

PRELIMINARY REPORT OF TWO SEASONS OF ARCHAEOLOGICAL INVESTIGATIONS AT THE BALA HISAR OF CHARSADDA, NWFP, PAKISTAN

DR. TAJ ALI*, DR. ROBIN CONINGHAM,
MR. MUKHTAR ALI DURRANI* & MR. GUL RAHIM KHAN***

1. Introduction

During South Asia's second, Iron Age, urbanisation, some of the earliest cities have been identified as emerging in the north-west region of Pakistan. Whilst some scholars interpret this as evidence of the colonisation of the region by the Achaemenids, others have suggested that they emerged as a result of internal dynamics prior to the incorporation of this area within the Achaemenid empire in the sixth century BC. The key to this debate must surely rest in the region's two urban centres which emerged during this period, Taxila and Charsadda. Whilst areas of early occupation at Taxila have been extensively examined (Marshall, 1951; Sharif, 1969; Allchin, 1982), in contrast the Bala Hisar of Charsadda has only been excavated for two seasons, one directed by Sir John Marshall in 1903 and another by Sir Mortimer Wheeler in 1958. However, as a result of Wheeler's fieldwork, one of the most comprehensive typological sequences of ceramics and other artefacts in the north-west of the subcontinent was published, a sequence which has been widely used in the dating of other sites (Dani, 1967, 1966; Callieri, 1995; Stacul, 1993, 1995; McNicoll & Ball, 1996). As Wheeler worked in Charsadda prior to the general use of radiocarbon dating, the dating of his sequence was restricted to the use of relative methods, which has led to a number of recent attempts to attribute new, older dates to the sequence through the use of ceramic cross-referencing (Dittmann, 1984; Vogelsang, 1988). As the Bala Hisar is so clearly a key site in our understanding of the regional chronology, renewed archaeological investigation were proposed by members of the Department of Archaeology, University of Peshawar and the Department of Archaeological Sciences, University of Bradford. Our proposal had four major aims. Firstly, to securely date Wheeler's structural sequence by re-excavating a number of old trenches and the excavation of new ones; secondly, to securely date Wheeler's artefactual sequence; thirdly, to test the effectiveness of archaeological geophysical survey at the site; and fourthly, to offer scientific archaeological training to students from the Department of Archaeology, University of Peshawar. This report presents the preliminary results of our first two seasons of fieldwork.

* Department of Archaeology, University of Peshawar, Pakistan.

** Department of Archaeological Sciences, University of Bradford, UK.

2. The importance of the site

Interest in the Bala Hisar of Charsadda as an archaeological site has been ongoing for over 165 years, beginning in the early 1830s, albeit with intermittent excavation in 1882, 1903 and 1958. The origins of this interest must lie in attempts to identify the historical topography of the region using classical descriptions of Alexander the Great's conquest. As this involved the matching up of archaeological sites with historically recorded cities, the Bala Hisar of Charsadda, standing some 20m above the flood-plain, was an obvious example to be identified (Figure 1). In the 1830s General Court argued that the mound of the Bala Hisar of Charsadda was the location of ancient Nysa whilst others agreed that it was ancient Massaga (Court, 1836,479). However General Sir Alexander Cunningham concluded in 1863 that it was the site of Pushkalavati or 'the lotus city', the ancient capital of Gandhara, also as known as Peukela or Peukelaotis to the Greeks (Cunningham, 1863,89). This identification was later corroborated by Marshall's find in 1903 of an inscription at Ghaz Dheri, a small monastic site some 1.6 kms from Charsadda. Part of the inscription reads "*Pukhala visae*" or 'in the district of Puskala' (Marshall, 1904,176). Further evidence has been taken from the abundant presence at the site of sherds impressed with lotus decoration, of which Wheeler stated "I...cannot help suspecting more than a coincidence in the association of the Lotus Bowls with the Lotus city - a Present from Pushkalavati" (Wheeler, 1962,35). There is, however, no further evidence for this identification. Wheeler categorically accepted this identification and furthermore believed that he had identified the very defences which had stood before Alexander and his troops. Alexander's presence at the site and subsequent installation of a Greek garrison offer an opportunity to study the dynamics which were associated with the appearance of the Greeks in the region as well as offering an absolute historical framework. Such an opportunity can be seen to mirror the so-called 'promise of Kandahar' (Helms, 1982,8), still largely unfulfilled, and the fulfilled promise of the clearly Hellenistic settlement of Ai Khanum (Bernard, 1968), both in Afghanistan.

The 'promise' of Charsadda, or rather the Bala Hisar of Charsadda, is not only concerned with the evidence of the Greeks, but also in the presence or absence of their imperial predecessors - the Achaemenids or Persians (Wheeler, 1962,3). Although there is no specific mention of Pushkalavati prior to the coming of the Greeks, Herodotus records that the region of Gandhara had been a province or satrapy of the Persian Empire (ibid.). It is also mentioned by name in the Behistun inscription of Darius (c.518 BC). Charsadda stands strategically at the confluence of the Swat and Kabul rivers, on routes from the west and Central Asia, within the fertile Vale of Peshawar. Wheeler assumed that it represented a Persian provincial capital (ibid., 4-5) on the road to the easternmost Achaemenid capital - Taxila. Arrian even records that the name of the ruler or governor of the city was Astes and

that he died in the attempt to defend the city (Wheeler, 1968,97). It is clear that the three probable eastern Persian capitals, Kandahar, Taxila and Charsadda, share a very similar feature - a largely artificial acropolis or citadel. Kandahar's citadel measures 200m by 200m and 30m high (Helms, 1982,11), Taxila's flat topped Hathial mound 240m by 160m and 30.5m high and Charsadda's Bala Hisar 320m by 274m and 22.25m high. Although the citadels may appear similar in form, other archaeological evidence for Achaemenid occupation is scarce. Kandahar yielded a bilingual Asokan inscription in Greek and Aramaic (suggesting a knowledge of Persian administration), an Achaemenid style casement fortification wall and a fragmentary Elamite tablet of the Achaemenid period (ibid.,13). Evidence from Taxila includes the Aramaic Asokan Piyadasi inscription (Marshall, 1951,15), silver bent bar coins (ibid.,14) and Persian-type stamp seals (ibid., 674). There is no comparable evidence from the Bala Hisar of Charsadda suggesting that if such material exists, its levels have not yet been successfully encountered.

