

# FORMATION OF AN EMPIRE. RESULTS OF THE SEASON 2017 IN TELL EL-RETABA

*Jozef Hudec (JH), Lucia Hulková (LH), Veronika Dubcová (VD), Anna Wodzińska (AW)*

*Abstract: This contribution focuses on the settlement history of Tell el-Retaba, starting from the settlements and cemeteries of the Second Intermediate Period and the early New Kingdom up to the construction of large fortresses in the Ramesside Period. The rich pit tomb {2458} of the early New Kingdom date seems to especially indicate the continuation of the Second Intermediate Period burial customs in the New Kingdom and, thus, a kind of settlement continuity. The discovery of a geminated moat of the Nineteenth Dynasty expands our knowledge of defensive constructions in the eastern Delta, confirms the location of the gate to the Nineteenth Dynasty fortress and contributes to our knowledge of the concept of transformation between the Nineteenth and Twentieth Dynasty. The 2017 season also extended the view of construction details of the Twentieth Dynasty defence “wall 2”.*

*Keywords: Tell el-Retaba, Second Intermediate Period, New Kingdom, settlement, cemetery, fortress, moat*

The joint Polish-Slovak Mission conducted the 2017 season in Tell el-Retaba from 5<sup>th</sup> September to 29<sup>th</sup> October 2017, under the co-direction of Sławomir Rzepka<sup>1</sup> and Jozef Hudec.<sup>2</sup> The Ministry of Antiquities of the ARE was represented by Khaled Fareed Abd el-Naeem, Misbah Zaki Mahmoud and Randa Adel Hassan. The interdisciplinary team comprised of archaeologists and Egyptologists: Veronika Dubcová,<sup>2</sup> Lucia Hulková,<sup>3</sup> Květa Smoláriková,<sup>6</sup> Lenka Horáková,<sup>6</sup> Barbara Jakubowska,<sup>4</sup> Łukasz Jarmużek,<sup>1</sup> Radka Knápek,<sup>6</sup> Agnieszka Ryś,<sup>5</sup> Silvia Štubňová,<sup>6</sup> Paulína Šútorová,<sup>6</sup> pottery specialist Anna Wodzińska,<sup>1</sup> archaeobotanist Claire Malleson; anthropologist Alena Šefčáková,<sup>2</sup> soil researcher Emil Fulajtár,<sup>6</sup> civil engineer Miroslav Černý,<sup>2</sup> surveyor Eva

Stopková;<sup>2</sup> architect Július Bruna,<sup>6</sup> conservator František Engel,<sup>6</sup> photographers Otto Bagi, Renáta Rábeková,<sup>6</sup> student trainees Lukáš Kováčik,<sup>6</sup> Ján Marko,<sup>6</sup> Dominik Sulecki and Katarzyna Szymańska.

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During the 2017 campaign, the Slovak part of the joint mission focused its work in Area 4 (Fig. 1), located in the north-westernmost part of the tell, in the immediate vicinity of a recent settlement, which is not significantly separated from the ancient remains. Works here were conducted in the surroundings north of the Green House and the Black House 1, largely uncovered during previous seasons.<sup>7</sup>

## 1. Phase G – Second Intermediate Period

LH, AW

The work in Area 4 took up where it left off in the previous short season in 2016.<sup>8</sup> In the following chapters, the situation in the area during the three occupational phases G3–G1 dated to the Second Intermediate Period (SIP) is described in more detail.

<sup>1</sup> Institute of Archaeology, University of Warsaw

<sup>2</sup> Institute of Oriental Studies, Slovak Academy of Sciences/Aigyptos Foundation

<sup>3</sup> OREA, Austrian Academy of Sciences/Aigyptos Foundation

<sup>4</sup> Independent researcher

<sup>5</sup> Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences

<sup>6</sup> Aigyptos Foundation

<sup>7</sup> RZEPKA et al. 2014, 55–64; RZEPKA et al. 2017b, 32–37.

<sup>8</sup> See RZEPKA et al. 2017a, 112–113; RZEPKA et al. 2017b, 22–23.



Fig. 1 Overall plan of the Second Intermediate Period structures in Area 4 (Spatial data E. Stopková, plan L. Hulková)

Phase	Dating	Main features
G3	Second Intermediate Period	Early open settlement and infant tombs
G2	Second Intermediate Period	Renewed settlement from the previous phase, continuation of the cemetery
G1	Second Intermediate Period	Scattered settlement remains and continuation of the cemetery of mud-brick built tombs
F5	Early Eighteenth Dynasty	Funerary activity in the cemetery in Area 4 continues, but the burial practice changes
F4b	Early Eighteenth Dynasty	The cemetery is overbuilt by a settlement
F4a	Early Eighteenth Dynasty	Settlement of the so-called Green Houses
F3b	Early Eighteenth Dynasty	Industrial activity between the settlements of the Green and Black Houses
F3a	Early Eighteenth Dynasty	Settlement of the so-called Black Houses
F2	Early Eighteenth Dynasty	Scattered settlement remains
F1	Late Eighteenth Dynasty	No archaeological record yet
E4	Nineteenth Dynasty	Earliest fortress of the Nineteenth Dynasty, core of Petrie's "wall 1"; infant burials, moats
E3	Nineteenth Dynasty	Fortress of the Nineteenth Dynasty: extensions of "wall 1"; moats, infant burials
E2	Nineteenth Dynasty	Fortress of the Nineteenth Dynasty
E1	Nineteenth–Twentieth Dynasty	Settlement and cemetery in the ruins of the fortress
D4	Twentieth Dynasty	Ruins of the Nineteenth Dynasty fortress levelled; fortress of Ramesses III: Petrie's "wall 2"
D3	Twentieth Dynasty	Fortress of Ramesses III: Petrie's "wall 3"

### 1.1. Earliest Settlement and Infant Tombs – Phase G3, Area 4

In 2017, we managed to clarify the situation concerning the building {2034}, which had been partially exposed already during the previous season and we further explored the area to the north and east of it. It became clear that, contrary to what we assumed at the end of 2016 campaign, there is no previous settlement phase in this area underneath the building {2034}. The yellowish gravel layer on which it was built is a natural layer, without any anthropogenic inclusions. We uncovered part of another building {2400} of the same phase in the newly opened squares further north. Both these structures are badly preserved – no more than three courses of brick of their walls are still standing.

The infant tombs of this phase {2412} and {2446}, located east of the buildings and between them, respectively, are better preserved. It is interesting to note that both these tombs, and the intramural burial {2490}, were built for newly born

babies who did not live longer than a couple of months at most. We, therefore, cannot really speak about a regular cemetery in this case, since inhumations of infants seem to follow special burial practices often diverging from the rules for burials of older children and adults.

#### 1.1.1. Building {2034}

The original ground plan of the building {2034} cannot be securely reconstructed (see: Fig. 1), because it suffered damage from ancient and more recent activities on the tell. The most severe damage was caused by a modern sewage pit obliterating the whole western part of the building, but tomb pits had already been cut into the abandoned rooms and walls during phase G2. The building was some 5.88 m long on the outside and had one-brick thick walls (brick size: 30 × 16 × 10 cm). It probably had at least three rooms – rooms 1 and 2 in the west clearly belong to it; the space termed tentatively room 3 cannot be securely connected to the rest of the building, because



Fig. 2 Cubic grinder made of flint nodule S3286  
(Photo R. Rábeková)



Fig. 3 Saddle quern S3278 (Photo R. Rábeková)

later structures of phase G2 were cut into the northern and southern end of its eastern wall [2355] dividing it from the rest of the building {2034}.

**Room 1** located in the northern part of the building {2034} is some 2.14 m long and 1.7 m of its original width is still preserved. It is not clear whether it could be accessed directly from the outside since no door opening was recognisable in the preserved part of the northern wall [2488]. No traces of a mud floor were recognisable here either. The room was filled with deposits composed of sand and dirt with a fine portion of ashes. Within this fill, concentrated along the northern wall of the room mentioned already, we found five heavily used or even broken grinders of the cubic/globular type S3280, S3283, S3284, S3285 and S3286 (Fig. 2); together with two querns S.3278 (Fig. 3) and S3287. It is possible that they were

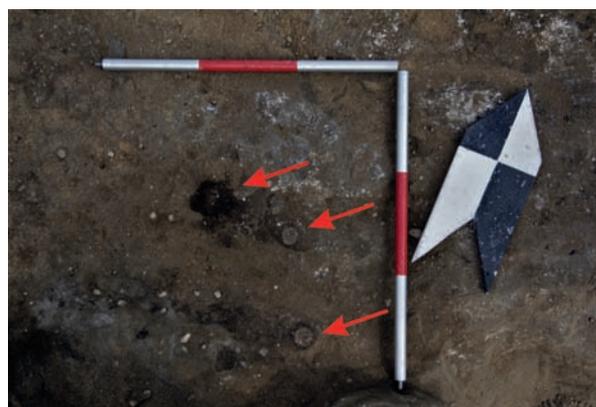


Fig. 4 Detail of three stake holes piercing the ashy deposit 2452 in room 2 of the building {2034} (Photo L. Horáková)

used for food preparation. There was no fireplace in the room itself but a fire pit <2477> was located close behind its northern wall [2488] in the open space outside the building {2034}. Finds of animal bones within the ashes of the fireplace and the ashy deposits in the surrounding area indicate that it could have been used (not necessarily exclusively) as a cooking installation.

On the other hand, it is also possible that these tools were used for other purposes than grinding foodstuffs. The two consecutive mud floors, (2342) and (2364), separated by the finely laminated ashy deposit (2352) pierced by number of round stake holes, some 3 cm in diameter and 5–10 cm deep (Fig. 4) that we found in the adjacent southern **room 2** are probably traces of some kind of production activity. The ashes of the deposit (2352) come from the simple fireplaces located within the room. Room 2 is 2.75 m long and some 3 m still remain of its original breadth. Sadly, the finds from this room are scarce, apart from another grinder S2833 only one red ochre pigment lump S3181 was found here. However, similar ashy deposits with stake holes were observed in House B in neighbouring Tell el-Maskhuta,<sup>9</sup> where the excavators suggested that they may be connected to leather or metal production. It is possible, therefore, that the building {2034} was not a purely domestic structure but offered space for multiple activities, larger scale production of goods being one of them.

**Room 3** in the east, on the other hand, is at least 3.18 m long but only 1.64 m wide. It was filled with an ashy deposit (2464) containing a number of sherds of the so-called handmade flat bottomed cooking pots. Interestingly, a small pit {2485} for an interment of a newborn had been dug in the north-eastern corner of the room.

<sup>9</sup> PAICE et al. 1996, 167–168.



Fig. 5 Badly preserved remains of the building {2400} (Photo L. Horáková)

### 1.1.2. Building {2400}

Building {2400} is located some 2.8 m north of the building {2034} (see: Fig. 1). Its layout and function are not really known yet, because most of it lies outside the excavated area (Fig. 5). The exposed remains seem to capture two phases of use. Two rectangular fireplaces, [2398] and [2399], (or possibly ovens) were built inside the rectangular space delineated by the walls, [2400] and [2401]; for the first time in the SIP settlement we have here ovens delineated by mud-brick walls. Similar rectangular fireplaces were found west of House B in Tell el-Maskhuta,<sup>10</sup> however, they are of a somewhat later date. We did not find any small finds in the excavated area around these fireplaces. Thus, further work is needed to see whether any specific function can be assigned to building {2400}.

### 1.1.3. Infant Tombs

Two infant tombs were found in the immediate vicinity of the buildings {2034} and {2400}. As far

as we can tell, they were both built at the time, when buildings {2400} and {2034} were still in use. The simple pit burial {2485} was even located inside a building. These tombs are described in more detail in the following chapters.<sup>11</sup>

#### 1.1.3.1. Tomb {2412}

A simple infant tomb {2412} built for a child of 0–3 months was located about 50 cm east of the wall [2401] (Fig. 6). This east-west oriented mud-brick tomb was built in a narrow and shallow oval tomb pit, 70 cm long and only 52 cm wide, dug into the natural gravel layer. The tomb was constructed around the child's body in a very simple way. Two bricks were placed on edge at the head and feet. Another half brick was placed behind the brick by the head. Its function is not clear. The sides made of sloping mud-bricks functioned simultaneously as a roof. The whole construction was held together by a lot of bonding mass. Such an irregular construction that does not comply with the typology of SIP tombs is not uncommon in internments of very small children.

<sup>10</sup> See PAICE et al. 1996, 168, Fig. 2.

<sup>11</sup> Burials of infants in the vicinity of houses or other structures or in clusters are documented from other sites and this practice is not reserved only to the SIP. However, in

most cases, the infants are placed in a pottery vessel – often an amphora – for protection. See, for example, THOMAS 1981, 21; PAICE et al. 1996, 163–164; FORSTNER MÜLLER 2008, 25–26; RZEPKA and GÓRKA 2011.



Fig. 6 The burial chamber of the tomb {2412} with the infant skeleton (Photo L. Horáková)

Only a skeleton was found within the tomb, lying on right side, with the head in the north-east. We cannot say in which direction the deceased was once looking due to the bad preservation of the bones. The left arm was stretched along the body, and the legs were strongly contracted with the knees pointing north. No grave goods were found.

#### 1.1.3.2. Tomb {2446}

The slightly larger mud-brick tomb {2446} (Fig. 7) contained a burial of an infant roughly the same age of 0–3 months. It was located immediately south of the wall [2400]. Different from tomb {2412}, it was oriented to the south-east. It was built in a shallow oval tomb pit <2445> some 100 cm long, 70 cm wide but only 30 cm deep. Inside the tomb pit, a 95 cm long and 60 cm wide mud-brick tomb was constructed over the body of the deceased infant. The tomb consists of a rectan-



Fig. 7 The burial chamber of the tomb {2446} with the infant skeleton (Photo L. Horáková)

gular tomb chamber with inner dimensions of 49 × 34 cm. It was constructed of one layer of mud-bricks in stretcher bond, placed on a bed. A roof of sloping bricks was placed over them, consisting of three pairs of bricks resting on the western gable. This gable was built of a brick placed on edge, covered by another slanting brick. The whole roof is covered by a thick layer of bonding mass stabilising the whole structure.

An infant was interred on its left side inside the burial chamber. The bones are very badly preserved, the position of arms could not be determined, but the legs are only slightly bent at the knees. No burial goods were found with the internment.

