



**External Spaces 60, 133, 145, 240, 241, 242, 291, 426 and Building 13**

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## Chapter 26

# External Spaces 60, 133, 145, 240, 241, 242, 291, 426 and Building 13

Lisa Yeomans

This external area was located between clusters of buildings in the 4040 Area and its excavation provided information on the use of external areas as well as the phasing of surrounding buildings. To the north of the linear external area was a cluster of buildings formed by B.48, B.49, B.52 and B.82 as well as some external spaces tacked onto the sides of the buildings at various times. In the centre of the 4040 Area were buildings B.55, B.59, B.64 and B.67 forming the southern side to the external area. The external area between these two clusters of buildings was the focus of extensive excavations to understand the construction sequence of the buildings (Fig. 26.1).

The phasing of the external space as a whole was somewhat problematic as there were not always stratigraphic links between events in different parts of the space. A matrix of the main phases and sub-phases of the spaces was therefore created (see inset in Fig 26.2 Harris matrix on CD). The stratigraphic narrative below follows these phases and sub-phases but, for example, there is no stratigraphic relationship between Sp.60 Phase 2b and Sp.60 Phase 1 (as shown on the phase matrix). The nature of the deposits, however, suggested that Sp.60 Phase 2b was probably roughly contemporary with other Sp.60 Phase 2 deposits. Below Sp.60, and excavated in a smaller area, was Sp.133. The space number was changed between Sp.133 and Sp.60 because a major building event, the construction of B.55, occurred at this time and the nature of the deposits changed with a notable decrease in the density of material recovered. Sp.133 overlay even earlier midden deposits in Sp.426 which predated the construction of Sp.242. The stratigraphic sequence spanned from Level 4040 F with Sp.426 through to Level 4040 I with the construction of Sp.240 that represented the latest significant change to the layout of the area.

### Space 426

To the southwest of Sp.242, the tops of walls F.4029 and F.4030 of an earlier building Sp.426 could be seen in plan aligned northwest to southeast. The unexcavated deposits either side of these walls were midden, probably part of the

Sp.133 sequence that had slumped into this earlier space below. The double wall probably formed a limit between an earlier cluster of buildings to the south and an external area to the north (Fig. 26.3). These earlier buildings have not been exposed within the 4040 Area trench but it is just interesting to note that before Level 4040 G there appears to have been a similar clustering to the buildings (Chapter 4).

### Space 242

#### *Space 242 Phase C: Construction*

Next in the excavated sequence of the external area was Sp.242 located to the south of B.48, prior to the accumulation of the Sp.133 midden deposits and built above earlier midden deposits infilling Sp.426. Sp.242 was a small, partially exposed space. Only the western half of this space was visible, the eastern side remaining unexposed under B.13. The structure was unusual in form as the corners of the space were rounded. Narrow bricks were used in the construction of the wall F.1612 of the space and it was thinly plastered on the inside (Fig. 26.4).

#### *Space 242 Phase B: Occupation*

The function of Sp.242 was not clear; the surviving floor surfaces inside the space were flat but remained unexcavated. The structure may have functioned as a processing area but it did not have any of the attributes that would identify it with or as a building. This was one of a number of spaces that were gradually built around the margins of the building cluster and appeared to be enclosed external spaces.

#### *Space 242 Phase A: Closure/infilling*

After the abandonment of Sp.242, (10722) was a fill layer in the lower portion of the structure. A compound midden deposit (10719) sealed this infill. This midden deposit, based on its contents has been tentatively assigned to some point in Sp.60 Phase 2. This also fits with the change of the nature of the external area after a major phase of construction including the building of a double wall around the north side of B.55.



