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BUILDING ARCHAEOLOGY INVESTIGATIONS IN THE CISTERCIANS ST. MICHAEL'S NUNNERY IN TALLINN

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Excavations, started in the inner yard of the monastic complex in 1997 (Tamm, Toos, Kalman, Mäll 1998), were extended in 1998 into the interior of the monastic complex and its western side (Fig. 1: I-IV)

The site I (8.125m by 7.5 to 9.625 m) was situated in the middle part of the west wall of the southern wing of the schoolhouse (Fig. 1: I), where the cultural layer was up to 220 cm thick. The natural earth surface was situated at an altitude of 13.80 m - 14.10 m in Baltic system. The lowest layer contained post remains of a northwest-southeast wattle fence, which is a typical feature of the early pre-urban settlement in Tallinn. The radio-carbon dating of the timber sample taken from the latter gave a calibrated result of 1012-1225 AD (Tln. 2354). The layer was void of any artefacts, but did contain a large number of broken bones of domestic animals. Of the cultural layer, which in the site I was preserved over a relatively small area, a construction layer concurrent with the building of the monastic complex (mid-13th century) could be identified from a substantial residue of wood processing remains. Two pavement layers of limestone rubble could be identified from the 2nd half of the 13th to the 14th century, placed at an altitude of 14.84 m and 15.12 m in Baltic system. The layer between the pavements contained a lot of animal (horse?) manure, and more than half (56%) of the artefacts found in the pit were obtained from there. A lot of manure was also contained in the layer on the upper pavement, which yielded 12% of the artefacts. A fourth period of building

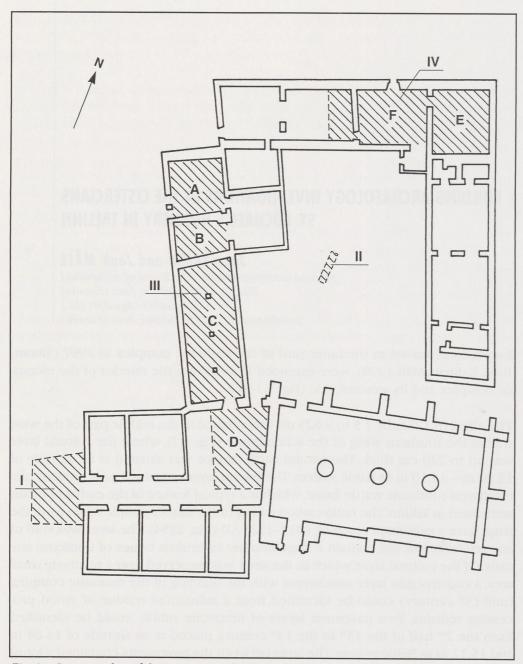


Fig. 1. Location plan of the excavations (I–IV) on the territory of the St. Michael's Convent in Tallinn in 1998.

Joon. 1. Tallinna Püha Miikaeli kloostri ehitusarheoloogilised uuringud 1998. aastal. IV kaevandi asendiplaan.

that can be more clearly defined may be connected with an extensive wastewater channel with limestone sides and a limestone slab cover. The floor of the latter was dug into the natural surface to the altitude of 13.50 m in Baltic system, with the interior of the channel measuring 50 cm across, and the sides 35–40 cm thick. Both forks of the channel, merging at a right angle, disappeared under the present south wing, and about 75 cm to the south-west of the crossing the main channel entered a sedimentation and purification well and then continued in the same south-westerly direction through the opposite wall of the well.

A cobblestone pavement (16.23 m in Baltic system) laid on a sand foundation, which apparently covered the whole area of the yard, was laid immediately after the construction of the well. The pavement, as well as the sewage mains system, together with purification shafts emerging from the former nunnery kitchen date to the major reconstruction of the west wing of monastic complex in 1818–1821 (Raam 1993). Also, the building of a NE-SW new partition wall in the former convent's household yard can be dated to the same period.