#### 1.1.3.3. Burial {2485}

The pit burial {2486} inside room 3 of building {2034} is the simplest of the excavated G3 burials in Area 4. The 15 cm deep circular pit <2490> with a diameter of 29 cm and rounded bottom contained the skeleton of a newborn child, aged between 0 and 3 months at the time of death. The burial was recognised only during the removal of the room fill (2464); at that point, the bones were no longer *in situ*. It is possible that the circular bead S3294 found within the room fill (2464) might have belonged to this burial.

#### Bead S3294

Material: shell (?)

Dimensions: Ø: 1.2 cm; th.: 0.1 cm; thread-hole Ø: 0.4 cm

Description: white circular bead

State of preservation: well-preserved, slightly chipped on edge.

## 1.2. Cemetery – Phase G2, Area 4

The buildings of phase G3 were abandoned at some point, and their ruins (Fig. 8) and the area around them were used as burial grounds in the following phase G2. So far, no substantial settlement structures of this phase could be identified in the exposed part of this area. This shift in use of specific settlement areas as cemeteries and *vice versa* is also known from other settlements of the time. The use of ruins as burial grounds is known especially from confined settlement areas, where space was scarce, such as Elephantine,<sup>12</sup> but also in

<sup>12</sup> VON PILGRIM 1996, 220.



Fig. 8 Overview of the ruins of the house {2034} of the phase G3 with tombs {2057}, {2061}, {2009} of the phase G2 and {1696} of the phase G1 (Photo L. Horáková)

Tell el-Dab<sup>a</sup><sup>13</sup> or Lisht<sup>14</sup> the use of an area varied between cemetery and settlement.

Nine graves of phase G2 were identified (see Fig. 1) within the excavated area, three of them already during the campaign of 2016.<sup>15</sup> The tombs {2061} and {2057} and possibly also {2474} – this structure could not be securely identified as a grave because it is still largely covered by the northern tower of the Migdol gate of the Twentieth Dynasty – were dug into the abandoned ruins of building {2034}. Other tombs, such as {2009} and {2496}, were built in its immediate vicinity. Four other tombs, {2428}, {2472}, {2500} and {2502}, were found further east. In their case, the dating into phase G2 is not entirely secure. Their direct stratigraphic relationship with the other tombs or with the buildings {2034} and {2400} could not be established. Recognising layers in the gravel-rich sediment around them is difficult, but they seem to be dug into a gravel layer covering the remains of phase G3.

Most of these tombs are rather substantial structures with a mud-brick burial chamber and a gabled or vaulted roof, depending on the size of the tomb. Sadly, especially the larger tombs have suffered from robberies that destroyed the assemblages within the tombs. Well-placed robbery pits show that the tombs must have been clearly marked on the surface, though no traces of these marks have survived until today.<sup>16</sup>

Two different general orientations<sup>17</sup> of the tombs were observed within the cemetery: six tombs were oriented northeast to southwest and two east-northeast to west southwest, but such a dichotomy is neither unusual nor limited to the SIP eastern Nile Delta.<sup>18</sup> As the tombs cannot be brought into tight stratigraphic relationships, it is not clear whether this dichotomy is caused by chronological differences or if other factors, such as personal belief or status differences, are at the root of it. Anyhow, it is clearly independent of the

<sup>13</sup> See BIETAK 1991; FORSTNER MÜLLER 2008; KOPETZKY 2014.

<sup>14</sup> See ARNOLD et al. 1995, 15.

<sup>15</sup> These tombs are {2009}, {2057} and {2061}. Only the first two have been published already, because tomb {2061} could only be opened in the campaign of 2017. See RZEPKA et al. 2017a, 114–116; RZEPKA et al. 2017b, 25–28.

<sup>16</sup> The excavators of Tell el-Maskhuta made a similar observation. See PAICE et al. 1996, 164.

<sup>17</sup> Actually, the SIP tombs of Tell el-Retaba are not precisely orientated according to fixed directions – each tomb differs from the points of the compass at a slightly different angle.

<sup>18</sup> See FORSTNER MÜLLER 2008, 36–37.

tomb type. Individual tombs are described in more detail in the following chapters.

### 1.2.1. Tomb {2061}

The mud-brick tomb {2061} located in the square Y65–X190 had already been discovered at the end of the campaign in 2016, but it could not be excavated due to the time shortage. It is one of the smaller east-northeast-oriented mud-brick tombs. It was built within the ruins of room 2 of the building {2034} dating to the previous phase.

Tomb {2061} was constructed within a narrow rectangular tomb pit <2367> with rounded corners. It corresponds to type 3.1 of the Tell el-Dab<sup>a</sup> typology.<sup>19</sup> The tomb consists of a rectangular



Fig. 9 Burial chamber of the tomb {2061} with the intact burial inside (Photo L. Horáková)



Fig. 10 Vase (inv. no. 2379-22428) from the tomb {2061} (Photo A. Wodzińska)

tomb chamber with inner dimensions of 106 × 54 × 32 cm roofed over with a gabled roof. The walls of the burial chamber are built of three rows of mud-bricks in stretcher bond. Only the gables are higher. The sloping roofing bricks are leaning on the western gable. A large amount of bonding mass was used to keep them in place where they meet the wall of the burial chamber. The ridge at the top of the roof is filled with bonding mass and broken bricks. The construction was apparently not very stable, because some of the roofing bricks had collapsed after some time. This did not disturb the burial that was covered by a layer of four bricks placed on a bed within the burial chamber, just over the body covered by a thin layer of fine sand.

An individual of 7–8 years (infans II) in a contracted position lying on its left side with the head in the east-northeast was placed under these four bricks (Fig. 9). Its head was resting against the side of a large mud-brick<sup>20</sup> heavily tempered with straw. A single pottery vase was found standing upright in the north eastern corner inside the tomb chamber (Fig. 10). A scarab S3197 (Fig. 11) was found by the left arm of the deceased – it could have been worn on the left wrist, but it could also have fallen out of the left hand.

#### Vase (inv. no. 2379-22428)<sup>21</sup>

Material: Nile B2

Dimensions: 7.6 cm in diameter

Description: vase with almost cylindrical body, round slightly flaring rim and round trimmed base, with red painted rim

State of preservation: well-preserved, not used prior to placing in the tomb

Dating: second half of the 15<sup>th</sup> Dynasty

#### Scarab S3197

Material: glazed steatite

Dimensions: l.: 1.6 cm; w.: 1.0 cm; th.: 0.7 cm

Description: head type: D9, back type: PS, side type: d5, design: 3A1 – *sm3 t3.wj*

The scarab is carved of steatite and then covered by yellowish glaze. The carving is of medium quality. A hole for suspension was drilled lengthwise through the base. The design carved in a lin-

<sup>19</sup> See FORSTNER MÜLLER 2008, 28.

<sup>20</sup> Mud-brick under or next to the head of the deceased are known from Tell el-Dab<sup>a</sup>, but here they do not seem to be common. See FORSTNER MÜLLER 2008, 175, Fig. 99, 176–

178, Fig. 101 for stratum F. However, this tradition seems to be more common in the tombs of Tell el-Koa. See EL-HANGOURY 2003.

<sup>21</sup> For more details see WODZIŃSKA 2019.

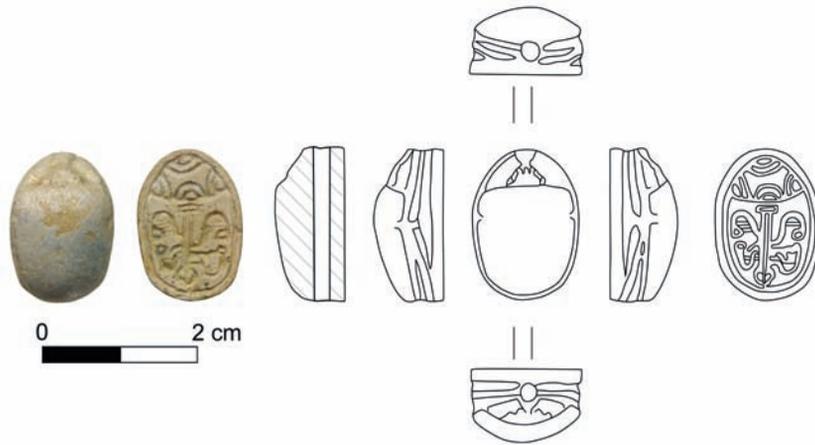


Fig. 11 Scarab S3197 from the tomb {2061} (Photo R. Rábeková, drawing L. Kováčik, digitalisation V. Dubcová)

ear pattern consists of a *sm3 t3.wj* with two floral stems on each side, growing out of the *sm3* sign. A field decorated by four semicircles is situated above this motive. These signs are enclosed by a single line. While both these motives are well-known from other scarabs, their combination is rather rare. The only good parallel comes from Tell el-Ajjul,<sup>22</sup> but a similar motive showing a twig flanked by two flower stems instead of *sma-tawj* was found in Tell el-Yahudiya.<sup>23</sup>

State of preservation: well-preserved, glaze corroded, only slight wear at the sides indicating that the scarab has been worn during life.

### 1.2.2. Tomb {2428}

Tomb {2428} located in the square Y70–X200 was once a substantial mud-brick structure. However, it was robbed in antiquity and heavily damaged when the moat of the Nineteenth Dynasty fortress was dug out (Fig. 12). Almost the whole western part of the burial chamber and the roof are now missing. It is possible that some traces of the roofing are preserved on the eastern side, unaffected by the moat, but here further work is needed to reach the SIP layers.

The tomb was built within pit <2429> that was rather narrow on the northern side, where it has been recognisable so far. The burial chamber walls were one-brick thick, built of headers and stretchers in alternating rows. The mud-bricks are heavily tempered with gravel. The preserved eastern wall of the chamber shows that it was once six rows high. The inner dimensions of the burial chamber are 170 × 67 cm. This substantial room was once most probably covered by a mud-brick vault.



Fig. 12 Badly damaged tomb {2428} cut by the moat of the Nineteenth Dynasty (Photo L. Horáková)

Only disarticulated human remains of a male of some 50+ years at the age of death (*maturus/senilis*) were found within the burial chamber filled with layers of fine gravel. The remains were scattered in the southern part of the grave. The looting had most probably already taken place before the building of the moat. A rectangular hole in the eastern wall of the burial chamber might have been dug by the robbers, but it is also possible that another chamber was attached to the tomb in the east. Future work is needed to clarify the situation here.

### 1.2.3. Tomb {2472}

Tomb {2472} is located in the squares Y65–X200 and Y70–X200. Its orientation could not be determined, because it was robbed in antiquity and nothing was left in place of the original interment (Fig. 13). However, the main axis of the architectonic structure runs northwest-southeast.

<sup>22</sup> KEEL 1997, 325, no. 653; BEN-TOR 2007, pl. 76:29.

<sup>23</sup> NAVILLE 1890, pl. x:37



Fig. 13 Tomb {2472} disturbed by the robbery pits visible in the south (Photo L. Horáková)

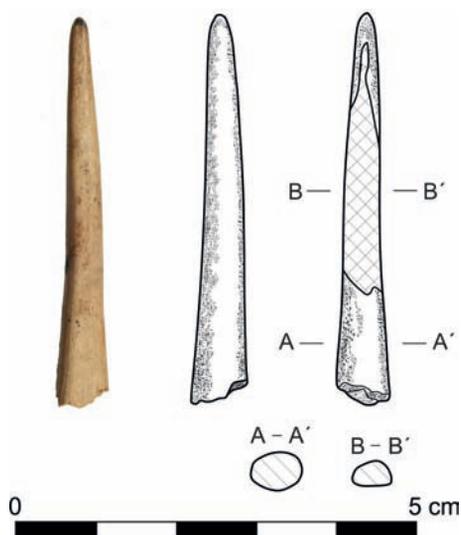


Fig. 14 Preserved part of a bone needle S3288 from the robbed tomb {2472} (Photo R. Rábeková, drawing L. Kováčik, digitalisation V. Dubcová)

The tomb was constructed within a narrow rectangular pit with rounded corners <2471>. The burial chamber has the inner dimensions of 150 × 60 × 66 cm. The long walls are half-a-brick thick, built in stretcher bond; the shorter walls are one-brick thick, made of alternating rows of headers and stretchers. Despite this varying thickness, the walls were built together. The burial chamber walls are five rows high. Upon the fifth row over the half-brick thick walls, another row of bricks is added in header bond, projecting outside of the burial chamber and building a platform for the vault. The barrel vault leans on the northern gable. It does not have the characteristic bricks projecting out in

every other row at the length sides. Its southern end is badly damaged by two robbery pits cutting into it from the east and west. This robbery took place most probably during the phases F5 or F4b.

The burial chamber appears to have been swept rather thoroughly. Disarticulated human bones were found scattered in the southern part of the burial chamber and also at the bottom of the robbery pits. They belonged to an adult individual aged 40–59 at the time of death (maturus); probably a female. Among them, only a broken bone needle S.3288<sup>24</sup> (Fig. 14) was preserved of the original grave goods. A disturbed (some of the bones were found in the tomb fill) infant burial, not older than 3 months at the time of death, was found lying on its back with the head to the north in the north-west corner of the burial chamber. It is not entirely clear whether this interment was put here at the same time as the primary adult burial or only later after the tomb was looted.

#### Bone needle? S3288

Material: bone

Dimensions: l.: 4.2 cm; w.: 0.4 cm; th.: 0.2 cm

Description: lengthy object made of bone with rounded section. The preserved end has a tapering, blunt point. Its use cannot be inferred from the context, but it seems plausible that it was used as a needle for decorative purposes or to hold pieces of garment together. That this should be a tool seems less probable, because finds of tools of the SIP tombs in the eastern Delta are quite rare.

Preservation state: incomplete

#### 1.2.4. Tomb {2496}

The mud-brick tomb {2496} (Fig. 15) is located in the square Y65–X190 close to the already known tomb 2009.<sup>25</sup> However, this south-southeast-oriented mud-brick tomb is a much smaller structure. It was discovered only as the profiles under the so-called black house walls were cleared for final documentation.

The tomb pit was visible only in the southern profile of the excavation trench, into which the tomb ran. It was very narrow here, only some 4 cm wider than the tomb itself. The tomb consists of a rectangular burial chamber, built of two rows of bricks in header bond. Its inner dimensions are

<sup>24</sup> Bone pins with incised decoration are rare in Tell el-Dab'a. For phase G, see FORSTNER MÜLLER 2008, 136, Fig. 74a:2553, 137. Another example was found in a tomb of

phase D/2, see FORSTNER MÜLLER 2008, 372, Fig. 297:3452, 333.