Interest in the Bala Hisar of Charsadda is not merely restricted to the presence or absence of Greeks or Persians but also to the very emergence of cities in the region. It had been made quite clear by Wheeler that he assumed cities in South Asia's second urbanisation were a colonial implant, first by the Achaemenids and then by Greeks (Wheeler, 1963,172). Evidence supporting this theory appeared to come from the very absence of earlier urban settlements in the region between the collapse of the Harappan or Indus civilisation and the 6th century occupation of the region by the Persians. However such an assumption can be refuted by the presence of large incipient pre-Achaemenid settlements (Coningham, 1994,54-72). Some of these early urban settlements even have evidence of large scale defences, for example the settlement at Kandahar was fortified with a 14m wide clay rampart during the first half of the first millennium BC (ibid.). Some of the early centres were also sizeable settlements, Allchin has suggested, based upon the distribution of 'red burnished ware', that the pre-Achaemenid settlement at Taxila covered an area of at least 13 hectares (Allchin, 1993,78). Furthermore, it appears that this pottery type, 'Red burnished ware', closely links the two postulated Achaemenid provincial capitals, Taxila and Charsadda, to a incipient urban period preceding Achaemenid contact. Such evidence allows us to start questioning the emergence of urban forms in South Asia's Early Historic period. Are they Persian and Greek colonial implants or are they part of an internal rise to complex society? Only archaeological investigations at the Bala Hisar of Charsadda and Hathial mound at Taxila can answer such questions.

3. Previous investigations at the site

Although identified as the ancient city of Pushkalavati or Peukelaotis by Sir Alexander Cunningham in 1863 (Cunningham, 1864,89), the first archaeological investiga-

tions at the site did not commence until 1882 under his assistant H.W.B. Garrick. Garrick reached the site a few days after twelve days of excavations by members of the 4th Company of Bengal Sappers and Miners under secondment to the Government of the Punjab (Garrick, 1882,101). He did not excavate the site but described the mound as it survived and drew a plan of the substantial structures on its summit. Garrick's work presented a plan of the remains of a fort with three gates standing on the summit of the mound (ibid.,102). The fort covered an area of 26791 square metres and consisted of two portions, a northern one measuring 200m by 73m and a southern one measuring 167m by 73m. Although there were few visible structures in the southern area, Garrick identified a palace, harems, baths, barracks, wells, temples, treasury's and stables in the north (ibid., 103). He also noted that evidence of walling was preserved in part of the western face of the mound. Although the site consisted mainly of an earthen mound some 23m high, the top 14.6m of the western aspect were still faced with brick and stone (ibid., 105). Fragments of this wall were preserved well enough to identify the locations of 12 bastions or towers (ibid., 106). The structures on the summit were already in ruins when he visited the site, but local inhabitants reported that it was occupied until the beginning of the century (ibid., 99) and that it had been dismantled shortly before the British annexation of Peshawar in 1849 (ibid., 100). Garrick also conducted some investigations at the nearby site of Shahr-i-Napursan (ibid., 108), whilst the sappers investigated Mir Ziyarat. Gandharan sculptures were recovered from both of these sites suggesting that they mark the location of Buddhist monasteries.

The second phase of research was led by Sir John Marshall, Director-General of Archaeology, who excavated at the site for two months in 1903. It is evident from Marshall's plan (Marshall, 1904,fig. 4) that sizeable sections of the mound had disappeared in the intervening twenty years, leaving an area measuring 19m north - south and 16.7m east - west (ibid.,147). The reason for the disappearance of sizeable portions of the mound was that local farmers were removing soil from the mound in order to dress their fields (Wheeler, 1962,18). The majority of the standing ruins on the summit had also been quarried by local villagers reducing them to heaps of debris. Almost all the evidence for walling around the summit had been undermined, leaving a single turret foundation in the south-west corner (Marshall, 1904,148). Marshall, wishing to avoid the later building identified by Garrick, excavated a series of trial trenches on the north, east and western edges of the summit. In the western trench, at a depth of 1.5m, he found evidence of a 1.3m thick and 3.8m high wall running for some 18m long (ibid., 148). As this wall was constructed of regular diaper masonry, Marshall noted that it had close affinities with Buddhist monastic structures in the region (ibid.). Close to the centre of the summit he opened up a further trench and exposed a series of 'Muhammadan' remains, presumably the bathing houses of Garrick's plan. His trench revealed the interior of a large hall and chamber. The hall, apparently open-ended and

oriented north - south, was 12m and 5m wide and had a chamber 5m wide and 2m long with three niches at its southern end. The eastern wall, consisting of plaster coated brick, was pierced by at least three windows, and the entrance to the chamber had originally been arched (ibid., 151). Although the foundations of this structure were close to the surface of the summit, some 4.5m deep, the absence of finds of coins and characteristic ceramics prevented Marshall from accurately dating the structure. Marshall also investigated a number of other monuments in the immediate vicinity of the mound. Mir Zarat, situated 2.4km further up the Swat river, was one of the first sites tackled in an attempt to identify Buddhist monasteries in the Bala Hisar of Charsadda's immediate hinterland. The results of the excavation were inconclusive as the site had been badly disturbed but Marshall believed that it had probably been a monastic site (ibid., 160). He then investigated two small mounds 1.6km to the east of Mir Zarat, Palatu and Ghaz Dheri. The former mound yielded the plan of a badly robbed out monastic complex consisting of a stupa and residential area (ibid., 164). Marshall recovered the remains of over 80 fragments of stone Buddha and Bodhisattva statues and 17 stucco ones showing the relative importance and wealth of this site (ibid., 168-72). The latter mound, Ghaz Dheri, also yielded evidence of monastic occupation in the form of a 10m square stupa base and courtyard, and the remains of some 19 sculptures (ibid., 177).

After a gap of fifty-five years the third phase of work at the site was begun by Sir Mortimer Wheeler, one time Director-General of the Archaeological Survey of India. Wheeler's work at the Bala Hisar of Charsadda lasted only seven weeks but during this time he opened trenches in five areas (Figure 2). His first trench, Ch. I was a stepped section. 20m long and 9m wide it cut from the most recent occupation on the mound's summit to the natural some 20m below. Wheeler used this trench for the construction of the chronological sequence of the site. His section clearly shows the superimposition of floor after floor confirming that the mound is definitely a man-made structure rather than a natural outcrop. Wheeler believed that the sequence at Ch. I ran continuously from c.530 BC until c. 4th century AD. Ch. II was located half way between the Bala Hisar and the slightly lower mound 100m to its east. At this position a 6m square trench was excavated in order to investigate the relationship between the two mounds and to explain the obvious depression separating them. A grey alluvial sand was encountered at a depth of 4m and interpreted as representing the original course of the Sambor river, diverted in antiquity by the expanding settlement. Now knowing that the earliest settlement did not extend as far as Ch. II, Wheeler sought to locate the extent of the tell by cutting a huge trench towards Ch. II. Although this trench, Ch. III, was divided into a sequence of smaller 11 trenches (A to K), it was in effect 76m long and between 2.6m and 10.6m wide. Unfortunately the full section of Ch. III was never published, however in the final trenches, J and K, a defensive ditch was identified. Wheeler expanded J-K in order to expose more of the ditch until it covered an area 17m by 10.6m. The ditch was

4.5m wide and 2.7m deep and was backed by a shallow depression some 2.4m wide. Wheeler identified this latter feature as having contained a rampart made from the excavated spoil of the ditch, and dated it to the time of the Alexandrian conquest. Seven additional slot trenches were excavated along the eastern edge of the mound in order to confirm the course of the ditch. Wheeler also investigated the eastern mound with trenches Ch. IV and V. Ch. IV was 6m square and struck natural clay at a depth of 2.1m whilst Ch. V was about 21m east - west and a maximum of 21m north - south. A series of superimposed house structures with a least five phases were identified in the latter trench, providing a date of the third and second centuries BC for the beginning of occupation at this locality. Wheeler did not restrict himself to the Bala Hisar of Charsadda but was also responsible for the discovery of the site of Shaikhani Dheri as its successor site. He identified the robbed out remains of a large cardinally planned city site with division into sectors of 36.5m square and correctly likened it to the city of Sirkap at Taxila. This discovery led to the excavation of the site by Professor Dani in two seasons in 1963 and 1964 (Dani, 1966).

