

north, where it once might have been connected to Floor N3F12N. Despite the truncation between the floor pieces N3F12aE, N3F12bE and N3F12N, it can be assumed that these pieces were part of a single flooring surface, topping the gravel fill of N3's foundation trench.

A.4.3.4 Below the Structure N28

At the second building phase (N3-a) Structure N28 was built upon a 6–10cm thick gravel bed, Deposit (N28De2), which overlies a patch of flooring material. The patch N3F12bE (IIA.4.3.2) that projects out the N28's southwestern corner, is part of a mud-coated surface, N3F12bE/N28F12W, underlying Deposit (N28De2) of Wall 01W (Fig. 11). Floor N28F12W gradually slopes downward to the north. Two pieces of flooring, N28F12aW and N28F12bW protrude slightly from below each side of Wall 01W's straight segment, and are levelled at 159.57m and 159.52m respectively. The patches labelled N3F12bE, N28F12W, N28F12aW and N28F12bW are thus part of a single surface, recognised below Structure N28's western Wall 01W (Pl. 5 and Fig. 8). It can be assumed that this surface once joined the Floors N3F12aE and N3F12N, built atop the gravel filling the foundation trenches of the Bastion N3 and Enclosure Wall N4. These floors therefore belong – like N3 and N4 – to the first building phase (N3-b) and predate Structure N28 of the second building phase (N3-a).

A.4.3.5 Below the Brick Tower N2 (Fig. 11 and Pl. 8)

As mentioned above, later construction of the larger Brick Tower N2 required some levelling works levelling in the area of N3 and N28. The former Structure N28, in particular, was dismantled down to its foundation courses and the gap between the Wall 01W and Bastion N3's northeastern face was filled. This backfill, identified on either side of N28's Wall 01W, consists of two layers of deposit: the lower (N2De1) is composed of abundant gravel

mixed with coarse yellow sand,¹⁰³ while the upper (N2De2) is characterised by frequent pebbles mixed with a number of whitish chalk nodules.¹⁰⁴

Over the backfill concealing the northern face of Wall 01W's curved segment was subsequently laid the mud-coated Floor N2F13N, which may originate from the time of N28's dismantling. Because this surface, levelled at 159.98m, was hidden and protected below the later large Brick Tower N2, it was found intact (Pl. 10b). On top of Floor N2F13N, two successive layers of occupational deposit developed, overlying the area of the Structure N28 and covering the bricks of Wall 01W. The lowest deposit (N2De3) consists of a light brown layer of silty and sandy soil, mixed with occasional vegetal remains.¹⁰⁵ This deposit underlies the loose upper deposit (N2De4), characterised with a dark colour, abundant charcoal pieces and occasional ashy lenses.¹⁰⁶ It can be assumed that the two layers of deposits, (N2De3) and (N2De4), match with the final phase of occupation assigned to Level 3. Following this stage, the area was concealed below the broken mud brick rubble underlying the masonry of the later Brick Tower N2 (Pl. 10a).

B BUILDING UNIT N24

B.1 Introduction

Located in the northern part of SAV1 North, next to Enclosure Wall N4, building unit N24 (Pl. 11) is delineated by Walls 08N and 08W to the west and Walls 07E, 03E, and 03S to the east. All of these walls were constructed using layers of mud brick stretchers in the traditional running bond pattern, generally half-a-brick thick. Although none of these five walls is preserved to its full extension or height, the two opposing intact corners of the building unit remain: to the northwest, the bonding of Walls 08N and 08W and to the southeast, the bonding of Walls 03S and 03E.

The walls of building unit N24 were reinforced by four pilasters. Each of the opposing north–south

¹⁰³ This *c.* 30cm thick deposit corresponds to Deposit (N28De1a) whose top is levelled at 159.86m to the west of Wall 01W, and to Deposit (N28De1b) whose top is levelled at 159.80m to the east of the same wall (Pl. 8).

¹⁰⁴ The thickness of Deposit (N2De2) varies from 15cm (from 159.96–159.80m to the east of Wall 01W, *i.e.* Deposit (N28De2b), Pl. 8) to 40cm (from 160.10–*c.* 159.70m to the west of Wall 01W, *i.e.* Deposit (N28De2a)).

¹⁰⁵ The thickness of Deposit (N2De3) varies from 8cm (from 160.20–160.12m to the west of Wall 01W, *i.e.* Deposit (N28De3a), Pl. 8) to 20cm (from 160.16m–*c.* 159.96m to the east of Wall 01W, *i.e.* Deposit (N28De3b)).

¹⁰⁶ Deposit (N2De4) varies from 5–15cm in thickness. West of Wall 01W, it corresponds to Deposit (N28De4a) levelled between 160.34–160.20m. On the other side of the same wall, the corresponding Deposit (N28De4b) is levelled between 160.21–160.16m (Pl. 8 and Fig. 9).

	N24	N25	N12	N26	N27
Estimated length of the outer southern side	5.45m 10 cubits and 3 palms	4.75m 9 cubits	6.98m 13 cubits and 2 palms	6.15m 11 cubits and 5 palms	5.37m 10 cubits and 2 palms
Inner length of the southern side	5.06m 9 cubits and 4 palms	4.30m 8 cubits and 1 palm	6.64m 12 cubits and 5 palms	5.70m 10 cubits and 6 palms	4.88m 9 cubits and 2 palms
Estimated length of the outer eastern side	5.65m 10 cubits and 5 palms	5.80m 11 cubits	intact 4.28m 8 cubits and 1 palm	3.85m 7 cubits and 2 palms	5.50m 10 cubits and 3 palms
Inner length of the eastern side	5.26m 10 cubits	5.45m 10 cubits and 3 palms	intact 3.86m 7 cubits and 2 palms	3.38m 6 cubits and 3 palms	4.96m 9 cubits and 3 palms
Estimated length of the outer northern side	5.46m 10 cubits and 3 palms	4.55m 8 cubits and 4 palms	7.12m 13 cubits and 4 palms	5.85m 11 cubits and 1 palm	intact 5.42m 10 cubits and 2 palms
Inner length of the northern side	5.05m 9 cubits and 4 palms	4.15m c. 8 cubits	6.70m c. 12 cubits and 5 palms	5.35m 10 cubits and 1 palm	4.63m 8 cubits and 6 palms
Estimated length of the outer western side	5.35m 10 cubits and 1 palm	5.60m 10 cubits and 4 palms	3.78m 7 cubits and 1 palm	3.30m 6 cubits and 2 palms	5.70m 10 cubits and 6 palms
Inner length of the western side	4.94m 9 cubits and 3 palms	5.25m 10 cubits	3.42m 6 cubits and 4 palms	3.05m 5 cubits and 6 palms	5.35m 10 cubits and 1 palm
External surface area	30.00m	26.78m	30.69m	22.92m	30.22m
Internal surface area	25.78m	22.92m	26.57m	19.09m	24.55m

Fig. 14 Dimensions of SAV1 North building units

oriented walls has a pilaster buttressing it from the outside of the wall: N24Pil1 is located along the outer face of Wall 07E to the east and N24Pil4 along the outer face of Wall 08W to the west. The two other pilasters (N24Pil2 and N24Pil3) stand along the inner faces of the opposing east–west oriented walls, protruding from the inner faces of southern Wall 03S and northern Wall 08N respectively.

N24 covers an approximately square area of 30.00m. Beyond its walls, two lanes run outside N24. The first, running between Enclosure Wall N4 and the northern perimeter wall of N24, has an east–west orientation and a width of 1.50–1.60m. The second, lying along the eastern perimeter wall, has

a north–south orientation and a width of *c.* 1.35m. This lane runs between building units N24 to the west and N25 to the east. The southern side of N24 is bordered by an open space that is nearly 5.00m wide, lacks construction and extends to the northern side of building unit N12.

Based on its six installations (IIB.3) and layout, it is suggested that building unit N24 operated as an open-air courtyard for the preparation of food and other cooking activities. All extant features related to storage facilities or pertaining to the use of the room as a workspace will be defined below, as will the two successive building phases, N24-b and N24-a.

B.2 Description of N24's perimeter walls
(Fig. 15)

B.2.1 Wall 03S

Wall 03S, the southern perimeter wall of N24, has an east–west orientation. The majority of its footing layer, 4.87m in length, is quite intact and is comprised of a dozen mud brick stretchers $38 \times 16/18 \times 8$ cm in size. At present, the western end of Wall 03S is missing the length of only one stretcher brick. Its eastern end, however, is undamaged and is bonded at a right angle to Wall 03E, running to the north. If one assumes that Wall 03S once formed a corner with the western perimeter wall of N24, it is then possible to estimate its length. The outer and inner lengths of the wall are thus 5.45m and 5.06m respectively and would have been composed of 14 stretcher bricks.

Consisting of mostly staggered stretchers laid on their broad side, Wall 03S is half-a-brick thick. The preserved height of the southern wall of N24 ranges from one to five bricks. Its base level varies from 160.47m (footing base on the eastern end) to 159.94m (bed plaster on the western end). On the southern side of the building unit, one can observe that the ground soil slopes gradually downward, from east to west (IIB.5.2.1).

B.2.1.1 Facing plasters of Wall 03S

There is no trace of a surface addition covering the faces of Wall 03S. However, fire activity has left black burn marks on the inner face of the mud bricks of Wall 03S. Stains from burning extend over a surface 1.15m long and 0.52m high, on the northern face of Wall 03S and the east side of the north-

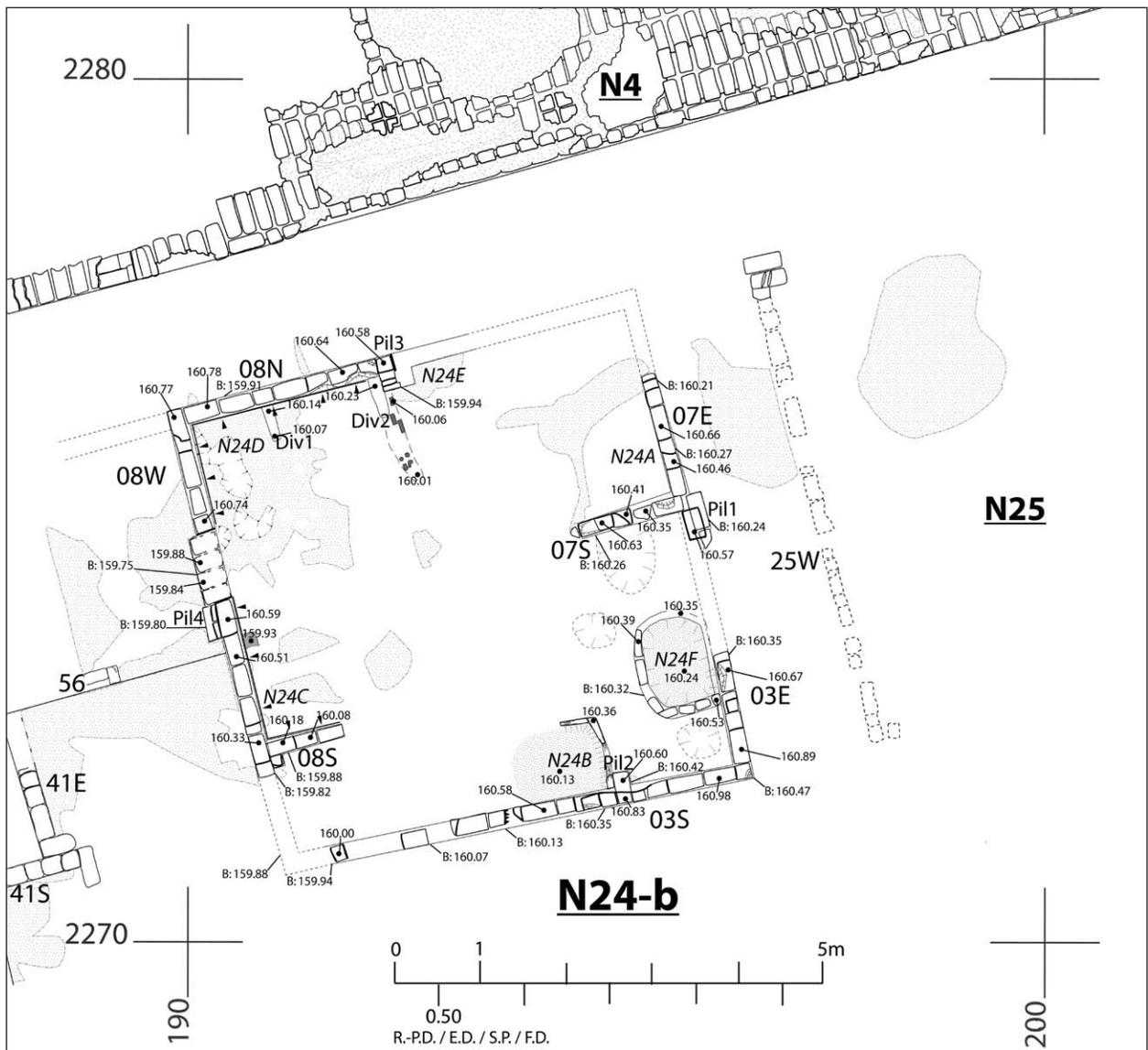


Fig. 15 Plan of Phase N24-b: levels of the perimeter/internal walls and installations