<sup>25</sup> RZEPKA et al. 2017b, 25–27.



Fig. 15 Tomb {2496} with the burial (Photo L. Horáková)

74 × 36 × 30 cm. This chamber was roofed over by mud-bricks, most probably in the form of a gabled roof. However, the roof is too damaged to be sure.

Within the small burial chamber, a strongly contracted individual, aged 8–9 years at the time of death (infans II) was placed on its left side, with the head to the south-southeast. The arms were placed in an unusual position in front of the upper body, but with the hands turned towards the knees. The legs were strongly contracted and placed above each other. No grave goods were found with this burial.

#### 1.2.5. Tomb {2500}

The mud-brick tomb {2500} located in the square Y70–X195 was built in a large tomb pit together with another tomb {2501} that could not be excavated due to shortage of time (Fig. 16). Although tomb {2500} seems to have been entered in antiquity (there is a circular hole in the southern part of the roof and some broken bricks lying around outside of it), it was not robbed thoroughly.

The tomb {2500} corresponds to type 3.1 of the Tell el-Dab<sup>a</sup> typology.<sup>26</sup> It consists of a rectangular mud-brick chamber with half-brick thick walls built in stretcher bond. They are only two rows high. The chamber is rather small, with inner dimensions of 95 × 38 × 50 cm. The roof is leaning on the northern gable. It was built of sloping bricks backed against each other and covered by a thick layer of mortar.

A skeleton of a child aged between 3 and 4 years at the time of death (infans I) was found lying on its right side, with the head to the south, within the burial chamber. The position could be just a result of the robbery, as the body was probably



Fig. 16 Tombs {2500} and {2502} (Photo L. Horáková)

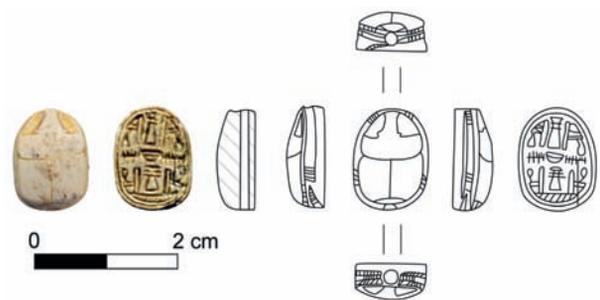


Fig. 17 Scarab S3302 from the tomb {2500}  
(Photo R. Rábeková, drawing L. Kováčik, digitalisation V. Dubcová)

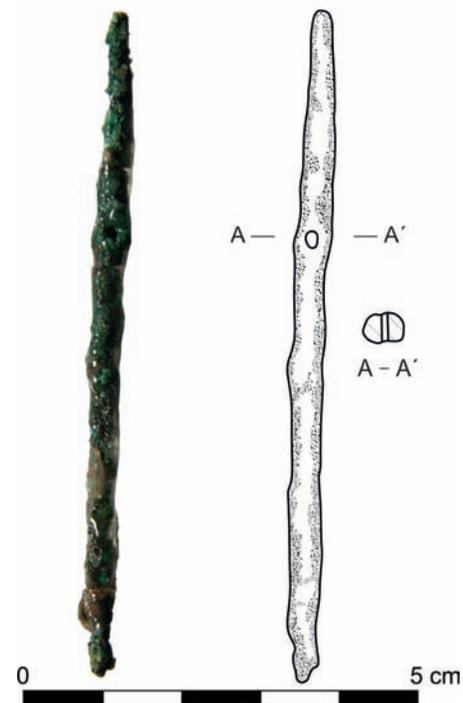


Fig. 18 Toggle-pin S3303 from the tomb {2500}  
(Photo R. Rábeková, drawing L. Kováčik, digitalisation V. Dubcová)

<sup>26</sup> See FORSTNER MÜLLER 2008, 28.



Fig. 19 a – Slender juglet (inv. no. 2505-22425);  
b – Small juglet (inv. no. 2505-22427) from the tomb {2500}  
(Photo A. Wodzińska)

dragged to the robbery pit. Despite this, a scarab S3302 (Fig. 17) and a copper alloy toggle-pin S3303 (Fig. 18) were found in the burial chamber, together with two pottery vessels (Figs. 19a and 19b).<sup>27</sup>

#### Slender juglet (inv. nr. 2505-22425, Fig.19a)

**Material:** Nile B1

**Dimensions:** 4.2 cm at the narrowest width of the rim

**Description:** slender juglet with funnel neck, round incurved rim with a flat spout, ovoid body, pointed base, and one handle; red slipped and burnished external surface

**Preservation state:** very well-preserved, not used before placing in tomb

**Dating:** middle and second half of the 15<sup>th</sup> Dynasty

#### Small juglet (inv. no. 2505-22427, Fig.19b)

**Material:** marl A4

**Dimensions:** 6 cm of shoulder

**Description:** small juglet with narrow cylindrical neck, biconical body, knob base and loop handle; smoothed external surface with red painted decoration – horizontal straight and wavy lines

**Preservation state:** rim missing, pot covered with white patina

**Dating:** middle and second half of the 15<sup>th</sup> Dynasty

#### Scarab S3302

**Material:** faience (?) with yellow glaze

**Dimensions:** l.: 1.1 cm; w.: 0.7 cm; th.: 0.3 cm

**Description:** head type: D1, back type: LN, side type: e9, design: A3A-varia

The scarab is unusually flat. The base is decorated in a linear pattern with three rows or eventually three columns – the distribution of signs allows both interpretations – over a *nb*-basket. In the first row, we see two upside-down oriented red crowns flanking a *djed*-pillar in the middle that is oriented correctly. In the second row, two water lines – the sign for letter *n* – flank a small *nb*-basket. The third row, just above the large *nb*-basket mentioned before, corresponds with the first row. It shows two red crowns, this time oriented correctly, flanking a *djed*-pillar. The whole motive is enclosed by a single line. As is often the case in this design class, the symbols used are common, but no exact parallels to this design are known to the author.

**Preservation state:** relatively well-preserved, glaze preserved only in incisions and on clypeus.

#### Toggle-pin S3303

**Material:** copper alloy

**Dimensions:** l: 8.5 cm; diam.: 0.5 cm

**Description:** lengthy metal needle with a circular cross-section. There is a slight thickening 2.8 cm from one end around a circular perforation. The head might be missing. On the other end, the pin thins out towards a blunt point. The pin is too corroded to be able to say if its shaft was decorated with ribbing, or if it belongs to the category of plain pins.<sup>28</sup> The toggle-pin was once probably used to hold the garments of the deceased together. **Preservation state:** corroded, possibly broken

### 1.3. Later cemetery – Phase G1, Area 4

The remains of phase G1 are rather scanty in the excavated part of the site. Apart from the massive tomb {1696}, known already from previous seasons,<sup>29</sup> only a relatively thick gravel deposit (2351) covering the structures of the previous phase was recognisable. This indicates that this part of the settlement was not used extensively at the end of the SIP, but it is not clear why this was so. It is possible that some of the tomb robberies had already been carried out during this phase.

<sup>27</sup> For more details, see WODZIŃSKA 2019.

<sup>28</sup> See PHILIP 2006, 95–102.

<sup>29</sup> RZEPKA et al. 2017b, 28–32. This tomb was formerly included in phase G2, but this dating had to be revised after the 2017 campaign.

## 2. Early Eighteenth Dynasty: Phase F

VD, AW

The 2017 season has brought new important evidence of the Eighteenth Dynasty occupation at the site. Work concentrated on the surroundings of the Green House and the Black House (Fig. 20). Two

ovens were among the newly unearthed structures northeast of the houses, post-dating the abandonment of the Green House. Probably the most important feature of the New Kingdom occupation predating the Green House and its settlement-phase is a small part of a cemetery. The cemetery of the early Eighteenth Dynasty constitutes the

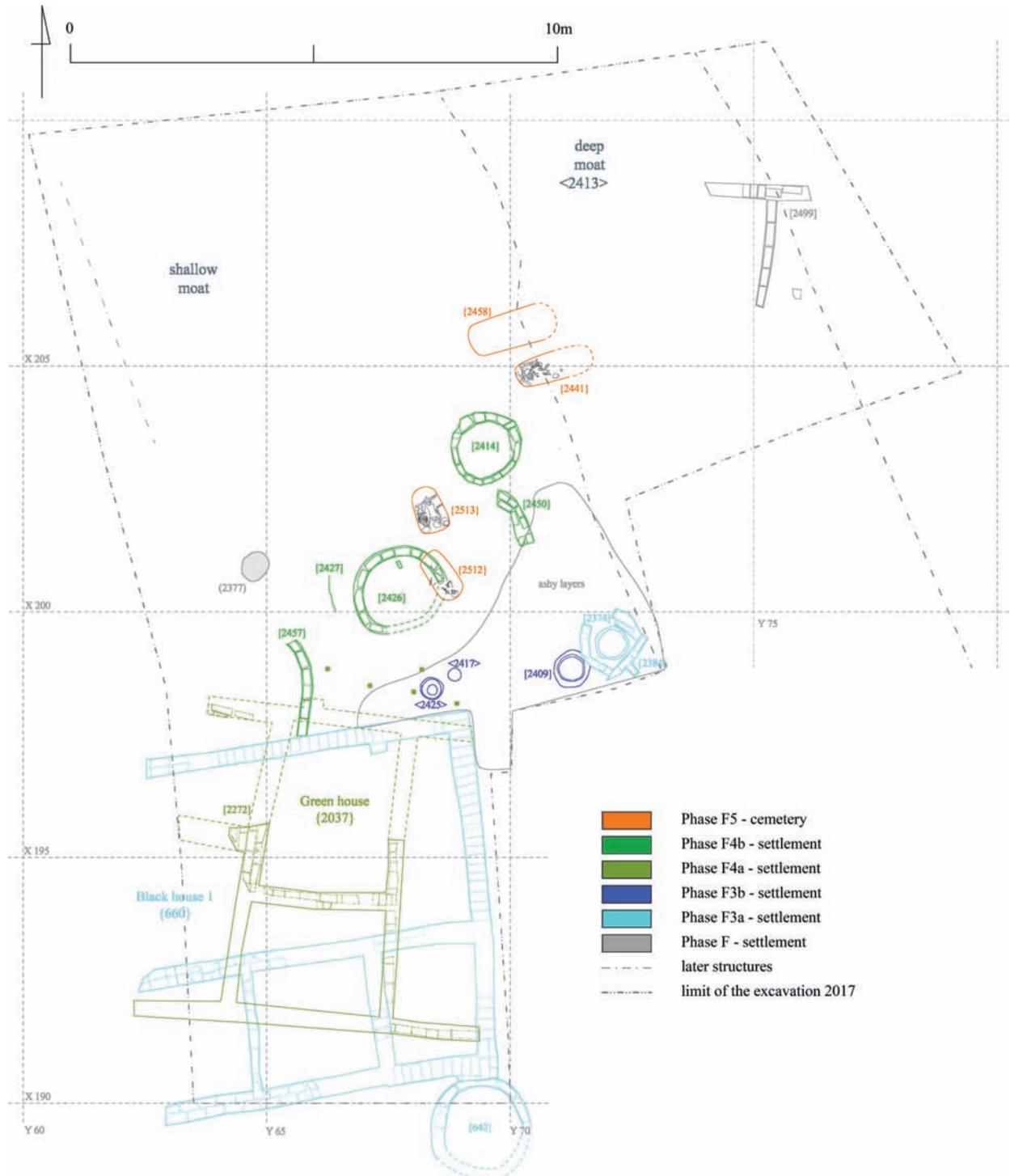


Fig. 20 Overall plan of the New Kingdom structures in Area 4 (Spatial data E. Stopková, plan L. Hulková)

earliest excavated feature of the New Kingdom occupation at Tell el-Retaba so far.<sup>30</sup> Four tombs have been excavated to date, three in an intact state. It appears that the space continued to be used as a burial ground after the SIP. Although there are some significant differences to the previous period, the continuation of the cemetery and some of the grave goods, whose character and internment mode may be seen as a legacy of the previous age, probably indicate a kind of persistent connection with the former occupants.

## 2.1. Early Eighteenth Dynasty cemetery: Phase F5, Area 4

### 2.1.1. Tomb {2441}

A pit of irregular elongated shape {2441} has been designated as a tomb because it contained a disarticulated human skeleton (Fig. 21). The remains of a male (?) juvenis were gathered at the southern edge of the tomb, with the skull and upper body part probably indicating its original position and orientation. Due to the cut in the eastern part of

the tomb and to the position of bones, it can be assumed that the original tomb was truncated by the construction of the moat in the later Ramesside period (see below) and probably robbed; or it could be just a case of secondary bone deposition.

### 2.1.2. Tomb {2458}

The second pit tomb (Fig. 22) discovered farther to the north of the disturbed tomb {2441} was of a



Fig. 21 Tomb {2441} (Photo L. Horáková)



Fig. 22 Tomb {2458} (Photo L. Horáková)

<sup>30</sup> There were some cemeteries from the late New Kingdom reported by Petrie (PETRIE and DUNCAN 1906, 32–34) and by the Egyptian mission conducting excavations in the 1980s, see RZEPKA et al. 2009, 241–243.



Fig. 23 a – Juglet (inv. no. 2459-22430), b – Juglet (inv. no. 2459-22735), c – Jar (inv. no. 2455-22429), d – Jar (inv. no. 2455-22431), vessels from the tomb {2458} (Photo A. Wodzińska)

similar elongated oval shape. It happened to be the richest of all the tombs in terms of the grave goods. It constituted a somewhat deeper pit tomb with the dimensions:  $1.80 \times 0.80 \times 1.40$  cm. Although the tomb also seems to be truncated by the construction of the Ramesside moat, it obviously remained unnoticed by the workers and surprisingly unrobbed. The skeleton of an adult (50–59 years old) of indeterminable sex was lying in a supine extended position with the head oriented to the east. Four pottery vessels (Fig. 23) were placed with the burial: a large jar by the north wall of the pit and smaller juglets next to the head and next to the right shoulder of the deceased. All the vessels had been badly damaged by the roots of later plants growing through them. It is especially the pottery which points to the early New Kingdom date of the tomb and of this part of the cemetery<sup>31</sup>.