From the first site 262 artefacts (AI 6219) were unearthed. Among them imported pottery from Siegburg, Lower Saxony, Langerwehe and Cologne dominated. Concerning local pottery, only five fragments from two vessels were found, which indicates a relatively high living standards in the nunnery. The metal finds (a knife and two bronze needles) were dated by stratigraphy to the 13th-14th centuries. Also the bottom of a wickerwork vessel, frequent in Tallinn (Tarakanova, Saadre 1955), dates from the same period. Fragments of clay pipes, faience pottery and local *grapens* go back to the post-monastic period (2nd half 16th-17th century).

The site II (Fig. 1: II) was a south-north trench of 7.0 by 1.45 m situated in the inner yard of the monastic complex. Coming to light here was a stout layer of humus-rich earth, predating the building, and exposed also in other parts of the monastic complex. Partly cutting into this layer and partly into the natural base layer was a stretch of wall, 80 cm thick, with its north-east end situated perpendicular to a dry-stone wall built on a beam foundation. The layer of rubble levelled over it was dated from artefacts to the 15th-16th centuries. Another filler layer situated at a higher level, with natural sand filler, and a layer of lime mortar above, should be separately mentioned. As such layers, indicating massive construction and re-construction works, have been found nearly everywhere in the nunnery's territory, they seem to have accumulated when the school was extended in the 17th century.

Most of the finds (AI 6219) were fragments of Langerwehe, Siegburg, Raeren and

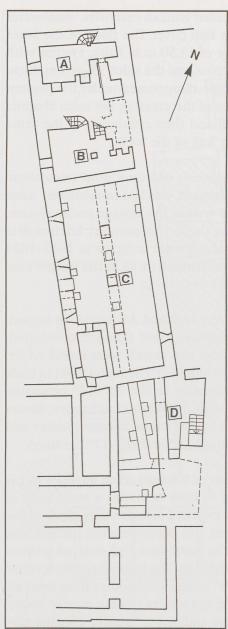


Fig. 2. St. Michael's Convent in Tallinn. Site III, rooms A, B, C and D. Joon. 2. Tallinna Püha Miikaeli klooster. III kaevand, ruumid A, B, C ja D.

Westerwald stoneware from the 13th century to the 1st half of the 17th century. Local material was represented by one wheel pottery fragment, as well as some edge fragments of 17th century *grapens*.

Site III (Figs. 1: III; 2) is the area between the cellars of the former nunnery's western wing basements and the church and the southern wing, where mainly layers accumulated in the post-monastic period were removed.

Undoubtedly the most interesting part was the House of the Abbess, situated at the north-western corner of the monastic complex. Two of the largest rooms of the basement were emptied of deposits. Although there have been several alterations throughout the building over the centuries, the following can be stated on the basis of the excavation:

The building's foundations rested at ca 13.00 to 13.20 m in Baltic system, thus 0.60 to 0.80 m below the surrounding natural surface. Although the original floor surface of the north room (Fig. 2: A) could not be precisely fixed, we can say that the room was ca 2.00 m in height and covered with a beam ceiling running in an east-westerly direction, which was covered with a layer of irregular limestone slabs¹.

The basement consisted of two parts - a part with nooks that was probably connected with a hypocaust furnace adjoining the main west part. A later stairway,

¹ Bore samples were taken from most of the beams by Alar Läänelaid, but no datings were awaylable when this article was completed.

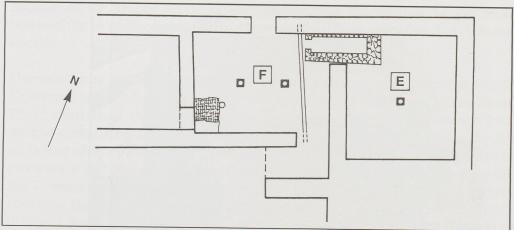


Fig. 3. St. Michael's Convent in Tallinn. Site IV, rooms E and F. Joon. 3. Tallinna Püha Miikaeli klooster. IV kaevand, ruumid E ja F.

100 cm wide, and a 102 cm wide niche, originally a passage to a south room which was later closed up and filled, were situated at the southern wall. In the west wall of the room was an opening for light, later rebuilt, which originally could also have been used for handing down firewood to heat the furnace. This room was connected with the ground floor of the House of the Abbess by means of a stairway in the north wall, 0.80 m wide and ascending towards the east.