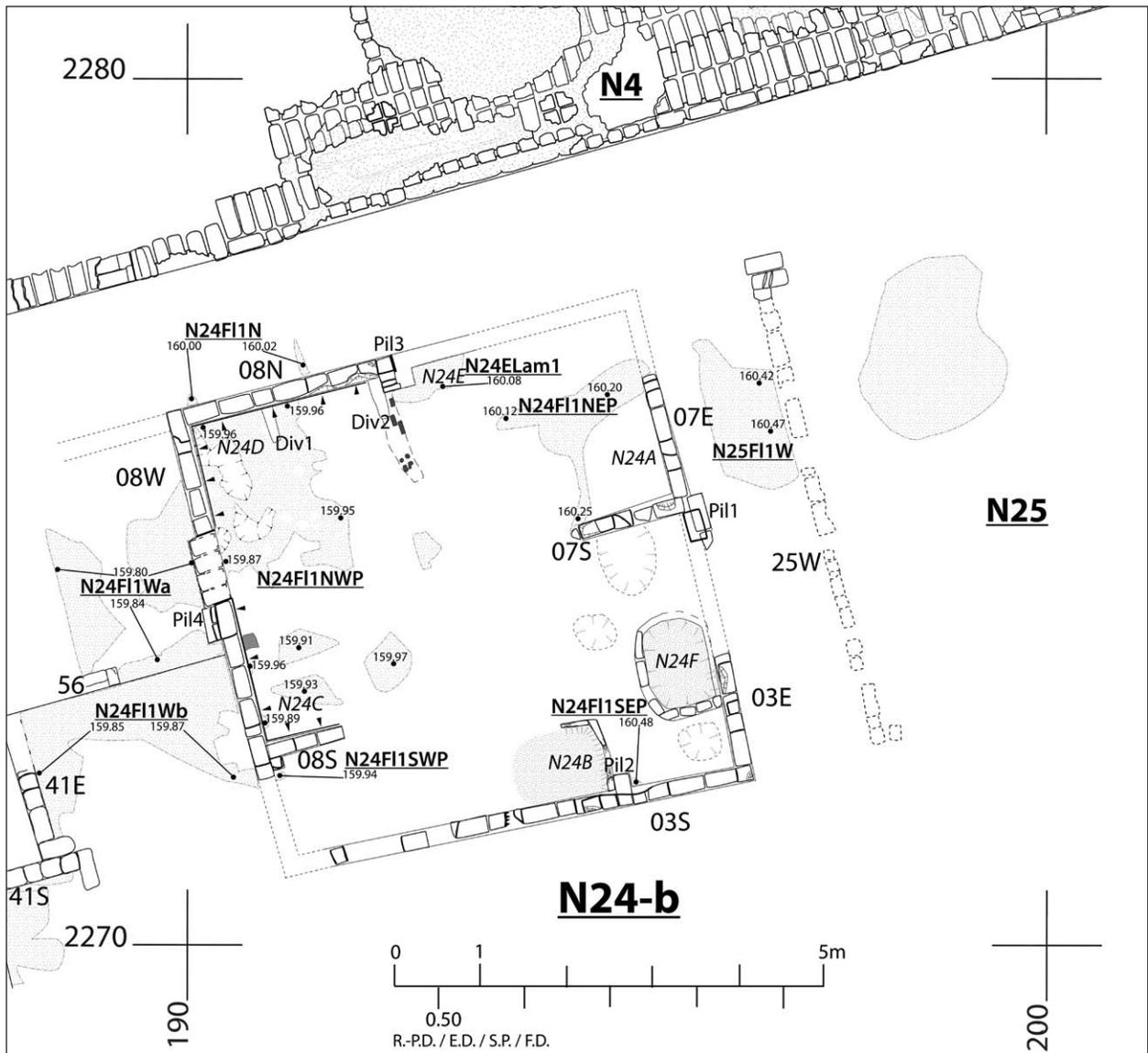


Fig. 16 Plan of Phase N24-b: levels of floors

projecting Pilaster N24Pil2. Farther west, where the brick face is not weathered, similar dark traces are also noticeable.

B.2.1.2 Pilaster of Wall 03S: N24Pil2

At a distance of *c.* 1.20m from the inner corner joining Walls 03S and 03E, Pilaster N24Pil2 (see Pl. 12) expands northward towards the inside of building unit N24. Perpendicular to Wall 03S, this narrow pilaster is 17 × 38cm in size and has a remaining

height of four courses of bricks (0.41m).¹⁰⁷ The top course remaining of N24Pil2 may have consisted of a header brick, now broken on the northern end, as can be judged from the small end of brick still visible from the southern face of the wall. In the second course from the top – where most of the bricks are positioned with the long faces visible – a small brick end may be evidence of a header brick, bonded to Wall 03S.¹⁰⁸ Below this possible header brick, the remaining two courses shaping Pilaster N24Pil2

¹⁰⁷ The top header brick of N24Pil2 is levelled at 160.83m, the base of the pilaster at 160.42m.

¹⁰⁸ Lacking any type of render, Wall 03S's regular coursing (made mostly of running stretcher bricks) is quite discernible from both faces.

are made of half bricks set against the northern face of the wall, not bonded to it.

B.2.2 Wall 03E

Bonded at a right angle to Wall 03S, the north–south oriented Wall 03E is 1.50m long. Half-a-brick thick, four running stretcher bricks of $38 \times 16/18 \times 8$ cm are preserved fairly intact; the state of preservation of Wall 03E ranges from two to four courses in height.¹⁰⁹

B.2.2.1 Facing plasters of Wall 03E

As in the case of the bonded Wall 03S, there is no plaster addition on either the east or west faces of north–south Wall 03E. Also similar to Wall 03S, the inner face of Wall 03E also has black burn marks, with dark stains spread over the extent of the wall segment. Black burn marks left by fire activity in the area of N24's southeastern corner might be related to the ash filling unearthed in Installation N24F (IIB.3.2.1 and IIB.5.2.1).

B.2.2.2 Pilaster of Wall 03E

There is no evidence of any pilaster associated with Wall 03E.

B.2.3 Wall 07E

The north–south oriented Wall 07E is 1.58m long, with the preserved height ranging from one to four courses, and is made of around four staggered stretcher bricks of $39 \times 18 \times 8.5$ cm. At its southern end, Wall 07E is bonded to the internal wall 07S, which protrudes perpendicularly at an east–west orientation.

Wall 07E is roughly aligned with Wall 03E running north–south. Between the northern end of Wall 07E and N24's southeastern outer corner, the span of 07E is 4.70m long. A possible corner between the northern end of Wall 07E and eastern end of Wall 08N is now lost, along with part of the masonry of each of these walls.

Although Walls 03E and 07E are no longer intact, together they may outline the eastern perimeter wall of building unit N24. One can thus estimate the length of the outer face of N24's eastern side to be 5.65m. Both segments of Walls 03E and 07E

are half-a-brick thick and bricks from their preserved upper course display parallel longitudinal grooves.¹¹⁰ This distinct feature on both wall segments 03E and 07E may be indicative of a corresponding phase of bricklaying.

B.2.3.1 Facing plasters of Wall 07E

No surface treatment over the faces of Wall 07E is identifiable.

B.2.3.2 Pilaster of Wall 07E: N24Pil1

From the bonded corner between Walls 07E and 07S, a footing stretcher brick of 40×17 cm abuts against Wall 07E running north–south (Pl. 12). A further brick, 35×19 cm in size, lies on top of the footing brick and is staggered toward the west. These two damaged layers of bricks are quite puzzling due to their poor condition and the lack of bonding evidence to the masonry of Walls 07E and 07S. The placement of these two out-of-alignment bricks, precisely opposite of N24Pil4 – the pilaster buttressing the outer face of western perimeter wall 08W – may suggest the presence of a possible external pilaster, N24Pil1, to the outside of the eastern face of N24.¹¹¹

Between the southern end of N24Pil1's upper brick and the northern end of Wall 03E's footing brick, brickwork is lost over a distance of 1.30m. Whether or not brickwork was permanently interrupted between the two wall sections 07E and 03E is difficult to assert. One possible explanation could be that Wall 03E at some stage ran to the northern edge of Installation N24F, and thus was around 2.10m long. In this case, an access point would possibly have separated the two wall segments of N24's eastern side. A second possibility is that Walls 03E and 07E formed a single wall, shaping the eastern perimeter wall of N24 building unit.

B.2.4 Wall 08N (Fig. 17)

On the northern side of building unit N24, Wall 08N culminates at a maximum height of 160.78m¹¹² with eight courses of mud bricks ($35/36 \times 17/18 \times 8/10$ cm).¹¹³ The part of Wall 08N that once extended eastwards is lost, along with the presumed joint shaped between Walls 08N and 07E at the north-

¹⁰⁹ The top of the preserved courses is levelled at 160.89m. The base of Wall 03E varies from 160.47m at its southern end to 160.35m at its northern end.

¹¹⁰ Type L category = Azim Type 6 (IIA.3). See KEMP and STEVENS 2010a, 369.

¹¹¹ The top of N24Pil1 is levelled at 160.57m; its base at 160.28m.

¹¹² The base of Wall 08N is levelled at 159.95–159.90m.

¹¹³ Some of the smallest bricks, $35 \times 17/18 \times 8$ cm in size, bear two central oblique grooves (Type B, IIA.3).

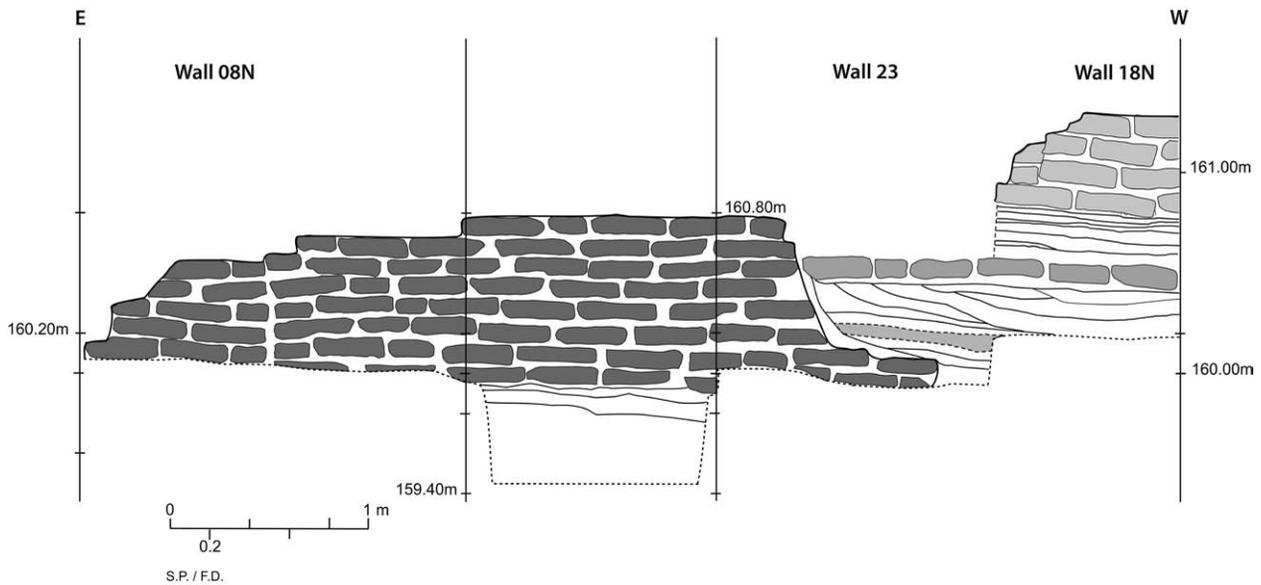


Fig. 17 Section drawing of Wall 08N's northern face

eastern corner of N24 building unit. At the opposite end of the wall, the northwestern corner of N24's bonded masonry is intact between 08N and 08W, running east–west and north–south respectively.