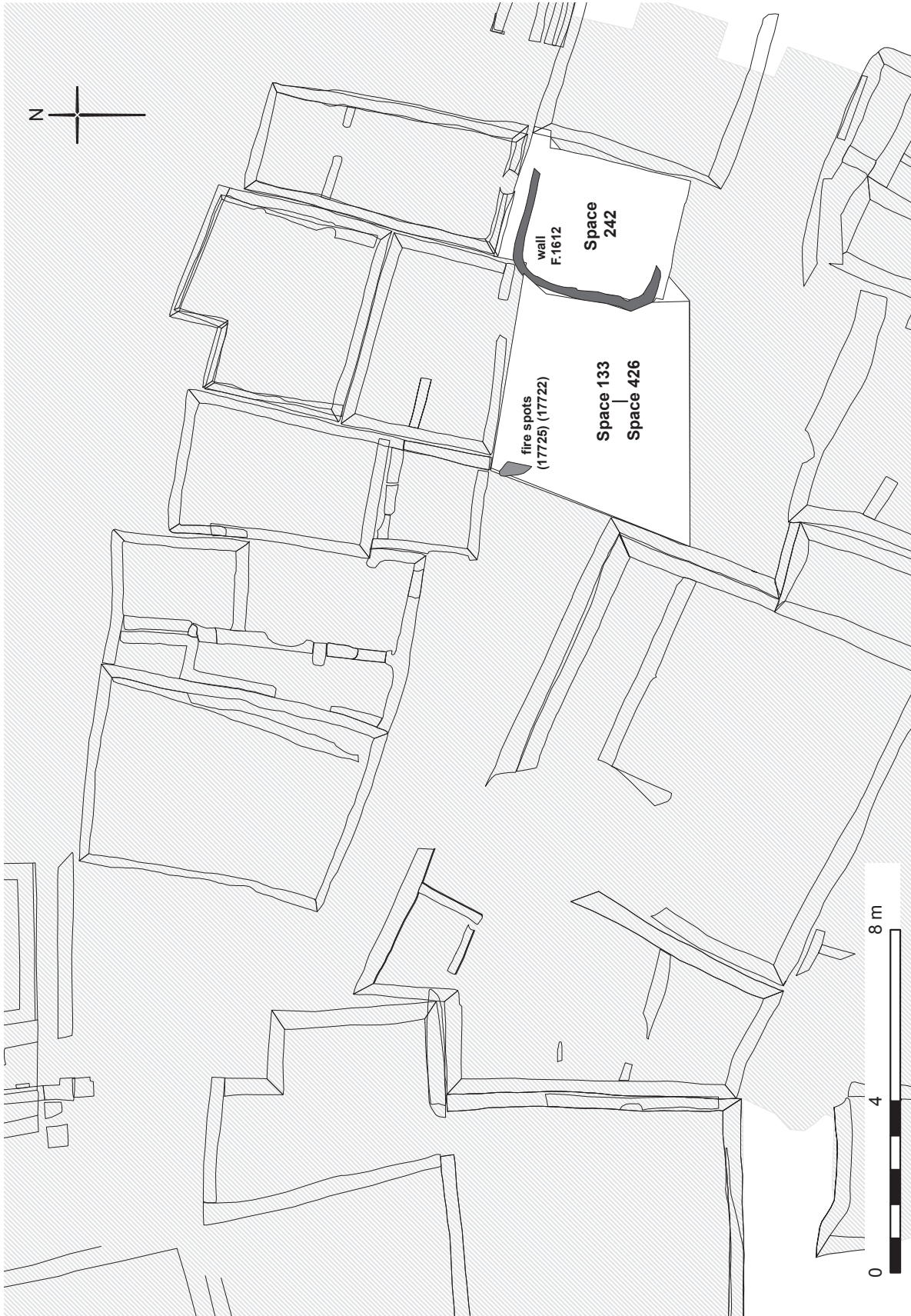


Figure 26.3. Plan of Sp. 426 below Sp. 133 and Sp. 242 (Plan by Camilla Mazzucato, Cordelia Hall and David Mackie).



**Figure 26.4.** Curved western wall of Sp.242 and midden deposits that the space was founded on (Photograph by Jason Quinlan).

### Building 13

Postdating Sp.242 to the east, B.13 was only partially investigated as it continued beyond the LOE. Abutting Sp.230 of Level 4040 H (Chapter 4, Fig. 4.29), only the walls were defined as F.1609 to the north, F.1618 to the west and F.1619 to the south. The walls were heavily plastered (17795); located centrally on the west wall was the outline of a post scar F.4067. First defined in the 1994 scrape plan and recorded as a midden, a layer of mixed topsoil was removed only to define the walls. A portion of the building infill was excavated in Foundation Trench 12 (Chapter 30), however, where a layer of firm mid-brown crushed mudbrick room-fill (15006) was sealed by loose ashy midden (15002). This area may have been occupied by a building which fell out of use and subsequently backfilled and reverted to a midden area.

### Space 145

The earliest deposits reached in the external space between the two clusters of buildings consisted of midden. This midden abutted the buildings to the north (B.82) and unexposed pre-existing buildings to the south (earlier than B.55).

Sp.145 refers to the midden units excavated in Foundation Trenches 18 and 19. These were assumed to be part of the same midden as in Sp.133 that underlay the external surfaces and trampled brick-rich dump layers of Sp.60. Midden deposits (Sp.133) were mostly exposed where deeper excavations took place to the east of an arbitrary limit of excavation. Deeper excavation that was also necessary in the Foundation Trenches 18 and 19 revealed similar midden deposits and these are thought to indicate that the same midden area extended further to the west. Within Foundation Trench 18 three midden deposits (15970)/(16037)/(16038) were excavated. The lower two of these deposits were probably equivalent to midden (15970) excavated in Foundation Trench 19. In the Foundation Trenches it was clear from the sections that the walls of B.59 pre-existed the midden formation which indicated that B.59 was earlier than B.55 which was itself earlier than B.64. From this it was clear that buildings with abutting walls were probably built in a series of stages and that abutting buildings may only have been contemporary for part of their occupation.