The south room (Fig. 2: B) of the basement was also composed of two parts. From east to west it measured 830 cm, and from north to south by the west wall, 534 cm. The room narrowed and ended with a 245 cm recess by the eastern wall, north of which was a 157 cm by 435 cm north-south directed hypocaust room with a vaulted ceiling. This basement room was covered with a ceiling of beams in the east-westerly direction, supported on a wall slat. Significant alterations had been made in this room (a new stairway in the north wall and a stone posts built to support the roof). This basement room was also originally connected with the ground floor with an east-westerly wall stairway, 75 cm wide, in the north wall.

There was an opening for light in the west wall, which also could have been used for handing down firewood for the hypocaust furnace. Somewhat below and southward was situated an arched niche extending into the interior of the wall.

Based on the 30 cm wide wall step and masonry just above, the south wall of the basement seems to have been laid anew.



Fig. 4. Late romanesque style capital, found during the excavation of the new refectory's basement. Fourth quarter of the 13th century.

Joon. 4. Uue refektooriumi keldri (C) täitepinnasest leitud hilisromaani kapiteel 13. sajandi IV veerandist.



Fig. 5. Detail from the capital.

Joon. 5. Detail kapiteelist.

Because of the limited scope of the investigations, the purpose of the room between the two masonry masses with an entrance from room (Fig. 2: A) remains unclear.

The southernmost investigated room in the west wing was the basement (Fig. 2: C), located under what was once the new refectory, the building of which in the 2nd-3rd quarters of the 15th century turned the monastic complex into a four-winged closed structure. A filler layer deposited in this basement (20.1 m by 8.3 m) during earlier building and reconstruction work was removed. In the course of this work a 19th century stone sewage main (similar to the one unearthed in the site I) was cleaned out, its 1.25 m by 0.75 cross-section lying about 0.7 metres above the floor level of the monastic period. A timber construction preserved to a height of three logs was unearthed at the west wall and is probably a remnant of a mortar box used during the building of the nunnery's west wall, which was later left under the basement floor. Symmetrical door and window openings in the west wall of the basement (though rebuilt later) suggest that the basement was originally divided into two.

On the basis of limestone brackets preserved on both the west and the east walls, the height of the room was about 2.75 metres. During the monastic period, this was covered by a ceiling of 8.3 m long beams running in an east-westerly direction, which in turn must have been covered with limestone slabs.

The larger northern room had two openings for light, originally with worked frames. At the south-western corner was a door opening into the convent's household yard, and a stair inside the wall. The slightly smaller southern room had a door opening in the Northwest corner and a window worked frames on its southern side. In the Southwest corner of the same room, parallel with the longitudinal axis of the west wall, was the body of a hypocaust furnace measuring 5.31 by 3.08 m which has been repeatedly rebuilt. The furnace, which once heated the ground floor, was composed of two parts during the monastic period - a hearth at the north and an anteroom at the south end. Connecting with the household yard was a door opening in the south-west corner of the hypocaust which had been walled up and had no steps inside the room. The doorway, situated in the ca 1.15 m thick south wall of the basement, connected the anteroom of the hearth with the basement of the kitchen complex south of the refectory. The same anteroom of the hypocaust also had a slit in the north wall to provide the necessary inflow of air. The slit opened into the large basement room. In the east wall of the latter was a door opening which made it possible for inmates of the nunnery to enter the basement room directly from the interior yard. The sherds

from two vessels of imported Langerwehe near-stoneware, dated to the 1st half of the 14th century, were found during archaeological investigation of the hypocaust's anterooms floor.

Finds were practically lacking in the filler of the above rooms, but separate mention should be made to five capitals of round pillars (Figs. 4; 5). By their shape and decor resemble those in the chapter hall and the north wing of the nunnery, and as a result they can be dated to the 4nd quarter of the 13th century. At the same time, it is very difficult to determine their original location. They did not belong to the rooms of the west wing, which, as we know, were completed in the 15th century, when such Romanesque form had long since fallen into disuse. Moreover, there were no vaults in the west wing. It is the most likely that the capitals were intended for the westernmost rooms of the north wing, which, however, never received such a vaulted shape. It was probably in the course of rebuilding after 1827 that they ended up in the filler of the basement rooms of the west wing. Alternatively, on the basis of a find from St. Mary's of Tartu in the Botanical Gardens, it cannot be ruled out that rubble from elsewhere in the city was also used in the building of the gymnasium.