4. Preliminary results of two seasons of investigations 1994-5

At the start of our first two seasons at the Bala Hisar of Charsadda we identified specific problems associated with the chronology and stratigraphy of the archaeological mound and focused our field operations in order to solve them. These problems consisted of seven major themes arising from Wheeler's excavation at Ch. III. They were the course of the defensive ditch; the date of the defensive ditch; the relationship between the postern gate and defensive ditch; the nature of the ditch fill; the relation between the defensive ditch and the wall foundation trench; the nature of the ancient river channel flowing between the Bala Hisar and the eastern mound; and the search for evidence of later phases of walling or revetments around the site. Our methodology included the recutting of Wheeler's trench Ch. III, the cutting of a fresh trench (Ch. VI) over the course of the ditch, the cleaning of a section high in the tell's side (Ch. VII) and the construction of a macro-stratigraphic section for the tell using a hand core (Figure 3). In each case the focused nature of the research, the stratigraphic recording and the radiocarbon measurements have allowed us to solve these problems.

4.1 *The course of Wheeler's defensive ditch*

Wheeler identified a ditch and rampart feature in Ch. IIIJ and K, and also in seven other cuttings (Wheeler, 1962, 27). From the results of these excavations he postulated the ditch's course for a length of almost 305m along the eastern side of the settlement. It appeared to begin to turn at the north-eastern corner of the mound, presumably to run along the northern edge. Wheeler estimated that, if indeed, it followed a similar contour on the north, south and

west sides it would enclose a minimum of 15 hectares (ibid.). It is interesting to note that the disturbed nature of the upper levels of the site have made it impossible to identify any part of its course on the air photographs taken by the Pakistani Air Force (ibid., plate IV). In order to further study the course of the ditch we reopened Wheeler's trench, Ch. III and, in addition, excavated a fresh trench (Ch. VI), some 10m south of Ch. III. Measuring 10m by 3m, Ch. VI was specifically sited in order to cut across Wheeler's postulated course of the ditch. We were surprised, therefore, when it became clear that we had to extend the trench westwards by a further 5m in order to expose the ditch (Figure 4). From the alignments in Ch. III and Ch. VI it appears that the ditch curves significantly to the west and in so doing narrows. This result is in contrast to the published alignments in Wheeler's report (Wheeler, 1958, 11). We believe that this contrast is due to the presence of a number of cut features on the peripheries of the natural clay mound which forms the core of the Bala Hisar. For example, we identified part of what appears to have been the badly disturbed remains of a substantial cut feature, 61, at the eastern end of Ch. VI (Figure 5). Measuring over 3m in width and some 2m below the top of the natural clay, it could quite possibly be the remains of another phase of defences. Indeed, the measurement of a fragment of bone from its fill at 2900 ± 50 BP giving a calibrated date of 1270 - 930 BC at 95.4% confidence (GRA-5246) suggests that it may represent a far earlier phase than Wheeler's ditch. Indeed such a suggestion is further supported by the younger measurement of a fragment of bone from the fill of Wheeler's ditch, 55, at 2460 ± 50 BP giving a calibrated date of 770 - 410 BC at 95.4% confidence (GRA-5247). It may be possible therefore to suggest that some of Wheeler's sondages, hastily dug in bad conditions (ibid., 27) revealed the sections of earlier cut features rather than the defensive ditch itself. We have proposed to further investigate the course of the ditch with a geophysical survey during our next field season.

4.2 *The date of the Wheeler's defensive ditch*

Wheeler was clear as to the dating of the defensive ditch and stated that "a line of rampart and ditch was unearthed and ascribed to the recorded siege of the town by the troops of Alexander the Great in 327 BC" (Wheeler, 1962, Summary). This dating scheme has found itself widely accepted, most recently by Callieri who states that "the expedition of Alexander the Great in 327-326 BC, is known only from the Greek and Latin writers and has left almost no archaeological evidence, apart from the ditch excavated at Charsada (sic)" (Callieri, 1995, 293). However, this hypothesis presents a series of problems. Wheeler himself mentions that there was very little pottery from the fills (ibid., 27), suggesting that there was limited dateable evidence for the ditch's abandonment and filling. Only one sherd from Ch. IIIJ & K was published in his report, a single sherd of 'rippled rim' type which had been found lying on the natural below the brow of the ditch (ibid., 28; 89). Whilst Wheeler had allocated

a date of between c.550 and 325 BC to such wares (ibid., 39), it is quite possible that the sherd in question may not have been 'in situ'. The second point is that Wheeler noted that the upper levels of the ditch had been badly mixed by later disturbances (ibid.) preventing the creation of a stratigraphic relationship. Indeed according to his published section (ibid., Fig. 6) any possibility of identifying from which level the ditch was cut appears to be remote. In spite of these two problems, Wheeler fully utilised the available descriptions of the classical writers. He argued that as it had taken three brigades of infantry, half of the companion cavalry and the whole of the mercenary cavalry thirty days to take the city it must have been well defended (ibid., 34). Furthermore he found a correlation between the classical descriptions of the slighting of the defences and the archaeological evidence that the ditch had been refilled after a very short exposure (ibid.). It was our belief, however, that such postulates could not be proved or disproved until the result of a series of carbon dates from bone and charcoal within the ditch fills was forthcoming. Certainly the precarious stratigraphic position of the ditch in relationship to the rest of the mound must support such an approach.

