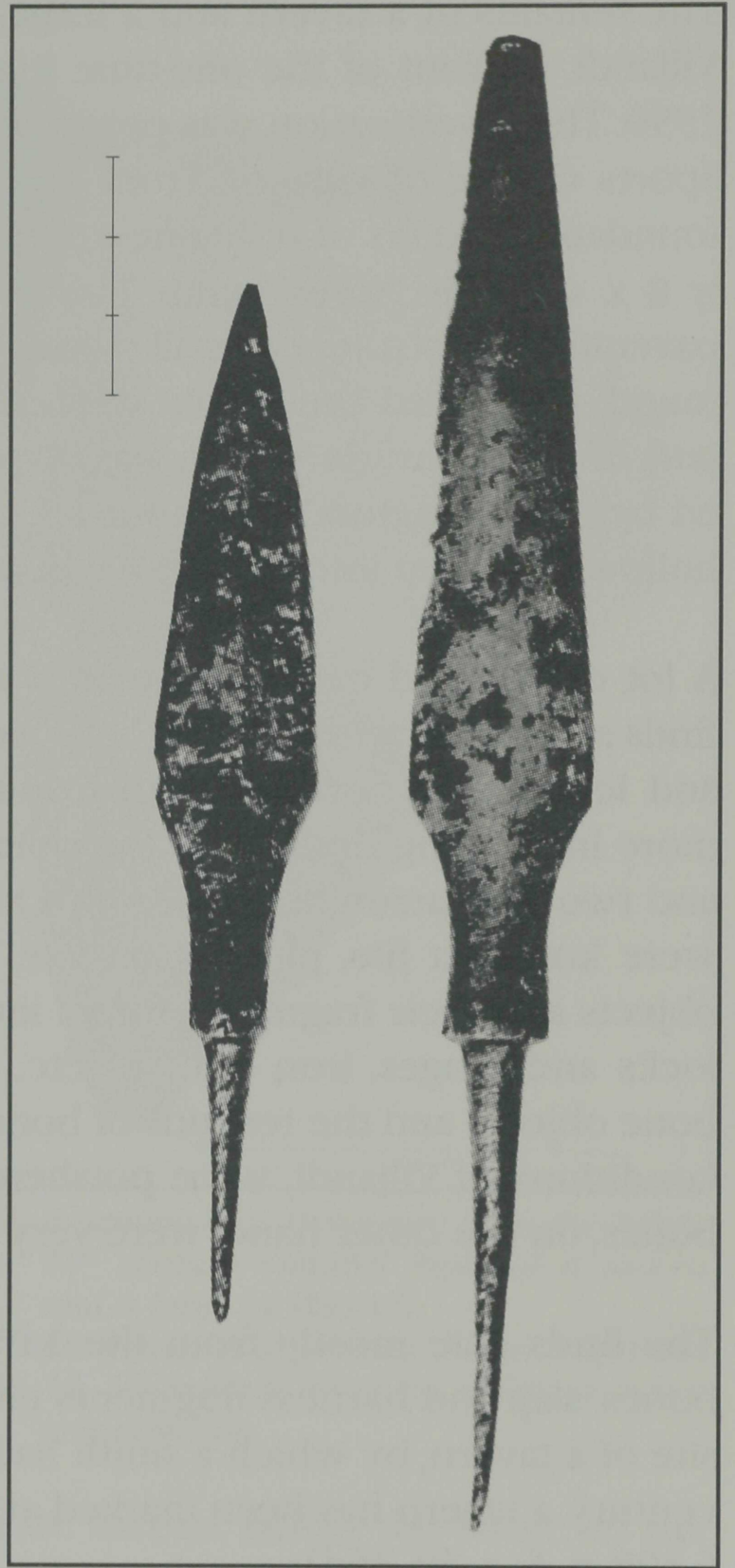


Photo 1. Iron arrowheads from the 14th to 16th-century cultural layer of a tavern and a forge in Viljandi.

Foto 1. Rauast nooleotsad Viljandist 14.–16. sajandi kõrtsi- ja sepa-paja-ase me kultuurkihist.