### Space 133

Sp.133 refers to the midden that accumulated in the eastern

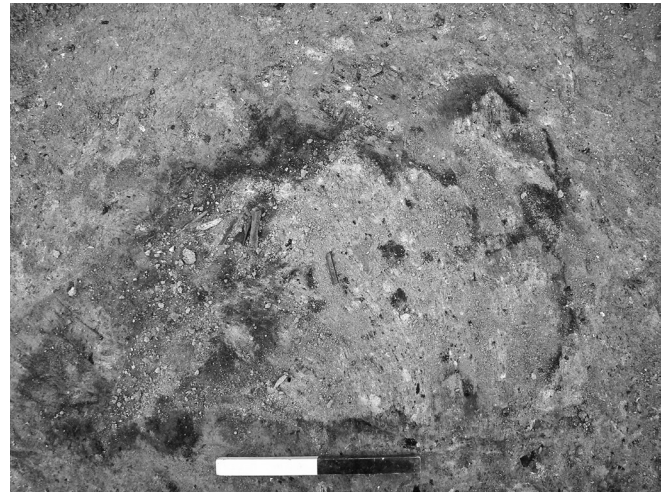
part of the external space where it was exposed by excavation in 2004; the midden probably extended further to the east, south and west. The midden area abutted the cluster of buildings to the north (Sp.146 and Sp.147 preceding B.52) as well as the walls of a building earlier than B.55 to the south (Chapter 4; Chapter 15). After the construction of B.55 midden deposits ceased being discarded in the same manner in the open area between the clusters of buildings. Even though the layout of the buildings remained more or less the same, the use of the external space changed slightly and was less intensively used for the deposition of waste.

Excavation in the eastern part of the area was sufficient to demonstrate that the midden built up against the southern walls of the two buildings that were knocked into one to form B.52 (Sp.146 and Sp.147). To the east end of the space the midden in Sp.426 which was the midden below Sp.133 was also earlier than the construction of Sp.242. Only a few centimeters of this deposit were excavated. It seems that the Sp.133 midden deposits accumulated during the occupation of the northern cluster of buildings.

Many layers of midden and deposition in this external area were excavated and no attempt will be made here to describe them individually. But some examples will suffice to show evidence for intermittent use of the midden between extended episodes of refuse deposition. For example, one of the earliest units (17725) excavated was a fire spot with the ash from the burning activity still *in situ*. The spread of the ash measured just 0.40m by 0.33m in extent with a depth of 20mm (Fig. 26.5). This was the result of one individual event rather than recurring use. The faunal assemblage was small but all of the bone was carbonized and mostly small fragments of sheep/goat bone. The material could be the final waste from food production but the burning was probably accidental burning of waste near a heat source.

This fire spot (17725) was sealed by approximately 50mm of laminated midden deposits (17724). The animal bone from the unit was moderately dense with good preservation. Over half of the bones were diagnostic and those that were not were the result of a high frequency of digested bones in the unit rather than poor preservation. Only a very tiny amount of the bone was burnt, despite the location of the deposit between fire spots. The species present included sheep/goat, small equid and fox as well as a badger tooth. Most of the sheep/goat bones were head and foot bones possibly suggesting the presence of butchery waste and this would be consistent with bone discarded prior to cooking. The gnawing suggested that the bones were discarded whilst fresh and attracted the attention of dogs scavenging in the area. Two bone points represented the worked bone in the deposit. No clay balls or pottery were recovered from this excavation unit.

Above the midden (17724) was another fire spot (17722) in roughly the same location as the earlier fire spot but there



**Figure 26.5.** *Ash in situ over scorching of fire spot (17725)* (Photograph by Lisa Yeomans).

was no ash left *in situ* above the scorched material. None of the animal bone was burnt and the few diagnostics were sheep/goat. The faunal assemblage appeared to have been battered and kicked around a bit and it was not directly related to the burning event that created the fire spot. No clay balls were recovered from this unit.

Further south were traces of a patchy plaster surface (17723) that had been partly scorched. This indicated that a temporary surface had been laid down in the midden on which a specific activity had taken place and that the burning in the midden areas was not just related to the burning of rubbish but also to the preparation or processing of a material in some way. The faunal assemblage comprised small fragments of bone with nearly half of them abraded but none burnt; it was “*more like a surface that people walked on/worked on for a short while*” (Faunal Unit Description 17723).