In order to more fully understand the ditch's chronology we opened a new trench, Ch. VI, some 10m to the south of Ch. III. When we excavated Ch. VI we identified the continuation of the defensive ditch in the western half of our trench. Again, as in the case of Ch. III, the top layers were mainly modern washes (4, 5, 6 & 7) whilst there was a substantial depth of disturbed levels (68, 53, 49, 65, 59 & 70), presumably resulting from earth robbing prior to the site's protection. Below these disturbed layers we excavated seven layers which represent 'in situ' deposits (66, 67, 72, 73, 78, 79 & 80). The matrix of Ch. VI is illustrated in Figure 6. It is useful to analyse elements of the diagnostic ceramics from ditch cut 55 as they may further help our dating of the feature. Wheeler identified eight key types of ceramics, 'Rippled rim' ware dating to c.550-325 BC; 'Soapy red' ware dating to c.550-300 BC; Wavy-line bowls dating to 550-250 BC; Carinated bowls dating to 550-200 BC; Tulip bowls or cups dating to the third and second centuries BC; Lotus bowls dating to the second century BC; and Northern Black Polished ware dating to c.300-150 BC (ibid., 37-44) (figure 7). As mentioned above, only one sherd from Ch. IIIJ & K was published, a sherd of 'rippled rim' which was found on the inner edge of the defensive ditch (ibid., 89). This ceramic type was generally dated by Wheeler to between c. 550 - 325 BC (ibid., 39). Two sherds of this same type, weighing 70gms, were recovered from the fills of the ditch cut 55 in our new trench Ch. VI. In addition, four sherds weighing 125gms of another of Wheeler's major ceramic types, 'soapy red' ware, dated by Wheeler to between 550 - 300 BC were also recovered from the ditch fills (Wheeler, 1958,39). In contrast none of Wheeler's later ceramic types, 'tulip bowls', 'lotus bowls' and Northern Black Polished ware, dating to the third and second centuries BC (Wheeler, 1958,40-1), were recovered from the ditch's fills.

Whilst finds of 'soapy red' ware and 'rippled rim' ceramic types could suggest a date as late as the fourth century BC for the filling of Wheeler's defensive ditch, it is also quite possible that this may have occurred a number of centuries earlier. A number of scholars, for example, have argued that these two types can be linked with similar ceramics belonging to earliest phase of the Gandhara Grave Culture, which is also termed Swat Period V (Stacul, 1979,90; Dittmann, 1984,159; Vogelsang, 1988,110). Such assertions are quite clear when one compares 'soapy red' ware vessels from Charsadda with vessels 7, 8, 11, 14 and 13 or 'rippled rim' vessels from Charsadda with vessels 36 and 40 from Timargarha 1 (Dani, 1967,124-5). Indeed, Vogelsang states that these two ceramic types represented a "local ceramic assemblage which had a long history in the region and which was found in particular in the cemeteries of the so-called Gandhara Grave Culture" (Vogelsang, 1992,246). Offering dates of between the second half of the second millenium BC and 800 BC, he suggests that this ceramic group was replaced by ceramics with an 'Indic' flavour, which first appeared in the mid-first millenium BC (ibid., 248-9). Other finds from the ditch fill included a ceramic female figurine (sf. 344) and a broken schist object (sf. 495). The latter weighed 30gms and was 7.7cm long, 2.4cm wide and a blade-like tapering thickness of 1.2cm with a pierced hole at one end (Figure 8). We first identified it as an elongated welt stone, but it could equally be part of a ground stone sickle as excavated at Kalako-deray (Stacul, 1993,78), we are hoping to study the edge wear pattern in detail to further understand its function. The former, sf. 344, provides an almost perfect example of a human figurine (Figure 9). Weighing 47.8gms and measuring 8.3cm by 2.5cm by 3.7cm its closest parallels from the Bala Hisar of Charsadda would be figurine 13 in Plate XXIII and figurine 3 in Plate XXVIA. The figurine is fiddle-shaped with incised eyes, a pinched nose, pointed arms and no legs or visible genitalia. It is provided with a necklace and its cloak or garment is covered in a pattern consisting of three repeated incisions. Wheeler notes that such figures are occasionally associated with 'ritual tanks' and have been found at the Bhir Mound, Sirkap and Charsadda (Wheeler, 1962,109-110). Further correlations may also be drawn with similar examples from Kalako-deray and Loebanr I (Stacul, 1995,123). These latter examples have been dated to Swat Period VII, between the fifth and fourth centuries BC (ibid., 109). A radiocarbon measurement from a bone within context 73, the middle of the fill of ditch cut 55, of 2460 ± 50 BP calibrates between 770 - 410 BC at 95.4% confidence (GrA-5247), suggesting that whilst it is impossible to comment on Wheeler's identification of the Alexandrian date of the ditch, the defences certainly date to the middle of the first millenium BC, as supported by the presence of specific ceramic types and the ceramic figurine.

4.3 The relation of the postern gate and Wheeler's ditch

Wheeler identified the presence of a postern and bridge across the V - shaped ditch in Ch. III. His evidence for this structure was in the form of two parallel lines of postholes,

1.8m apart, running at a right angle to and across the ditch (Figure 10). It was also noted that the postholes were 0.30m in diameter and between 0.30m and 0.45m deep (ibid.,27). Although Wheeler's publication does not record the total number of postholes found it is clear from his plan that there were 35 in total (ibid., Fig. 6). In 1995 we reopened Ch. III in order to retrieve material for chronometric dating and took the opportunity to re-excavate the postern and bridge (Figure 11). We successfully located the majority of the postholes even though there had been some erosion on the western side of the ditch, undoubtedly caused because the trench had not been backfilled. Furthermore it became evident that even though some of the original postholes had been destroyed by erosion there were many more postholes than the 35 indicated on Wheeler's plan - 55 in total (Figure 4). The new postholes, in combination with the old ones, form a rather different orientation to that recorded on Wheeler's plan. They appear to cross the ditch and apparently turn a right angle along the eastern edge of the ditch. It is clear that this orientation could equally be interpreted as part of a right angle corner of a rectangular structure. Certainly the presence of a line of postholes along the eastern, and presumably outside, edge of the ditch cannot be explained in terms of military architecture. There is also, unfortunately, no obvious stratigraphic relationship between the postholes and the ditch, leading to a choice of one of three possible interpretations. Firstly, that the ditch and posthole structure are of a contemporary nature, secondly, that the ditch was cut across an earlier posthole structure, or thirdly, that the ditch was filled and that fill was later cut by an alignment of postholes. We attempted to solve this stratigraphic problem by comparing the carbon dates from samples recovered from both the basal ditch fill and one of the postholes, although evidently one not excavated by Wheeler. The resultant radiocarbon measurement of 2370 ± 60 BP from one of the postern's new postholes (139) calibrated to 770 - 370 BC at 95.4% confidence (GRA-4219). This result appears to be quite similar to the measurement of 2460 ± 50 BP from the ditch fill which calibrated to 770 - 410 BC at 95.4% confidence (GRA-5247), suggesting that the two features may well be contemporaneous.