The burial lacks any clear coffin or matting remains. The status of the deceased is, however,

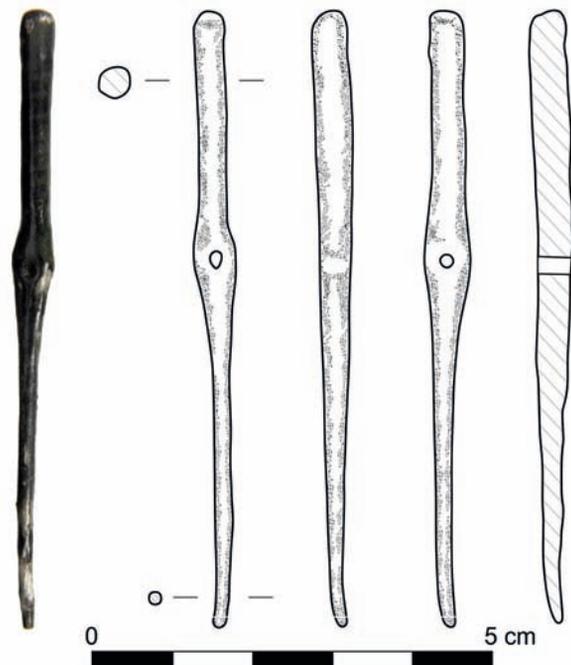


Fig. 24 Toggle pin S3243 (Photo R. Rábeková, drawing R. Knápek, digitalisation V. Dubcová)

<sup>31</sup> For more details, see WODZIŃSKA 2019.



Fig. 25 Reconstructed silver sheet S3238  
(Photo R. Rábeková, drawing R. Knápek, digitalisation V. Dubcová)



Fig. 26 Silver ring S3272  
(Photo R. Rábeková, drawing R. Knápek, digitalisation V. Dubcová)

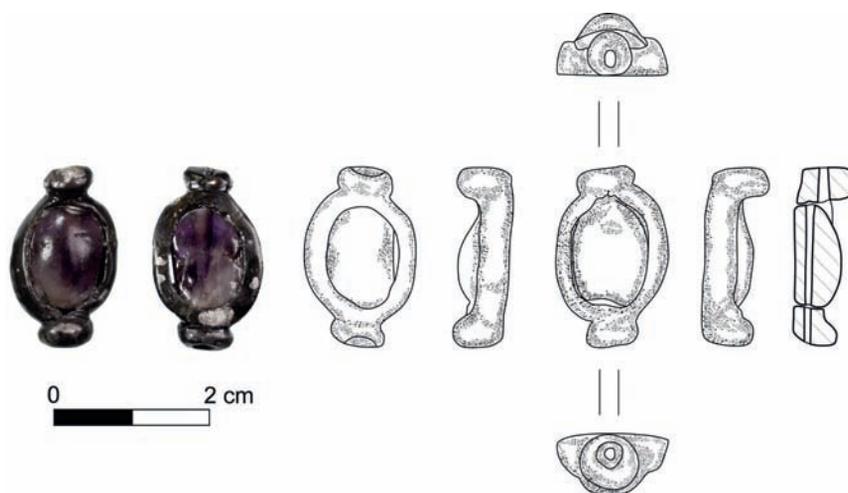


Fig. 27 Amethyst scarab finger ring with silver mounting S3240 (Photo R. Rábeková, drawing R. Knápek, digitalisation V. Dubcová)

clearly highlighted by the rich grave goods found within its fill (2455). They were found on the body, most of them representing personal adornment used in life. There was a silver toggle-pin S3243 (Fig. 24), a plain rectangular sheet S3238 (Fig. 25), a ring made of thin silver sheet S3272 (Fig. 26)

and an amethyst scarab set into a silver mounting S3240 (Fig. 27). This collection of jewellery was completed with a string of amethyst and silver beads (Fig. 28) and the last type of objects found



Fig. 28 Reconstructed bead necklace from the tomb {2458}  
(Photo R. Rábeková)

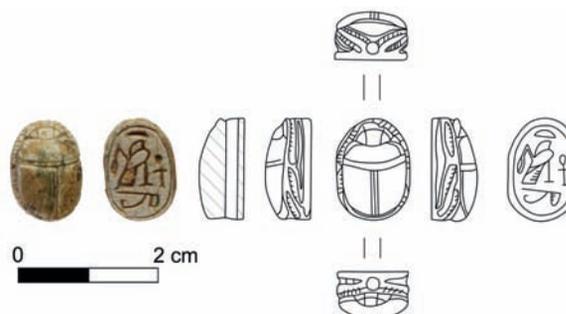


Fig. 29 Scarab S3267 (Photo R. Rábeková, drawing L. Kováčik, digitalisation V. Dubcová)

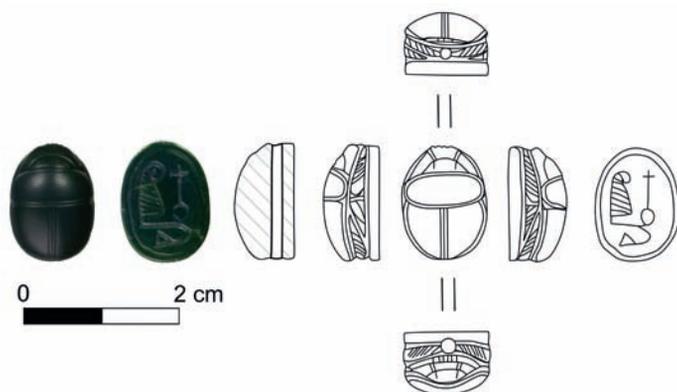


Fig. 30 Scarab S3239 (Photo R. Rábeková, drawing L. Kováčik, digitalisation V. Dubcová)

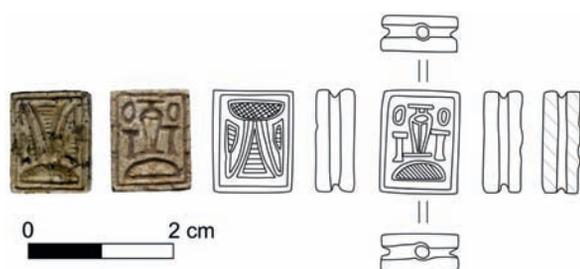


Fig. 31 Scaraboid in form of rectangular plaque S3266 (Photo R. Rábeková, drawing L. Kováčik, digitalisation V. Dubcová)

in the tomb were amulet seals, two scarabs, S3267 (Fig. 29) and S3239 (Fig. 30), and a rectangular scaraboid S3266 (Fig. 31).

#### Vessel (inv. no. 2459-22430, Fig. 23a)

Material: Nile B2

Dimensions: base 3 cm in diameter

Description: juglet with globular body and flat base, with black burnished external surface

State of preservation: rim and handle missing

Dating: early 18<sup>th</sup> Dynasty, probably reign of Thutmosis III

#### Vessel (inv. no. 2459-22735, Fig. 23b)

Material: Nile B2

Dimensions: rim 3.5 cm in diameter

Description: juglet with globular body and flat base, flaring rim, narrow neck and one vertical handle, with black burnished external surface

State of preservation: very fragile, preserved in fragments

Dating: early 18<sup>th</sup> Dynasty, probably reign of Thutmosis III

#### Vessel (inv. no. 2455-22429, Fig. 23c)

Material: Nile B2

Dimensions: rim of 8.6 cm in diameter

Description: jar with ovoid body, pointed base and flaring rim; red slipped external surface

State of preservation: well-preserved, not used prior to placement in the tomb

Dating: early 18<sup>th</sup> Dynasty, probably reign of Thutmosis III

#### Vessel (inv. no. 2455-22431, Fig. 23d)

Material: Nile B2

Dimensions: rim 11.5 cm in diameter

Description: large jar with ovoid body, narrow flat base and flaring rim; red slipped external surface with black painted rim and spiral band

State of preservation: well-preserved, not used prior to placement in the tomb

Dating: early 18<sup>th</sup> Dynasty, probably reign of Thutmosis III

#### Toggle pin S3243

Material: silver

Dimensions: l: 6.5 cm; diam.: 0.2 cm

Description: lengthy silver toggle pin of circular cross-section with a cylindrical rounded head at the top and a circular perforation in the wider place some 3 cm from the top. The head bears horizontal ribbed decoration and the other end narrows to the thin point. This type of toggle pin constitutes an important item typical of the SIP and also widely used during the New Kingdom period.<sup>32</sup> A number of toggle pins have also already been found at the site; these were, however, always made of copper alloy.<sup>33</sup> Silver toggle pins of this

<sup>32</sup> SPARKS 2004, 33–34.

<sup>33</sup> E.g. RZEPKA et al. 2015, 101–102, Fig. 8; RZEPKA et al. 2017b, 36.

type occurred in tombs of the SIP in Tell el-Ajjul,<sup>34</sup> Tell el-Dab<sup>a</sup><sup>35</sup> or Tell el-Maskhuta.<sup>36</sup>

Preservation state: well-preserved, in one piece, with corroded surface, restored.

### Headband S3238

Material: silver

Dimensions: l: 10.9 cm; w.: 1 cm; th.: 0.1 cm

Description: Silver object broken into several pieces; its shape was clearly recognisable only after restauration. A thin silver sheet of rectangular elongated shape, slightly rounded, creating a kind of band. The band tapers towards the ends, which are rounded-off and perforated. It probably served as a headband. This type of headband made of gold, silver or gilded copper alloy is well-documented from SIP tombs from Tell el-Maskhuta and Tell el-Dab<sup>a</sup>.<sup>37</sup>

Preservation state: Fragmented and corroded, broken into ten pieces, restored.

### Ring S3272

Material: silver

Dimensions: l: ca. 7 cm; w.: 1.3 cm; th.: 0.2 cm; diam. 2.2 cm

Description: Silver object broken into several pieces; its shape was clearly recognisable only after restauration. It consists of a thicker silver sheet, decorated with a striped incised pattern and its border curved inside along the whole diameter. One of its ends seems to be thinner, possibly creating a kind of closing. According to its shape, the object could have served as an earring,<sup>38</sup> toe-ring<sup>39</sup> or possibly a hair-ring, however, its position within the tomb, in the vicinity of a finger suggests its function as a finger-ring.

Preservation state: Broken into four fragments, corroded, restored.

### Scarab finger ring S3240

Material: silver, amethyst

Dimensions: l.: 2.2 cm; w.: 1.4 cm; th.: 0.8 cm; diam. of the thread hole: 0.1 cm

Description: the surface of the amethyst scarab is almost completely smooth (greatly worn?), there are only small traces of the former or unfinished incised decoration, partly on the clypeus; no decoration is preserved on the base. It is perforated along its longer side and there was a piece of thread by the arms of the deceased on which it had been hung. It seems likely that the scarab was reused and only secondarily adjusted with the silver mounting, typical of the SIP and the New Kingdom.<sup>40</sup> The mounting consists of a circle surrounding the edges of the scarab and has two thick, rounded extensions at its shorter sides. They were probably designed to attach the original ring.

Preservation state: The amethyst scarab is well-preserved, perhaps worn or unfinished, the silver mounting was broken into several pieces and corroded; restored.

### Scarab S3267

Material: glazed steatite

Dimensions: l.: 1.3 cm; w.: 0.9 cm; th.: 0.6 cm

Description: head type: A3, back type: LN, side type: d7, design: 3A4 – Horus hawk with *ntr* and other signs.

The scarab is carved of steatite covered by yellowish-beige glaze, perforated lengthwise through the base. The carving is quite worn; the lines of the back and clypeus with lunate head and eyes indicated with single lines and tibiae decorated with short stripes are clearly recognizable. The base shows a linear design. It consists of the Horus hawk sign and a floral bud (*Winkelhaken*), placed between a reversed red crown- and a *neb*-sign,

<sup>34</sup> PETRIE 1932, pl. III, no. 16; 1934, 9, pl. XXI, no. 223 from a tomb with similar contents; many of these toggle-pins were made of gold, see e.g. PETRIE 1931, 7, pl. XV, no. 4: from a tomb containing pin, earrings, scarabs, string of carnelian beads.

<sup>35</sup> PHILIP 2006, 94–95, fig. 44, no. 375 (A/I-g/3 Gr. 1, burial 1, Str.: D/3–E/1); a large number from Tell el-Ajjul, mainly in bronze or gold, e.g. in PETRIE 1932, pl. XVIII, nos. 208, 214, 216–218; 1933, pl. XXIV, nos. 105, 183; in the context of the New Kingdom, there is a golden toggle-pin of a similar type from Gurob, see THOMAS 1981, Vol. I, 87, no. 754; Vol. II, pl. 40:754.

<sup>36</sup> REDMOUNT 1989, 933, nos. 33–36 from the tomb 12.12736

<sup>37</sup> See REDMOUNT 1989, 904, 908, no. 16, 912, no. 9, 933, nos. 37–39; for examples made of gold, see FORSTNER MÜLLER 2008, 169–170, no. 2593 (str. F), 278–279, no. 2185 (str. E/1); from Tell el-Ajjul: PETRIE 1934, 7, pl. XVIII, no. 86; PHILIP 2006, 86–88.

<sup>38</sup> See a similar penannular earring from the SIP–New Kingdom in LILYQUIST 2003, 163.

<sup>39</sup> SAVE-SÖDERBERGH and TROY 1991b, pl. 30 (185/402:4).

<sup>40</sup> A similar piece was found, for example, in the tomb in Tell el-Ajjul, PETRIE 1934, pl. XVIII:124 (tomb 1502).

with an *ankh*-sign in front of it.<sup>41</sup> The hieroglyphic signs are enclosed by a single line.

State of preservation: well-preserved, glaze corroded, only slight wear at the sides indicating that the scarab had already been worn during life.

### Scarab 3239

Material: green jasper

Dimensions: l.: 1.4 cm; w.: 1 cm; th.: 0.7 cm

Description: head type: A5, back type: LN, side type: d12, design: 3A3 Varia

The scarab is made of dark green jasper, presenting carving of a high-quality, with clear lines and smooth polished surface. The head with clypeus and parts of the back (pronotum, elytrae) are well articulated. The linear design on the base displays a combination of hieroglyphic signs, the *nfr* sign and *maat*-feather, connected with a floral bud.<sup>42</sup> This combination of signs was very popular and appears on numerous items known from the SIP, especially on the Early Palestinian Series.<sup>43</sup>

State of preservation: very well-preserved

### Scaraboid S3266

Material: glazed steatite

Dimensions: l.: 1.4 cm; w.: 1.1 cm; th.: 0.5 cm

Description: design type: it combines the 1E group with floral motifs with 3A3 Varia

Scaraboid in the form of a bifacial rectangular plaque, pierced lengthwise through the plaque. This scaraboid can be attributed to Keel's Type II of rectangular plaques with undecorated thinner sides. Both larger sides are decorated with a combination of hieroglyphic signs: the first can be attributed to Mlinar's 1E1e, three papyrus buds over a hill; this design is incised in a reversed position. All three buds are filled in with horizon-

tal stripes and the hill with cross-hatching. The second side shows a centrally placed libation *Hs*-vase above a hill, flanked by two *ankh* signs (with their loops being separated from the rest of the sign-body).

