

# 2. The Western City Wall

---

A fortification wall along the north side of the Bronze Age city at Qala'at al-Bahrain was discovered by G. Bibby in 1957 (Bibby 1958. *Qala'at 1* p. 9-12, 32-44). Subsequently, the presence of a city wall along the west side of the tell was confirmed by several additional excavations, numbered 420, 422, 423, and 424, as well as by four soundings (figs. 1-2). The wall was

traced over a length of about a hundred metres from the north-west corner towards the south. The excavations along the west wall took place during the 1960 and 1961/62 campaigns and were directed by G. Bibby (Glob 1960 p. 212. Bibby 1965 p. 103. 1969 p. 192-195).

## Excavation 420

---

The largest excavation along the western wall was Excavation 420 (fig. 2), and it was carried out in two campaigns. In 1960 Svend Bue Madsen oversaw the daily operations. A trench measuring c. 10 x 18 m was opened in which the city wall was uncovered, and its façade was exposed (fig. 4). The area in front of the wall could not be investigated as it was occupied by a private garden. Behind the wall, near the surface of the tell a row of small houses were uncovered. In 1961/62 Aino Kann Rasmussen and Elsebeth Sander Jørgensen oversaw the work. They enlarged the trench to c. 11.5 x 18 m, made two deep soundings, and investigated the structure of the city wall.

The following description is based on a selection of the extant documentation: plan 1, sections 1-3, and elevation 1 of the city wall façade as well as a number of excavation photos. The pottery and other finds from the excavated layers were examined and their datings have been added in red to the section drawings.

With respect to horizontal measurements, the excavation forms the south-west quadrant of a north-oriented coordinate system. Levels are above sea level (cf. *Qala'at 1* p. 12).

**Periods I-IIa occupation.** Above bedrock in level c. 1.60-2.00 m, section 2:71, sterile sand layers 70 and

72 appeared. The original surface, 69, lay on top of these. The layers, 70-72, are the natural deposits in the area, only removed in antiquity in the west end to make room for the foundation of the city wall.

Hereafter follows a sequence of culture layers from a continuous occupation which in section 2 terminates at about level 4.50-4.70 m. The pottery contents date this sequence to period IIa.

Many of the period IIa layers in section 2, consist of multiple thin layers of ash, clay, shells, sherds, etc., and they undoubtedly represent refuse from a nearby occupation. Small heaps of stones that may derive from collapsed house walls were observed in several places (cf. section 2:39, and 67 and section 3:8, figs. 5, 7-8).

In the middle of section 2 were the disturbed remains of a substantial building with a compact heap of large, up to 50 cm, stones and a few large plaster fragments (35a), apparently delimited by two parallel, north-south running walls (35b-c). Some of the stones were described as roughly shaped, but no real ashlar were present.

Below the building, the shape of layer 48 in section 2 is rather like the sand-filled foundation trenches encountered below the walls of monumental buildings in Excavation 519 (*Qala'at 2* p. 13, section 18:33,



Fig. 4. The Early Dilmun western city wall façade, looking N (1960).



Fig. 6. Section 2, 14-12 m EW, looking N (1961/62).



Fig. 5. East-west running trench, looking E. To the left section 2. In the foreground left and right the disturbed city wall I (1961/62).



Fig. 7. Section 2, 12-10 m EW, looking N (1961/62).

section 4:20, p. 18, section 12:10-11) and below “private houses” in Excavation 520 (*Qala’at 1* p. 59, plan 3:9).

The sequence of layers west and east of the building, section 2:33, 62, 64-65, and 38-39 (fig. 8), have clearly accumulated against these walls (35b-c) and thereby date the building to period IIa. A continua-

tion of the two walls was observed at several places up to 7 m south of section 2 (plan 1:12). At c. 6 m EW x 5.6 m NS the east wall was penetrated by a runnel cut in a plaster slab at level 4.91-5.06 m. The use of roughly shaped stones and the lack of dressed ash-lars correspond with the already known architecture



Fig. 8. Section 2, 11.5-8 m EW, looking NE (1961/62).