The remains of a tavern and a forge, situated west of the medieval Old Town of Viljandi, in front of the one-time Riga gate, were investigated in the summer of 1999. The investigation was prompted by the construction of an extension to the Sports Centre of Viljandi. From the investigated area of 330 square metres, the foundation stones of only one outbuilding, with the dimensions of approximately 8 x 4 metres, were found. Just above the natural undisturbed clayish sand, a pavement consisting of small stones (no larger than a fist) and pieces of slag was found; it covered the whole western part of the excavated area. In the eastern part of the excavation there was no pavement, but a one-metre-deep hollow existed below the natural ground level. It extended from east to west, with smaller hollows running into it from north and south.

A lot of slag and bases of furnaces were found from the whole excavation. The finds associated with the smithery were numerous - namely slag, nails, horseshoes and ice-nails of horses, stirrups, spurs and fragments of horse-bits. Among the more interesting finds were the point of a dagger, a fragment of an iron helmet, and two iron arrowheads (Photo 1). Among the tools and their fragments found were knives, a file, pincers, an axe, borers, a scythe. The other numerous iron objects and their fragments found included a bar of iron, iron heels, fragments of locks and hinges, iron buckles etc., were also numerous. Also numerous were bone objects and the remains of bone processing. Unusually rare, considering the conditions of Viljandi, were potsherds (Photo 2) and the tile fragments. Animal bones, on the other hand, were very numerous all over the excavated area.

The finds date mostly from the 14th to 16th centuries. The quantities of animal bones, slag and harness fragments give good reasons to conclude that this is the site of a tavern, by which a smith had been working. On the city maps of the 18th century, a tavern has been marked at the place of the present investigations (EAA f. 308, n. 6, s. 40, 364).

In the territory of the medieval hanseatic city of Tartu, Arheoloogiateenistus Ltd. carried out investigations at several sites. Archaeological monitoring was carried out on *Toomemägi*, in the area of the medieval castle of the Bishop and its bailey, between the present-day Observatory and Women' Hospital, because of the construction of a gas line. The depth of the trench for the gas line was only 90 cm, so medieval and earlier layers and constructions were unearthed at some locations only. On the western side of the Observatory a part of a wall was unearthed, originating most likely from the Bishop's castle. Below the square in front of the Old Anatomical Theatre of the University of Tartu, the lower part of the outer wall of the bailey was unearthed. Between the Women' Hospital and the Observatory, on

the western slope of a one-time valley that separated the hill-fort from the rest of *Toomemägi*, in a 5 metre long section of the ditch, a 70–80-cm-thick dark brown cultural layer could be observed. It lay directly on undisturbed natural sand, and it contained a lot of burnt stones and animal bones, but fragments of brick and lime were missing (in contrast with the rest of the gas track). A few small potsherds suggest that this layer should be dated to a period earlier than the German conquest.

On the edge of *Toomemägi*, by *Kuradisild* (The Devil's Bridge), small-scale excavations were carried out, necessitated by the construction of stairs onto the 17th-century bastion. The bastion turned out to be piled up of soil and sand in which compact layers of construction debris, with fragments of medieval bricks and mortar in it, were also present. Below the earthwork, a medieval cultural layer from the 13th

century was unearthed in an area of 4,5 square metres. Below the latter, on the natural undisturbed soil, there was an up to 30-cm thick layer, which originated from the 11th to the beginning of the 13th centuries (i.e. before the German conquest), based on the potsherds. A post-hole with the diameter of 25–30 cm, wedged with stones, was associated with this layer.

Earlier excavations in the area of the medieval Dome Church have proved the existence of pre-conquest cultural layer on the western part of *Toomemägi* (Valk 1995). The current investigations showed that an analogous layer also existed in the middle of *Toomemägi*, by the side of the hill-fort in the eastern part of the hill. Most of the pre-conquest as well as the medieval cultural layer, which had once existed there, seems to have been heaped up into the bastions and other earthen defences constructed around *Toomemägi* in the 17th century. The one-time layer