### Discussion

In summary, the nature of the deposition in the midden sequence in Sp.133 differed from that in the later middens of Sp.279 (Chapter 27). The midden deposits were more finely laminated with numerous fire spots occurring as the midden accumulated. In this respect the midden was much more like the midden sequence excavated in the South Area (south of the B.65-B.56-B.44-B.10 sequence of buildings). The patterning in Sp.133 may be related to the fact that the midden built up in an external area between buildings in which activities were taking place, and people were walking and using the area for small temporary fires. In Sp.279, much of the midden accumulated in the quarry pits and it seems that the occupants were not regularly passing through this area and were not using the space to carry out activities.

## Space 60 Phase 1

### ***Building 55 Phase C: Construction***

During the 2008 season, the limit of excavation was positioned to explore the relationship between B.55 and the midden deposits by excavating the northeast corner of the double walls surrounding B.55 (Video 26.1 [http://www.catalhoyuk.com/media/video/2008/20080722\\_4040\\_01.html](http://www.catalhoyuk.com/media/video/2008/20080722_4040_01.html)). A construction cut (17730) had been dug 0.1m in depth into the top part of the midden and cut the wall of an earlier building. The double walls of B.55 were constructed in this cut as one event. This is shown by the fact that the same brick and mortar was used in both the main wall of B.55 and the retaining outer wall (17727)/(17728). The midden removed by the digging of the construction cut was used as backfill (17729) and the disturbance of the originally laminated midden deposits was clear in section. The function of the double wall was to ensure that building was protected from erosion. This wide double wall around the northern and northeast corner of the B.55 was built to compensate for the problem of having an outer wall facing an external space from the outset of the building's construction. This wall continued around the northern part of B.58 supporting the suggestion that some buildings within clusters were rebuilt at the same time and may have been more of a communal effort. The construction of B.55 is therefore phased after the midden in Sp.133 but the building would have continued in use as the deposits in Sp.60 built up and repairs had to be made to the external wall (see below). The discussion of B.55 sequence is provided in a separate report (Chapter 17).

### ***Space 241 Phase C: Construction***

Built over the external midden deposits of Sp.133, were two walls (F.1604 and F.1606) (Fig. 26.1) making Sp.241. These walls, built at right angles to each other, abutted the western corner of the southern wall of Sp.229 (B.82), although B.82 was out of use by the time Sp.241 was constructed. The southern wall of Sp.229 therefore formed the northern boundary of Sp.241. The newly constructed walls formed the southern and western sides of the space and the eastern side used the western wall of Sp.230. Sp.241 appears to have been an open, enclosed area. An additional foundation support (10718) was constructed against the internal side of the southern wall. The function of Sp.241 is not certain. Perhaps it formed a similar function to earlier Sp.242 and was just an outside processing area of some kind.

### ***Space 241 Phase B: Occupation***

An absence of floors in Sp.241 suggested that it was an external space. We do not have any evidence as to what activities were undertaken in this space and it is also possible that the floors were scoured out when the space fell out of use.

### ***Space 241 Phase A: Infilling***

The infilling sequence in Sp.241 comprised a deposit of wall collapse (10746) overlain by a series of midden in-fills ((10721/17726), (10714)). The waste was probably contemporary with continued occupation in the cluster of buildings to the north such as B.49 and would have been from the later part of the occupation of those buildings. The fact that the wall collapse (10746) was sealed by midden confirmed that B.82 had gone out of use before this midden started to accumulate. The upper part of the infill sequence consisted of a homogeneous fill (10711) with few finds. There was no stratigraphic evidence to phase the infilling of either Sp.241 or Sp.242.

## Space 60 Phase 2a

Following the construction of B.55 the dumping activities in the external area changed, with dumps comprising of more clay-rich material obviously derived in part from broken up mud bricks. Other material was clearly discarded in this area as moderate quantities of animal bone, stone, shell and obsidian were recovered. In section these deposits appeared coarsely laminated and may well have functioned as a walked upon route between parts of the site. These were the same deposits as those excavated in 2004 (Sp.60 Phase 2b) sealing the midden to the east. Excavations of these deposits showed that they extended though the external area towards the large open area to the northwest of B.52 prior to the construction of Sp.90. The deposits were sealed by a localized deposit (16717) representing a dump of charcoal-rich waste and other, more generalized dumps (17709)/(16716). The animal bone from unit (16717) was moderately dense and comparatively unmixed for a midden deposit. Surface condition of the bones was excellent with edges very sharp and unworn. There was no trace of trampling or digestion. Diagnostics were primarily from the forelimbs of sheep/goat and there were no foot bones. The assemblage appeared to be post-consumption waste probably accumulated over a short period of time and rapidly buried and this unit was interpreted as primary deposition of household waste. Two mini clay balls were recovered from the unit. From the more general dumps (17709)/(16716) eight clay ball fragments in total were recovered and the animal bone has not been analyzed. A relatively large fire spot (16715) sealed this layer.