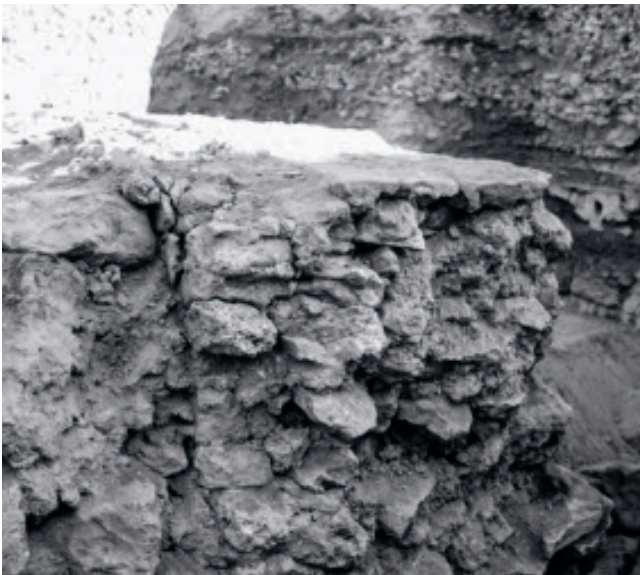


Fig. 9. Inner city wall in front of section 3. Vertical joint between wall I (right) and wall II (left), looking N (1961/62).

from period IIa, such as the northern city wall and the 'private houses' within the city wall in Excavation 520 (*Qala'at 1* p. 35, 59) and phases Ia, Ib, and IIa of the Barbar temple (Andersen & Højlund 2003).

The stratigraphic connection between the period IIa sequence of layers and the city wall is disrupted by a disturbance of the rear side of the city wall, which must be due to stone plundering. However, it seems likely that the occupation layers described above originally continued right up to the rear side of the city wall. They must have accumulated inside the city wall and thereby date the construction of the



Fig. 10. Early stage of excavation through the city wall at section 3, looking E. In foreground, ashlar façade of wall II. In centre, plastered façade of wall I. In background, above, heavy wall of large stones (1961/62).

wall to the beginning of period IIa as has also been established for the first city wall on the north side of the city in Excavation 520 (*Qala'at 1* p. 32-40).

The same block of occupation layers datable to period IIa can be seen in section 3:7-8, 10-11 and 13 and section 1:17-20 and 22. In section 1:23-24 there was a scatter of sherds datable to period I (figs. 34-37) below the period IIa sequence (figs. 38-58).

No pottery assemblage from Excavation 420 can be dated to period IIb.

**Early Dilmun city wall.** The city wall appears on plan 1 with two main phases, walls I and II, with wall I being the older and wall II being constructed in front of wall I. Large parts of wall I were only present as a disorderly heap of stones, especially towards the north. The wall was cut through by the excavators in two places, in the north (section 2) and in the south (section 3).

In section 3 the partition of the wall corpus in walls I and II was evident in a vertical furrow (fig. 9) that could be followed all the way down to bedrock. Both walls have their bases sunk into bedrock, 18, and are built on an artificial clayey foundation layer, 17.

The façade of *wall I* consisted of flat, up to 40 x 15 cm stones. The stones in the interior of the wall were up to head-size. It was demolished on the rear

Fig. 11. Façade of Early Dilmun city wall II, looking N (1960).



side, where layers 9 and 12 fill a plunderer's hole. The original width of the wall can be estimated as at least 1.8 m. An up to 6 cm thick plaster layer, 21, covered the preserved part of the wall top, plan 1:3 (fig. 9), as well as the façade from the preserved top and down to the level of c. 2.65 m (fig. 10). The plaster used for this cover as well as for the mortar in the mass of the upper part of the wall was slightly reddish. The mortar in the lower part of the wall, that is, below level c. 2.65 m, for both the stones in the façade as well as those in the interior of the wall, was green clay.

These features perhaps suggest two phases for wall I: 1) a primary phase constructed of stones in green clay. The original appearance of the upper part of this phase is unknown. 2) a secondary reconstruction using slightly reddish plaster both as mortar and as a coating. With a height of c. 3 m it is possible that this was the original upper termination of an independent wall I in a hypothetical second phase.

The façade of *wall II* was constructed partly of regular ashlar, and wall I constituted its backside

(figs. 9-10). The width of wall II itself was 1.5 m. Its base was sunk deeper than that of wall I. The façade of wall II was entirely uncovered over a 16 m long stretch in Excavation 420 and continued, after a 1 m wide baulk, in a 4 m long sondage (figs. 2, 4, 11-12).