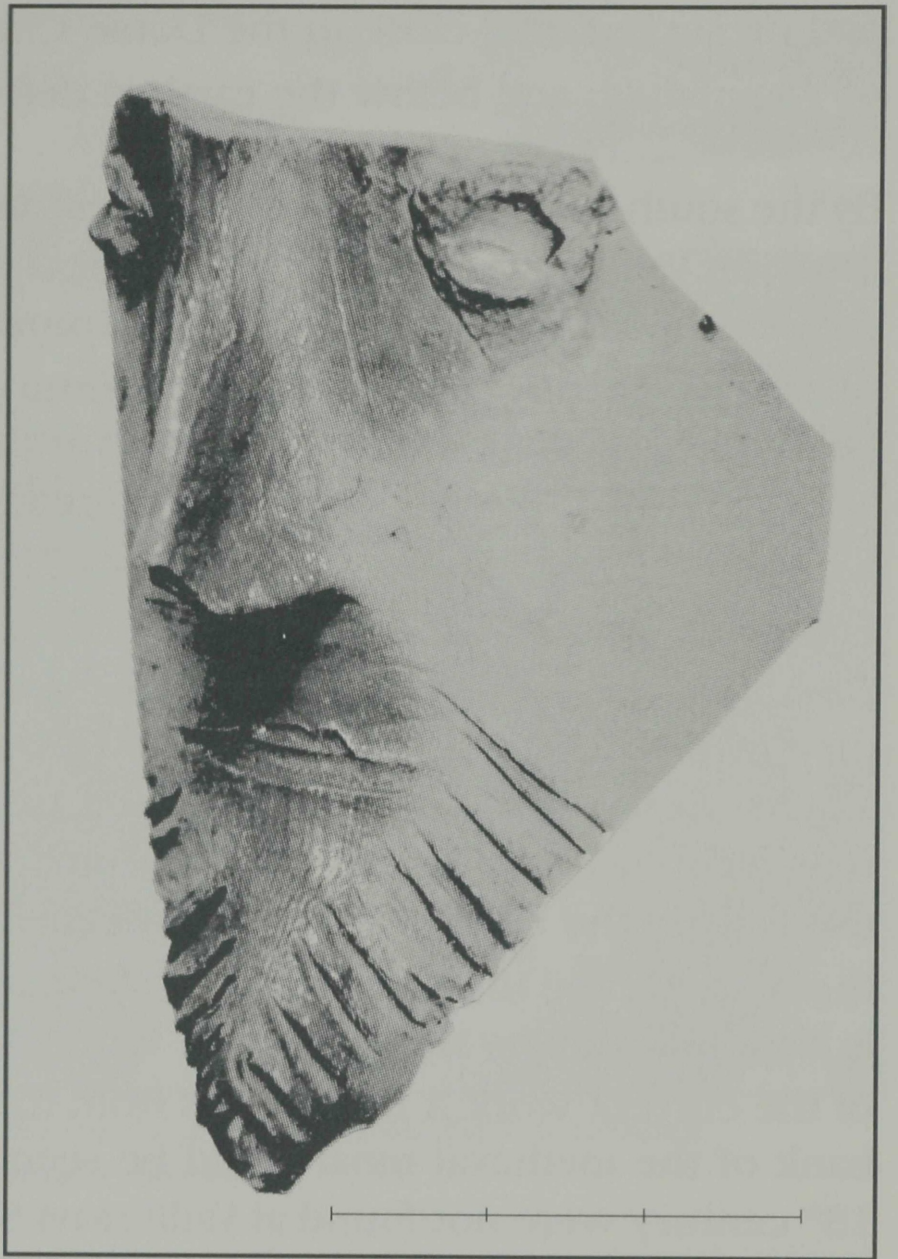


Photo 2. Fragment of a stoneware from the 14th to 16th century cultural layer of a tavern and a forge in Viljandi.

Foto 2. Kivikeraamilise kannu katke Viljandist 14.-16. sajandi kõrtsi- ja sepapaja-ase me kultuurkihist.

had preserved only close to the Dome Church, at some locations on the plateau of *Toomemägi* and below the earthen defences.

By the southern side of the pre-conquest and medieval castle around the one-time moat, on Vallikraavi Street archaeological monitoring was carried out because of renewal of fresh-water and sewerage pipelines below the street. The lower part of the supporting wall of the 17th-century *Bastion Charles IX* was discovered below the sidewalk on the lower end of the street (closer to the river). The wall, built of big granite stones, was plastered and painted brick red. In the western part of Vallikraavi Street, the remains of the supporting wall of *Bastion Charles Gustavus* were found, but they were in a much worse condition than those of *Bastion Charles IX*'s were. Both of the walls found are depicted on the 17th-century map of Tartu city fortifications (EAA f. 2623, n. 1, s. 2049, l. 31; s. 2050, l. 19–20). As a result of the monitoring it turned out that the moat attained its current form in the 17th century, when material for constructing the bastions was taken from the outer bank of the medieval moat. The medieval moat ran below the bastions and the houses on the slope of *Toomemägi* by Vallikraavi Street. This is also indicated by the profiles of the trenches dug into the yards in the course of the current work. A few metres from the street, towards *Toomemägi*, the outer bank of the medieval moat could be seen in the profiles. Layers earlier than the 18th century were not found at Vallikraavi Street, since the area was dug deeper in the course of constructing the bastions.