Although there are some Palestinian examples, which clearly indicate the beginning of this type of amulet during the SIP (end of MB II),<sup>44</sup> the majority of them come from New Kingdom contexts.<sup>45</sup> Thus this piece could be a heirloom of the previous period or a product of the early New Kingdom.<sup>46</sup>

State of preservation: well-preserved, slightly worn at the surface

### Bead necklace<sup>47</sup>

Material: amethyst, silver, carnelian

Dimensions: l.: 0.3-1.5 cm; w.: 0.3-1.2 cm; th.: 0.3-1.2 cm

Description: A collection of beads of various shapes and produced of different materials: 16 amethyst beads (15 spherical, 1 lozenge), three spherical silver beads and one lozenge carnelian bead, which were placed around the neck; common types known from many SIP and New Kingdom sites.<sup>48</sup>

State of preservation: very well-preserved

#### 2.1.3. Tomb {2512}

The second pit tomb (Fig. 32) discovered farther to the west of the disturbed tomb {2441}, was a simple oval burial pit (dimensions: 1.30 × 1.05 × 0.60 m), just long enough to accommodate the body. Its walls dug into the gravel layer were hardly recognisable and very unstable. The individual (2507) buried in the pit was lying on its back in a

<sup>41</sup> MLINAR 2001, 147–155; BEN-TOR 2007, 17, 76, 126, 160, pl. 33:13–35; pl. 52:1-40 – Early Palestinian series (especially); a similar design can be found on a scarab found at Harageh, see ENGELBACH and GUN 1923, pl. XXI, no. 209; from Qau, BRUNTON 1930, pl. XXXIV, no. 53.

<sup>42</sup> An identical design can be found on a glazed steatite scarab in the Israel Museum in Jerusalem, acc. no. 76.031.4082 (dated to the 18<sup>th</sup> Dynasty), see <https://www.imj.org.il/en/collections/593607> (22. 4. 2019).

<sup>43</sup> BEN-TOR 2007, 16, 76, 126, 160, pls. 7, 51, 77.

<sup>44</sup> KEEL 1997, 344–345, no. 707; also personal communication with Othmar Keel (18.4.2019).

<sup>45</sup> KEEL 1995, 90–92.

<sup>46</sup> From among the New Kingdom examples from Fadrus: SAVE-SÖDERBERGH and TROY 1991a, 92, Fig. 22; 1991b, pl. 17, no. 185/545:12 (with the name of Amenhotep, most likely Amenhotep I, from adult burial, found on the feet); from Gurob: BRUNTON and ENGELBACH 1927, pl. XXII, no. 1 (Amenhotep I); XXIV, no. 33 (Thutmose III); from Qau: BRUNTON 1930, pl. XXXIV, no. 1 (tomb 5502), no. 45 (tomb 5420).

<sup>47</sup> S3242 (three silver beads), 3244, 3247, 3249, 3252, 3253, 3254, 3256, 3257, 3259, 3260, 3261, 3262, 3268 (carnelian bead), 3269, 3270, 3271

<sup>48</sup> For parallels and typology of the New Kingdom beads (18<sup>th</sup> Dynasty), see: GIDDY 1999, 112–131, pls. 26-27; also ENGELBACH and GUN 1923, pl. LIV (73 barrels and 79 spheroids); BRUNTON 1930, pl. XXXII.



Fig. 32 Tomb {5012} (Photo L. Horáková)

supine extended position at the bottom with the head to the south and legs probably semi-contracted or even pulled up. It was a child of above five years old, suffering from *cribra orbitalia* (a result of anaemia?), *hypoplasia* and some injury. This interment was rather poor: only one small cylindrical faience bead S3306 was found with the burial.

#### **Bead S3306**

Material: faience

Dimensions: l.: 1.4 cm; w.: 0.4 cm; diam.: 0.4 cm

Description: Cylindrical elongated bead, perforated through its long side.<sup>49</sup>

State of preservation: slightly broken at its ends, worn surface

#### *2.1.4. Tomb {2513}*

The last tomb of this phase (Fig. 33) of the cemetery {2513} was discovered in the immediate vicinity north of tomb pit {2512}. It was a simple burial in a rectangular pit with rounded corners

(dimensions: 1.00 × 0.80 × 0.75 cm) and contained remains of three individuals. Only two skeletons in a strongly contracted position were clearly recognisable during the excavation (2509) and (2510); the bones of a third individual were recognised by the anthropological analysis. Skeletons (2509) and (2510) belonged to children aged 12–15 and 5–9, while the third individual was a toddler less than 4 years old. No cause of sudden death of any of the three children was discovered, although it seems likely that they were buried at the same time. The two older children were lying on the right side with their heads to the south. A large pottery vessel (Fig. 34) was placed next to the face of a skeleton (2510), the first from the east. This skeleton was obviously covered with some organic material; however, it was so badly decomposed that it was impossible to identify the material more precisely. It seems likely that the body was wrapped into some vegetable/plant fibre matting. The only other object found in the burial was a button-like object S3307 (Fig. 35).

<sup>49</sup> For similar items dated to the 18<sup>th</sup> Dynasty, see e.g. Harageh: ENGELBACH and GUN 1923, pl. LIV:L; Tell el-Dab<sup>a</sup>: JANKOVICH 2008, nos. 322b–c; 326b; 326; etc.



Fig. 33 Tomb {5013} (Photo L. Horáková)



Fig. 34 Jar from tomb {5013} (Photo A. Wodzińska)

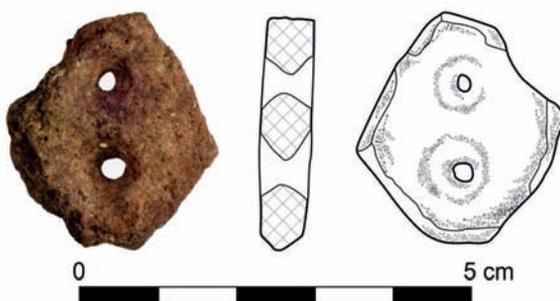


Fig. 35 Pottery disc S3307 (Photo R. Rábeková, drawing R. Knápek, digitalisation V. Dubcová)

#### Pottery disc S3307

Material: clay

Dimensions: l.: 3 cm; w.: 2.6 cm; th.: 1.1 cm

Description: Flat rounded disc made of pottery, probably reused sherd, with two perforated holes in its central part. A comparable object appeared by the hand of a skeleton in Tell el-Dab<sup>a</sup> tomb A/II-m/10 No. 7 (str. E/1).<sup>50</sup> When found in a settlement context, this type of pottery disc is usually interpreted as serving different functions, perhaps as weights, reels or spindle whorls.<sup>51</sup>

State of preservation: slightly broken at its edge, worn surface

#### Vessel (inv. no. 2506-22424, Fig. 34)<sup>52</sup>

Material: Nile B2

Dimensions: 12 cm in diameter

Description: jar with globular body, round slightly flattened base, short cylindrical neck and flaring triangular rim; red slipped external surface

<sup>50</sup> BIETAK 1991, 215. Ceramic discs with two holes were common in the Middle Bronze Age Canaan sites such as Hazor, Megiddo, Gezer, Bethel, Tell el-Ajjul and Tell Jammeh as well as Beth Shean, see YAHALOM-MACK in MAZAR and MULLINS 2007, 662–663.

<sup>51</sup> KEMP and STEVENS 2010a, 453, Fig. 24.3, nos. 34949, 35051; also from Sai, BUDKA 2017, 163–164, Fig. 90.3–4.

<sup>52</sup> For more details, see WODZIŃSKA 2019.

**State of preservation:** complete vessel

**Dating:** early 18<sup>th</sup> Dynasty, probably reign of Thutmosis III.

### 2.1.5. Discussion of the Early New Kingdom Cemetery

In many aspects, the grave goods found in the four tombs discussed (especially in 2458) still reflect the tradition of the SIP, with many objects produced obviously in (or in tradition of) previous times, reused or inherited.<sup>53</sup> One of the indications of this practice may be the use of amethyst. Amethyst was a precious material and its sources were known and largely exploited in the Middle Kingdom;<sup>54</sup> the majority of known comparable items were produced during the Middle Kingdom and SIP.<sup>55</sup> For this reason, the items found in this tomb probably constitute heirlooms.

However, the construction of the tombs, their form, the position of the skeletal remains and some of the offerings (especially pottery) differ from the previous SIP tombs and already demonstrate New Kingdom traditions and material culture. It is, above all, the absence of the mud-brick construction, typical of the previous period at the site, which indicates a change in burial customs. Simple pit or shaft tombs (also ‘sand graves’) were common during the whole New Kingdom and their appearance on sites with previous Asiatic occupation has been noted, for example, by Petrie in Tell el-Yahudiyah.<sup>56</sup> There is a larger variation in the position of the deceased in the tomb with the newly introduced supine position next to the still popular contracted or semi-contracted position.<sup>57</sup> These

changes may be caused by new impulses appearing at the transition from the SIP to the New Kingdom, with the old occupation perceiving them or even with new settlers coming to the site.

By far the best comparison to these tombs are offered by cemeteries from contemporary or later (late New Kingdom) periods, especially Fadrus in Lower Nubia,<sup>58</sup> the South and North cemetery from Amarna,<sup>59</sup> the small New Kingdom cemetery in Harageh<sup>60</sup> or in Gurob.<sup>61</sup> The type found so far in Tell el-Retaba can be compared to the simplest shaft tombs (Fadrus, type S), lacking any mud-brick structures, coffins and special offerings.<sup>62</sup> Most of the shaft tombs in Fadrus can be attributed to the time of the reign of Thutmose III (more precisely), they are more or less similar.<sup>63</sup> The skeletal remains within the tomb {2513} seem to be wrapped in some organic material: leather, textile, or some plant matting, deposited at the bottom of a shaft. This custom and the whole spectrum of matting types is well-documented in Amarna (North and South cemetery).<sup>64</sup> The wealth of the tomb {2458} and the richer finds within the excavated houses of the early Eighteenth Dynasty<sup>65</sup> indicate the higher position and a kind of prosperity of its occupants, probably associated with the strategic position of the site in Wadi Tumilat connected with various military and trading activities.<sup>66</sup>

## 2.2. Eighteenth Dynasty Settlement (Green Houses and Associated Structures): Phase F4b-a, Area 4

After some time, the cemetery was abandoned in favour of the settlement and domestic activities,

<sup>53</sup> This was a common situation also in case of other early New Kingdom cemeteries, see e.g. Gurob: BRUNTON and ENGELBACH 1927, 10.

<sup>54</sup> NICHOLSON and SHAW 2000, 50–51; SHAW 2000, 219–220.

<sup>55</sup> See several examples of amethyst items found in Qau (Middle Kingdom cemetery), BRUNTON 1930, 1–3; others in the Metropolitan Museum in New York: a necklace from Abydos: HAYES 1953, 236; <https://www.metmuseum.org/art/collection/search/555791?&searchField=All&sortBy=Relevance&where=Egypt&what=Amethyst&ao=on&ft=amethyst+egypt&offset=0&rpp=20&pos=3> (22. 4. 2019); scarab finger ring (acc. no. 10.130.910): HAYES 1953, 127, 239; <https://www.metmuseum.org/art/collection/search/548345?&searchField=All&sortBy=Relevance&where=Egypt&what=Amethyst&ao=on&ft=amethyst+egypt&offset=20&rpp=20&pos=29> (22. 4. 2019).

<sup>56</sup> PETRIE and DUNCAN 1906, pl. XII, nos. 24, 30, 31, 34.

<sup>57</sup> The contracted or semi-contracted position appearing at the cemetery at Fadrus is interpreted as indicating different populations, see SÄVE-SÖDERBERGH and TROY 1991a, 214.

<sup>58</sup> SÄVE-SÖDERBERGH and TROY 1991a, 212–250.

<sup>59</sup> KEMP 2009; KEMP et al. 2013; STEVENS and DABBS 2018.

<sup>60</sup> ENGELBACH and GUN 1923, 17–18, pl. LXIII.

<sup>61</sup> BRUNTON and ENGELBACH 1927, 9–17: the majority of tombs were group tombs, pls. XVIII–XIX.

<sup>62</sup> SÄVE-SÖDERBERGH and TROY 1991a, 214–215; 1991b, pl. 66.

<sup>63</sup> SÄVE-SÖDERBERGH and TROY 1991a: a large number of tombs: 185/8, 10, 12, 68, 86, 73, 183, 409

<sup>64</sup> KEMP 2009, 11–27; PAQUA 2015, 6.

<sup>65</sup> Presented mainly in RZEPKA et al. 2015, 103–108; 2017, 31–41.

<sup>66</sup> Similarly, this seems to be the reason for the well-being of the occupation buried at Fadrus, see SÄVE-SÖDERBERGH and TROY 1991a, 249.



Fig. 36 Silos [2414], [2426] and [2450] (Photo J. Marko)



Fig. 37 Rounded pit (2425) (Photo L. Horáková)

indicated by several architectural remains and layers. Fragments of three rounded silos [2414], [2426] and a much damaged one [2450] (Fig. 36), with the outer diameter ranging from 1.35–1.95 m, were found together with a small piece of rounded wall [2457]. They lay clearly below the remains of the Green House; therefore, it is possible that they belonged to another house which has yet to be discovered. The same can be assumed for a small circular pit (2425) with its concave sides

intentionally lined with small sherds (Fig. 37), probably a storage pit or post hole and for a rounded muddy concentration (2417), possibly a pillar base.<sup>67</sup> The nature of the activities performed in this period is indicated by a number of stone grinders and hammer stones found mainly in the surroundings of the silos (S3226, 3245, 3248, 3251 a hammer stone, 3276 and 3277). The Green House is known from previous excavations.<sup>68</sup> However, it was possible in 2017 to clearly establish that the thickness of the walls of this house was one brick instead of the assumed half-brick. The poor quality of the greenish bricks makes it hard to distinguish their collapsed remains from room fill.