The lower and upper façades of city wall II differed along the whole stretch uncovered (elevation 1, figs. 11 and 13). In the lower parts, the stones were large, regular, and well-laid ashlar. In the upper parts, they were smaller, more irregular, more weathered, and in less accurate alignment. All the stones in the wall are set in greenish or dark yellow-brown clay. In section 2 the green clay was noted below level 2.60/2.90 m and the dark yellow-brown clay above. The two different stone sizes may well be part of contemporary building activity.

The lowermost course of ashlar was sunk in a foundation trench cut into the rock. The front of these large stones, 55-70 x 20-40 cm, was carefully dressed whereas the other sides were roughly shaped. Only between 9 and 11 m S the excavation was continued down to bedrock, elevation 1. Outside this stretch



Fig. 12. Façade of city wall II to the left, looking SW (1960).



Fig. 13. Ashlars in façade of city wall II, looking E, cf. elevation 1 (1960).



Fig. 14. City wall II façade, looking N. In centre, the wall has been breached at section 3 (1961/62).



Fig. 16. City wall II façade, excavation through wall at section 3, looking NE (1961/62).



Fig. 15. City wall II façade, excavation through wall at section 3, looking NE (1961/62).



Fig. 17. City wall II façade, excavation through wall at section 3, looking SE. To the right, ashlar with round cutting and rabbet (1961/62).

the first course is not visible either in the elevation or in the photos.

Where section 3 cut the wall, it could be observed that the foundation cutting in the bedrock was quite irregular, probably to accommodate the first course of ashlar (figs. 18-19).

Slightly reddish plaster rubble occurred in the stony fill of the wall, which may indicate the reuse of building material from wall I where reddish plaster

was used both as mortar and as cover for the front and upper side as described above. This material may have been procured through the plundering of the rear side of wall I. The upper part of wall II is missing.

Several of the stones in wall II were dressed and must have come from primary use in other constructions and thus clearly represent reuse. This was observed for the façade as well as for the interior of



Fig. 18. City wall, excavation through wall at section 3, down to exposed bedrock surface, looking E. To the right, ashlar with round cutting (1961/62).



Fig. 19. City wall, excavation through wall at section 3, down to exposed bedrock surface, looking W. To the left, ashlar with round cutting (1961/62).

the wall where it was broken through at section 3 (figs. 14-19). A number of these stones are described below. First from the façade:

The rear side of a 22 x 35 x 98 cm ashlar had a deep round cutting in the side, 14 cm wide and 11 cm deep, probably a threshold from a building that may have held a doorpost (figs. 17-19) (cf. Laursen 2017 fig. 215).

Two courses above, another ashlar (fig. 17) may have been a door jamb with a vertical rabbet to receive a wooden door (cf. Laursen 2017 fig. 202).

Another probable jamb stone, 29 x 34 x 56 cm, had a rabbet cut along the long side (fig. 20).

Seven wedge-shaped limestone ashlars were found set into the façade (fig. 21).

A wedge-shaped ashlar with a quadrangular, 0.5-2 cm deep, cutting on its front (fig. 22).

The fragment of a quadrangular trough (fig. 23).

From inside the wall:

A limestone ashlar, roughly cubic, 24.5 x 27 cm.

A fragmented ashlar (fig. 24).

An oolitic limestone ashlar (420.MO) had a dressed front, 44 x 44 cm, with a flat-bottomed, 1.7 cm deep, quadrangular cutting and a 3 cm deep channel with a round bottom leading to the edge of the stone (fig. 25). The ashlar is c. 21 cm thick and the rear side has a higher, less well-dressed portion in the middle with two deep parallel cuttings at each side, shaped to receive neighbouring stones. One corner and one side are somewhat damaged. Possibly an altar (cf. *Qala'at 1* fig. 2039).

A 45.5 cm long cylindrical dressed oolitic stone with a 28 cm wide out-curving end, convex with a round depression in the centre (fig. 26) (420.LA). Similar stones have been found north of the Barbar temple, reused at the Northeast Temple at Barbar and at the village of Zallaq (Andersen 2003 p. 47-49. Højlund et al. 2005 figs. 32-33). They have been interpreted as phallic symbols.