The two lowest courses of Wall 08N were partially uncovered during excavation. They show that the lower masonry of this wall continues westwards,¹¹⁴ beyond the corner with Wall 08W. As far as can be determined, these basal courses are over 4.28m long, or nearly twelve stretchers. The base of the lowest course of Wall 08N's western span was partly exposed on its southern side, levelled at 159.78m.¹¹⁵

From the outer corner between Walls 08N and 08W, the intact section of Wall 08N is 3.51m long. The same section of wall is 3.30m long from the inner western corner of N24 building unit. Assuming that there was possibly a corner on the eastern side of this building unit, the outer and inner lengths of N24's northern side can be measured as 5.46m and 5.05m long respectively from the reconstructed northeast corner to the bonded northwest one. An anomaly in the coursing pattern is visible 2.61m

from the bonded outer northwestern corner of N24 – a running perpend joint that separates the five eastern courses from the wall's masonry, where bricks are otherwise bonded and staggered. The lack of bonding between the two parts of Wall 08N suggests that they were built at different stages. The initial outline of the N24's northern perimeter wall might have been planned with an entranceway alongside the half-a-brick thick pilaster, N24Pil3 (western part), running perpendicular to the wall. At the second phase of construction (N24-a, IIB.5.3) this access was filled with 0.90m long brick masonry, including another bonded half-a-brick thick pilaster, N24Pil3 (eastern part), built abutting the former one.

Similar to the walls delineating the southern and eastern sides of building unit N24, the half-a-brick thick Wall 08N (0.20m wide) shows a quite even coursing made of mostly running stretcher bricks with staggered beds. The joint width between the bricks varies from 2–10cm. The colour of the bonding material between the courses contrasts with the medium light brown mud bricks and consists of light greyish brown silt with occasional chalk particles.

¹¹⁴ According to the section drawing of the outer/northern face of Wall 08N (Fig. 17), the westward extension is visible 0.76m beyond the corner. On Fig. 21, the section drawing shows the inner/southern face of the westward extension with its lowest courses of uncoated mud bricks running *c.* 1.30 m beyond the corner.

¹¹⁵ Sondage B, east of the bonded corner with Wall 08W (Fig. 24), exposed part of the northern face of Wall 08N, down to its footing course. At that point, it can be observed that the base of the footing course is levelled from 159.95–159.90m. These footing bricks overlay two successive layers of compact sand (5cm thick each) and a gravel backfill (10cm thick) upon the natural soil, levelled from 159.86–159.77m.

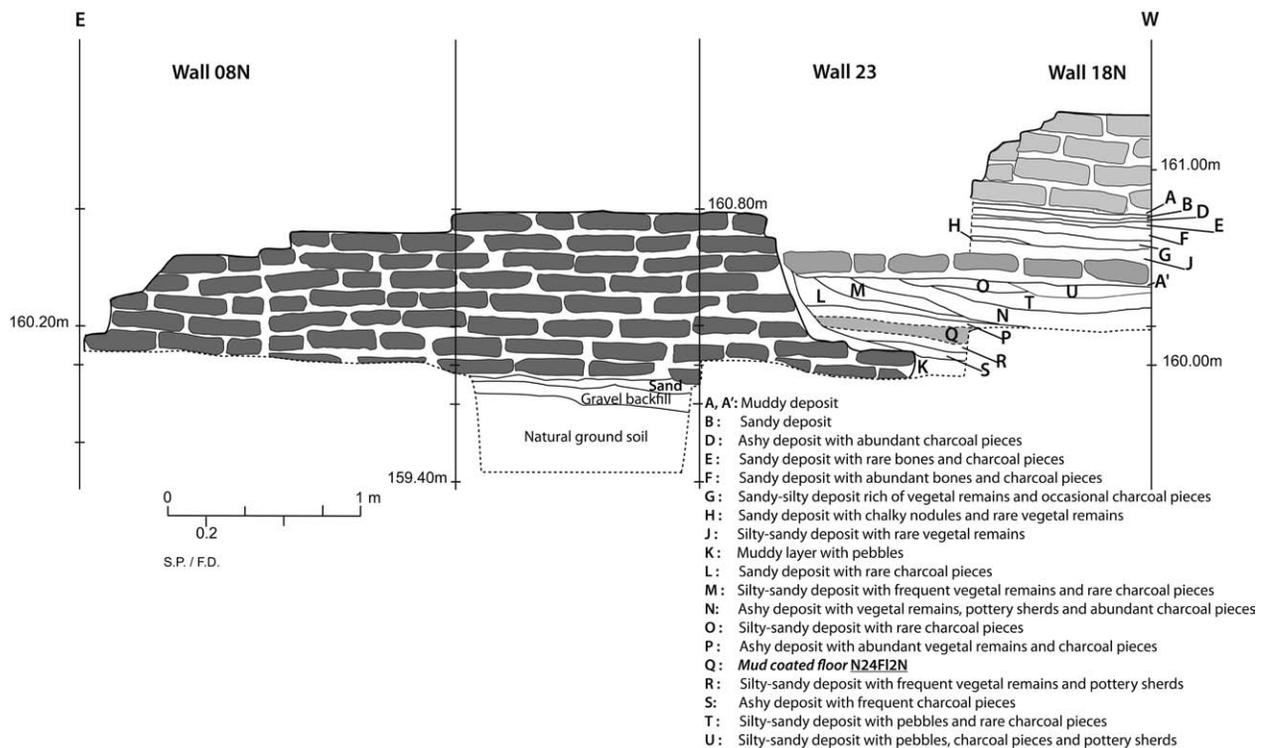


Fig. 18 Section drawing 021/2010 (Squares 190/2270 and 180/2270, north face of Walls 08N, 23 and 18N's eastern end)

B.2.4.1 Facing plasters of Wall 08N

The inner and outer faces of Wall 08N were coated with rather well-preserved plaster. To the outside of Wall 08N, the plaster extends down to a floor level of 160.17m.¹¹⁶ Coating was applied over its internal side down to the occupation floor levelled at 159.95m (see Fig. 22 and IIB.5.2.4).

The northern face of Wall 08N was fully covered with a smooth greyish sandy-silt wash, including some medium-size pebbles. Now removed in order to draw the bricklaying pattern, this surface addition extended down to the base of the wall, leaving the two lowest courses uncoated since they were concealed by the floor (see Fig. 18: layer Q) that overlays an earlier deposit occupying the space of the wall street between Wall 08N and the inner face of Enclosure Wall N4.

The southern face of Wall 08N shows a similar type of render to its outer face. The smooth greyish sandy-silt wash with occasional medium-size pebbles (Plaster A) extends *c.* 2.20m eastwards from

the inner corner of building unit N24 to mud divider N24Div2. This divider is bordering Installation N24E against N24Pil3 further east. It is noteworthy, however, that from the limit of the running joint in the middle of this pilaster, the southern face of 08N masonry is free of any surface addition (Pl. 11).

Along the edge of mud divider N24Div2 (IIB.3.3.2), the southern face of Wall 08N features a distinctive surface treatment with additional layers of render (Plaster A', see Fig. 19).¹¹⁷ It is worth noting that the lipping out inferior limit¹¹⁸ of extra wall Plaster A' matches the inferior extent of the original one (Plaster A) against the basal course of the wall, *i.e.* the sixth course from the top.

B.2.4.2 Pilaster of Wall 08N: N24Pil3 (Fig. 19)

Pilaster N24Pil3 stands 2.22m east of the inner northwestern corner of building unit N24. This pilaster measures 38.5 × 40cm and is bonded to Wall 08N, as can be clearly seen from the northern face

¹¹⁶ Layer Q from the section drawing, Fig. 18.

¹¹⁷ Plaster A' predates the final plaster wash covering the mud divider 2 against N24Pil3.

¹¹⁸ The inferior limit of plasters A and A' is levelled at 160.01m. The inferior limit of the render over N24Div2's western face also lips out, and is correspondingly levelled from 160.00–160.04m.

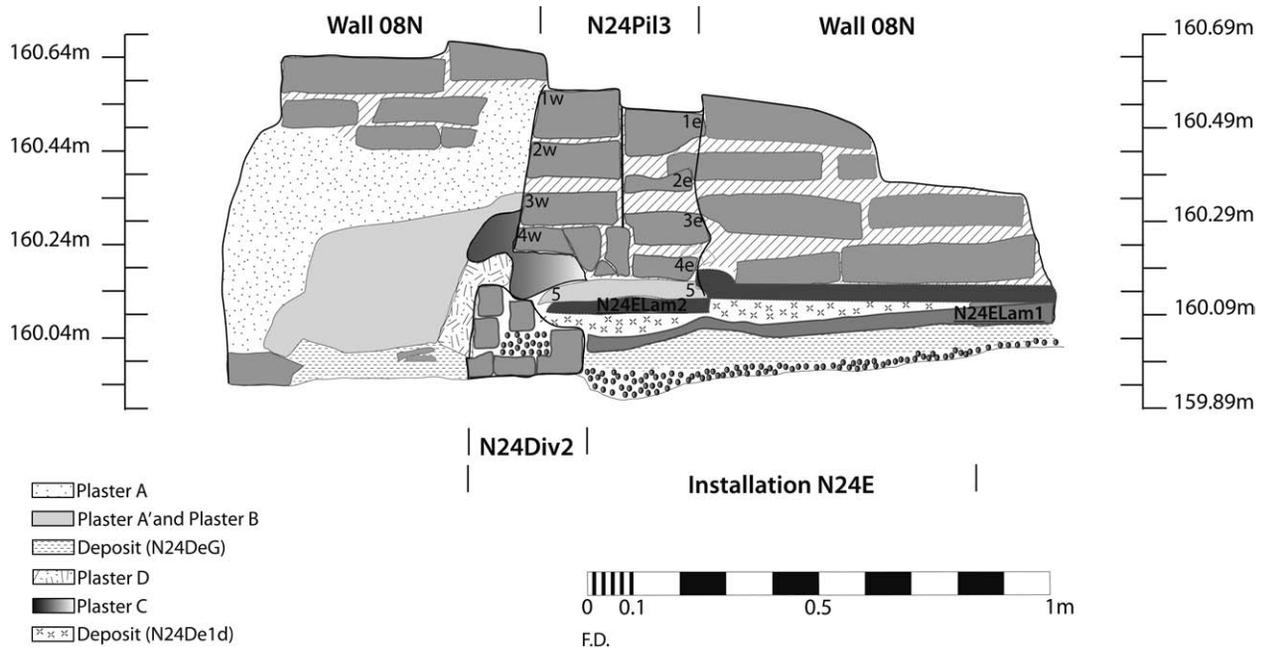


Fig. 19 Elevation drawing of Pilaster N24Pil3

of the wall. Where the pilaster was inserted into the wall, the masonry features headers instead of the more commonly used of stretcher courses. The bonding of the wall to the pilaster alternates courses consisting of a pair of projecting headers with courses of running stretchers. A striking running perpendicular joint separates the two halves of the pilaster. As suggested above (IIB.2.4), this lack of bonding results from two distinct construction phases for each half of the pilaster. N24Pil3's western half is bonded to the earlier built western part of the wall masonry while the eastern half of the pilaster is bonded to the east part of the brickwork, filling the entranceway at later stage of construction (N24-a).

When considering Wall 08N's southern face, one can observe N24Pil3 expanding southwards and perpendicular to the wall. The western courses of this pilaster consist of bricks described below (Fig. 20):

- Levelled at 160.58m, the top brick of the pilaster's western half is a broken header, as can be seen from its small rectangular end apparent from the northern face of the wall.
- The second course from the top of the wall itself is a stretcher. The pilaster's corresponding brick is therefore not bonded to the wall but was

instead a brick piece that was added against the southern face of Wall 08N.

- The brick of the third course, $33 \times 19\text{cm}$ in size, is a header protruding out of the southern face of the wall and levelled at 160.35m.
- As the fourth course from the top of the wall is a stretcher, the pilaster itself is most probably made of a brick piece added against the wall. A render hides this brick piece.
- Like the third course, the fifth course from the top is also a header placed perpendicular to the wall, $38 \times 17\text{cm}$ in size, and levelled at 160.12m.

What is still visible on the eastern half of N24Pil3 is a similar arrangement with a broken top header levelled at 160.51m. The second brick piece from the top is partly missing while the bonded header of the third course is fairly intact. This latter brick stretches out on the brick piece from the fourth course, against the stretcher of the wall. In contrast to the bricks of Pilaster 3's four upper courses that are partly damaged, lack rendering and possess visible perpend, the fifth course consists of two adjacent header bricks joined together by a common layer of plaster (Fig. 19: Plaster B) that conceals the composite character of the pilaster's course. The sixth course¹¹⁹ of the pilaster is fully hidden by Installation N24E (IIB.3.3.2)

¹¹⁹ The inferior limit of the pilaster footing is estimated at 159.94m according to the inferior limit of the brick wall, visible *c.* 0.50m further west.