Above these deposits was a clear surface with a smooth, flat, thin deposit (16714/16795) initially interpreted as a layer of trample. This included frequent phytolith remains suggesting that a spread of plant remains had deliberately or accidentally become incorporated. Analysis of the faunal remains from unit (16714) showed that they did not display damage indicative of trampling. Most of the diagnostics bones were sheep/goat but insufficient in number to determine body-part

representation. The degree of breakage suggested possible marrow extraction but the bones were not broken enough for grease processing. The only piece of worked bone was 16714.F1 the base of a needle with considerable use wear. A single clay ball was recovered from this unit.

Following the use of this surface in the external area, deposits continued to build-up and *in situ* activities were represented by fire spots ((17706)/(14194), (16700)) as well as ash lens (16791). About 10–15 per cent of the animal bone from (17706) was low temperature burnt and bone fragmentation was high. A significant amount of the bone had signs of trample polish. This bone assemblage did not appear to be directly related to the activity that resulted in the fire spot and more likely it was the trampled, mixed material from the layer that the fire was laid on. The bone from (14194) was similar and interpreted in the same way. No clay balls were recovered from any of these contexts and the animal bone from the other deposits has not been analyzed. This fire spot contained phytoliths from wheat (*Triticum* sp.) husks, as well as unidentifiable cereal phytoliths, indicating cereal de-husking waste disposal, and leaves and stems from *Phragmites* reeds and sedges which were most likely from the ashy remains of fuel. Two additional fire spots were excavated just northeast of B.55. The two fire spots (12315) and (12316) were excavated along with a dump of brick-rich material (12318) that was probably the same as (17709). As the deposits built up fire spots were often located in the same area, overlaying earlier fire spots but separated by brick-rich dump layers. Slight traces of two walls F.1635 forming Sp.232 had been recorded after the topsoil was originally removed. The phasing of Sp.232 remains uncertain, but it must post date the use of the fire spots (12315) and (12316).

### Space 60 Phase 2b

To the east in the area of the 2004 excavation, similar brick rich deposits were excavated above the Sp.133 midden. The unit (11029) directly above the midden was prioritized for specialist study. The unit had a low density of animal bone and although some larger pieces of bone were present, much of the faunal assemblage was heavily processed and fairly worn. This deposit was sealed by some wall collapse (11030) and the compound external dump layers (11015) and (11014). These were sealed by a number of equivalent excavation units (11000/11005/11007/11018) separated by later truncations. In Foundation Trench 13, units ((15000)/(15003)) were also excavated through the external space and consisted of dumps of brick-rich material similar to in the rest of the external space and located above midden (15005) similar in character to the Sp.133 midden, and abutted the north wall F.2800/F.2360 of B.67.

### Space 60 Phase 2c

In Sp.60 Phase 2c there was the construction of additional, retaining wall on the north side of a pre-B.64 wall. The construction of B.64 had extended out over the top of the retaining wall rather than over the original wall of the pre-B.64 structure. The retaining wall had been built in a construction cut (16790) truncating the external surface (16714/16795), indicating that B.64 was constructed later than B.55.

### Space 60 Phase 2d

Sealing the backfill of the construction cut (16790) and extending over the external area to the north and west of B.64 was a layer of demolished mudbrick material mixed with some other dumped waste ((14196)/(16786)). This measured 0.18m to 0.27m thick and, given the location, it seems highly likely that this deposit was partly the result of the demolition of the walls of the pre-B.64 (Sp.138) structure. Stratigraphically the demolition material sealed the pre-B.64 (Sp.138) retaining wall and was below dump deposits respecting the northern wall of B.64. These large dump deposits (17705/14191/16736/16786) covered much of the external area and probably accumulated as the area was used as a route across the site with some dumping of waste. The processes that led to the formation of deposits in Phase 2d represented a similar use of the area as in Phase 2a and a further fire spot (14190/17704) was excavated.

A moderate quantity of bone was recovered from (14191) including digested bone; bone fragmentation was high and mostly consisted of long bone fragments. Species whose bones were present in the unit included sheep/goat, cattle, equid and dog but by far the bulk of the assemblage was sheep/goat with the bones suggesting that the unit was mixed and had been heavily reworked. It consisted mainly of highly processed domestic rubbish: both post-butched and post-consumption waste. As for the worked bone there was a real red deer canine bead (14191.F7). During the use of this bead, the tooth broke at the original perforation and was re-perforated further down. Finally, it broke again when the bead was discarded or lost. There was also an expediently made point from the splinter of a proximal tibia shaft. This had been resharpened, and intensively used before discard. The clay ball fragments were, like the animal bone, mixed, with some pieces with a high degree of wear and others with minimal wear. The worked bone was recorded from (16736) and (16786) and all that was present was a point (16736.x1) made on a tibia that had been used in wood-working. This same unit also produced a comparatively large clay ball assemblage which included a whole clay ball with basketry and finger impressions, a number of small fragments and a couple of mini clay balls.