A broken quern stone with a smooth depression (fig. 27).

Fragment of a stone tray (fig. 28).

Section 1 is a close parallel to section 3 but includes the area immediately in front of the wall with stony layers that may indicate phases of collapse in the history of the wall (figs. 11-12).

Section 2 shows wall II preserved to level 4.20 m, whereas wall I is a plundered heap of stones, 77a-b (figs. 5-6). Below the base of the wall was green clay, 78. Behind the up to 1 m long and ½ m wide façade stones was a filling of head-size stones in a clayey mortar (figs. 15-19).

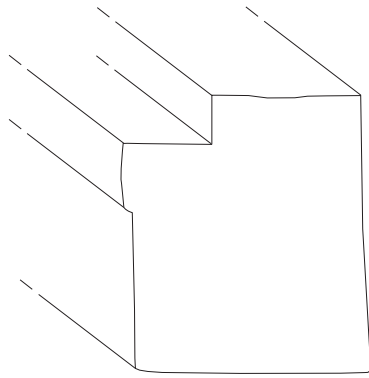


Fig. 20. Sketch of the end of a probable jamb stone, reused in the façade of city wall II, 1:10.

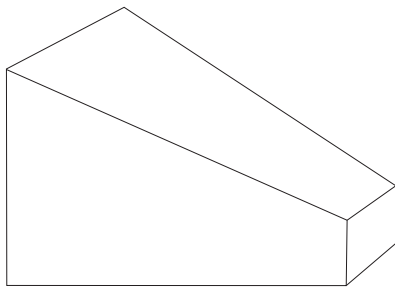


Fig. 21. Sketch of wedge-shaped ashlar, reused in the façade of city wall II, 1:10.

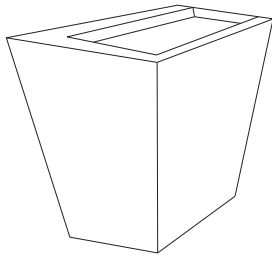


Fig. 22. Sketch of ashlar, reused in the façade of city wall II, 1:10.

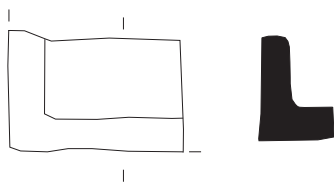


Fig. 23. Sketch of fragment of trough, reused in the façade of city wall II, 1:10.

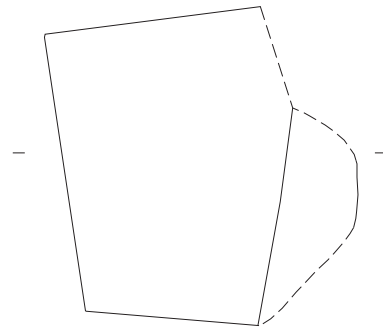


Fig. 24. Sketch of ashlar, reused inside city wall II, 1:10.

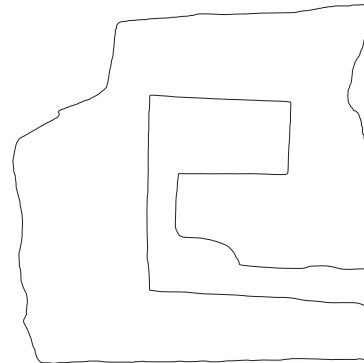


Fig. 25. Ashlar in oolitic limestone with runnel, reused inside city wall II, 1:10.

Above, a dating of the construction of city wall I to period IIa was proposed, due to the accumulation of occupation layers from this period inside the wall and in accordance with the dating of the first city wall in Excavation 520 to period IIa. Wall II was clearly built up against wall I and therefore later, though none of the potsherds found embedded in walls I-II

during their sectioning could improve the precision of the dates of their construction.