The Cistercian Monastery of Kärkna (*Falkenau*), close to Tartu, was established in 1234 by the first bishop of Tartu, Herman I (Schmidt 1941, 131). This was one of the biggest Cistercian monasteries in medieval Livonia. It was destroyed by the Army of the Grand Duke of Moscow in 1558. The monastery consisted of a convent building surrounded by a castellum-type wall. The walls of the monastery have survived up to the height of 2 to 3 metres, below a layer of debris. The aim of the investigations of 1999 was to find out the condition of the walls, the nature of the cultural layer, and the original elevation of monastery yard as well as the chapel floor.

Two sondages were dug to the inner side of the northern castellum-type wall: one at the northeastern corner of the wall, the other 11 metres west of the corner. The original ground of the monastery yard turned out to be covered by a layer of ruins up to 2 m deep by the inner side of the castellum-type wall. Under this layer, a brick floor was found, covered by a thin layer of charcoal and ashes. Below the brick floor, there was 50 to 60 cm deep layer of sand with humus, where fragments of bricks and lime mortar could be found. Under this, a layer of dark grey



Photo 3. The remains of the brick portal of St Michael's chapel in Monastery at Kärkna.

Foto 3. Kärkna kloostri Mikaeli kabeli tellisportaali jäänused.

soil with charcoal in it was found. This seems most likely to be the original ground level. The northern wall of the castellum is 2.5 metres wide and is built of big granite stones in straight lines; fragments of stones were wedged between the big stones. In the foundation slab, the big granite stones are grouted with clayish sand. On the brick floor, a brick lining was laid to the inner side of the castellum wall. The only finds from the sondages were tile fragments and a fragment of a brick covering of the slab of a hypocaust (TÜ 820: 9).

In the western wall of St. Michael's Chapel, situated in the northeastern corner of the monastery, the southern part of the portal, the threshold and a part of the floor were unearthed (Photo 3). In the excavated area there was a debris layer up to 2 metres deep on the chapel floor, a few human bones were also found there. The western wall of St. Michael's Chapel, unearthed only partially, was built of granite stone and covered with a brick lining. The chapel turned out to be constructed against the castellum wall, i. e. later than the wall. In the western wall of the chapel, the portal of profile bricks was originally covered with a thin layer of plaster, painted brick red. Into the plaster, a hexagon (Star of David) was scraped. From the lower part of the doorjamb, a granite stone had preserved, with cut-in

grooves for fastening the hook of the door hinges. Big flat granite stone served as a threshold. About one square metre of the floor was unearthed next to the portal. It consisted of two types of brick plates. Parallel to the threshold, there was a row of at least five square plates of 23–24 cm size. Those plates were burnt red. East of this row, diagonal to the latter plates were 27 cm plates, burnt yellow. From the debris layer, profile bricks from the groins of a vault, fragments of window glass and a piece of plaster with a fragment of a wall painting on it (TÜ 820: 25), were found. From the layer of soil in front of the threshold of the chapel, a fragment from a thin glass vessel (TÜ 820: 40) was found.

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EAA= Rahvusarhiivi ajalooarhiiv (Estonian Historical Archives).

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ARHEOLOOGILISTEST UURINGUTEST VILJANDIS, TARTUS JA KÄRKNAS

Andres TVAURI

Viljandi ordulinnuses jätkati müüride väljapuhastamist rusudest ja nende konserveerimist. Konvendihoone lõunamüüri põhjaküljele tehti 17 m² suurune kaevand, kus tänapäevasest hoovipinnast u. meetri võrra sügavamal fikseeriti tellismüüre ja munakivisillutis, mida kattis 16. saj. teisel poolel ladestunud söe- ja tuhakiht koos arvukate loomaluudega. Müüride vahele jäänud kanalist avastati puutüvest õõnestatud renn, mis oli maha asetatud märgatava kaldega ning väljus müüri tehtud avavuse kaudu konvendihoone lõunaküljele.