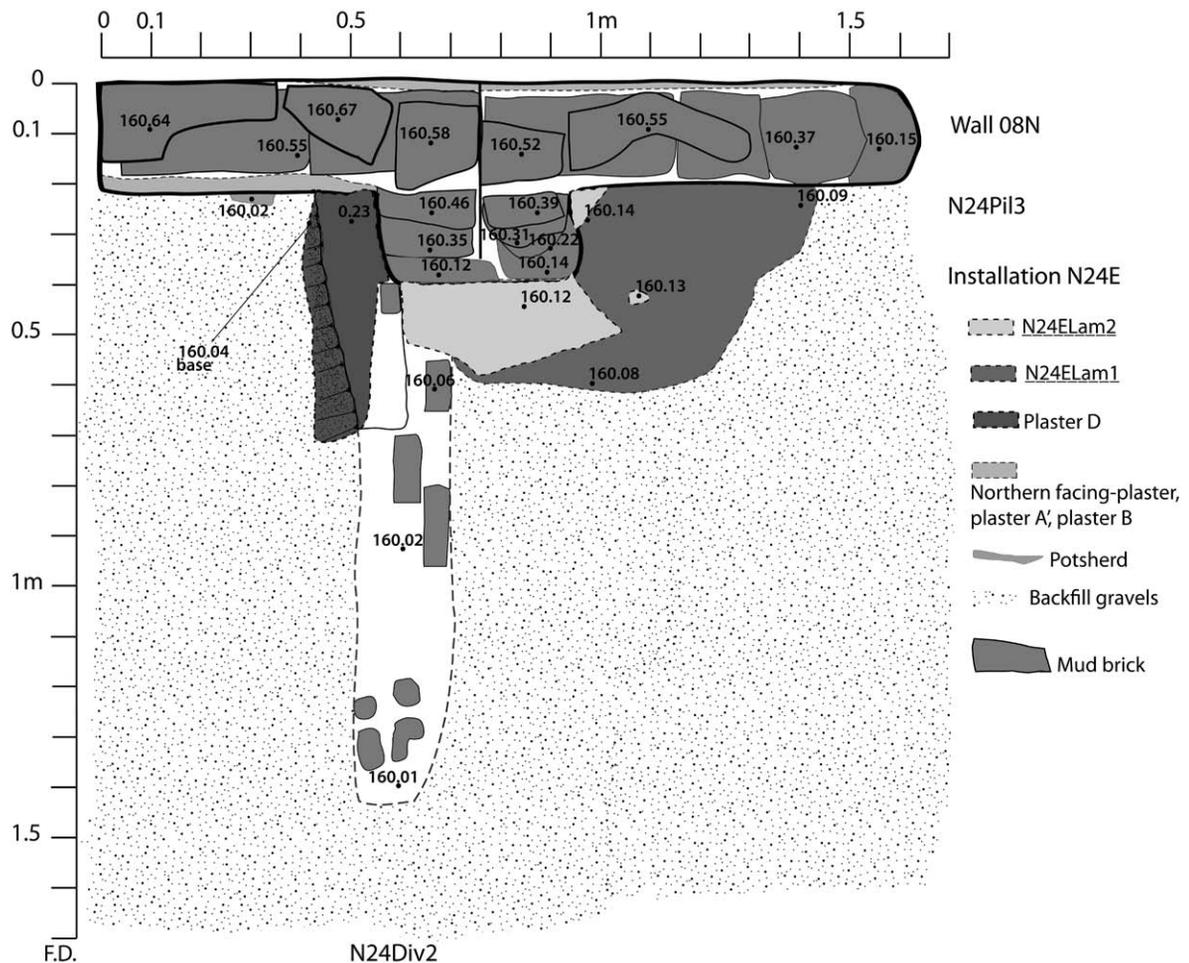


Fig. 20 Plan of Pilaster N24Pil3

against the southern face of both Wall 08N and Pilaster N24Pil3. Resulting from the two distinct building phases, this pilaster's lowest course should have been made of two brick pieces against stretcher footing bricks of Wall 08N. Presumably, the faces of the sixth (footing) course of the pilaster would also have been coated as well, as indicated by the remains of Plaster B over the fifth course.

B.2.5 Wall 08W (Pl. 11)

On the western side of N24, Wall 08W, is made of three to nine intact courses of staggered mud brick stretchers,¹²⁰ half-a-brick thick and north-south oriented. At the bonded corner with perpendicular Wall 08N, the maximum height of 08W culminates at

160.78m. Composed of bricks $36 \times 17 \times 10$ cm in size, the intact part of Wall 08W is 4.26m long, nearly twelve stretchers. Next to the present southern end of Wall 08W, 3.65m from the inner northwestern corner of N24, an internal wall 08S extends perpendicularly. East-west oriented the internal wall 08S is not bonded to the western perimeter wall 08W.

As evidenced by a threshold¹²¹ (Fig. 21) made of four mud brick headers projected to the west within the brickwork's lowest course, a doorway 0.78m wide once opened into building unit N24 through Wall 08W. Clearly visible from both the inner and outer faces of the wall, an anomaly of the coursing pattern consists of two perpendicular joints, situated 1.20m and 2.00m from the inner corner joining Walls 08W and 08N. At some stage this opening

¹²⁰ Including foundation courses whose inferior limit is levelled at 159.79m (see Fig. 11 and IIB.5.1.4).

¹²¹ The top of the threshold levelled at 159.87m and its base at 159.75m.

was sealed with mud brick, filling in the space between the two running joints and completing Wall 08W's masonry.

The southern end of Wall 08W's brickwork is lost. Presumably it might have shaped the south-western corner of building unit N24 by joining Wall 03S at a right angle. Next to this possible corner, a *c.* 20cm patch of bedding joint plaster lying in the alignment with Wall 08W could be an indication of a footing course, which is today missing over a length of 1.12m. From the reconstructed southwest corner to the bonded northwest one, the outer and inner lengths of N24's western side are measured as 5.35m and 4.94m respectively.

In order to make it easier to describe Wall 08W's features, one must consider three distinct sections within this wall (Pl. 11):

- The northern section, from the inner bonded corner between Walls 08W and 08N to the northern running joint adjoining the blocked door area
- The middle section consisting of the blocked door area
- The southern section, from the southern running joint adjoining the blocked door area to perpendicular internal wall 08S. This section includes Pilaster N24Pil4 stretching outside Wall 08W.

B.2.5.1 Facing plasters of Wall 08W

There is evidence of surface treatment on both faces of Wall 08W. Viewed from its western side, Wall 08W's masonry was fully obscured by surface treatment made of a smooth greyish sandy-silt wash with occasional medium-sized pebbles.¹²² Facing plaster covered the six upper courses of bricks and extended down to 160.10m, the level of a coated floor surface (IIB.5.1.4) labelled layer E. On its western face, the three lowest courses of Wall 08W are thus left uncoated.

On the eastern side of 08W, the surface treatment varies according to the section of the wall (IIB.2.5). The eastern face of Wall 08W's northern section reveals bricks that are not completely hidden by patchy and sparse wall plaster. On the other hand, a thicker greyish sandy-silt wash with occasional

pebbles thoroughly covers the wall's medial section, made of the blocking masonry. Over the east face of 08W's southern section, the surface addition to the brickwork is also made of such a wash.

As already seen from the western face of the wall (Fig. 21), the northern part of Wall 08W consists of a maximum of nine preserved brick courses. On the eastern face of the wall plaster wash extends roughly down to the base of the eighth course from the top. By joining the lowest lip of the plaster wash, the coated floor levelled at 159.96m (IIB.5.2.4) hides the footing course of the wall, *i.e.* the ninth course from the top.

The blocking of the access point through N24's western wall by an addition between two running joints belongs to a later phase of construction (N24-a) than the building of Wall 08W itself (N24-b). This part of the wall shows eight courses of mud bricks¹²³ largely hidden by a thick facing plaster that covers its eastern face and extends down to the base of the seventh course from the top.

A render was identified on both faces of Wall 08W's southern section. Viewed from the eastern side of the wall, the facing plaster extends down to the top of the penultimate brick course.¹²⁴ At that point, levelled at 159.96m, the lipping plaster wash may correspond to the joint with the coated surface floor, presently truncated. The basal course of bricks is thus left uncoated below the lowest point of wall coating.

Moreover, at the southern end of the western perimeter wall 08W, a corner is formed with east–west Wall 08S. The lack of bonded masonry between these two walls supports the hypothesis that the internal wall 08S was a later addition that abutted against the north–south wall. However, Wall 08W's facing plaster extends on to the inner corner joining the two walls. This surface addition conceals the corner itself and corresponds to the same phase of plastering as the eastern face of Wall 08W.

B.2.5.2 Pilaster of Wall 08W: N24Pil4

Around 2.00m¹²⁵ from the northwestern corner and 2.70m from the reconstructed southwestern corner of N24, Pilaster N24Pil4 stands next to the blocked doorway of Wall 08W's medial section. As men-

¹²² For drawing purpose, facing plaster was removed from the western face of 08W's northern and medial sections.

¹²³ We know from the western view that the masonry actually consists of nine brick courses. The lowest inferior level of the threshold/footing bricks is levelled at 159.75m.

¹²⁴ South of N24Pil4, Wall 08W's southern section culminates at 160.51m. The base of this section of the wall is levelled at 159.87m.

¹²⁵ N24Pil4 stands 2.25m from the outer corner of Walls 08W and 08N.

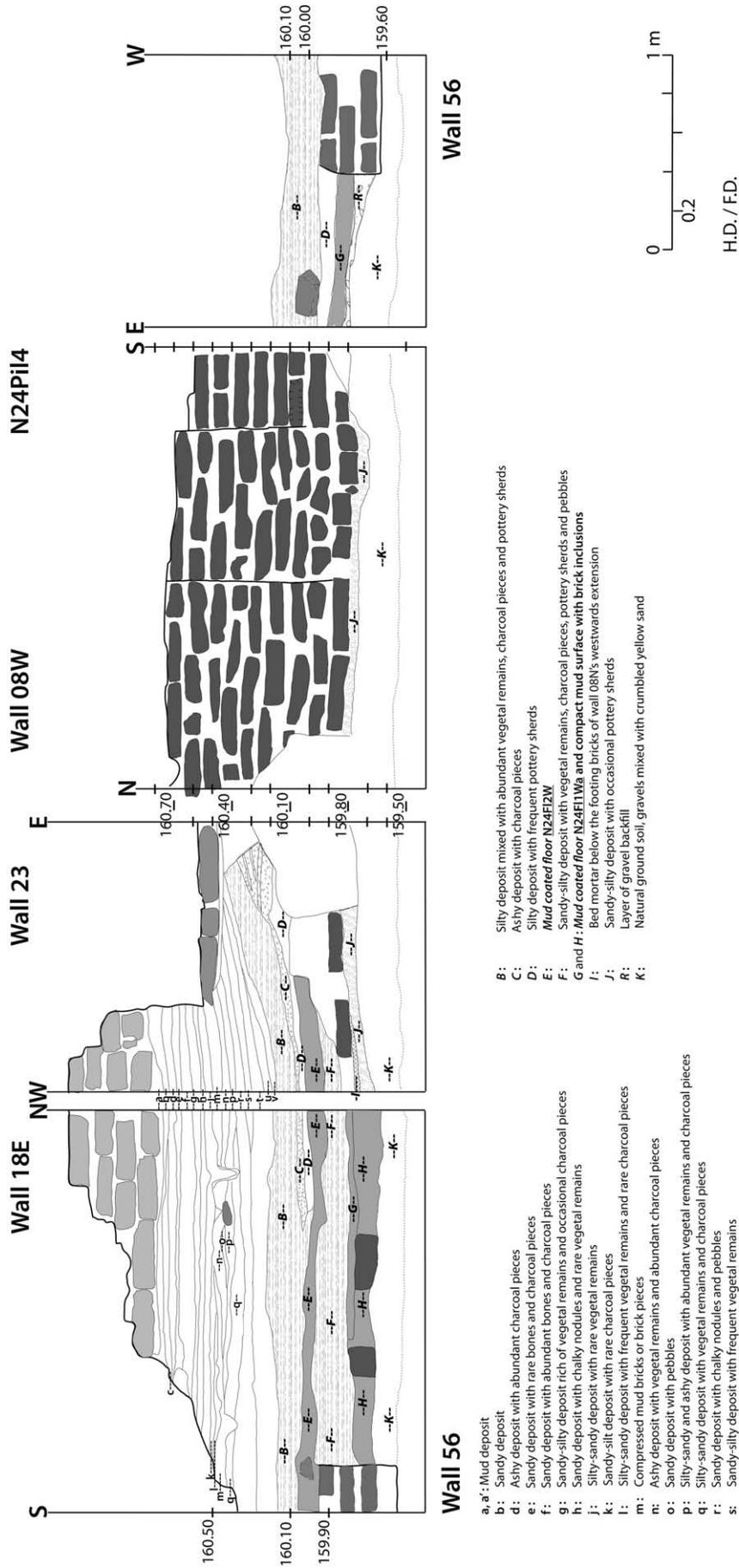


Fig. 21 Section drawing 35/2012 (Square 180/2270, sondage west of Wall 08W)

tioned, N24Pil4 protrudes out from the external face of Wall 08W and its location correlates with N24Pil1's position outside N24's eastern perimeter wall, *c.* 2.75m from the southeastern corner of the building unit (Fig. 15).