4.4 The nature of the Wheeler's ditch fill

As mentioned above Wheeler's ditch section in Ch. III, revealed a V - shaped ditch some 3.6m wide and 2.1m deep (ibid.,27). Its fill had been mixed near the surface by modern farmers cutting the mound away for fertiliser, but the lower fills were still 'in situ'. These lower fills consisted of a thin primary fill of grey alluvial sand covered with a thick deposit of clay which was devoid of pottery (ibid.) (Figure 12). These factors combined with the absence of the remains of an earthen rampart behind the ditch led Wheeler to hypothesise that the ditch had been deliberately filled with its own rampart almost immediately after its construction (ibid., 18). This hypothesis correlated perfectly with the classical descriptions of the slighting of the defences by the victorious Greeks after the siege (ibid., 34). In 1995

we reopened Ch. III and recut the section illustrated by Wheeler (ibid., Fig. 6). It soon became clear that our section was narrower than that illustrated by Wheeler, 3.75m as opposed to 4.87m wide. This inconsistency appears to have been due to the sighting of the original section at 15 degrees and not at 90 degrees to the line of the ditch. It is also clear from Wheeler's plan that the southern end of the ditch is curving steadily towards the west, further accentuating the section's width. Although our recut section appears to be similar in outline to the original 1958 one, there are two notable differences. Firstly, it is clear that the grey alluvial sand at the base of the ditch is not a basal fill but a natural layer which underlies the entire mound (see section 4.6). Secondly, it is clear that the clay fill of the ditch at this point was not the result of a single filling activity soon after the digging of the ditch. The undisturbed clay fills were separated into 20 individual lenses consisting of alternate bands of sandy and silty deposits. These lenses contained fragments of bone, charcoal, pottery and brick, suggesting a gradual silting up of the ditch aided by the disposal of domestic rubbish. A similar pattern was recovered from ditch cut 55 revealed by trench Ch. VI, which we assume to be the continuation of Wheeler's ditch. The 'in situ' stratigraphy consisted of a series of 7 distinct deposits of clay, silt or silty clay (Figure 13). These 'in situ' deposits contained a total of 1010 pottery sherds weighing 24.34kg, 69 fragments of brick weighing 12.94kg and 102 bone fragments weighing 217gms, further demonstrating the differences between the published section and its historical correlations. In conclusion the ditch feature appears to have been filled over a period of time with occupation debris and refuse rather than with its wall or rampart during a military slighting operation.

4.5 *The relation of Wheeler's ditch and the wall foundation trench*

Although, the contemporaneous nature of the ditch and rampart behind it was accepted in 1958 (ibid., 34), evidence for such a relationship is not obvious. There was no proven stratigraphic relationship between the two features in the Ch. III section (ibid., Fig. 6), in fact the section only details the ditch fills. Of course there is logical assumption that the soil from the ditch must have been either removed or used close by. This factor combined with the presence of a rampart behind the ditch suggests that it is probable that the excavated soil was utilised in this way to further strengthen the defences (ibid., 27). However, there appears to have been some confusion in Wheeler's own mind because in some parts of the monograph he refers to a rampart on the inner margin of the ditch (ibid., summary, 27 and 34) and in other parts to a wall in this location (ibid., 26 and 27). This problem is further compounded by the discovery of the stump of an unburned mudbrick wall behind the ditch in Ch. VI. Unfortunately the location of our own trench, Ch. VI, some 10m to the south of Ch. III has also been affected by later disturbance. This problem notwithstanding we successfully identified the eroded or levelled remains

of a unburned mudbrick wall to the west of the ditch (Figure 14). The wall survived to a height of two to three badly damaged courses. The eastern edge of this feature was clearly defined but the western edge was under the western section of trench Ch. VI, forcing us to postulate that the wall was at least some 2m thick. The eastern edge itself was eroded and damaged by later robber pits obliterating the key stratigraphic relationships between the wall and the ditch. Whilst it is clear that the two features, the ditch and the wall, follow very similar paths, even following the substantial change in angle that occurs between the two trenches, we are unable to conclude that they were constructed at the same time.

In order to further test this relationship we examined the artefactual contents of both features. As mentioned above in section 4.2, the dating of ditch feature 55 was reached through a combination of absolute and relative dating. The presence of two sherds of 'rippled rim', four sherds of 'soapy red' ware and the absence of later ceramic types such as 'tulip bowls', 'lotus bowls' and Northern Black Polished ware in combination with the pinched-nose, fiddle-shaped figurine (sf. 344) and a calibrated radiocarbon date of 770 - 410 BC at 95.4% confidence (GrA-5247) suggests that it is reasonable to suggest that the ditch was filled during the second half of the first millennium BC. Wall foundation cut 174 is filled with context 147, a stump of 'in situ' unbaked mudbrick fragments and sealed by contexts 71 and 63, which appear to represent the badly weathered, and robbed, remains of the upper parts of the wall. Whilst ditch cut 55 yielded only 70gms of 'rippled rim' and 125gms of 'soapy red' ware, the contexts 71 and 63 yielded 1.02kg of the former and a further 2.79kg of the latter. In addition to the high weights and counts of these two ceramic types, context 71 yielded five examples of stemmed vessels weighing a total of almost 1kg, such ceramic forms are well represented with the early phases of the Gandharan Grave Culture (Vogelsang, 1992,247). It is interesting to note that Wheeler reported no examples of this type from his excavations at the Bala Hisar. The presence of these three ceramic forms in such high quantities suggests that this structure may be somewhat different from the fills of ditch cut 55. This difference is further heightened by the results of a radiocarbon measurement of a sample of bone from the base of foundation cut 174; the resultant date of 2870 ± 60 BP calibrates to between 1260 - 900 BC at 95.4% confidence. This difference may also account for the apparent cutting of wall foundation trench 174 by ditch cut 55 which is visible on the plan of the trench. In summary it appears that Wheeler's ditch cut and the wall in foundation cut 174 belong to different structural periods, indeed, it appears to be closer in date to the remnants of ditch cut 61. This similarity is strengthened by the presence of stemmed vessels and high counts of 'rippled rim' ware and 'soapy red' ware in ditch cut 61.

4.6 *The nature of the river channel flowing between The Bala Hisar of Charsadda and the Eastern mound*

In 1958 a trench, Ch. II, was opened some 100m east of Ch. I, midway between the Bala Hisar of Charsadda and the eastern mound (ibid., 23-5). A grey alluvial sand was found at the base of the trench and was interpreted as being part of the silted channel of the Sambor river which had originally flowed close to the east side of the Bala Hisar of Charsadda before joining the Swat river close to Charsadda town. It was further hypothesised that the channel had slowly become choked by silt from the two settlements on either side of its banks until it was forced to flow to the south of both mounds to join the Swat river just downstream from Mirabad (ibid., 2; 36). In 1994 we constructed a stratigraphic profile of this area by taking a series of auger samples in an east - west line running from the flanks of the Bala Hisar of Charsadda to eastern mounds in order to test the accuracy of Wheeler's syncopated section (ibid., Fig. 9). It became clear from these samples that the grey alluvial sand identified in Ch. II was the same as that incorrectly identified as a basal fill in Ch. III's defensive ditch. We were able to link these sands with further samples at the foot of the eastern mound and on the western side of the mound. The resultant section suggests that both the Bala Hisar and the eastern mound are low natural mounds of alluvial sands and clays, standing some 4-5m above the plain (Figure 15). Such a finding helps to explain why these sites were originally occupied, evidently to protect the first settlements from the vagaries of the active flood plain.