**Figure 26.6.** Construction cut for south wall of Sp.82 (Photo by Lisa Yeomans).

### Construction of Building 64 after Space 60 Phase 2c or Phase 2d

The stratigraphic sequence of the construction of B.64 cannot be tied exactly into the phasing of the external area of Sp.60. However, the construction of B.64 must have post-dated the construction of the retaining walls seen for the Pre-B.64 building (Sp.60 Phase 2c) and pre-dated the earliest retaining walls for B.64 (Sp.60 Phase 3bi). This building sequence could be seen in the sections, exposed by the later quarrying (Chapter 26), as a shift in alignment with the walls of B.64 overlying the earlier retaining walls. The construction of B.64 did not immediately follow the construction of B.55. This shows us that the buildings that formed a cluster gradually accrued with different buildings replaced overtime.

Analysis of the material from the fire spot showed that unit (14190) contained mostly (based on the diagnostics) sheep/goat foot bones but long bone shafts that could not be identified to an individual bone were also present. The bone was probably not related to activities that produced the patch of scorching in the external space as only a minimal proportion of the bone was burnt.

### Space 60 Phase 2e

Truncated from the sequence of deposits in the rest of Sp.60 by a construction cut for Sp.90 (see Sp.60 Phase 3b) were a number of dump layers. These formed a continuation of the Sp.60 Phase 2 deposits but as the stratigraphic link was truncated they have been treated as a separate sub-phase. Excavations in this area were not extensive. There was an indication that the fire spots that were prevalent in Sp.60 outside the wall of the later space Sp.90 also occurred within the area later used as Sp.90. The south part of the deposits excavated, for instance deposit (10303) “*had black burnt patches at the south end*” (US 10303, TK, 16.07.05). Unfortunately, these were not recognized at the time of excavation as fire spots and therefore they were excavated with the rest of the deposit rather than sampled separately. Overall, these deposits were minimally sampled and analyzed but on the basis of the stratigraphic evidence, it seems that this area of Sp.60 was a continuation of the large brick-rich dumps of material, occasional fire spots and discard of other waste.

### Summary of Phase 2 deposit formation

Throughout Phase 2, the area consisted of an open gap between two clusters of buildings. Although some waste was discarded in the area, it was on a small-scale and not the same as the earlier rich midden (e.g. Sp.133). Some trampling and external activities took place leading to the numerous fire spots. Dumps of building materials also formed a significant component of the material deposited in the area. Subsequent to Phase 2 there were a number of construction events.

### Space 60 Phase 3a

In the northern part of the external area the deposits were truncated (Fig. 26.6) by a wide construction cut (16740) for the southern wall (F.4057) of an unexcavated building (Sp.82) to the north. Within Foundation Trench 19 the southwest corner of this building was removed as F.2847. None of rest of this building has been excavated but the layout of the building was hinted at by the 1993–1994 scrape plan, with Sp.82 forming the main space of the building. The animal bone from the fill was variable in terms of surface condition.

### Space 60 Phase 3b

#### *Space 60 Phase 3b(i)*

To the north of B.64 a series of retaining walls was construct-

ed to reinforce the building's northern wall (F.2011). The first of these was localised in the western part of the northern wall, perhaps to reinforce a limited area of erosion. A length of four bricks and three courses was set into a shallow 0.15m deep construction cut (16785). This formed the retaining wall F.4063 which abutted the eastern wall of the northern storage space in B.59. This retaining wall thus closed off a small wedge-shaped gap between B.64 and B.59.

#### ***Space 60 Phase 3b(ii)***

It was not long before it became necessary to reinforce the rest of the northern wall of B.64. A second construction cut (16780) truncating the eastern part of the first retaining wall was dug so that the retaining structure could be extended F.2221 to the east and could be continued around the north-east corner of B.64 abutting the external wall of B.55.

#### ***Space 60 Phase 3b(iii)***

The early phase of wall F.2221 was subsequently added to with a different type of brick (16749) and mortar (16750) to form three additional courses to the retaining wall. This now ran the length of B.64 and abutted B.59. This later phase of wall F.2221 was constructed with distinctive white marl plaster mortar.

#### ***Space 60 Phase 3b(iv)***

After F.2221 was finished, the double wall of B.55 was abutted by a repairing structure (16746) and (16747). This was built on the north side of the external wall F.1599 of B.55 indicating that B.55 was still in use. At a later date the western end of this repair was truncated by the large quarry pits dug through B.64 (Chapter 21) providing a link to the stratigraphic sequence in Sp.279.