The original layout of the above rooms of the west wing (the house of the abbess, the new refectory) and their basements is relatively easy to read, despite repeated instances of rebuilding. However the situation in the area south of the refectory adjacent to the west wall of the church (Fig. 2: D) is totally different. There, the biggest rebuilding took place during the gymnasium period, and it changed the original ground plan considerably.

The first ground plan after the convent, made in 1682 (Jensen 1931), shows two independent buildings. The smaller of the two, a square building, which was used as the convent's kitchen, was located at the Southwest corner of the refectory wing. This plan, however, contradicts a so-called "Dahlberg's model of Tallinn", completed a year later (a replica of the original kept at *Armemuseet*, Stockholm, is exhibited in the Tallinn City Museum). Namely, the plan shows the square building is detached from the church. At the same time, the model shows the two as being united. Although the model can be critisized for large innaccuracies, the excavation results showed that the building adjoining the refectory on its south side, 825 cm from its east wall and 252 cm from its south wall, was still extant. On the basis of a wall extending from the Southeast corner of the building toward the church, it can be presumed that, at least in the final phase (15th century) it was an irregular, trapeze-shaped building narrowing toward the south, measuring 8.5 m by 7-7.2 m. It was only after the rebuilding of 1827 that they were gradually

connected with the parlatory and the building containing priest rooms to south of it. The original ground plan of the south wing of the monastic buildings was finally obliterated during dismantling work accompanying rebuilding in 1841–1843. Only a few wall fragments of the kitchen building and lower parts of the east and south walls of the parlatory survived.

During the excavations, no finds from the monastic period were unearthed from the layer above the natural surface, but the original layer of sod, at altitude 14.0 m in Baltic system, predating the building, had survived in parts.

The site IV (Figs. 1: IV; 3) was situated in the east part of the north wing of the nunnery at 2 Kooli Street. The goal of the investigations was to excavate the original floor level of the rooms. Still deeper layers were only investigated by means of probes and in places where sewage pipes were laid. Fortunately there were no layers containing finds or constructions below the oldest floor level. Local and imported pottery dominated the 248 artefacts (AI 6129) found from the fourth site. Of local pottery there were 7 fragments from the 13th -14th centuries, and 13 fragments of local *grapens* from the 2nd half of the 16th and the 17th centuries. Imported pottery included 13th-17th century fragments from Rheinland and 2nd half of the 16th to 17th century products from The Netherlands. There were also fragments of 17th-18th century clay pipes and of glaze stove tiles, a fragment of a bone comb (13th-14th century), a clay bead (15th-16th century), bone knife handles and a fragment of a vat tap (16th-17th century), fragments of lead window-frames (13th-17th century), as well as a tin spoon fragment (18th-19th century).

It may be presumed, on the basis of excavation results, that the foundations of the wall in the east part of the north wing were laid at 13.00–13.20 m in Baltic system, whereas the natural surface varies in altitude between 13.80 and 13.70 m in Baltic system A timber sample taken directly from a layer of earth with later traces of use on the natural surface was radio-carbon dated to the period 1259–1304 AD (Tln. 2355). The layer was preserved to its original extent only in a strip, one metre wide, along the outer walls. In Room E, the easternmost room of the north wing, a refectory floor of irregular limestone slabs, fragments of which had been preserved, was opened at an altitude of 13.97–14.05 m in Baltic system, laid on a limestone mortar base. Associated with the floor level was a stove base situated at the north wall of the north wing and passing though the wall separating the two rooms. Part of the stove base, 260 cm long by 222 cm wide, was on the refectory side and adjoining it was a hearth 183 cm long and 230 cm wide in the west kitchen room. In the east wall of the room there were two window openings in worked frames and apparently also the two windows in the north wall had anal-