The use of limestone ashlar in the façade of wall II makes a dating to the late period II likely. There was a widespread use of well-dressed limestone ashlar in period IIb-c in large monumental buildings in the centre of Qala'at al-Bahrain (*Qala'at 2* p. 40-41)



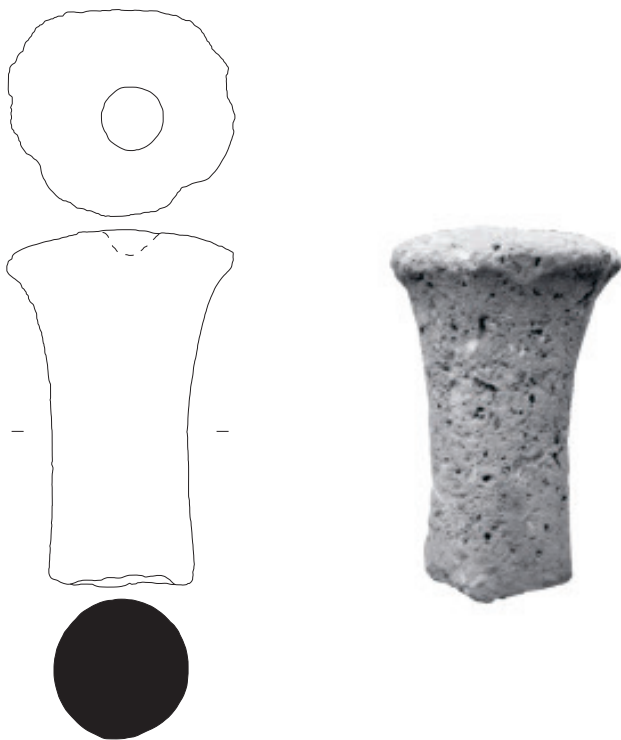


Fig. 26. Phallic cult figure in oolitic limestone, reused inside city wall II, 1:10.

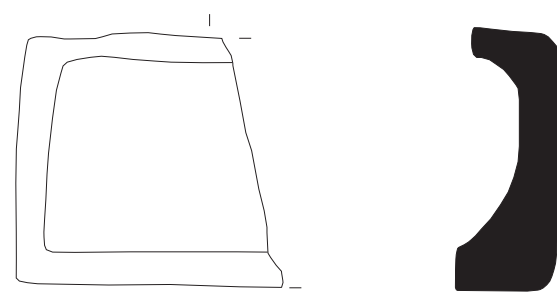


Fig. 27. Sketch of broken quern, reused inside city wall II, 1:10.

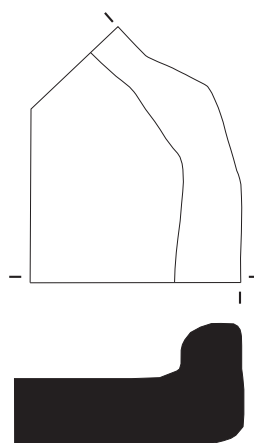


Fig. 28. Sketch of fragment of stone tray, reused inside city wall II, 1:10.

and in the contemporary phases IIb-III of the Barbar temple (Andersen & Højlund 2003 p. 323-330). Limestone ashlar were also used in gate 4 in the northern city wall dating to period IIc (*Qala'at 1* p. 39-40).

Some of the special cuttings observed in the secondarily used ashlar in wall II, such as the doorpost threshold and the two jambs with rabbets for receiving a wooden door, are elements found in the Palatial Style architecture that appears around 1800 BC in the Royal Mounds of A'ali and confirms the hypothesis that royal burial architecture imitates palace architecture (Laursen 2017 p. 350-353).

It should be noted that throughout period IIb-c, monumental buildings were constructed in the centre of Qala'at al-Bahrain and subsequently torn down and replaced with even larger buildings (*Qala'at 2* p. 40-41. Højlund 2007b), resulting in an abundance

of construction materials that could be reused in city wall renovation.

**Disturbance of city wall rear.** Section 1 clearly shows how stone material from the rear side of city wall I was removed in connection with the digging of a pit from around level 4.20 m through the period IIa occupation layers. Layers 15-16 and 21, filling the pit, and, with respect to layer 15, continuing east above layer 17, contained copious quantities of pottery datable to period IIc (figs. 61-222), as well as some period IIa pottery.

In the two other sections of the city wall, sections 2 and 3, and the section through the city wall in Excavation 424, the same impression of the removal of stones from the rear side of wall I appears in connection with the digging of a deep pit. Moreover, in Excavation 424 the pit contained period IIc pottery.



Fig. 29. Period IVb houses, looking SE (1960).