#### ***Space 60 Phase 3b(v)***

Further repairs to the external double wall of B.55 recorded as ((16742) and (16743)) also suggested that B.55 was in use for a long time. This fits with the evidence from inside B.55 where there was a thick build-up of plaster on the walls and other features.

#### ***Space 90: Construction***

At roughly the same time as the other modifications in Phase 3 there was the addition of a large space (Sp.90) to the west of B.52. At about the same moment Sp.146 and Sp.147 were modified into one large building B.52. On the southern side (wall F.2139) the Sp.90 walls were set in a deep construction cut (16755) truncating earlier external deposits and also cutting an earlier wall F.4059 and oven. The construction cut was also visible along the eastern north-south aligned wall but was not found along the western north-south aligned wall where the western limiting wall of Sp.90 was laid directly on the sloped underlying deposits. Numerous types of brick were used in the

construction of the walls; the reuse of old bricks was evident from the presence of plaster adhering to some of the bricks within the construction cut as well as elsewhere. Minimal effort had gone into ensuring the corners were well built and overhanging bricks protruded into the external space. The area enclosed by the walls (Sp.90) would have been an open (unroofed) space and no effort had been expended on removing upstanding bits of architecture from earlier buildings. One possibility is that the area was used to grow plants or it may simply have functioned as an enclosed outdoor space that could be used by the occupants of B.52 for multiple purposes. There was no evidence for any penning of sheep or goats.

#### ***Space 291: Construction***

An additional space (Sp.290) was built onto the southern side of B.52 with a crawl-hole providing access. This brought the southern limits of the building into line and during the construction part of the western wall of Pre-B.52 East (Sp.147) was slightly cut by these added-on walls (F.1486 and F.2010). Another narrow, slightly trapezoidal space (Sp.291) was also added to the southern part of B.52, resulting in an enclosed area measuring 4.60m in length by 0.46m at the narrow western end to 1.1m at the wider eastern end. The limited size of this area would have restricted its use and there was no evident access into the space from B.52. The walls may have formed a retaining structure built to enclose and protect the southern limit of the building. But a patchy floor found in the lowest part of the infill (17715) of Sp.291 suggested that it may have had a limited function at times, perhaps as an additional open storage area. The most important function of the construction, however, appears to have been the protection of the southern walls of the house and possibly the reclamation of some of the communal space to the south of the building. The construction of the walls of Sp.291 appears to have been more haphazard than well planned. The bricks (16705)/(16707)/(16710) used varied in composition as if reused and the corners of the structure were not well finished. The bricks overhung one another as if any available bricks were used and no effort was made to cut them to size. The walls were set into a shallow construction cut (17717) that had been dug through the underlying deposits of Sp.60.

### Space 60 Phase 3c

#### ***Space 60 Phase 3c(i)***

In the eastern part of the external space, surrounding walls needed to be reinforced. The initial attempt at this was a short section of narrow bricks of four courses (F.4064) along the eastern end of the south face of wall F.2011 and set within a construction cut (17713). This was just the initial stage of reinforcement of the southern side of Sp.291.

### **Space 60 Phase 3c(ii) and Space 240**

The effort to add strength to the wall bounding the southern side of B.52 in Phase 3ci was insufficient and had to be strengthened. Three courses of narrow bricks were added along the whole length of the southern face of wall F.2011. This new wall F.4050 was the same phase as F.1752 excavated in 2004 to the east where it doglegged around the south of Sp.241. The construction of the wall created a new enclosed area Sp.240 but the dogleg in the southwest corner of the space meant that the access route around the northeast corner of B.55 was not constricted. A late pit truncated the middle of the central wall of the space, but the continuation of the wall, on the east side of the pit, was built into walls F.1755 and F.1754. The internal area of Sp.240 measured just 5.98m by 0.85m at the widest east end. Part of the wall F.1752 was recorded as having traces of possible plaster, but this was only present on the part of the wall excavated in 2004; the ‘plaster’ may have just been salt deposits on the face of the wall. Inside the space, redeposited (17702/11020) midden may have been used as a make-up layer and traces of a possible trampled surface (11015) were recorded indicating that some activity may have been conducted within the space. But in general, the space seems to have been backfilled and may have been constructed as a retaining structure. This fits with the fact that no access was provided into the space.