### 2.3. Eighteenth Dynasty Settlement (Black Houses): Phase F3, Area 4

In the time span ranging from the collapse and abandonment of the Green House to the construction of its successor, the Black House 1, the space continued to be used for a wide spectrum of domestic activities. An oven was found [2409] with an inner diameter of about 0.50 m some 3.50 m east of the Green House remains (Fig. 38). This type of cylindrical ceramic-lined oven (with the inner ceramic shell and outer clay lining) was typ-

<sup>67</sup> VON PILGRIM 1996, Fig. 65 (H49c), from 17<sup>th</sup> Dynasty.

<sup>68</sup> RZEPKA et al. 2017b, 31–35.



Fig. 38 Remains of ovens [2409] and [2374] (Photo L. Horáková)

ical of the New Kingdom<sup>69</sup> and was already documented from the area further south in 2011.<sup>70</sup> It was built on a brown-pinkish sandy layer (2424) consisting perhaps of underlying mud-bricks creating a kind of foundation. The oven consisted of the inner clay lining and outer mud covering and was filled with ash mixed with collapsed fragments of the inner oven's reddish clay lining. It appears that the oven had actually two phases of use, since two layers of the inner clay lining are actually preserved. After the original and slightly larger oven was no longer used (and collapsed?), its fill was cleaned and a second smaller lining was constructed.

Another slightly larger oven [2374] of a similar construction (Fig. 38) with an inner diameter of about 0.60 m was built just east of the previous one at a later time, although it is not entirely clear whether the first oven [2409] was already out of use. In any case, it was abandoned later, since the

ashy layers associated with the younger oven cover the remains of the older one. This larger and later oven was created above a thick ashy layer (2392), probably coming from the older oven. The practice of multiple use of ovens and of building one oven above the remains of another and, thus, saving space can also be followed in other sites, such as Amarna (Workmen's village) or Amara West.<sup>71</sup> As was the case of the older oven, its bigger successor was also constructed from a thick layer of mud with an inner clay lining and its walls were supported with some mud-bricks [2383] mainly at its southern side (with an opening?). On its eastern side, it leaned against a slightly rounded wall [2384]. The whole area was covered with a thick multiple layer of black ash, which was mainly distributed behind the wall [2384], possibly creating a dumping place, and another thick layer running southwards from the oven in the form of a channel (Fig. 39). Its present form was possibly caused by

<sup>69</sup> PENDLEBURY 1951, pl. XXVIII, no. 6 (Amarna); JÁNOSI 1996, 91 (Tell el-Dab'a); WILSON 2011, 72–74 (Sais); KEMP and STEVENS 2010a, 483–499 (Amarna); SPENCER et al. 2014, 32–33, 52–55 (Amara West); for a general discussion, SAMUEL in NICHOLSON and SHAW (Brewing and baking) 2000, 566–567.

<sup>70</sup> RZEPKA et al. 2014, 58, 60.

<sup>71</sup> This type of ovens does not have a long use-life, they become engulfed in ash and other rubbish, see SAMUEL 1999; SPENCER et al. 2014, 33.

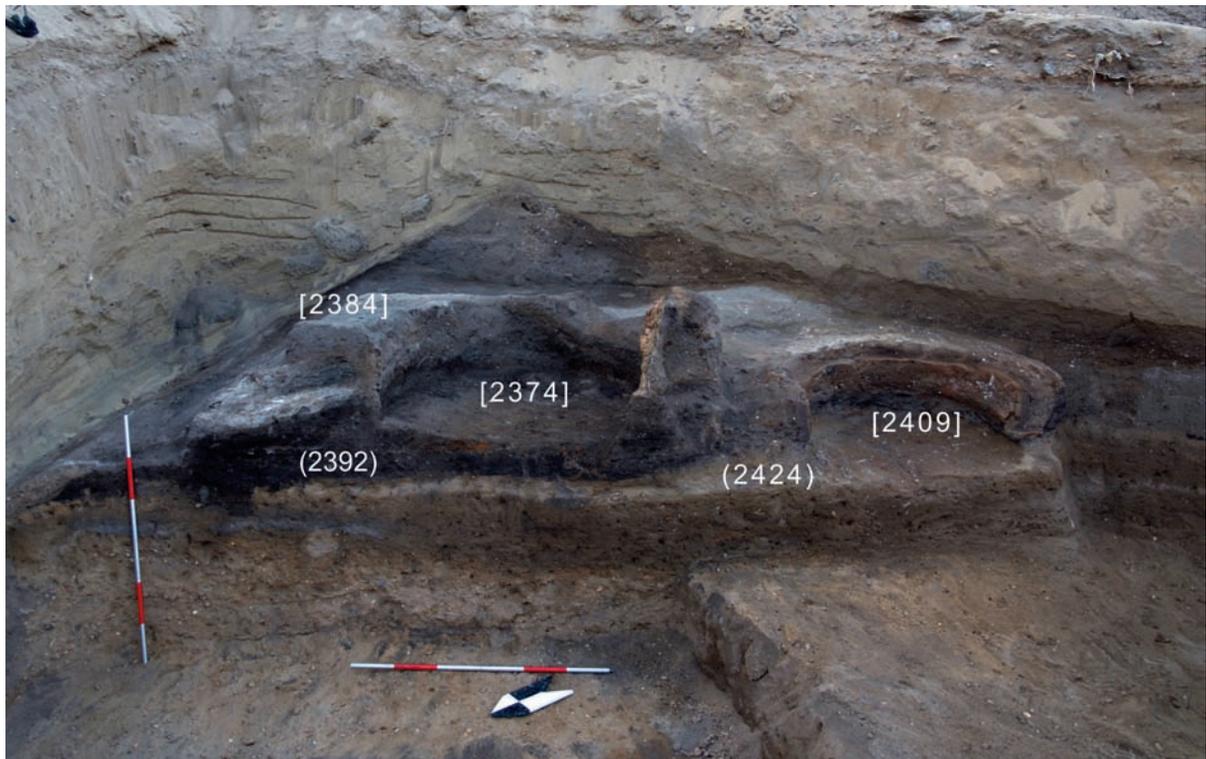


Fig. 39 Section through the ovens [2409] and [2374] (Photo L. Horáková)

levelling the place for the construction of the Ramesside platform (see below). Considering the purpose of the ovens, they probably constituted multifunctional structures. The lack of raw materials, tools or moulds and the presence of animal bones in their fill and surroundings indicates rather domestic or kitchen use for baking and food processing.

The stratigraphy of these deposits indicates that the Black House 1 was already standing when the second oven was in use.<sup>72</sup> It would suggest some continuity in the use of the space despite the structural development of the settlement. There was also a hearth or storage pit next to the two ovens, surrounded by a rounded mud-brick structure [2377] and associated with a number of animal bones, indicating some food preparation activities. This structure seems to be slightly later or contemporary with the second oven [2374] and, thus, probably with the occupation level of the Black House 1. It seems likely that this was a kind of industrial area with the activities performed in this area indicated by several small finds coming from the overlying and underlying layers, especially (2271, 2366) containing a number of flint tools,

<sup>72</sup> Ovens located east of a house were also observed in the early New Kingdom settlement in Tell el-Dab'a, see JÁNOŠI 1996: 91.

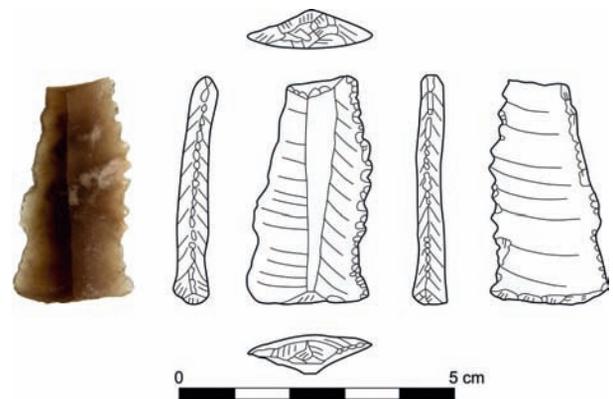


Fig. 40 Flint tool S3188 (Photo R. Rábeková, drawing R. Knápek, digitalisation V. Dubcová)

such as S3188 (Fig. 40), grinders, a lot of copper alloy prills (e.g. S3175, 3177, 3187, 3190) and a bronze object S3192, probably a piece of failed casting. The pottery from Black House 1 represents domestic activities, however, it is clear that it was used mostly during the serving/consumption of food.<sup>73</sup> Remains of another building [2499] from the early Eighteenth Dynasty were located, but not explored this year, east of the Nineteenth Dynasty moat.

<sup>73</sup> For more details, see WODZIŃSKA 2019.

### 3. Defensive constructions of the Nineteenth and Twentieth Dynasties – Phases E, D4 and D3

JH

Excavations at Tell el-Retaba contributed to the knowledge of defensive constructions of the Nineteenth and Twentieth Dynasties. Defence “walls 1–3” were known from Petrie’s excavation in 1905.<sup>74</sup> Some of the walls were uncovered again during Egyptian excavations around the turn of the millennium; they are still visible along the southern side of the tell.

“Wall 1” is expected to enclose the entire Nineteenth Dynasty fortress. Prior to the 2017 season, it was attested on the western side (Area 4) and southern side (Area 9) of the tell and probably

also in the water-pipeline trench from 1981<sup>75</sup> in the central southern side of Tell el-Retaba.

“Wall 2” is expected to enclose the entire Twentieth Dynasty fortress. Prior to the 2017 season, it was attested on the western side (Areas 4, 7, 8) and southern side (Area 9) of the tell. Geophysical survey<sup>76</sup> and several test pits (e.g. Area 1) identified the wall alongside the northern side of the tell.<sup>77</sup>

“Wall 3” was attested only in the Area 9 and along the southern side of the tell and near the south-eastern corner of the fortresses. The wall seems to also be indicated by geophysical survey on the eastern side of the tell.<sup>78</sup> Its occurrence on the northern and western side of the Twentieth Dynasty fortress has not been confirmed so far.

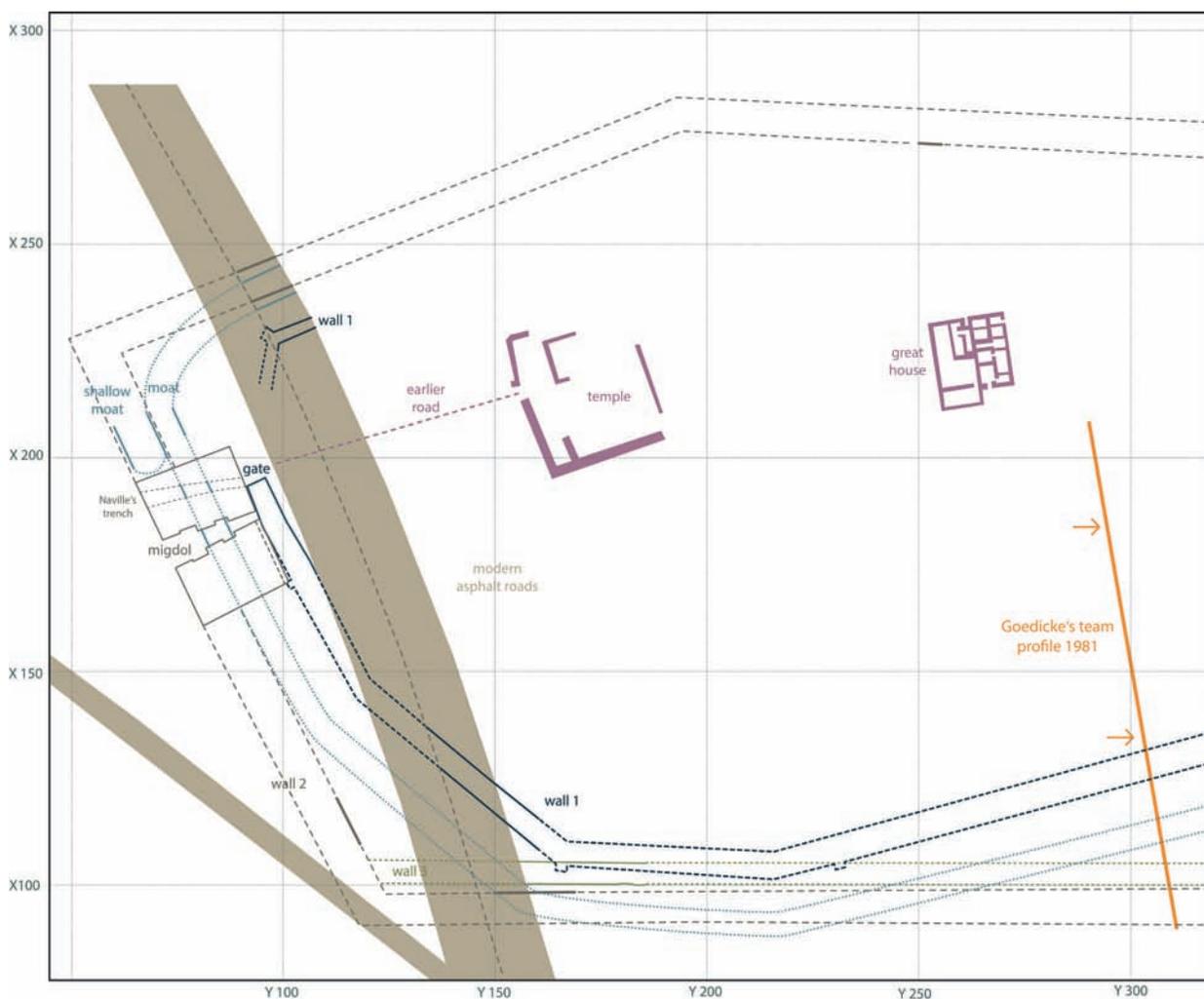


Fig. 41 Ground plan of the moat and defence walls of the Ramesside fortresses (Spatial data E. Stopková, drawing L. Hulková)

<sup>74</sup> PETRIE and DUNCAN 1906, Pl. XXXV.

<sup>75</sup> For more details, see cf. HUDÁKOVÁ and HUDEC 2017, 383, Fig. 4.

<sup>76</sup> RZEPKA et al. 2009, 249, Fig. 7.

<sup>77</sup> RZEPKA et al. 2009, 252.

<sup>78</sup> RZEPKA et al. 2009, 249, Fig. 7.