The pit must be interpreted as evidence of major stone plundering, an activity that has often been noted in relation to stone-built architecture on Bahrain and Failaka (*Qala'at 1* p. 23. Højlund & Abu Laban 2016 p. 59). Rather than the result of many separate stone plundering activities – organized by individual households in order to build private houses – the fact that this intrusion into wall I can be followed for about 40 m suggests that it was the result of a single, large scale, well-organized event. That the disturbance only interfered with the first phase of the city wall and never intruded into Phase II indicates that whoever was in control of this stone

plundering wanted to maintain the defensive function of the city wall.

The recovery in city wall II of reddish plaster rubble, a material used in the construction of wall I, indicates that the plundering of wall I took place during the construction of wall II. It seems to have been a way of procuring readily accessible building material without damaging wall I too much and leaving a portion of wall I that was of a size sufficient to support the backside of wall II.

In conclusion, wall II was constructed in period IIc and the stone plundering pit behind wall I was dug from a level around 4.20 m to procure building

material for wall II. Subsequently, refuse from period IIc accumulated on this level, as well as in the pit. Had the pit been dug a long time before period IIc it is unlikely to have contained period IIc pottery in its deepest parts and would instead have been filled with older material and windblown sand.

It may be added that the bottom layers in front of city wall II in sections 1 (11) and 2 (80) have some period IIc pottery, adding support to the theory that the wall was in use during this period.

**Period III.** The remains of two walls may testify to occupation in period IIIa. The base of a wall that may be dated to period IIIa is visible in section 2. Wall 20c, dating to period IVb, seems to be constructed on top of an older wall, 20d, which is stratigraphically dated to period IIIa by the following sequence of layers 76, 63, 32, 31, and 34. In the same section, a little to the west, a heap of stones sitting in layers 32 and 63 may be remains of another wall (figs. 5, 7-8).

Period IIIa pottery found at the foot of city wall II at sections 1 (11) and 2 (81) (and at the section in Excavation 424, cf. below p. 67) indicates that the wall was in use at least at some point during period IIIa, otherwise the space in front of the wall would, presumably, have been filled with drift sand and refuse from previous periods.

The period IIc layers behind the city wall were covered by thick layers, section 1:12-14, containing period IIIa pottery (figs. 232-305). These layers extended towards the west and also covered the upper surfaces of city walls I and II. This could mean

that the demolition of city wall II occurred sometime during period IIIa.

Pottery dating to period IIIb was scarce in Excavation 420 but was noted in section 1:8.

Layer 7 in section 1 contained period IIIc pottery and fragments of two incense burners of the cuboid type (figs. 318-319) which is elsewhere connected to this period (cf. p. 51). The layer seems to contain material that slid down from the upper part of the tell covering the period IIIa layers and the demolished top of the city wall.

**Period IVb settlement.** Behind the city wall, towards the east, a complex of small houses on both sides of an alley appeared around level 5.00 m, compare section 2: 20a-c (fig. 29). West of the alley, plan 1:9, the remains of four houses were found, 6-7, and to the east there was probably a fifth, 10.

Two of the houses were relatively intact. Each consisted of a larger room with access to the street, a staircase built up against a wall (figs. 30-31) and a small back room. The doors were fitted with plastered thresholds. The staircases must have led to an upper floor, or perhaps to a flat roof. Similar stairways are known from Excavation 520 (*Qala'at 1* plan 4A:59).

The walls and staircases were built of rough, undressed stones and covered with a white-grey plaster. Between 6 and 9 m EW, the period IIa ruin, section 2:35a-c, with the superimposed wall 20d dating to period IIIa, was used as a foundation. In most rooms, several plastered floors were encountered, separated by thin layers of ash, shells, bones, and



Fig. 30. Staircase in period IVb house, looking NE (1960).



Fig. 31. Staircase in period IVb house, looking E (1960).

Fig. 32. In foreground, deep excavation behind city wall. In centre, heavy wall built of large ashlars. In background, period IVb houses, looking SE (1960).



pottery sherds. The levels of the different floors went from 4.85 to 5.41 m.