### **Space 60 Phase 4**

Sp.60 Phase 4 deposits represented a change in use of the northwest corner of the external space. There were no corresponding deposits in the eastern part of the area where they may have been lost to erosion or extensive truncation by late features. The deposition sequence was a series of midden dumps interspersed with construction material dumps. A midden deposit (16728) accumulated in a central depression within the area. At this time the wall of Sp.90 was reinforced with a single course of narrow mudbricks F.4055 overlying the midden and sealing the construction cut for wall F.4057 (Phase 3a). This suggested that Sp.90 was still in use during Phase 4 of Sp.60. Also above the construction cut for wall F.4057 was another east-west aligned wall (F.4056) that was very eroded. This wall (F.2833) was also excavated in Foundation Trench 19 and may have formed the northern side of an eroded building that was constructed over part of the large external space to the west of B.52.

The midden deposit (16728) was notably different from most of the Sp.60 deposits. It did not consist of brick-rich dump layers but rather it was the ashier type of midden containing more discarded materials. The animal bone showed a high amount of burning with about 40 per cent of the sample carbonized. The burning was found on all elements, species

and sizes and seemed to have resulted from *in situ* burning within the shallow depression that the midden accumulated in. The material was mixed, and not from a single event, and had a much stronger post-consumption signature than the larger middens. A single piece of worked bone was a bone point 16728.x1, which had also been burnt to a dark brown color.

The deposits in Foundation Trench 14 that fit into the Phase 4 sequence of Sp.60 are described below but the small size of the trench made it difficult to see the structures that they related to. Deposited against the external face of wall F.2847 (the southwest corner of a building assigned to Sp.60 Phase 3a) was a 0.16m thick deposit of laminated ashy layers (15637) representing repeated dumps of ash and midden material. The compact nature of some of these laminations, and the presence of at least one large circular heavily burnt area, strongly suggested specific activities were taking place in this area. The burning was sealed by a similar highly laminated ashy layer (15627), which contained occasional plaster fragments, animal bone, obsidian and a single bead. Constructed on this layer was an enigmatic external rectangular feature F.2842 which measured 0.95m by 0.9m. This feature abutted wall F.2847 to the east and extended beyond the limits of the trench to the north. A level base for construction was created by cutting into the underlying layer slightly and dumping a layer of firm sandy clay (15626) which contained occasional fragments of mudbrick. On top of this a mudbrick (15619) and mortar (15623) wall defined the extent of the feature. The interior of the feature was filled by orange brown clay silt (15615). This fill contained mudbrick and plaster destruction debris as well as clay ball fragments and animal bone. The fill showed no sign of lamination and appeared to have been produced by a homogenous construction event intended to create a solid platform. The exterior of the feature was covered in white plaster (15620) which lipped over wall F.2847 to the east. Against the exterior of F.2842 compact ashy layer (15614) consisted of a mid brown layer containing mudbrick, sealed by mid gray charcoal-rich laminations. This accumulation may have been associated with activities on or around F.2842. To the east deposit (15614) was truncated by a construction cut for wall F.2833 which was the same wall as F.4056 to the east. F.2842 was sealed by a dump of orange brown silty clay material (15600) which contained charcoal, and evidence of burning. This latter layer had no clear structure to it and may have been dumped over F.2842 after it fell out of use. The deposits were subsequently truncated by a series of pits under the topsoil.

Within the main excavation area the deposits that post-dated wall F.2833/F.4056 seemed to have been affected by mixing and erosion as a result of their proximity to the present day surface of the mound.

## Discussion

The sequence in the external area between two clusters of buildings witnessed an overall change in the depositional sequence from midden to external dumps with activity horizons. Over the course of the stratigraphic sequence the size of the external space was reduced as a number of the buildings surrounding the space built small additional external spaces onto the sides of the buildings, thus claiming part of the area that had previously been an open communal space. Additional retaining walls further reduced the width of the external space and these may have functioned to help protect the walls, stop damp from the middens getting into the buildings or offer additional structural support. The construction of the retaining walls was an ongoing process and many phases of repair were evidently needed. Numerous fire spots as well as dumps of various types represented activities in the external space itself.

## Acknowledgements

This sequence was excavated piecemeal from 2004 to 2008 (and continuing until 2010). In 2004 the Berkeley University Field School, supervised by Ruth Tringham, excavated small upper structures at the east end of the space with students Elizabeth Tien Ha and Shanti Morell-Hart. Other areas were excavated by students Pia Andersson and Rahmat Seresty under the supervision of Emma Twigger. In 2005 Lisa Yeomans supervised a sequence at the western end of the area with the help of Stanford Field Team students Amelia Strom Hardin and Bradley Heinz. Lisa Yeomans and Richard Turnbull conducted some excavations in 2006, whilst in 2007 only a small area was excavated by Lisa Yeomans in the foundation trenches for the shelter construction. In 2008, excavations continued under the supervision of Lisa Yeomans with help from David Mackie and students Louise Richter, Madeleine Douglas, Tiffany Cain, Sophie Vitae and Yasemin Özarlan.