As a result of excavations of Egyptian archaeologists Mustafa Nur el-Din<sup>79</sup> (in 2010–2011) and Khaled Fareed (in 2017), two parallel sections were also cleaned in a construction area for a new road on the eastern side of the Salheya-Dawaweez road. Petrie’s “walls 1–3” were confirmed in the southern end of the eastern section (Area 9). Opposite, in the western section in Area 9, the last relics of “wall 2” were also visible; other relics were probably removed during previous construction of the local road in the 1970s.

### 3.1. Newly Identified Walls – Phases E4, E3, D4

In 2017, traces of up to then unknown parts of Petrie’s “wall 1” and “wall 2” (Fig. 41) were recognised close to the northern end of the sections in the Salheya-Dawaweez road construction area mentioned above, i.e. in Area 2.<sup>80</sup> Mud-brick dimensions and materials of “wall 1” in the eastern section of Area 2 (Fig. 42) were rather similar to the core of the “wall 1” preserved on the west-

ern side of the tell in Area 4.<sup>81</sup> More types of mud-bricks were generally used in the “wall 1” construction; however, in Area 2, the dimensions and material of mud-bricks of “wall 1” were similar in both sections.<sup>82</sup> The wall in the western section was wider (Fig. 43). It seems that either the wall



Fig. 42 “Wall 1” in the eastern section of Area 2 (Photo L. Horáková)



Fig. 43 “Wall 1” in the western section of Area 2 (Photo L. Horáková)

<sup>79</sup> RZEPKA et al. 2012–2013, 253–287; NOUR EL-DIN et al. 2016, 75–114.

<sup>80</sup> Detailed publication of the discoveries will be the subject of another contribution.

<sup>81</sup> RZEPKA et al. 2011, 143–145, Fig. 19.

<sup>82</sup> HUDEC et al. 2018, 33.



Fig. 44 Section of the “wall 1” in Area 4 (Photo M. Odler)



Fig. 45 Section of the “wall 1” in Area 9 (Photo J. Hudec)

was cut aslant (as it might change direction at the section’s spot) or there was a bastion connected to the wall in this very place (similar to bastions identified by Petrie).<sup>83</sup> Thorough examination of the western section was not possible as it was situated below the frequented road.

“Wall 1” in Area 4 consists of a core, an internal extension and an external extension (Fig. 44). Fine yellow sand was in the fundamentals of both extensions. The fundament of the “wall 1” core has not been uncovered in the wall’s section so far. The extensions were probably made parallel at the same time, based on the construction details: the same dimensions of mud-bricks, greenish and black mud-bricks used in both extensions and the same brick bonding patterns.

“Wall 1” in Area 9 also consisted of a core, internal extension and external extension (Fig. 45). At the fundament of the internal extension was a gravel bed with shards; the fundament was higher

than the foundation level of the wall’s core (similar to the situation in Area 4). The external extension was at a lower level than the core and based on a sand layer. The core of the wall was built on a sand layer; rusty coloured gravel was below the sand layer.<sup>84</sup> Samples of mud-bricks and soil, examined from “wall 1” in Area 9, have slightly different dimensions and also different soil materials were used for their production than the samples from Area 4.<sup>85</sup>

### 3.2. Moat related to “wall 1” in Area 2 – Phase E

After closer examination of the two sections in Area 2, relics of a moat were identified in both of them. According to the horizontal stratigraphy, the moat was related to the Nineteenth Dynasty wall (Petrie’s “wall 1”), which runs a distance of ca. 6–7 m southwards of the moat.

The moat was dug into older layers of the Eighteenth Dynasty or maybe into even older layers. Some earlier constructions were disturbed by the digging, other were more or less respected by the ancient diggers. The southern edges of the moat (closer to the “wall 1”) were disturbed by later human activities registered in both sections; the edge was disrupted by recent excavation of a Late Period well<sup>86</sup> in the eastern section; a younger (probably Third Intermediate Period) pit disrupted the edge in the western section. The maximum width of the moat in the eastern section was ca. 7.5 m, maximum depth ca. 0.95 m (Fig. 46); the width in the western section was ca. 6.5 m, and depth ca. 1.4 m (Fig. 47). The level of the northern edges of the moat was slightly lower than the southern edge. The sections of the moat were not opposite each other on the road construction pit axis which was NNW–SSE. The course of the moat was probably cut slightly aslant to its direction by the construction pit. After hypothetical connection of the moat edges it is possible to assume a NEE–SWW orientation of the moat (and probably also of the “wall 1”) in this part of the fortress.

The moat was filled with natural gravel and artefacts; irregular stratigraphy suggests that the infilling resulted from a dumping process, which had probably been going on since a period when the moat lost its defensive function.<sup>87</sup>

<sup>83</sup> PETRIE and DUNCAN 1906, 28f, pl. XXXV.

<sup>84</sup> HUDEC et al. 2018, 33f.

<sup>85</sup> HUDEC et al. 2018, 34ff.

<sup>86</sup> NOUR EL-DIN et al. in preparation.

<sup>87</sup> HUDEC et al. 2018, 38.

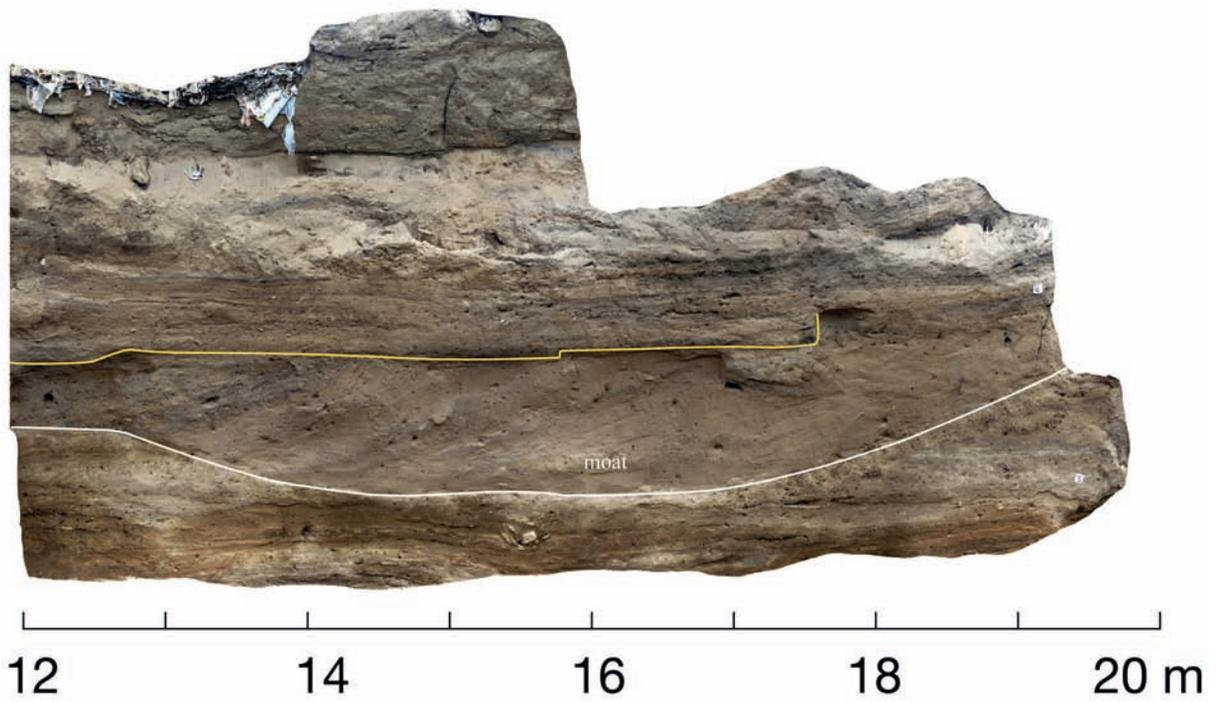


Fig. 46 The moat in the eastern section of Area 2 (Photo L. Horáková, drawing L. Hulková)



Fig. 47 The moat in the western section of Area 2 (Photo L. Horáková, drawing V. Dubcová)

### 3.3. Moat related to “wall 1” in Area 4 – Phases E

After removing a part of the “wall 2” foundations in Area 4, a double moat was discovered in the squares Y65–X200, Y65–X205, Y65–X210, Y70–X200, Y70–X205 and Y70–X210 in the 2017 season. According to the horizontal stratigraphy it belonged to the Nineteenth Dynasty fortress, similar to the situation in Area 2. The moat runs from SSE to NNW (Fig. 1), apparently alongside the western side (and probably around the NW corner) of the “wall 1”.

The geminated moat consisted of two depressions: the shallower one <2373> was ca. 30 cm deep (90 cm from the bottom of the “wall 2”) and ca. 6 m wide, situated further from the wall (more westward); the deeper one <2413> was ca 130 cm deep (190 cm from the bottom of the “wall 2”) and ca. 5 m wide, situated closer to western “wall 1” (i.e. more eastward).

The shallower moat <2373> (Fig. 48) was probably not a continuation of the northern moat mentioned above (identified in both sections in Area 2) on the western side of the Nineteenth Dynasty fortress. Unfortunately, there are doubts whether it would ever be possible to confirm the connection between the western and northern moat(s), because it seems that the corner/bend of the moat(s) is overbuilt in this area by relatively recent commercial building.

There is a rusty weathered alluvial gravel of natural soil underlying cultural layers in the section of the shallower moat. The gravel is covered by cultural layers, with “wall 2” on the top. The moat infillings are comprised of stratified Aeolian sand deposits. The sand layers were probably locally redeposited by water. The strata are very smooth and they follow the convex bottom of the moat in the lowest part of the section. The layers

became gradually horizontal in the upper part of the profile. This morphology suggests the impact of local redeposition by water, either smoothly flowing or stagnating. The moisture supported a vegetation growth, which is indicated by the occurrence of weakly developed humiferous horizons. However, the depression was not oversaturated by excess moisture because no red-oximorphic features were observed. A minor component of coarse fragments in the section indicates that some settlement was also present nearby during the Aeolian deposition and, therefore, the deposits were occasionally contaminated by dumped stones, sherds, etc.<sup>88</sup>

The deeper moat <2413> cut through at least one large massive mud-brick tomb architecture of SIP date, when it was ditched in the time of the Nineteenth Dynasty. It was probably contemporary with the shallower moat, as is demonstrated by the same fill of fine yellow Aeolic sand. The sections<sup>89</sup> (Fig. 49 and 50) show a large extent of natural sandy material, which might have been, after its deposition by wind, locally redeposited by water in some places. Typical Aeolian sandy deposits have oblique-oriented fine stratification. The layers are associated with the original bottom of the moat which was relatively steep at this place when the sand sedimentation began.

The fill of the deeper moat covered cultural layers from the Eighteenth Dynasty on its eastern edge (Fig. 50); thus, the vertical stratigraphy also supports its date to the Nineteenth Dynasty. The continuation of the deeper moat to the south was not interrupted (as was the case of the shallower moat), as corroborated by the previous discoveries of the Polish-Slovak excavations in the so-called Naville’s trench.<sup>90</sup>

In the 2011 season, a massive deposit of fine yellow sand, up to 2.5-m thick, was unearthed in a depression below Migdol’s northern tower in

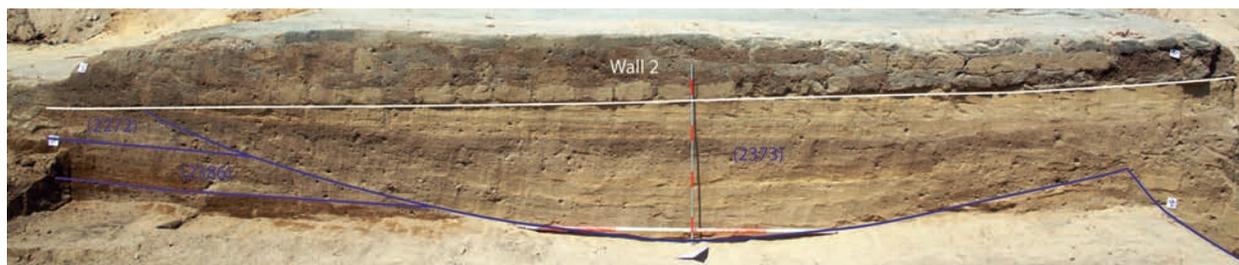


Fig. 48 Section of the shallower moat <2373> (Photo L. Horáková, drawing V. Dubcová)

<sup>88</sup> Cf. profile 3 in HUDEC et al. 2018, 38.

<sup>89</sup> Cf. profiles 1 and 2 in HUDEC et al. 2018, 38.

<sup>90</sup> RZEPKA et al. 2014, 71f.

Naville's trench. The western slope of the depression lays on early Eighteenth Dynasty layers (Fig. 51), the eastern slope was not unearthed. A similar depression was observed in the Migdol's

gateway; its eastern slope was partly documented (Fig. 52) and the western slope was covered by threshold of Migdol's gate. A deposit of fine sand was also observed in the internal corner of the

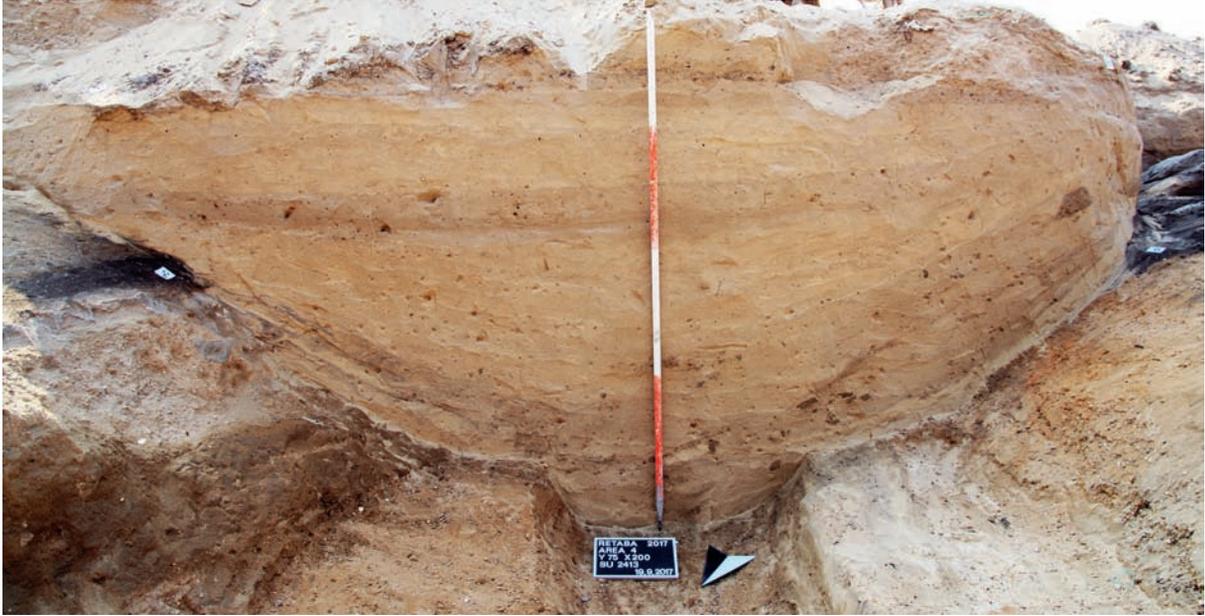


Fig. 49 Section of the deeper moat <2413> view towards south (Photo L. Horáková)



Fig. 50 Section of the deeper moat <2413> view towards north (Photo L. Horáková)



Fig. 51 Western slope of the deeper moat in the Naville's trench (Photo L. Hudáková)



Fig. 52 Eastern slope of the deeper moat in the Migdol gateway (Photo L. Hudáková)

Migdol's northern tower and "wall 2", i.e. in the course of the deeper moat <2413>.<sup>91</sup> In the article, an interpretation of the sand depression, without knowing its full extent, was connected to three

different hypotheses; now, the least probable interpretation – "moat defending a gate in the 'wall 1'"<sup>92</sup> – seems to be the correct one, although use of the cultural layers dug from the moat for mud-brick production (however, in the Nineteenth Dynasty) also could not be excluded.