4.7 *The search for evidence of walling and revetments around The Bala Hisar of Charsadda*

When Wheeler investigated the Bala Hisar of Charsadda in 1958 he noted that there was no evidence of walling around the mound. Indeed, he dismissed the earlier sightings of Garrick and Marshall stating that they "seem to have been ready to mistake spoil heaps and deep pebble footings of interior mud-brick buildings in the crumbling faces of the mound for fortifications." (ibid., 7). Furthermore it is clear from Wheeler's descriptions of Ch. I that he interpreted the mound as a tell created by series of mud-brick structures being built one on top of another. With such an interpretation there was no need for a revetment or wall around the mound. Wheeler, a man with much military experience, showed great interest in the defensive ditch surrounding the mound and ascribed its date to the Alexandrian conquest in 327 BC, however, he made no further comment as to the pre-Alexandrian or post-Alexandrian defences of the city. Are we to understand that through its entire occupation, from c.530 BC to c.4th century AD, it was only ever defended once in 327 BC? During our first fieldseason in 1994 we conducted an exploration of the edges of the mound to see if fresh erosion had revealed stone or brick walling that might possibly be interpreted as a facing or revetment. As there was no evidence of walling, apart from low foundations of cobbles or brick at various

different levels, we were tempted to confirm Wheeler's hypothesis that the walls identified in 1881 and 1903 were merely eroding fragments of series of domestic structures within the tell. During our second field season in 1995 we again conducted an exploration of the edges of the mound to see if the monsoon had exposed any fresh evidence. We were surprised to find the section of a wall, measuring at least 10m wide and 8m high, in a large erosion gully on the eastern side of the mound at a depth of 6m below the summit's surface. The wall was constructed of large unbaked mud-bricks set in a mud mortar. As at first there was some concern as to whether this structure was of single massive wall or just multiple rebuilding phases on a small scale, we carefully cleaned the bricks and confirmed that they appeared to be consistent with a single phase construction. It also became clear that although the structure had been constructed in a single phase it had been done so over an uneven surface with some portions of the wall standing as many as eight or nine courses lower than others. We then drew the elevation of the wall in relation to the topography of the mound in order to start some preliminary discussion of its probable date and function (Figure 16). The wall appears to run through the gully in a north - south alignment parallel with the edge of the mound. Such an alignment would be consistent with the hypothesis that it is a revetment or terracing structure. It was impossible to follow the alignment further as it is still buried under a talus of eroded material to the north of the gully and has been completely destroyed by erosion and farmers to the south. Charcoal samples were recovered from levels immediately above the wall, and we can now offer a date for this late structure which was constructed at a time when the mound was already at least 12 m high. We expected it to correlate with a date of the second century AD by using a relative level from Wheeler's Ch. I section, and this was confirmed when a date of 1870 ± 20 BP was measured, calibrating to 80 - 220 AD at 95.4% confidence (GrD-21831). This date range confirms suspicions that the Bala Hisar was not completely abandoned in preference to Shaikhan Dheri, but that it remained an important monumental focus in the landscape.

6. Summary

We hope that it is now clear that the research questions framed in section 4 have now been, for the whole, addressed. As stated above we have concentrated on solving particular problems involving the dating and stratigraphic relationships of various features at the site. Whilst having concentrated on solving the particular, we are also now in the position to also make some wider reaching conclusions about the site. We can now confirm for the first time that the suggestions (Dittmann, 1984; Vogelsang, 1988, 1992; Allchin, 1993) that occupation at the Bala Hisar of Charsadda predates the sixth century BC date ascribed to it by Wheeler (Wheeler, 1962, 33) appear to be proved by the calibrated radiocarbon dates. Indeed, samples from cut feature 61 (GRA-5246) and wall foundation cut 174 (GRA-4210) have

yielded calibrated dates of between the beginning of the first millennium BC and the thirteenth century B.C. Dates which even equate to Swat Period V, the earliest phase of the Gandharan Grae complex (Vogelsang, 1988, 109). Whilst some features are clustered around the beginning of the first millennium BC, others, namely Wheeler's ditch and postern, cluster around between the fourth and eighth centuries. BC. As mentioned above, whilst these dates do not confirm or refute the expedition of Alexander the Great, they prove that there was substantial activity at the mound side around the middle of the first millennium BC, at which point a sizeable defensive complex was erected. We can also confirm that the site continued to be a major focus of activity in the early centuries of the first millennium AD. A massive retaining wall was constructed on the summit of the mound at this time, disturbing the simplistic model of urban leap-frogging which is ascribed to both Charsadda and Taxila, with the foundation and subsequent abandonment of the sites of the Bhira Mound, Sirkap and Sirsukh in the case of the former, and the Bala Hisar and Shaikhani Dheri in the case of the latter (Wheeler, 1962, 17). This is, of course, only a preliminary report and we have organised a further two seasons of fieldwork at the site. During the first we shall examine the earliest occupation at the site by cutting a trench close to the western end of Ch. I and during the second we will conduct a geophysical survey in an attempt to identify the course of Wheeler's ditch and to recover any plans of structures dating to the final phase. In the resultant monograph we aim to provide a new, chronometrically, dated sequence and artefact typology for the site, a sequence and typology which can be widely used in the region for comparative purposes. Indeed, it is interesting to note that Ihsan Ali has published two sherds (5.11 & 5.13), which appear to be part of the 'rippled rim' category found during his survey of Charsadda District (Ali, 1994, 67, 127). If this is the case, the distribution of Early, if not, Proto-Historic sites in the region has already been enlarged.