N24Pil4 is bonded to Wall 08W, as can clearly be seen from its western face (Fig. 21). Made of eight brick courses, this pilaster rises 0.82m.¹²⁶ At the emplacement of N24Pil4, the stretcher top brick actually belongs to Wall 08W and is 39 × 19cm in size. The dimensions of the bricks used to build Pilaster 4 are, therefore, slightly larger than the brick format used for the majority of Wall 08W. The second and sixth courses from the pilaster's top, and possibly the footing course, consist of a pair of headers projecting westwards out of Wall 08W. Other preserved courses of Pilaster 4 are made of stretcher bricks running north–south along the outer face of Wall 08W.

B.3 Description of N24 installations

(Fig. 15)

B.3.1 Along the southern perimeter wall (03S)

(Pl. 12)

B.3.1.1 N24B

Installation N24B (inner dimensions 1.10 × 0.78m) is most probably a storage pit cut into the gravel soil. It is set along the northern or inner face of Wall 03S and is orientated east–west. To the west of Pilaster N24Pil2, 1.38m from the inner corner between Walls 03S and 03E, a plastered mud brick margin frames the eastern edge of an installation along the southern side of building unit N24. This margin runs north–south and measures 82cm long, 8–12cm thick, and 21cm high. It is made of mortared bull headers that culminate at 160.49m.

The only remnant of this installation, the plastered mud brick boundary, abuts both the northern side of Wall 03S and the western side of Pilaster N24Pil2. Nothing remains of N24B's northern and western edges. The bottom of N24B is levelled at 160.13m; the eastern side of this installation is set against the gravel soil whose level, measured at 160.30m, drops abruptly at this particular point

(IIB.5.2.1). Parts of the inner lining of bin N24B cover the eastern and southern inner sides of the bin itself, hiding the basal courses of Wall 03S and its gravelled substratum.

B.3.2 Along the eastern perimeter wall (03E)

(Pl. 12)

B.3.2.1 N24F

Feature N24F is located alongside the western or inner face of Wall 03E. North–south oriented, this installation is a sub-rectangular mud-coated bin (inner dimensions 1.00 × 0.65m), whose bottom is levelled at 160.24m. The edge of N24F is made of mortared bull header mud bricks, found *in situ* on both the southern and western sides. N24F is a shallow storage pit cut into the natural gravel soil 0.68m north of the inner southeastern corner of building unit N24.

The top of N24F's southern edge abutting Wall 03E is levelled at 160.53m. Each brick of the boundary stands on a mortar joint running above the natural gravel soil surface.¹²⁷ Up to six bull headers surround the pit, whose inner surface is coated with plaster stained by ashy and black traces of fire activities¹²⁸. The lining covers both the gravelled substratum, the mud brick margin on the southern and western sides of the container and the footing bricks of Wall 03E on the eastern side of N24F.

B.3.2.2 N24A

Located alongside the western or inner face of Wall 07E, Feature N24A, a possible storage bin, is 1.00m north of Installation N24F. The eastern perimeter wall of building unit N24 is thus bordered by two installations, both of them north–south oriented. The southern limit of N24A is a 1.32m long internal wall, 07S. Preserved from one to four brick courses in height, Wall 07S culminates at 160.63m. Though the southeastern corner of N24A is in poor condition, it is still possible to estimate from here that Wall 07S, bonded to Wall 07E, is half-a-brick thick and runs east–west. The dimensions of its mud bricks (35 × 17 × 8cm) are slightly smaller than those used in Wall 07E (Fig. 25). There is no render on either face of the internal wall 07S.

¹²⁶ The maximum height of N24Pil4 is levelled at 160.62m, its base at 159.80m.

¹²⁷ The bedding mortar joint, levelled at 160.36m, overlays the gravelled soil levelled at 160.33m.

¹²⁸ Similar mud-coated bin installations have been noted elsewhere in SAV1 North, including N12E (IID.5.2.1) and N12F (IID.5.3.2). Furthermore, N27A (IIF.5.3) also demonstrates additional evidence of heating activity inside the bin. See BUDKA and DOYEN 2013, 173 and note 55 for parallels in other sites.

Culminating at 160.63m, mediocre and uneven masonry abutting the north face of Wall 07S' western end forms the western side of Feature N24A. On the northern side of N24A no proper wall is preserved, but rather a mix of solid rubble-brick and ceramic debris,¹²⁹ running west at an oblique angle to the western face of Wall 07E. The presently composite character of N24A's side walls gives a roughly rectangular shape (inner dimensions 0.90 × 0.65m).

In contrast to Installations N24B and N24F, which are storage bins cut into the gravelled natural soil, Installation N24A, though possibly also used

for storage purpose, was placed at ground level. Both its brick sides, to the east and to the south, stand on natural soil and have a correlated foundation course level that ranges from 160.30m to 160.21m.

B.3.3 Along the northern perimeter wall (08N) (Pl. 12)

B.3.3.1 N24D (Fig. 22)

Potentially a small enclosed area within the structure, N24D is formed by combining two types of ev-

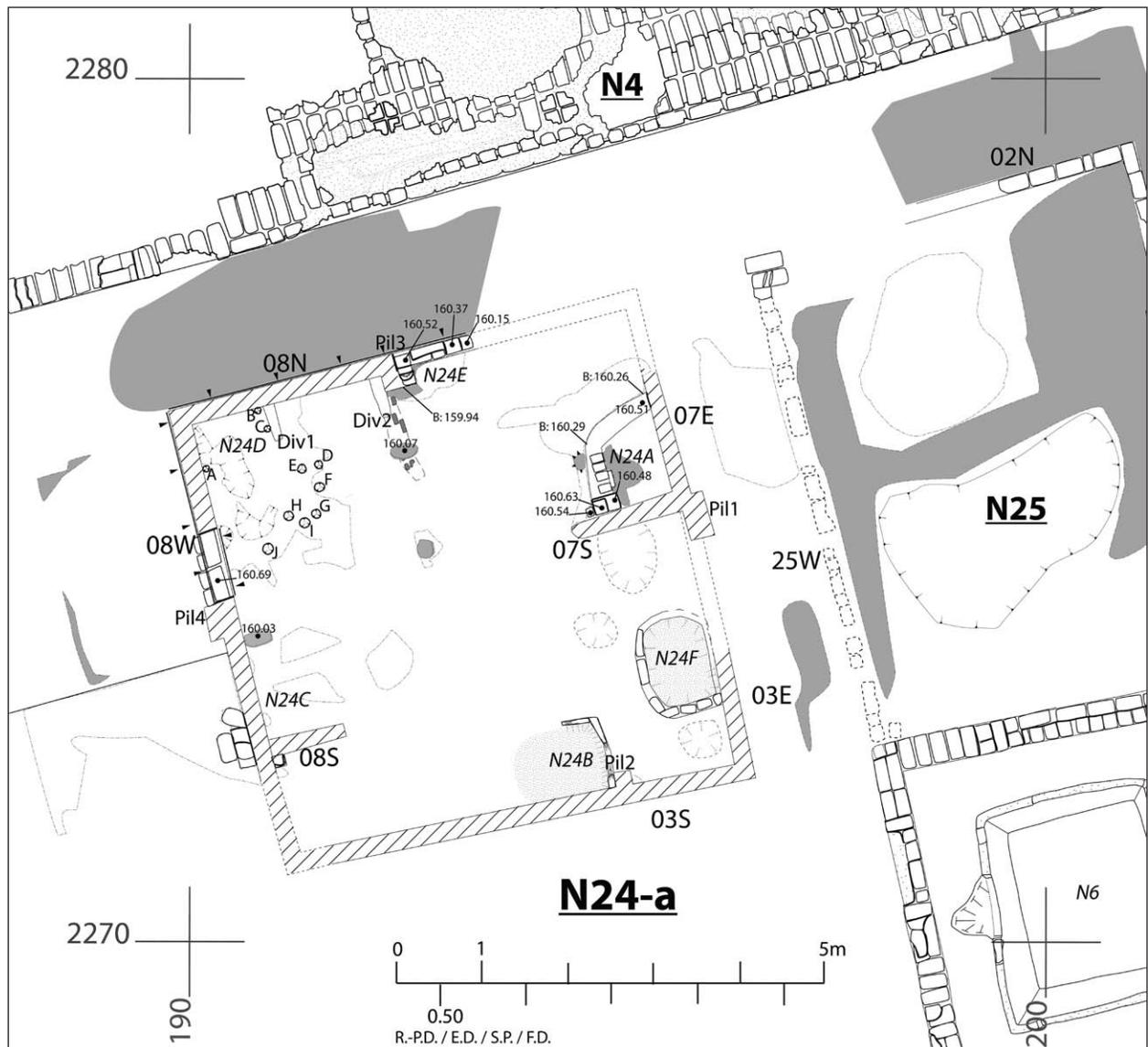


Fig. 22 Plan of Phase N24-a: levels of additional wall segments

¹²⁹ The top of the northern side of N24A is levelled at 160.51m and base at 160.26m. The lower layer of pottery fragments is levelled between 160.30–160.26m.

idence: a low dividing wall (N24Div1) and a series of shallow holes (A–J). The mud divider N24Div1 (l: 0.40m; max. w: 0.14m; max. h: 0.19m) abuts perpendicularly the lowest courses of Wall 08N, 0.83m from the northwest inner corner of N24.¹³⁰ Possibly made of a bull header brick laid on edge, N24Div1 is entirely covered with plaster. From the coating over both the floor¹³¹ and the facing plaster of Wall 08N's southern face, the plastering of this divider appears to be consistent with the later phase of setting Installation N24D. Though similarly placed bricks have previously been attributed to storage facilities¹³², identifying N24D by isolating N24Div1 is insufficient.

In the vicinity of N24Div1, a series of ten holes (labeled A–J) were cut into the coated surface of the ground (Fig. 22). Two of these depressions (B and C) are located at the foot of N24Div1's western side, while another (A) is in the northwestern corner of the structure. Together, the holes A, B, D, and J encircle a surface area of *c.* 1m. At a radius of about 1.60m from the corner of building unit N24, the five more distant holes (D, F, G, I, J from north to west) follow a curving line. Just outside this outer line, an additional pair of holes (E and H) complete two triangular outlines. The group D/E/F and group G/H/I are approximately 40cm away from each other and the sides of the triangles all range from 10–20cm. Though no traces of wood have been identified here, it is possible that these are the remains of post or stake holes – the scattered pattern and irregular spacing of the holes may be evidence of a wattle work fence or shelter, possibly part of Installation N24D located in the northwestern corner of building unit N24.

B.3.3.2 N24E (Fig. 19)

Feature N24E is situated 1.12m east of N24D, running east along the inner face of Wall 08N. Just next to N24Pil3, Installation N24E is fringed by N24Div2, a dividing brick alignment. The mud divider runs perpendicular to the lowest courses of Wall 08N, 2.06m from the northwestern inner corner of N24. Abutting the western side of N24Pil3's

basal courses, N24Div2 consists of approximately three rows of brick pieces turned on edge (Fig. 19) and is max. 0.25m in width and max. 0.27m in height. Its full extent measures 1.22m, including the brick arrangement of the last 0.50m, which is badly degraded due to grinding implements used during occupation attested by Deposit (N24De1d) (Pl. 12).