Viljandi keskaegse linnamüüri asukoha ja säilivuse selgitamiseks jätkati töid kümnes erinevas kohas. Üllatavaks leiuks võib pidada maapinnal nähtavate linnamüürijäänuste avastamist Viljandi raekoja tagusel haljasalal. Vanalinna järvepoolisel küljel on linnamüür mitmes kohas nõlvakust alla varisenud. Uurimistöodel selgus, et järvepoolse müüri siseküljel on olnud tee või tänav, mis sillutati munakividega arvatavalt 16. sajandi esimesel poolel. Kinnitust sai ka oletus, et Viljandi linnamüür rajati terves ulatuses samasugust ehitusviisi kasutades: enne ehitustöid eemaldati maapinnalt huumusekiht, seejärel laoti algsele pinnasele u. 2 m laiune saviliivaga seotud maakividest müürikeha. Paarist alumisest kivikihist kõrgemal on müüriladu seotud rohkelt saviliiva sisaldava lubjamördiga.

Seoses Viljandi Spordihoone juurdeehituse rajamisega, uuriti Viljandi keskaegsest linnasüdamest lääne pool asunud Riia värava ees paiknenud kõrtsi- ja sepikojaaset. Puhastati välja 8 x 4 m suuruse keskaegse kõrvalhoone vundament ja saviliivale laotud sillutis, mis koosnes väiksematest kividest ja šlakitükkidest. Kogu kaevandi alalt leiti arvukalt sepatööle, s.h. hobuste hooldamisele osutavat leiumaterjali (näit. ääsi põhjad, šlakk, hobuserauad, kabjanaelad, jäänaelad, sadulajalused, kannused ja suitsed). Leidudest väärivad eraldi märkimist veel pistoda teramik, raudkiivri katked ja kaks nooleotsa (foto 1). Teine suurem leiurühm oli luuesemed ja nende tootmisjäägid. Tavatult vähe leiti savinõukilde (foto 2). Saadud leiumaterjal, mis pärineb enamasti ajavahemikust 14.–16. saj., võimaldab järeldada, et sellel kohal tegutses kõrts koos sepapajaga. Lisaks rauatööle on siin valmistatud ka luuesemeid. Nagu nähtub vanematelt Viljandi linnaplaanidelt, on arheoloogiliselt läbiuuritud alale veel 18. sajandil märgitud kõrts ja trahter.

Tartu vanalinnas tehti arheoloogilisi uuringuid Toomemäel keskaegse piiskopilossi ja eeslinnuse piirkonnas. Tähetorni ja Naistekliiniku vahelisel alal toimusid järelevalvetööd seoses gaasitrassi rajamisega. Kuna trass oli vaid 90 cm sügav, satuti keskaegsetele ja varasematele kihtidele ning konstruktsioonidele harva. Tähetorni lääneküljel tuli nähtavale müürijupp, mis pärineb arvatavalt piiskopilossist. Ülikooli Vana Anatoomikumi esisel platsil leiti eeslinnuse välismüüri alaosa. Tähetorni ja Naistekliiniku vahelisel alal, muinaslinnust kunagi Toomemäest eraldanud loodusliku vagumuse läänepoolsel kaldal, oli trassikraavis u. 5 m pikkuses lõigus jälgitav looduslikule liivale ladestunud 70–80 cm paksune tumepruun tihke kultuurkiht. Selles leidis palju põlenud kive ja loomaluid, kuid puudus lubja ja tellisepuru, nagu kõikjal mujal läbiuuritud trassialal. Kultuurkihist leitud paar väiksemat savinõukildu annavad alust oletuseks, et selle kihi näol on tegemist saksa vallutuse-eelse ladesetusega.

Tartu Toomemäe serval, Kuradisilla kõrval, toimusid väiksemad kaevamised seoses uue trepi ehitusega 17. saj. lõpul rajatud muldkindlustusele. Selgus, et muldkindlustus on kokku kuhjatud liivast ja mullast, milles leidub ka keskaegseid tellise- ja mõrditükke sisaldavaid rusukihte. Muldkindlustuste all avastati u. 4,5 m² suurusel alal kultuurkiht, mis võiks olla tekkinud vallutusejärgsel ajal 13. saj. Selle all oli kuni 30 cm paksusega kiht, mis oli ladestunud inimtegevusest puutumatule pinnasele. Otsustades kihist leitud savinõukildude põhjal, pärineb see saksa vallutuse eelsest ajast, ajavahemikust 11.–13. saj. alguseni. Sama kihiga seostati ka 25–30 cm läbimõõduga kividega kiilutud postiauk. Eelnevad kaevamised Tartu keskaegse Toomkiriku piirkonnas on näidanud, et varasemat asustuskihti esineb Toomemäe lääneosas. 1999. a. uuringud näitasid, et samalaadset kultuurikihti esineb siiski ka Toomemäe keskosas, mäe idaosas paiknenud muinaslinnuse kõrval. Nähtavasti on valdav osa Toomemäele ladestunud muinas- ja keskaegsest kultuurkihist sattunud 17. sajandi lõpul rajatud bastionidesse ja teistesse muldkindlustustesse. Kesk- ja muinasaegset kultuurikihti on säilinud siiski vaid Toomkiriku lähiümbruses, paiguti ka Toomemäe platool ning muldkindlustuste all.