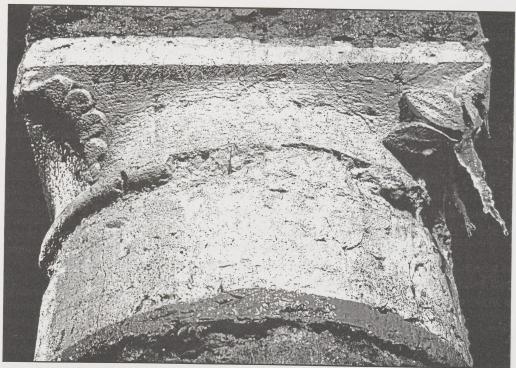


Fig. 6. Romanesque capital of the vaulting pillar in old refectory (E). Joon. 6. Vana refektooriumi (E) võlvide ümarsamba romaani kapiteel.

ogous frames. In the centre of the room, round pillar with a Romanesque base and capital (Fig. 6), supported vaults, which were rather high. Deciding by the somewhat flatter wall ribs, they were designed somewhat lower.

The refectory was connected with the other rooms of the eastern wing by a doorway in the Southwest corner, which opened to a staircase behind the wall. Passage to the inner yard of the convent was through a doorway in the same corner, but in the west wall, providing the shortest route to the house of the abbess. The refectory was connected with the westernmost kitchen room by a doorway opening into the Southeast corner.

The kitchen (Fig. 3: F) on its western side was almost as big (72 sq m) in area; yet, it was different in many aspects in terms of its room layout. On the central axis of a somewhat narrower room there were two Romanesque pillars (Fig. 7) supporting a two-aisle vaulting. In the north wall were two window openings, to a certain extent analogous in proportion with the refectory windows.

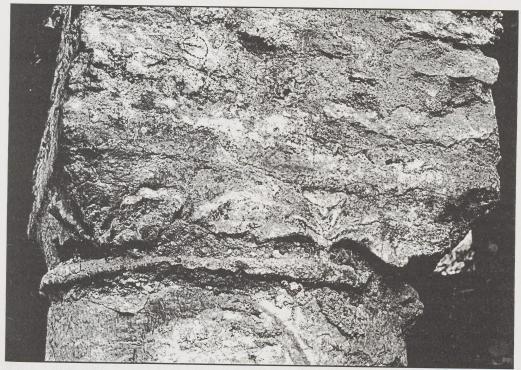


Fig. 7. Romanesque capital of the vaulting pillar in old refectory's kitchen (F). Joon. 7. Vana refektooriumi köögi (F) võlvide ümarsamba romaani kapiteel.

A floor of freely shaped limestone slabs was opened at an altitude of 14.51–14.73 m in Baltic system, the irregularity caused by pressure from the later filler layers. As mentioned above, a part of the next room's stove was situated in the Northeast corner of the room. Since there was no first floor to heat above the north wing, the stove remains mentioned above, are probably of a baking oven, whose part toward the refectory was also used as a radiator, while the west part with a relatively large front part was the hearth. Remains of a smoke hood's corner pillar at the Southwest corner of the kitchen marked a typical Tallinn feature, where food was prepared in kettles in a kitchen corner measuring 2.0 by 2.1 metres. Such a kitchen with several hearths, in a much better condition, have been excavated in the east wing of the Pirita convent (Raam 1984).

In addition to the above constructions, we should also mention a wooden drainage gutter, unearthed under the kitchen's limestone slab floor, running in the north-southerly direction and emerging from under the north wall of the room unearthed under the kitchen's limestone slab floor. Its altitude at the north wall was 13.67 m in Baltic system, and at the south wall 13.81 m in Baltic system At its

end toward the interior yard, which was demolished during the building of a later staircase in the 1960s, it was impossible to establish if the gutter continued also southward. Under the same staircase, a relatively complete skeleton was found at an altitude of 13.64 m in Baltic system, and a skull about one meter Southwest of it. Since the wooden gutter was situated 0.80 to 0.90 cm below the kitchen floor, and the investigation established no connection with the stratigraphy on the floor, it seems more likely that it started in the inner yard and was intended to drain the yard of excess water. Relying on a timber sample taken from the wooden gutter (Tln. 2353) dated to 1390–1412, and considering the growth of midden in the inner yard, such a function is quite feasible.

In addition to the doorway in the east wall, the kitchen had an opening, about 144 cm wide, in the west wall, at a point of 134 cm from the north wall. Walled up later, it probably had worked stone frames during the monastic period.