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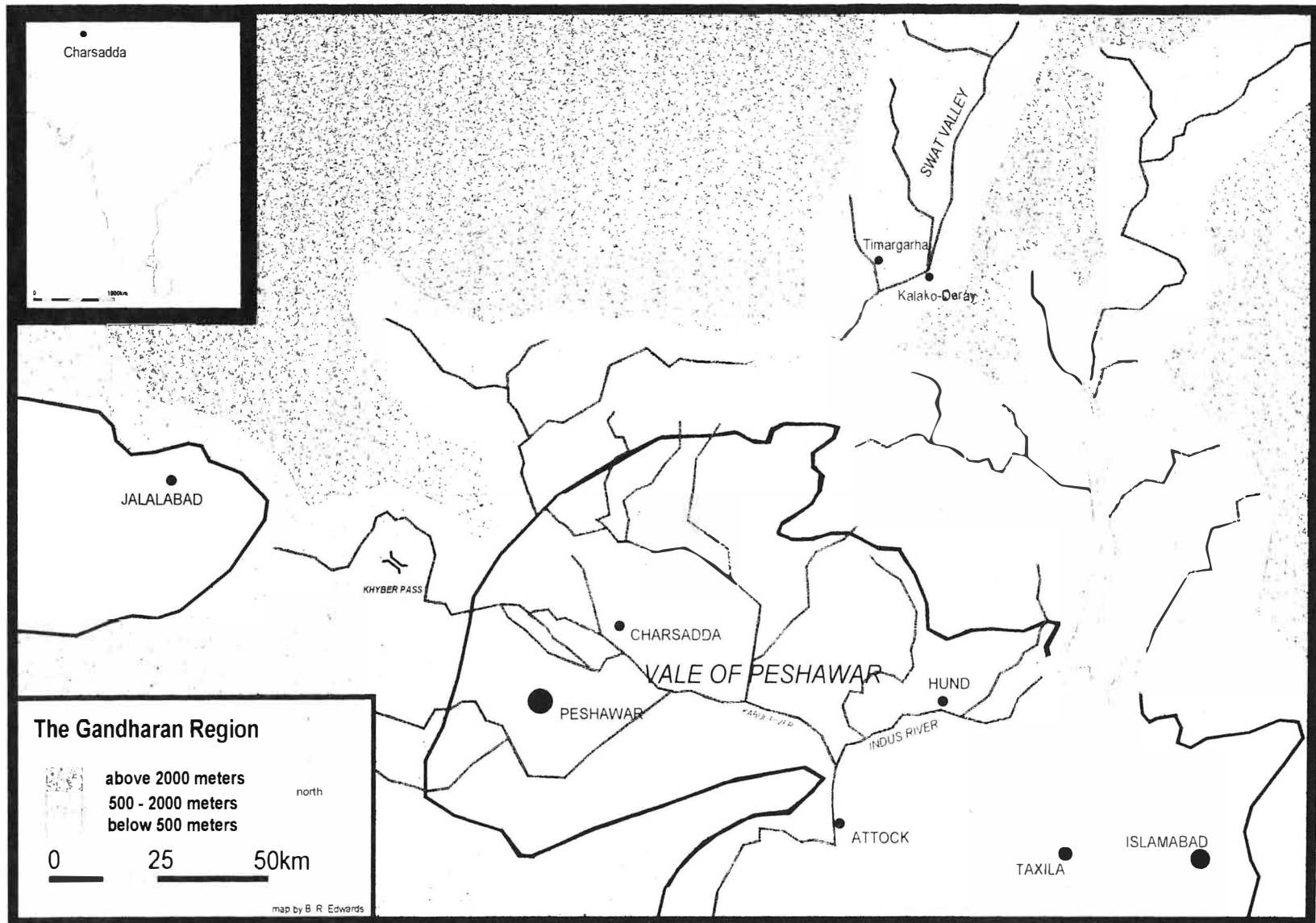