Below the north-westernmost room in this quarter an undulating floor made of yellow clay with plaster inclusions was exposed, most likely the floor of a date juice installation, a *madbasa*. No finds are related to this floor. Its levels went from 4.50 to 4.65 m, so it was probably earlier than the architecture dated to period IVb which has a floor in 4.85 in this room, and later than the preceding period IIa occupation. A *madbasa* dated to period IIIb1 was previously encountered in Excavation 519 (*Qala'at* 2 p. 46-48. Højlund 1990).

**Later periods.** West of the period IVb houses ran the remains of a heavy wall, built of large squared stones, and oriented approximately north-south. The stones can be seen in figs. 10 and 32, in plan 1:4b as well as in section 1:25 and section 3:1a. The wall stratigraphically seals the period IIIa levels and lies slightly above the level of the period IVb houses and



Fig. 33. Well, built in stone, with finger smear marks in plaster cover (1960).

is therefore probably later than these, but an exact date cannot be given. Along the wall was a possible sidewalk, plan 1:4a and section 1:26, bordered by a baulk, plan 1:5 and section 1:27, consisting of stone and clay. Several post holes were noted along the passage (plan 1:4c), possibly from a lean-to roof.

From the upper levels, a scatter of pottery dating to the Tylos and Islamic periods was encountered, among them a few sherds that probably belong in the Sasanian period Ve (figs. 325-330).

South of the period IVb houses was a well, plan 1:11, built of stone set in plaster or clay and covered both on the internal and external faces with plaster

in which the finger smear marks could be seen (fig. 33). It contained glazed and unglazed pottery and glass dated to the Islamic period.

The upper part of the tell was disturbed by a series of massive plundering holes dating to the Islamic period (cf. section 2:2-10, 21).

In general, there has been no continuous occupation in the west part of the city of Qala'at al-Bahrain covered by Excavation 420. The remains of occupation are concentrated in periods IIa, IIc, IIIa, IIIc, and IVb, which all have thick deposits with copious finds and sometimes related architecture, interrupted by long intervening periods with sparse or no finds.

## Pottery and other finds

The pottery from the layers excavated in Excavation 420 was examined and classified typologically and chronologically, and its datings have been marked on sections 1, 2, and 3. In 1960 care was taken to excavate stratigraphically in relation to section 1. Two parallel east-west going trenches were laid out two metres apart. Both sides of the 2 m block were drawn in section – the north-facing side of the block corresponds to section 1 – and then the block was excavated level by level, with the section drawings as guides to ensure that each level was taken cleanly and accurately (Bibby 1969 p. 193).

### *Period I pottery*

#### **Level 23 in section 1 (420.CS)**

*Barbar tradition.* Two holemouth rims of types B13-15. One everted rim in sand-tempered ware (fig. 34)

has an identical parallel from a period Ia context in Excavation 520 (cf. *Qala'at 1* fig. 151). Another smaller, eroded rim has a somewhat similar shape and ware. One body sherd with chain-ridge decoration of the early type B55A (fig. 35), that is, where the impressions are more than 1 cm, a type that is common in period I.

*Eastern tradition.* A 1.5 cm thick body sherd (fig. 36) in fine, hard-fired red ware with mica spots and black internal slip, probably from the lower concave part of a large storage vessel of Indus type, found previously in period Ib contexts at Qala'at al-Bahrain (*Qala'at 1* type E1). Another fragment of the same ware with black external slip. Simple rounded, vertical rim on bowl with scraped lower part in hard-fired greenish ware (fig. 37).

The pottery from this level dates to Qala'at al-Bahrain period I (cf. *Qala'at 1* figs. 396-544).



Fig. 34. 2:5.



Fig. 36. 2:5.

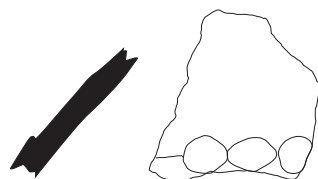


Fig. 35. 2:5.

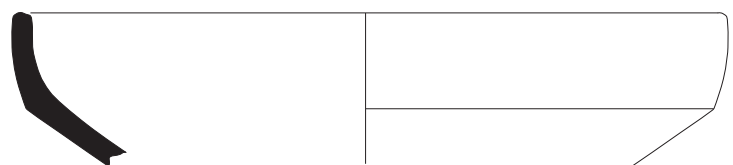


Fig. 37. 2:5.

Figs. 34-37. Pottery from period I.