The base level of this dividing wall is at 159.96m, coinciding with the assumed footing of N24Pil3 (IIB.2.4.2). On the other hand, N24Div2's top level culminates at 160.23m, corresponding to approximately halfway up the pilaster's fourth course. A facing plaster (Plaster D) spreads over the intact portion of N24Div2, extending down its western face to 160.04/160.00m. Plaster D's lowest point matches the lowest levels of both Wall 08N's facing plasters A and A', *i.e.* at the height of the top of the footing course (IIB.2.4.1).

The corner of N24E formed between Pilaster 3 and N24Div2 defines an area filled with successive features. These are, from bottom to top:

- A 2–3cm thick uneven coating surface labelled N24ELam1,¹³³ which expands *c.* 2.8m over a soil mixed with pebbles, connecting to the base of the footing course of Wall 08N's eastern part.
- A max. 4cm thick lens of occupation deposit (N24De1d).
- A 2–3cm thick patch of coating surface, N24ELam,¹³⁴ lying *c.* 0.65m on top of the former deposit. This joins the facing plaster at the bottom of N24Pil3's fifth course from the top, covering the corner between the pilaster's east side and the footing course of Wall 08N.

This sequence highlights two coating episodes: the lowest one is connected to the Wall 08N's footing course, east of N24Pil3, and the upper one is joined to the base of N24Pil3 and lips out from the basal course of the wall (IIB.5.2.4).

The corner between N24Div2 and Wall 08N (west of Pilaster 3) is also covered with a facing plaster (Plaster C), starting 160.32m or roughly halfway up the pilaster's third brick course, down to the top of N24Div2. Plaster C extends down to

¹³⁰ The top of N24Div1 is levelled at 160.14m at its northern end against Wall 08N, and at 160.07m at its southern end.

¹³¹ Here the coated floor is levelled at 159.95m. On both sides of N24Div1, the connection between the facing plaster of Wall 08N and the coated floor is quite intact at 159.96m (IIB.5.2.4).

¹³² See at Amarna, in Room 4 of House 50.40, a "single brick" similarly "turned on edge and mortared to the southern wall" is defined as "perhaps as the edge of a bin-like emplacement", KEMP and STEVENS 2010a, 333.

¹³³ The coated surface N24ELam1 is levelled at 160.08m.

¹³⁴ The coated surface N24ELam is levelled at 160.12m.

160.12m, partly covering Pilaster 3's large southern face.¹³⁵

Against Pilaster N24Pil3, the masonry of N24Div2 is much degraded. This partition-like brickwork is neither bonded to the northern perimeter wall 08N nor to Pilaster N24Pil3. Nevertheless, N24Div2 demarcates an area where there is evidence of occupation, altered from the entranceway that is assumed at the first phase of construction, N24-b (IIB.2.4). Furthermore, the presence of a grindstone associated with the occupation deposit (N24De1d) may suggest that the area was probably designated for grinding activities.

B.3.4 Along the western perimeter wall (08W) (Pl. 12)

B.3.4.1 N24C

On the west side of N24, close to the intact southern end of Wall 08W, internal wall 08S extends east–west, perpendicular to the inner side of Wall 08W. Wall 08S is the main feature of Installation N24C, outlining an area possibly used for grinding activities. Wall 08S is half-a-brick thick and 0.86m long. Its length consists of a minimum of three staggered stretchers bonded to one header against the perpendicular western wall. From the two to three courses preserved in height, the top brick is levelled at 160.18m. The mud bricks themselves are 34/38 × 16 × 8cm in size.

The southern face of 08S's masonry was left uncoated. In contrast, the northern side shows patchy remains of facing plaster or bonding material that is pointed and extruded. A piece of wall plaster covering the corner between Wall 08W's east side and Wall 08S's north face indicates that building of internal wall 08S precedes plastering of the interior of perimeter wall 08W.

1.00m north of Wall 08S, two plaster clumps holding a grinding implement adhere to the facing plaster of Wall 08W. This feature is composed of an almost intact grindstone (SAVIN 2432, 30.7 × 17.4 × 11cm, see IV.4.1), set perpendicular to 08W. The top of the grindstone is levelled at 160.03m, while its base lies at 159.96m. Below this is evidence of

a 3cm thick occupational deposit that separates the intact grindstone from a second, fragmentary example,¹³⁶ lying parallel to the western wall.

B.4 Layout and dimensions of N24 building unit

Building unit N24 is a roughly square freestanding building. The northern wall of N24 (08N), like that of its neighbour N25 (02N) lies parallel to Enclosure Wall N4, separated by a *c.* 1.50m wide wall street. The external surface area¹³⁷ of N24 is 30.00m (5.45 × 5.65 × 5.46 × 5.35m) while the internal surface area is 25.78m (5.06 × 5.26 × 5.05 × 4.94m) (see Fig. 14).

From the seven documented walls encompassing and partitioning N24, a total of six different brick formats were identified (see Fig. 25); occasionally, bricks of slightly different sizes could be used in the construction of a single wall. Only the bricks from Wall 07E fall into the large format category, while the bricks from all the other walls (07S, 08N, 08W, 08S, 03S and 03E) fall into the medium format category. The diversity of brick types thus signifies that no specific format was considered more suitable for the construction of a perimeter or internal wall, or even of a pilaster. Finally, some bricks from Wall 08N bear two central oblique grooves, while bricks from Walls 07E and 03S display longitudinal shallow channels that may correspond to finger grooves imprinted in either the brick or the bed of mortar.¹³⁸

From the segment of northern Wall 08N that runs west beyond the northwestern corner of N24 (see Figs. 17 and 21), it may be reasoned that there was an adjacent western room next to building unit N24. It is thus likely that the access point through Wall 08W dates to the foundation phase of the western perimeter wall, in order to allow circulation from the western room to the inside of N24. Mud brick headers from the threshold and a connected flooring surface (N24F11Wa or Layers G and H documented within the western space, IIB.5.1.4) correspond to this foundation stage N24-b. At the opposite end of Wall 08N, the running perpendicular joint separating the two halves of

¹³⁵ Plaster C slightly coats Pilaster 3's large southern face, from 160.18m down to 160.12m.

¹³⁶ The lower grindstone is 18 × 16 × 5cm in size. Its top is levelled at 159.93m and its base at 159.88m, lying over the gravelled ground.

¹³⁷ The external surface area encompasses the perimeter wall thickness.

¹³⁸ These finger marks fall into the Type B category (Azim Type 8) and the Type L category (Azim Type 6) respectively (IIA.3).

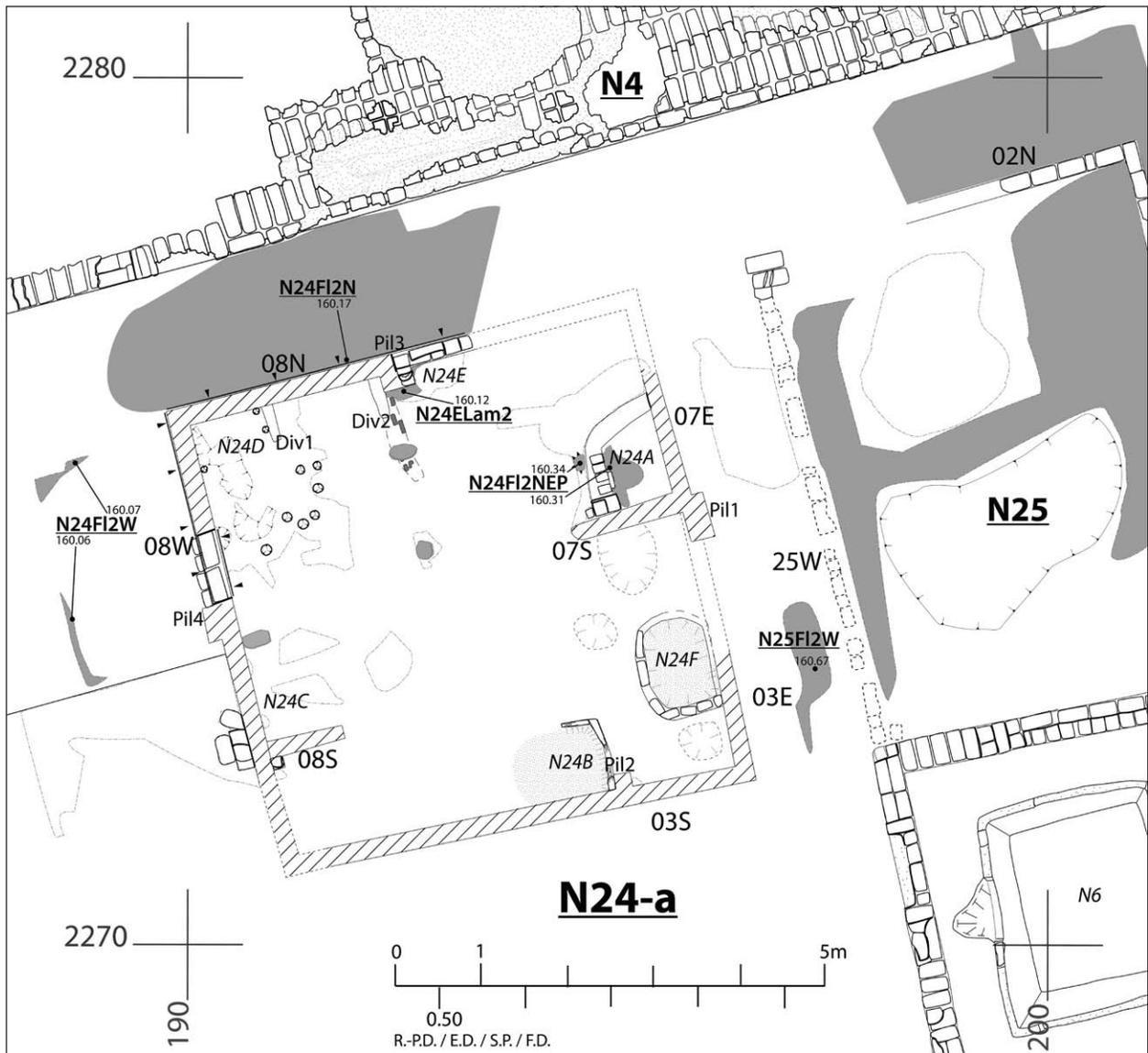


Fig. 23 Plan of Phase N24-a: levels of floors

Pilaster 3 (IIB.2.4.2) indicates that an entranceway through the northern perimeter wall was included in the earliest stage of building.

The sealing of the doorways in Walls 08W and 08N belongs to a second phase of construction, N24-a, at which time building unit N24 must have had another access point. All the masonry from N24's southwestern corner has vanished, except for the bedding joint mortar below the footing bricks. This mortar feature points to the presence of built brickwork, with no further evidence supporting an access route to N24 in this area.¹³⁹

At the opposite end of N24, the northern and eastern perimeter walls have two other points where a span of wall is missing. From this lack of evidence, it is difficult to draw conclusions as to whether brickwork was possibly built across the length of the wall or whether an opening was planned for an access point. Nevertheless, it can be tentatively suggested that a probable access was either built through the east side of the building unit or its northern side. Opposing the outer Pilaster N24Pil4, the remnant remains of possible Pilaster N24Pil1, outside the eastern perimeter wall 07E, may favour the loca-

¹³⁹ For discussion on the problem of access identification, see KEMP 2000, 88; KEMP and STEVENS 2010a, 387.

tion of an access point at that place. In support of this, throughout the SAV1 North site such a feature, namely a pilaster, is usually found standing next to an access point.

B.5 The coated surfaces and floors associated with N24 (Figs. 16 and 23)

B.5.1 Outside N24

B.5.1.1 To the south of N24

No coated flooring surface remains on or near the outer (southern) face of Wall 03S.

B.5.1.2 To the east of N24

A piece of flooring surface is located to the east of N24 and Wall 07E. This surface, N25F11W (IIC.6.1.4) overlays the gravelled soil backfill throughout the area of the lane between building unit N24 and the next unit, N25. The connection between this coated surface and the remains of the footing bricks of N25's western perimeter wall (Wall 25W) is intact. The top level of this mud-coated floor ranges from 160.47m to 160.42m. One may assume that this coated surface – despite lacking a preserved connection with the eastern face of Wall 07E – once covered the area of the north–south oriented street between the two building units and abutted Wall 07E's footing courses. Further south of the lane, another piece of Floor N25F12W is also preserved¹⁴⁰ east of Wall 03E and not connected to it.

B.5.1.3 To the north of N24

An east–west oriented wall street runs between Enclosure Wall N4 and N24's northern perimeter wall (08N). On the northern/outer face of Wall 08N, the plaster coating extended down to 160.17m (Fig. 18), where Floor N24F12N overlaid a 17cm thick occupation deposit (N24De1a). Opposite this, on the southern face of Enclosure Wall N4, is an additional indication of the altitude of Floor N24F12N; at its

lowest point (levelled at 160.17m) the render curves outward and shows evidence of a former connection between the floor and the facing plaster. Below that point, basal courses of N4 were left uncoated.