The deeper moat was apparently intended to strengthen the defence of the gateway to the Nineteenth Dynasty's fortress. It is also worth considering whether the shallower moat could not also serve as a mud source for bricks used to construct the defensive walls. The constructors took the material from the source situated close to the construction site, for example, along the external side of the wall. This approach had a double effect:

1. minimizing the effort of man labour needed for the construction of the wall, and
2. strengthening the defensive efficiency of the wall, as the digging of the moats increased the elevation which attackers would have to overcome.

This reasoning is supported by the fact that one of the few known New Kingdom moats in the region, the moat at Tell-Borg dated to the Eighteenth Dynasty,<sup>93</sup> was made by a completely different building process. The sides of the moat at Tell-Borg were strengthened by eight rows of burned bricks at the bottom, and the higher sides were overlaid by mud-bricks at a 45 degree angle.<sup>94</sup> In addition, in comparison to the Middle Kingdom way of moat construction,<sup>95</sup> the moats in Tell el-Retaba give the impression that they were built in a hurried and untidy way.

Future excavations could probably determine the deeper moat's southern extent on the western side of the tell. Closer examination of the southern end of the long sections mentioned above (Area 9) in 2017 confirmed that the defence moat of "wall 1" is present also in this part of the tell (despite previous negative reference),<sup>96</sup> at least in the eastern section (Fig. 53). The fill of the moat, made of fine yellow Aeolian sand, had already been noticed earlier, however, it was not correctly interpreted. Due to working building mechanisms it was neither possible to excavate the moat, nor to clean its profile in the western section. The shape of the moat in the eastern profile indicated rather a continuation of the deeper one; its southern edge

<sup>91</sup> RZEPKA et al. 2014, 71.

<sup>92</sup> RZEPKA et al. 2014, 72.

<sup>93</sup> HOFFMEIER 2015, 185.

<sup>94</sup> HOFFMEIER 2013, 172–179, Figs. 6–8, 12, 14; HOFFMEIER 2015, 185.

<sup>95</sup> VOGEL 2004.

<sup>96</sup> RZEPKA et al. 2014, 72

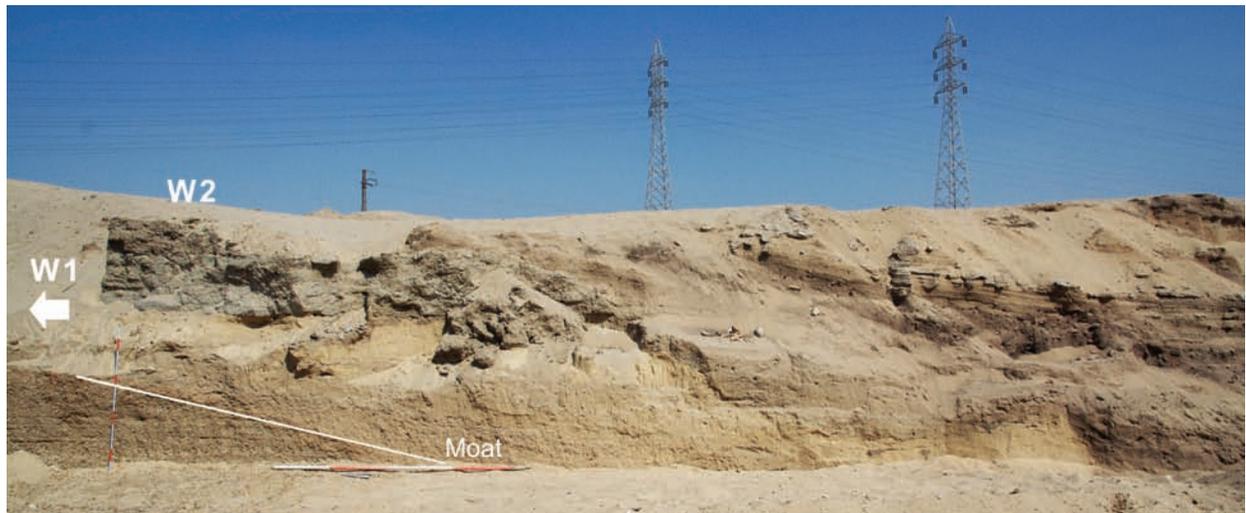


Fig. 53 Eastern section of the moat associated with the defence “wall 1” in Area 9 (Photo J. Hudec)

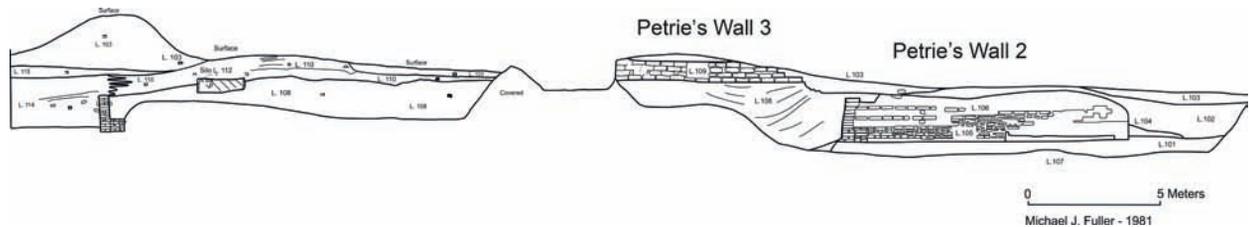


Fig. 54 Section of the defence walls on the wall of the water-pipeline construction trench (Drawing M. Fuller, mission led by H. Goedicke in 1981, digitalisation V. Dubcová)

was disturbed by a pit with a large amount of Greco-Roman ceramics.<sup>97</sup> Similar to “wall 1”, the moat was also cut aslant in this part of the site, as it runs in a NW–SE direction.

Possible presence of the moat in the eastern section of the water-pipeline’s trench, documented by M. Fuller of Goedicke’s mission,<sup>98</sup> is not possible to attest due to unexcavated and covered section on the supposed spot of the moat (Fig. 54).

Ceramic material was not very frequently present in the sandy infilling of the moats. However, in the 2011 season, an infant burial in a jar [609] was discovered (Fig. 55) in sandy infilling of the deeper moat.<sup>99</sup> The jar was dated either to the Nineteenth Dynasty or early Twentieth Dynasty.<sup>100</sup> Due to previous interpretation of the sandy infilling as connected to the construction phase of the Ramses III Migdol, the burial was dated rather to the Twentieth Dynasty. Under new circumstances, the burial could be also dated to the Nineteenth Dynasty and, due to its position in the upper strata

of the moat infilling, it could be rather dated to the later part of the Nineteenth Dynasty.

It can be assumed from the investigated infillings of the moats that some parts of the moats underwent natural geomorphological development (filling by sand deposited by wind and eventually water), while other parts were filled by dumping. This indicates that during the ca. 100 years’ period of their existence (roughly between Ramses II and Ramses III), there was probably a period when the moats were not maintained but abandoned and filled mostly by natural geomorphological processes. However, some local settlement sustained at the site of the former fortress is indicated by burial and dump infillings in some parts of the moat. When, during the rule of Ramses III, “wall 2” was constructed atop the moats from the Nineteenth Dynasty, the moats had already been naturally filled without the necessity to make substantial additional filling to support the fundamentals of “wall 2”.<sup>101</sup>

<sup>97</sup> HUDEC et al. 2018, 40, footnote 77.

<sup>98</sup> HUDÁKOVÁ and HUDEC 2017, 382f, Figs. 3, 4.

<sup>99</sup> RZEPKA et al. 2014, 67f.

<sup>100</sup> RZEPKA et al. 2014, 68.

<sup>101</sup> HUDEC et al. 2018, 40f. Cf. “Any pit in this region is quickly filled up with sand from the desert, and the holes made in one year are levelled up again in the next”, in PETRIE and DUNCAN 1906, 28.



Fig. 55 Infant burial in a jar {609} from the 2011 season, re-dated to the Nineteen Dynasty (Photo L. Hudáková)

The reason why the moat on the western side is geminated could be explained by the presence of a gateway to the Nineteenth Dynasty fortress. The presence of the gateway in “wall 1” was indicated previously by Petrie<sup>102</sup> on the eastern side of the Migdol’s northern tower. The configuration of the moats on the northern side of the Migdol indicates the occurrence of a passage to the gateway from the western side. The passage was later covered by the Migdol, however, the cessation of the shallower moat in the area of the squares Y65–X190 and Y65–X195 where the shallow moat rises up southwards from Y65–X205 and Y65–X200, shows that it respected the passage. The elevation of the shallower moat, from the profile (Fig. 48) to its disappearance close to Black House 1, makes 1 m up on ca. 7 m length.

<sup>102</sup> PETRIE and DUNCAN 1906, XXXV.

<sup>103</sup> ČERNÝ, HUDEC 2016, 125, 300, Fig. 17.

### 3.4. Some construction characteristics of the “wall 2” – Phase D4

The moat examined in Area 9 was to a lesser or larger extent overbuilt by “wall 2” of Ramses III of the Twentieth Dynasty (Fig. 53). A similar arrangement, with “wall 2” built above the moats, was recorded in Area 4 (Fig. 48), where “wall 2” was constructed mainly above the shallower part of the moat, however, with some extent of its internal side over the deeper moat. Some other features were recorded on the internal side of “wall 2” in Area 4 which could be related to the construction of the internal sand rampart/embankment.<sup>103</sup> During the excavation on the internal side of “wall 2”, an irregularly high and wide, muddy-stony layer <2360> (Fig. 50) was discovered running alongside the internal side of “wall 2” at a distance of about 2.8 m.

The purpose of the layer might be to emphasise the border of the rampart’s bottom line. Different elevation, distance from the wall and also width of the starting muddy-stoned layer point out that this layer could be also an auxiliary structure which helped during the construction of the wall’s foundations/platforms, considering the uneven terrain. However, mud-brick material washed off “wall 2” down the rampart could not be excluded either.

According to samples from the bottom of the wall foundation footing, tested at the site, and also by measuring a friction angle with approximate correlations,<sup>104</sup> an effective friction angle  $\phi$  for sand was determined to range from 28 to 42 degrees, for very loose to very dense conditions. Thus, the natural windblown sandy slope could have a maximum inclination of about 30 degrees and a slope constructed by building activity could probably reach a maximum of inclination of about 40 degrees. At the eastern section (Fig. 53) in Area 9, there is an evident sand slope below “wall 3” with an angle of about 38 degrees at the internal side of “wall 2”. It could be assumed that the slope (rampart) is a result of building activity rather than wind-blown. A similar situation situated about 150 m eastwards from the section in Area 9 has already been examined by Goedicke’s mission (Fig. 54).

If the sand rampart in Area 4 was constructed according to the same principle as that mentioned

<sup>104</sup> DAY 2010, 3–24.

above, from the muddy-stones layer <2360> as a starting line of the slope towards “wall 2”, the height of the slope at “wall 2” could be about 1.65–2.35 m for a distance of the muddy-stones layer <2360> from the wall of about 2.80 m. If the slope was similar to the rampart in Area 9, i.e. ca. 38 degrees, the height of the rampart at “wall 2” could be about 2.15 m.

An internal sand rampart was not determined in the sections of the northern “wall 2” in Area 2. Here, “wall 2” was constructed mainly over the moat of the Nineteenth Dynasty. Due to research conditions, it is too early to conclude whether the absence of a sand rampart in Area 2 was caused by another construction pattern, a local situation on the spot of the section or potentially by later occupation activities. The sand rampart was not attested in Area 1.<sup>105</sup>

The Migdol gate very probably covers an older gateway into the Nineteenth Dynasty fortress, which had a rather eccentric (northward) location in relation to the western “wall 1” (Fig. 41). The Migdol gate was part of the defence “wall 2”, because western “wall 3”, if any, has not been attested so far.

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<sup>105</sup> RZEPKA et al. 2009, 252–255, Fig. 9.

<sup>106</sup> RZEPKA et al. 2009, 277, Fig. 33.

The results of the geophysical survey indicate that there is another gate or even gates on the eastern side of the Twentieth Dynasty fortress.<sup>106</sup> The eastern gate(s) has not been clearly associated with a specific fortress so far.<sup>107</sup> Further archaeological research will be needed to explain the arrangement of the gates in the fortresses and their prospective relationships to the walls.

## 4. Conclusions

The results of excavations at Tell el-Retaba in 2017 contributed to a better understanding of the transformation between the SIP and New Kingdom and of construction details of the fortifications of the Nineteenth and Twentieth Dynasty on the eastern periphery of the Nile Delta. The 2017 season contributed to further confirmation of the continuity between the SIP and the New Kingdom. The season's results confirmed that there was a period when the Nineteenth Dynasty fortress might have been abandoned and its defensive (and administrative?) function loosened between the Nineteenth and the Twentieth Dynasty, although a form of occupancy might have been sustained.

<sup>107</sup> HUDEC et al. 2018, 43f.

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