It is nearly impossible to say, based on existing information, how far westward the north wing extended in the monastic period and what its layout was. At any rate, there have been significant constructional changes in two of the westernmost rooms – no traces of the vaulting have been discovered. At the same time, the masonry of the foundations and a clear streak of mortar on the north and south walls of both rooms indicate that the ground level was rather high when they were built. A layout different from the present one is shown by a fragment of a transverse wall, 87 cm thick at the south wall in Room G, as well as by a round-arched doorway westward of it. That doorway was only visible from the outside, as it was later walled up and was hidden behind a partition wall on the inside (Eriksdotter & Reisnert 1991). Since the north wing belonged to a printing shop from 1633 onwards and both the west wall and the next eastward partition are secondary structures, it may be presumed that two rooms of the west part were completely rebuilt in 1794 (Laul 1981), and most of the monastic period building substance was eliminated in its course.

SUMMARY

Archaeological excavations in the household and inner yard of the convent and in its western and north wings showed that the 380-year building history of the monastic complex is extremely complicated. Despite major later rebuilding and the addition of annexes and new floors, as well as dismantling which in places embraced whole wings, the original layout of the nunnery and its further change is still readable. We can therefore say that the generally secluded rules and prin-

ciples of the Cistercian Order were relatively precisely followed in the monastic complex which started with the building of St. Wenceslaus' chapel in 1219, and completed with the erection of a massive south wing adjoining the church in 1450-1470. Some deviations from these building regulations can be explained by the nunnery's scattered layout in the initial period, before the erection of a regular structure, significant deterioration of the material condition of the nunnery in the 14^{th} and 15^{th} centuries, and loss of support by the Town Council and citizens of Tallinn. The excavations carried out in 1998 largely corroborated the building history of the monastic complex earlier suggested by the authors (Tamm 1998).

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EHITUSARHEOLOOGILISED UURINGUD TSISTERTSLASTE TALLINNA PÜHA MIIKAELI NUNNAKLOOSTRIS

Jaan TAMM ja Jaak MÄll

Seoses Gustav Adolfi Gümnaasiumi renoveerimisega jätkati 1998 aasta suvel ehitusarheoloogilisi uurimistöid kloostrikompleksi siseruumides ja lääneküljel (joon. 1: I- IV).

Kaevand I (joon. 1:I) asus koolihoone lõunatiiva lääneseina keskosas uue rajatava trepikoja alal, kus kultuurkihi paksuseks oli 220 cm. Looduslikul aluspinnal lasunud elutegevusjälgedega mullatekkekiht sisaldas kirde-edela suunalise vitsaia jäänuseid, millest võetud puiduproov andis vanusemäärangu ajavahemikus 1012–1225 AD. Sellele ladestunud ehitusjäätmete kihti võib seostada kloostrihoonestuse tekkimisega 13. sajandi keskpaigas. 13. sajandi II poolde ja 14. sajandisse dateeriti kaks paekividest sillutisekihti. Sillutiste vahele ja peale oli ladestunud hulgaliselt loomasõnnikut sisaldav intensiivne elutegevuskiht. Sellele lisaks avati I kaevandis paeplaatidest reoveekollektor koos ümara sette- ja puhastuskaevuga. Nimetatud konstruktsiooniga üheaegselt näis olevat rajatud ka liivapadjale laotud munakivisillutis ning tõenäoliselt ka kirde-edela-suunaline eraldusmüür kunagises kloostri majandusõues. Vaadeldud rajatised võiks arvatavalt seostada ajavahemikus 1818–1821 toimunud ehitustöödega.

Kaevand II (joon. 1: II) paiknes kloostrikompleksi siseõues ning kujutas endast põhja-lõunasuunalist tranšeed. Siingi paljandus looduslikule aluspinnale ladestunud mullatekkekiht. Osaliselt sellesse, osaliselt aga looduslikku aluspõhja oli rajatud 80 cm paksune müür, mille kirdepoolne ots ristus palkalusele kuivlaos ehitatud müüriga. Konstruktsioone katnud kasutusjälgedega tasandus- ja täitekiht dateeriti esemeleidude põhjal 15.–16. sajandisse. Nendel kihtidel lasunud liivakihti, mis oli kaetud lübjamördi ja ehitusprahiga, võib siduda koolikompleksi korrastamistöödega 17. sajandil.