Further down, below deposit (N24De1a), patches of a lower flooring surface were exposed (Figs. 16 and 24). This lower floor, N24F11N, is partially connected to Wall 08N against the bedding joint mortar above the eighth course from the top (160.02m–160.00m). These connected patches of mud material reveal the presence of a lower flooring surface overlying the loose pebble backfill.

B.5.1.4 To the west of N24

While on the internal sides, the facing plaster covers the whole surface of the brickwork until the level of the occupation floor,¹⁴¹ the coating of the exterior face of Wall 08W extends down to *c.* 160.08m, leaving the lower three courses of mud bricks (*c.* 0.35 m high) uncoated. One could assume that Wall 08W's outer facing plaster¹⁴² ended at the point of connection with the floor identified as layer E or N24F12W.¹⁴³ Floor N24F12W is heavily truncated and overlies a *c.* 20cm thick lower occupation deposit, (N24De1b).

The footing bricks of Wall 08W were built on a thin (5cm thick) layer of compact sand that overlies the natural gravel soil mixed with crumbled yellow sand. To the west of Wall 08W, an earlier flooring surface, N24F11Wa, connects with the foundation course of N24's western wall. This rather uneven floor consists of a patchy coated surface¹⁴⁴ overlying the natural gravelled soil. Against Wall 08W's footing bricks, the coated surface N24F11Wa is levelled at 159.80m, corresponding to roughly halfway up the threshold's footing (IIB.2.5). Against the footing course of Pilaster N24Pil4,¹⁴⁵ this lower floored surface is levelled at 159.85m, roughly halfway up the pilaster's footing.

Outside the southern end of Wall 08W, in the area between the assumed southwestern corner of

¹⁴⁰ This surface overlies a *c.* 15cm thick deposit layer densely mixed with pebbles, (N25De1a). See IIC.6.1.4.

¹⁴¹ At that place, the floor N24F11WP is levelled at 159.95m (IIB.5.2.4).

¹⁴² Wall 08W's outer facing plaster dates to a phase later than the closing of the access point through the western wall by addition of brick masonry. It may also date to a phase contemporaneous with the plastering of the medial part of Wall 08W's eastern face (IIB.5.3).

¹⁴³ Layer E only survived in the north and west sections of the space west of Wall 08W. The top of Layer E is either

levelled at 160.02m/160.07m (Fig. 11, north section) or 160.06m (Fig. 11, west section). As this coated surface is much truncated, its connection to the outer face of Wall 08W is lost. Nevertheless, the top level of this surface matches the inferior limit of the facing plaster that once covered the western face of 08W.

¹⁴⁴ The floor N24F11Wa corresponds to layers G–H in Fig. 11.

¹⁴⁵ The footing brick of the pilaster corresponds to the eighth course from the top. The base of N24Pil4 is levelled at 159.80m (IIB.2.5.2).

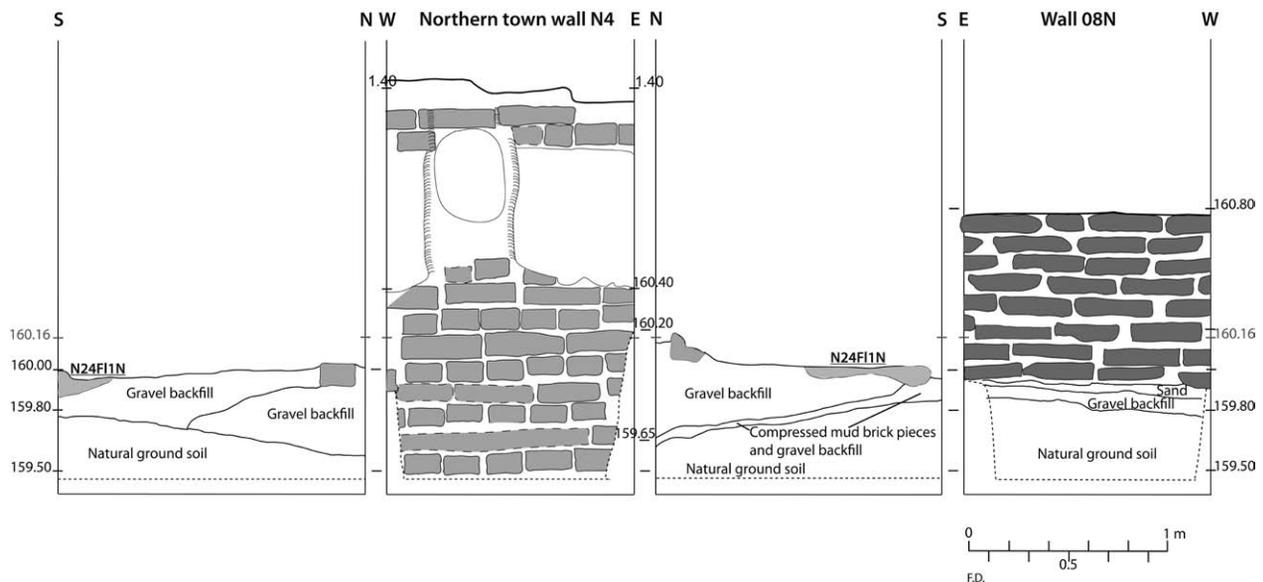


Fig. 24 Section drawing 033A & B/2012 (Square 190/2270, Sondage B north of Wall 08N)

building unit N24 and the eastern face of Wall 41E (see Fig. 3), one finds evidence of a flooring surface, N24F11Wb, whose top ranges from 159.83m to 159.91m (Fig. 22). To the east, this coated surface abuts the top of the footing course of Wall 41E,¹⁴⁶ at 159.85m. Floor N24F11Wb (5–8cm thick) overlays a lens of loose gravel backfill that runs on to the natural ground soil, consisting of pebbles mixed with crumbled yellow sand. As can clearly be seen from the section view, the footing course of Wall 41E lies upon natural ground levelled at 159.74m. To the east, on the other side of Floor N24F11Wb, the connection between the coated surface and the footing of Wall 08W is also visible. Here, this floor plaster is levelled at 159.90m and 159.87m, abutting the western face of Wall 08W's foundation course. The pile of mud bricks¹⁴⁷ standing against the outer face of N24's western perimeter wall and upon the floor N24F11Wb therefore belongs to the later phase, N24-a.

B.5.2 Inside N24

B.5.2.1 The southeastern quadrant

Much of the plastered floor surface is missing in the southeastern quadrant of building unit N24. Only a

patch of mud floor plaster remains, attached to and abutting against the base of the corner joining Wall 03S and Pilaster N24Pil2.¹⁴⁸ This poorly preserved remnant of floor coating N24F11SEP overlays the compact natural ground floor, which is itself made of pebbles tightly held together with a chalky or crumbled yellow sandy matrix. In some places, small patches of mud material adhere to this gravelled surface. This exposed natural ground passes beneath the east–west Wall 03S and the north–south Wall 03E, extending beyond the interior space of N24. At the southeastern corner of N24, the foundation of these walls was built directly on the gravelled ground, whose level varies from 160.48m to 160.35m along the edges of the building unit. Nearby, the shallow scoop of Installation N24F (IIB.3.2.1) cuts into this rocky surface, while bricks delineating the storage bin sit upon a 2cm thick extruded bedding mortar joint¹⁴⁹ that overlays the natural ground soil.

Around Installation N24F, three small depressions are cut into the gravelled soil. These depressions are 30–40cm in diameter, not plastered, and contain a red burnt or ashy fill, of the same sort as the fill overlying the concave scoop of Installation N24F.¹⁵⁰ These grey/black or reddish filling deposits correspond to

¹⁴⁶ The coated surface N24F11Wb is also documented westwards, within Square 180/2290.

¹⁴⁷ The top of the pile of mud bricks is levelled at 160.23m. Though the absence of bonding does not allow for identification as a proper pilaster, the bricks are arranged in such a way that it is unlikely they result from a dump.

¹⁴⁸ The top of the 2–3cm thick patch of floor plaster N24F11SEP is levelled at 160.48m.

¹⁴⁹ The top of the bricks' bedding mortar ranges from 160.36–160.32m.

¹⁵⁰ The bottom of Depression C is levelled at 160.14m.

Building Unit N24		Length (cm)	Width (cm)	Thickness (cm)	Total l + w + t	Format
Perimeter walls	03S finger mark Type L	38	16/18	8	63cm	<i>medium</i>
	N24Pil2	38	17	10	65cm	<i>large</i>
	03E	38	16/18	8	63cm	<i>medium</i>
	07E finger mark Type L	39	18	8.5	65.5cm	<i>large</i>
	N24Pil1	40	17	9	66cm	<i>large</i>
	08N	35	17/18	8	60.5cm	<i>medium</i>
	08N finger mark Type B	36	17	10	63cm	<i>medium</i>
	N24Pil3	38.5	19	9/10	67cm	<i>large</i>
	08W	36	17	10	63cm	<i>medium</i>
	N24Pil4	37	17	8	62cm	<i>medium</i>
Internal walls	07S	35	17	8	60cm	<i>medium</i>
	08S	34/38	16	8	60cm	<i>medium</i>
	N24Div1	39	17	10	66cm	<i>large</i>
	N24Div2	38?	16	10	64cm	<i>medium</i>

Fig. 25 Walls and Pilasters of N24: brick sizes

the dark markings on the walls' inner faces or N24F's muddy lining,¹⁵¹ attesting to fire activity.

The sequence phasing of the southeastern quadrant is as follows (in chronological order):

- The foundation of bonded Wall 03E, Wall 03S, and Pilaster N24Pil2 on the natural gravelled ground
- The shaping of storage bin N24F and three nearby shallow depressions cut into the ground
- The assembly of bricks shaping the outline of N24F
- The inner lining of N24F
- The coating of the ground soil with a muddy surface, N24F11SEP, now almost entirely eroded and only preserved in the corner joining Wall 03S and Pilaster N24Pil2.

The northeastern part of site SAV1 North shows several indications of the naturally uneven and sloping character of the ground soil. As mentioned previously, the natural ground floor corresponds to the foundation level at the corner joining Walls 03S and 03E. There is, however, a variant type of gravelled

surface, which passes beneath other wall segments located a short distance from the corner. This pebble backfill consists of gravel stones mixed with sand and, being rather loose, contrasts with the compact natural ground soil near the corner.

Discrepancies between footing levels from one end of Wall 03S to the other demonstrate how variable the altitude of the natural gravelled soil is (*cf.* Pl. 13). From the southeastern corner of building unit N24, this ground slopes downwards to both the west and north. In the same way, a corresponding change of level occurs at the footing of Enclosure Wall N4, where the baseline drops abruptly.¹⁵² Taking advantage of the ground soil's natural declivity, builders used the difference in ground level¹⁵³ as natural boundaries of storage bin N24B (IIB.3.1.1 and Pl. 12).

B.5.2.2 The southwestern quadrant

In the southwestern quadrant of building unit N24 much of the plastered floor surface is missing, except for a piece of muddy material with amalgamated pebbles that abuts the base of the outer corner

¹⁵¹ The top of this deposit is levelled at 160.39m and its base (the bottom of N24F) at 160.24m.

¹⁵² With a slope of 23.24° or 40%.

¹⁵³ For parallel, see the situation around Temple A of Sai: AZİM and CARLOTTI 2011–2012, 27, 34, 57, pl. IXa.

joining Walls 08W and 08S. This fragment of floor coating N24F11SWP¹⁵⁴ overlays the loose pebble fill composed of gravel mixed with sand. At its western end, no flooring surface remains alongside the base of Wall 03S's inner side.

B.5.2.3 The northeastern quadrant

In contrast to N24's southern half, where most of the flooring is missing, the northern area of the building unit retains sizeable intact parts of coated surface. To the east, N24's northeastern quadrant also includes Installation N24A.

An indurated mud-coated surface, N24F11NEP, is located north and west of Installation N24A, up to 7cm thick. It overlays the gravelled soil and passes beneath the north and west edges of N24A (IIB.3.2.2). Due to its layered character, this floor varies in thickness, ranging from a compact and uniform surface to an irregular coating, which leaves the underlying pebbles visible. Because of the downward slope of the ground soil, Floor N24F11NEP also varies in height, ranging from 160.25m near the installation's base, to 160.12m at the most distant point *c*. 1m northwest of N24A.