Tartus, muinas- ja keskaegse linnuse lõunaküljel, kunagise vallikraavi piirkonnas tehti arheoloogilisi

järelevalvetöid seoses vee- ja kanalisatsioonitrasside väljavahetamisega Vallikraavi tänaval. Tänav Emajõe poolses osas, Toomemäega külgneva kõnnitee all, leiti 17. saj. lõpul ehitatud Karl IX bastioni tugimüüri alaosa. Suurtest maakividest müür oli krohvitud ning värvitud telliskivipunaseks. Vallikraavi tänav lääneosas leiti veel Karl Gustavi bastioni tugimüüri halvasti säilinud jäänuseid. Mõlemad müürid on kujutatud ka 17. saj. Tartu linnakindlustuste plaanidel. Järelevalvetööde tulemusena selgus, et praegusel kujul nähtav vallikraav on tekkinud 17. saj., mil bastionide ehitamiseks võeti pinnast keskaegse vallikraavi välisnõlvalt. Keskaegne vallikraav kulges tänase Vallikraavi tänav Toome poolisel küljel, majade ning bastionide all. Seda tõendavad ka majahoovidesse kaevatud kraavide profiilid, kus mõni meeter Vallikraavi tänavast Toome poole tuli nähtavale vallikraavi välisnõlv. Kuna praeguse Vallikraavi tänav ala süvendati alles seoses bastionide ehitusega, ei leitud Vallikraavi tänaval kultuurkihti, mis oleks vanem 18. sajandist.

Kärkna kloostri rajati kaks prooviauku põhjapoolse kastellimüüri siseküljele: üks kirdenurka, teine samast nurgast 11 m lääne poole. Tehti kindlaks, et kastellimüüri siseküljel katab kloostriaegset maapinda kuni 2 m paksune varingukiht. Rusukihi alt leiti tellistest laotud põrand, millel lasus õhuke tuha- ja söekiht. Tellispõranda all oli 50–60 cm tusedusega määrdunud liiva kiht, milles leidis lubjamördi puru ja tellisetükikesi. Selle kihi all oli tumehall söesegune muld, mida võib pidada algseks maapinnaks. Kastelli 2,5 m paksune põhjamüür oli laotud suurtest maakividest sirgete ridadena. Suurte müürikivide vahele oli kiilutud kivikilde. Müüritaldmikus olid suured, saviliivaga seotud maakivid. Vastu kastellimüüri sisekülge oli laotud tellistest vooder, mis algas tellispõranda pealt. Leidudena saadi katusekivide ja kalorifeerahju plaadi telliskatte katkendeid.

Kärkna kloostri kirdenurgas asunud Mikaeli kabeli lääneseinas avati portaali lõunapoolne osa, lävi ja veidi põrandat (foto 3). Kabelipõranda peal oli kuni 2 m paksune varingukiht, milles esines üksikuid inimluid. Osaliselt avatud läänemüür oli laotud maakividest ja kaetud tellistest voodriga. Selgus, et kabel ehitati vastu kastellimüüri sekundaarselt. Kabeli lääneseinas asunud profiiltellistest portaal oli algselt kaetud õhukese, tellispunaseks värvitud krohvikihiga. Krohvi sisse oli kraabitud kuusnurk e. Taaveti täht. Uksepiida alaosast oli säilinud maakivi, millesse oli raiutud sooned uksehingede kinnitamiseks. Läveks oli valitud suur lame maakivi. Tellisplaatidest põrandast puhastati välja u. ruutmeetri suurune ala. Rusukihist leiti profiiltelliseid võlviroietest ja aknaklaasi kilde ning krohvitükk, millel on säilinud seinamaalingut. Kabeli läveesisest mullakihist leiti kild õhukeses seinalisest klaasnõust.