Kaevand III (joon. 2) paiknes kloostri läänetiivas, kus keldriruumidest eemaldati uusaegsed täitekihid. Täitepinnase eemaldamisel avastati uue refektooriumi alla jäävas keldris (joon. 2: C), sarnaselt I kaevandile, paekividest reoveekollektor ja hüpokaustahi, mille eesruumi arheoloogilisel uurimisel saadi 14. sajandi alguse keraamikat. Uusaegsest täitepinnasest leiti ka 5 ümarsamba kapiteeli (vt. joon. 4 ja 5). Oma kujult ja dekoorilt sarnanevad need kloostri kapiitlisaali ja põhjatiiva kapiteelidega, mistõttu võib arvata, et nendegi valmistamisaeg peaks langema samasse aega, s.o. 13 sajandi IV veerandisse. Kapiteelide algne asukoht jääb aga lahtiseks, kuna III kaevandi alal läbiuuritud keldrikorruse ruumid olid kaetud talalagedega. I ja II kaevandis täheldatud mullatekkekiht oli osaliselt säilinud ka III kaevandis. Siin puudusid aga kloostriaegsed ladestused.

Kaevand IV (joon. 1: IV; 3) asus kloostri põhjatiiva siseruumides. Tööde eesmärgiks oli välja selgitada ruumide algne põrandatase ja seejärel eemaldada hilisemad ladestused. Ruumide algsest põrandatasemest madalamale jäävaid ladestusi uuriti šurfidega nendes kohtades, kuhu paigaldati uued kanalisatsioonitrassid. Ka IV kaevandis oli šurfides paljandunud kasutusjälgedega mullatekkekiht samal kõrgusel kui eelmistes kaevndites. Sellest kihist võetud puiduproov andis C¹⁴ analüüsi tulemuseks aastad ajavahemikust 1259–1304 AD. Algne ruumide põrand koosnes mördist alusele laotud paeplaatidest sillutisest. Paest põrandatasemega võis seostada ka kahte ruumi (joon. 3: E ja F) eraldavat ahjualust, mille suue jäi köögiruumi (joon. 3: F) ja kus kerist kasutati vana refektooriumi (joon. 3: E) kütmiseks. Köögiruumi edelanurgas paljandus veel teinegi küttekolle - tellistest laotud leease koos mantelkorstna tugisambaga. Taoline, mitme tulekoldega köök on varem ehedamal kujul välja kaevatud Pirita kloostri idatiivas. Mõlema ruumi võlve kandsid romaanipäraste kapiteelide ja baasidega sambad (vt. joon. 6 ja 7). Köögiruumis paljandunud põhja-lõuna suunaline puidust

reoveekollektor, mis oli mõeldud sisehoovile koguneva vee ärajuhtimiseks, dateeriti C^{14} meetodil ajavahemikku 1390–1412 AD.

Arheoloogilised uuringud kloostri majandus- ja siseõues ning läänetiivas näitasid kujukalt, et kloostrihoonestuse kolmesaja kaheksakümne aastane ehituslugu on äärmiselt komplitseeritud. Vaatamata hilisematele ümberehitustele ning kohati terveid hoonetiibu haaranud lammutustöödele on kloostri algkavatis ning selle edasine genees siiski jälgitav. Seetõttu võib öelda, et 1219. aastal Püha Ventseli kabeli rajamisega alanud ning 1450.–1470. aastal kirikule liitunud lõunatiiva hoonetekogumi püstitamisega lõpetatud kloostrikompleks järgis oma üldises suletuses võrdlemisi täpselt tsistertslaste ordu reegleid ja printsiipe. Mõned kõrvalekalded olid selle kompleksi puhul tingitud regulaarsele kavatisele eelnenud kloostri algusperioodi hajahoonestusest ja kloostri materiaalse baasi halvenemisest Tallinna rae ja kodanikkonna toetuse kadumise tõttu 14.–15. sajandil. 1998. aastal toimunud uurimistööd kinnitasid suures osas käesoleva artikli autorite poolt juba varem välja pakutud kloostriehituse kujunemislugu.