Along the west side of Installation N24A, there is another small distinct patch of flooring material. This patch of floor, labelled N24F12NEP and levelled at 160.34m, lips out from the western face of N24A. This small piece of floor hides the lower layer of pottery fragments imbedded in N24A's western and northern walls (IIB.3.2.2). Finally, at the northeastern corner of building unit N24, no wall masonry is preserved, nor is any floor surface evident. At that spot, levelled at *c*. 160.00m, only the pebble fill on top of the natural ground remains.

Inside Installation N24A itself, it is worth noting that the pebble fill is also coated, a continuation of N24F12NEP. This surface culminates at 160.31m and extends up on to the base of N24A's interior western edge face. Along the three other sides, erosion has damaged this lining surface layer, which may well have once extended across most of the inner space of the installation.

The sequence phasing of the northeastern quadrant is as follows (in chronological order):

- The levelling with pebbles of the naturally sloping ground soil

- The foundation of bonded Walls 07E, 07S, and the possible Pilaster N24Pil1 upon the pebble fill
- The laying of flooring surface N24F11NEP
- The shaping of the northwestern edge of N24A, defined as a possible storage case
- The inner lining of N24A with Floor N24F12NEP, which corresponds to the upper floor coating outside the installation.

B.5.2.4 The northwestern quadrant

The most substantially preserved span of coated floor surface runs across the northwestern quadrant of building unit N24. On both sides of N24Div1, in particular, the connection between the wall plaster and the coated Floor N24F11NWP is intact at 159.96m (Fig. 16). At that spot, the coating of the floor extends up on to the base of Wall 08N, *i.e.* against the footing course (or the eighth course from the top) of N24's northern perimeter wall.

Further east, near to N24Div2, any evidence of flooring is lost. However, the inferior limit of wall Plasters A and A'¹⁵⁵ lips outward at the top of the footing course of the wall. This feature may correspond to the formerly joined coated Floor N24F11NWP, now truncated and eroded at that place. Here, at the foot of Wall 08N, a section view discloses potsherds and half a doum palm nut within a *c*. 10cm thick loose occupation deposit (N24DeG) overlying the pebble fill. These remains support evidence of activity prior to the flooring of the pebble surface inside N24.

West of N24Div2, as detailed above (IIB.3.3.2), the area of Installation N24E yielded an informative sequence of alternating floors and deposits: the patch of coated material N24ELam overlies a 4cm thick lens of occupation deposit (N24De1d) that in turn overlies a distinct lower coated surface, N24ELam1. Levelled at 160.12m, upper Floor 2 is joined to the basal course of Pilaster 3, covers the basal course of Wall 08N,¹⁵⁶ and may correspond to the pavement N24F12N identified outside building unit N24. As mentioned above (IIB.5.1.3), this surface N24F12N was laid over the wall street, between the outer/northern face of Wall 08N and the inner/southern facing of Enclosure Wall N4 (see Fig. 18: layer Q). North of N24, the pavement N24F12N joined the top

¹⁵⁴ The top of the 2–3cm thick patch of floor plaster N24F11SWP is levelled at 159.94m.

¹⁵⁵ The inferior limit of wall plasters A and A' is levelled at 160.01m (IIB.2.4.1).

¹⁵⁶ The top of the basal course of Wall 08N's eastern section is levelled at 160.15m.

of the basal course of Wall 08N at 160.17m. Within N24E, deposit (N24De1d) separates the upper Floor N24ELam from a distinct lower surface N24ELam1, levelled at 160.08m. Because it is connected to the top of Wall 08N's footing course, N24ELam1 may also be related to two other surfaces, N24F11NWP and N24F11N, indicating a point of connection at the corresponding location. Finally, below the alternating flooring is a *c.* 7cm thick layer of loose occupation deposit (N24DeG) overlying the pebble fill, levelled at *c.* 159.97m.

To the west, on the northern part of Wall 08W, the lowest point of the plaster coincides with the flooring surface N24F11NWP, levelled at 159.96m. In the places where the coated floor, which once joined the lowest point of the plaster wash, is lost, a layer of the occupational deposit (N24DeG) is visible above a pebble backfill.

Further south on the medial part of Wall 08W, the same flooring surface N24F11NWP (levelled at 159.87m) is joined to the base of the lowest course of the wall. Below Floor N24F11NWP, both the occupation deposit (N24DeG) and its underlying lower pebble backfill are banked against the footing course of Wall 08W (IIB.5.1.4 for the sequence on the other face of Wall 08W). Here, the footing course includes the threshold, a remainder of the first building phase of Wall 08W (N24-b) when an access way was still open in the wall's masonry. The few potsherds¹⁵⁷ piled up against the medial part of Wall 08W's basal course belong to a subsequent *c.* 10cm thick occupation deposit (N24De1e), which overlies the earlier Floor N24F11NWP. At the base of the seventh course from the top, *c.* 159.96m, the facing plaster that covers the masonry blocking the earlier passage way curves slightly outwards. This lipping feature may indicate the presence of a coated surface that was, at some later stage, laid over Deposit (N24De1e). This surface might be related to surface N24ELam, located in the area of Installation N24E (IIB.3.3.2).

Another curving out and lipping feature is also visible on the southern section of Wall 08W, where the plaster wash indeed lips out from a point lev-

elled at 159.96m and may correspond to the level of the coated surface Floor N24F11NWP. Near the corner of internal perpendicular Wall 08S are some patchy remains of flooring material, levelled at 159.89m and overlaying the gravelled ground, adhere to the basal course of Wall 08W. In this area between Walls 08W and 08S, occupation deposit (N24DeG) separates the floored surface from the pebble backfill, levelled at 159.86m.

The sequence phasing of N24's internal western part is discussed as follows (in chronological order):

- The foundation of bonded Walls 08N (with its inner Pilaster N24Pil3) and 08W (with its outer Pilaster N24Pil4) upon a sandy layer overlying the natural gravelled ground. At this time, Wall 08W is not made of continuous masonry (IIB.2.5), but includes an access point, as evidenced by a mud brick threshold built directly on the sandy layer. Perimeter Wall 08N is built of two parts, as can be seen from its northern face where the brickwork of the wall features a running perpendicular joint (IIB.2.4)
- The backfilling of the area with a loose pebble fill of variable thickness¹⁵⁸
- The foundation of internal wall 08S and dividing walls N24Div1 and N24Div2 upon the pebble fill
- The initial building phase N24-b resulting in Deposit (N24DeG) on the pebble fill¹⁵⁹
- The plastering of the walls' inner faces:
 - Firstly, on the eastern face of Wall 08W jointly with the northern face of Wall 08S
 - Secondly,¹⁶⁰ on the southern face of Wall 08N (excluding its eastern section), as well as on the large southern face of Pilaster N24Pil3
- The coating of the area with flooring surface N24F11NWP upon the occupation deposit (N24DeG)¹⁶¹ and the coating of the N24E area with the Floor N24ELam1 above the same deposit
- The sealing of the access point in Wall 08W with mud brick masonry
- The plastering of dividing walls N24Div1 (N24D) and N24Div2 (N24E) to the north, and

¹⁵⁷ These potsherds are levelled between 159.98m and 159.87m.

¹⁵⁸ Against the bottom of the walls, the pebble fill is as thick as a course of bricks.

¹⁵⁹ Along the basal courses of the walls, tiny floor pieces, potsherds and a fragmentary grindstone from Installation N24C belong to this deposit phase.

¹⁶⁰ The facing plaster of Wall 08N covers the inner corner joining Walls 08N and 08W, applied after the plastering of 08W's eastern face.

¹⁶¹ The coated surface N24F11NWP covers the basal courses of Wall 08N and was laid after the plastering of the wall.

Outside, north of N24	Outside, west of N24	Outside, south-west of N24	Outside, east of N24 = west of N25	Outside, south-eastern part of N24	Inside N24, north-eastern part	Inside N24, south-western part	Inside N24, north-western part	Inside N24, north-western part	Building phases of N24
<u>N24FI2N</u>	<u>N24FI2W</u> //Layer E		<u>N25FI2W</u> // <u>N12FI2aNE</u>		<u>N24FI2</u> <u>NEP</u>			<u>N24E</u> <u>Lam2</u>	N24-a Second building phase
08N (east)	08W (central)				N24A			N24E N24D	
(N24De1a)	(N24De1b)		(N25De1a)					(N24De1d)	(N24De1e)
<u>N24FI1N</u>	<u>N24FI1Wa</u> //Layer G-H	<u>N24FI1Wb</u>	<u>N25FI1W</u>		<u>N24FI1</u> <u>SEP</u>			<u>N24FI1</u> <u>Lam1</u>	N24-b First building phase
08N (west)	08W (north)	08W (south)	03E	03S (east)	07S	08S N24C		(N24DeG)	
Sandy layer	Sandy layer		07E	03S (west)				N24Div1 N24Div2	
Gravel backfill		Gravel backfill							
Natural ground									
Gravel backfill									

Fig. 26 Floors, fills and building phases of N24

the assembly of the grinding implement (N24C) to the west

- The piercing of the coated floor surface N24F11NWP (possible postholes related to Installation N24D)
- The occupation of the area resulting in deposit (N24De1e) on Floor N24F11NWP and, in the N24E area, Deposit (N24De1d) lying on Floor N24ELam1
- The plastering of the eastern face of Wall 08W's medial section, the blocked access point
- The coating of the area of N24E with the flooring surface N24ELam.

B.5.3 Building phases of N24

(Fig. 16, 23 and 26)

Because of varying altitudes in the natural gravelled soil, an extensive assessment of N24's building phases proves to be challenging. From the south-eastern corner of building unit N24, where the bricks of the wall's footing course sit directly upon the top of the natural surface, this ground slopes downwards both to the west and the north. There are thus discrepancies between the footing levels of the different walls and installations of N24 (Fig. 15), for which the builders may have occasionally added a pebble layer to counter the irregularities.

Despite these difficulties, an interpretation of the phasing was attempted. The first building phase (N24-b) began with the construction of N24's perimeter walls – leaving space for access through the western and northern sides of the building – their respective bonded pilasters, and the internal wall 07S. Also belonging to this initial phase of construction is the shaping of storage bin N24F, three nearby shallow depressions cut into the ground, probable storage pit N24B, as well as the arrangement of mortared bricks around bins N24F and N24B. During Phase N24-b, there was also a levelling with pebbles of the naturally sloping ground soil. This pebble layer, lying beneath the footing course of internal wall 08S and dividing walls N24Div1 and N24Div2, preceded the construction of these three walls and the occupational deposit (N24DeG). The plastering of the inner faces of Walls 08W, 08S and 08N¹⁶² followed this early stage of occupation, after which the floor coatings labelled N24F11 or

N24ELam1 were laid upon the initial occupational deposit. Installation N24C also belongs to the first building phase, N24-b. The phase of occupation identified within N24 by deposits (N24De1e) and (N24De1d) and outside the building as (N24De1a), (N24De1b), (N24De1c), comes after the first building stage N24-b.

At the second construction phase, N24-a (Fig. 22), the access points through western Wall 08W and northern Wall 08N were blocked. The arrangement of the composite north and west sides of Installation N24A also belong to N24-a because they were built upon the earlier Floor N24F11NEP.

The plastering of dividing walls N24Div1 and N24Div2 (Plaster D) and the arrangement of the grinding implement from Installation N24C also followed the earliest flooring stage. Though there is sparse evidence of the subsequent flooring phase within N24 (Fig. 23), it can be more substantially documented outside the building (N24F12N, IIB.5.1.3.). The final plastering (Plaster C) over Pilaster N24Pil3, as well as the western face of Wall 08W, the eastern face of the medial part of Wall 08W and the northern face of Wall 08N may also date to this Floor 2 stage of the N24-a construction phase.

C BUILDING UNIT N25

C.1 Introduction

The perimeter mud brick walls of building unit N25 (02E, 02N and 25W) are severely degraded both in length and height (Pl. 14), but it is still possible to determine that they are half-a-brick thick and made of running stretcher brick courses. Each corner of the building unit was found in a different state of preservation. On the eastern side of N25, in the northeastern corner there is evidence for the joint of the northern perimeter wall 02N and eastern perimeter wall 02E, while the masonry of the southeastern corner is entirely lost. To the west, given the orientation of the crossing headers running eastward at the northern end of western perimeter wall 25W, one may consider that these bricks were once joined to the northern perimeter wall 02N, thus forming N25's northwestern corner. Finally, only a negative impression of a crossing brick may potentially support the former presence of the building unit's southwestern corner.

¹⁶² The plasters covering the northern perimeter wall include Plasters A and A' (over the southern/inner face of Wall 08) and Plaster B (over the southern face of N24Pil3).