Figure 1. The Vale of Peshawar

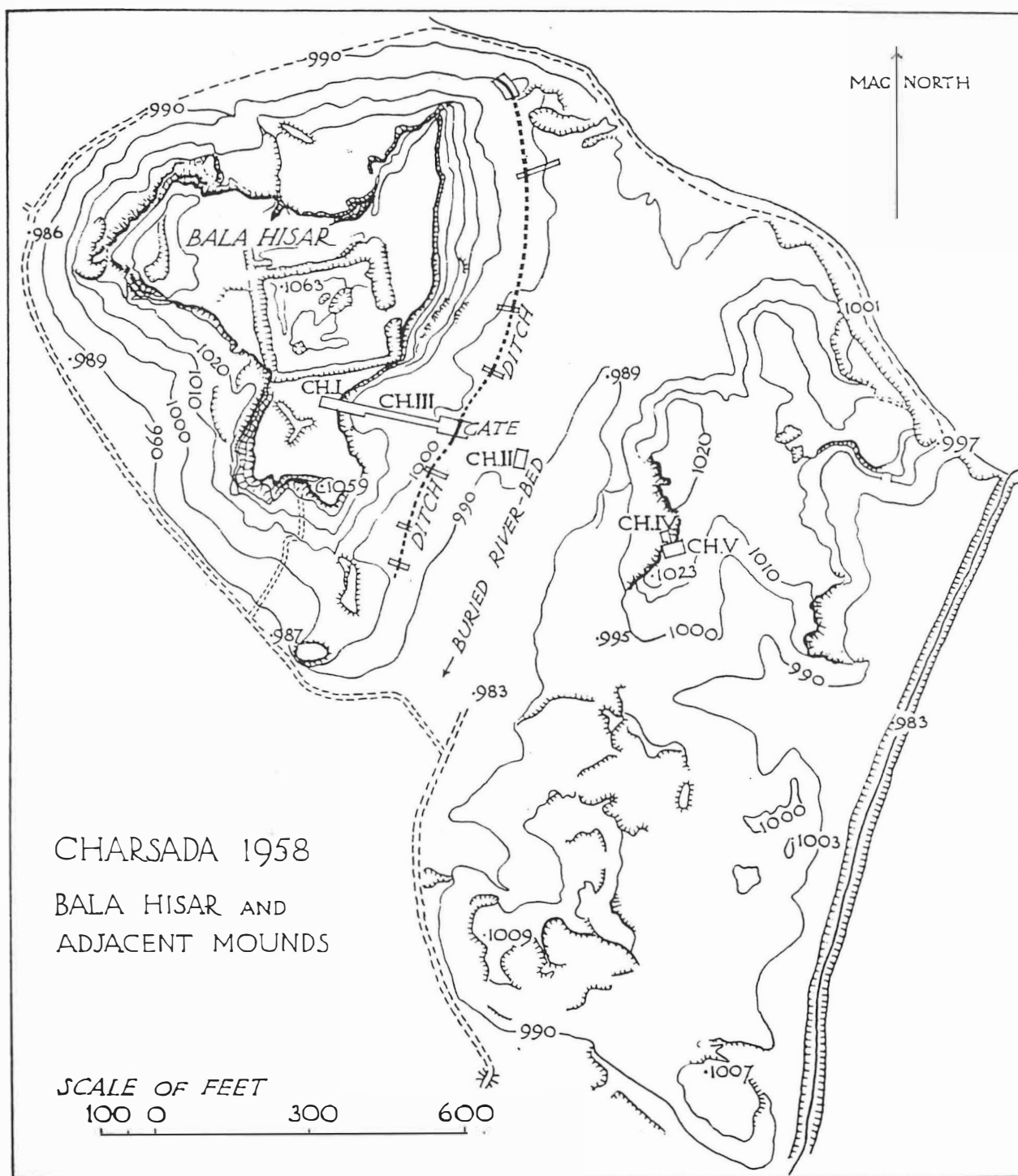


Figure 2. Wheeler's plan of the Bala Hisar of Charsadda

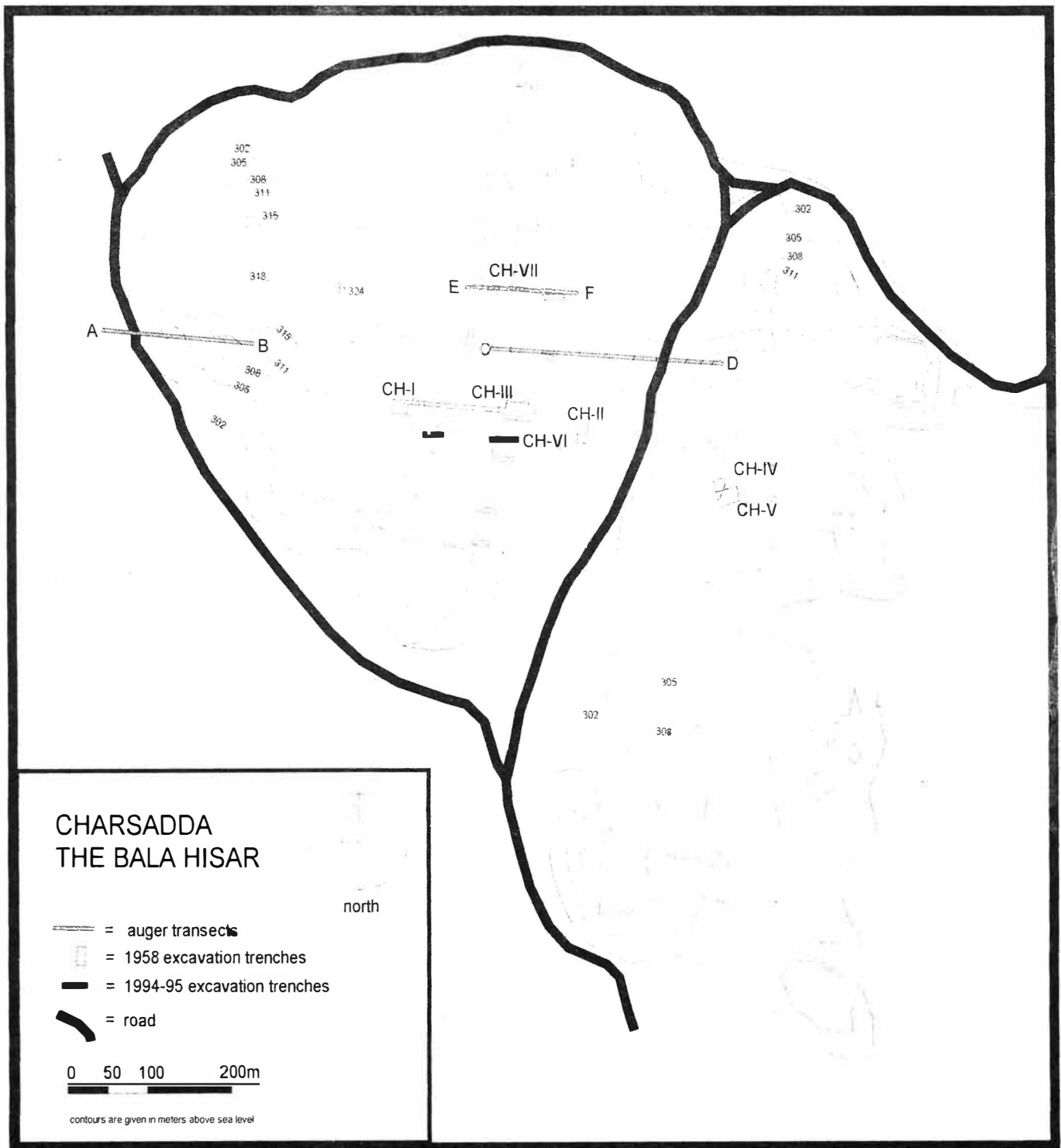


Figure 3. Bradford-Peshawar plan of the Bala Hisar of Charsadda

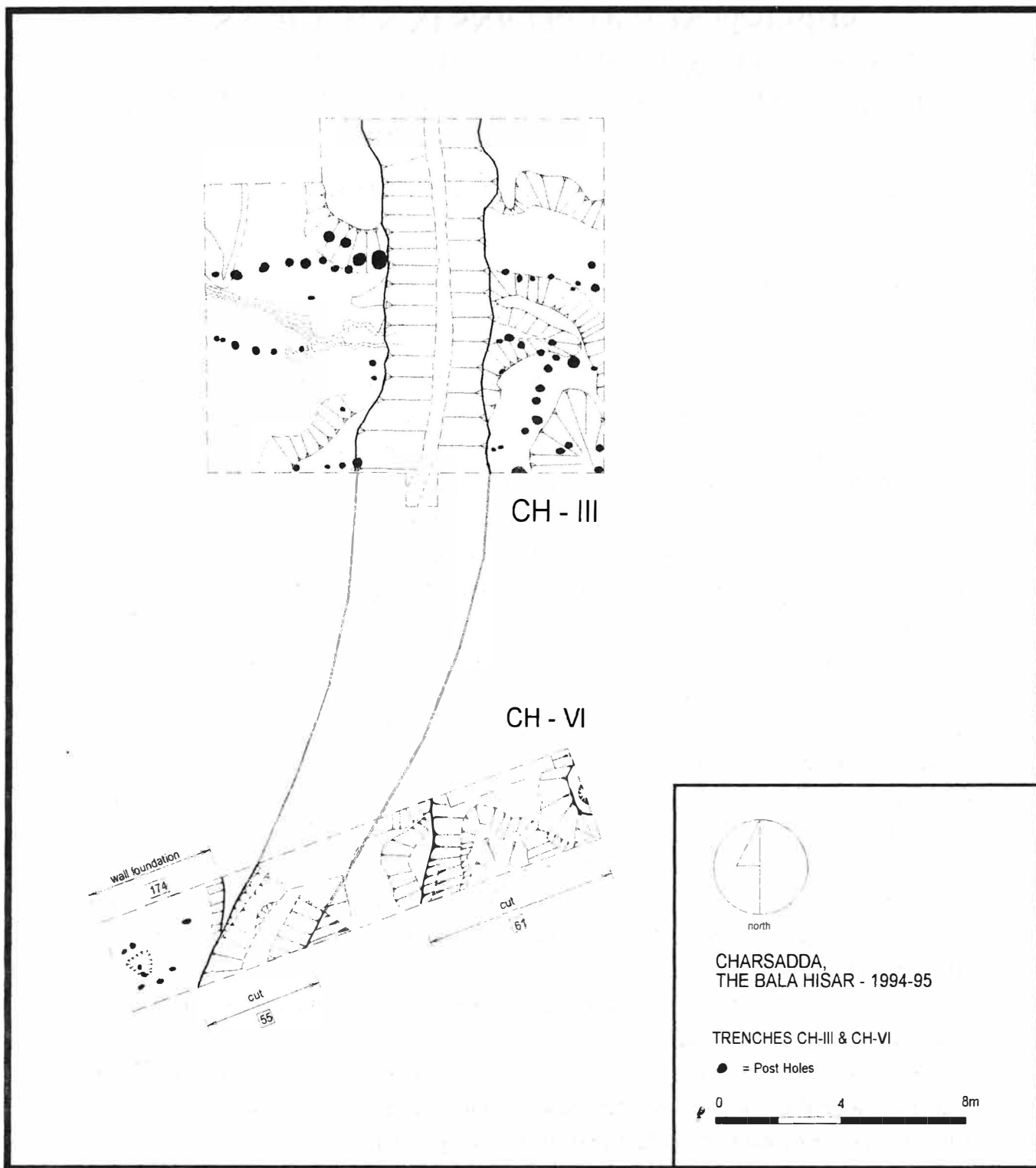


Figure 4. Plan of trenches Ch. III and Ch. VI

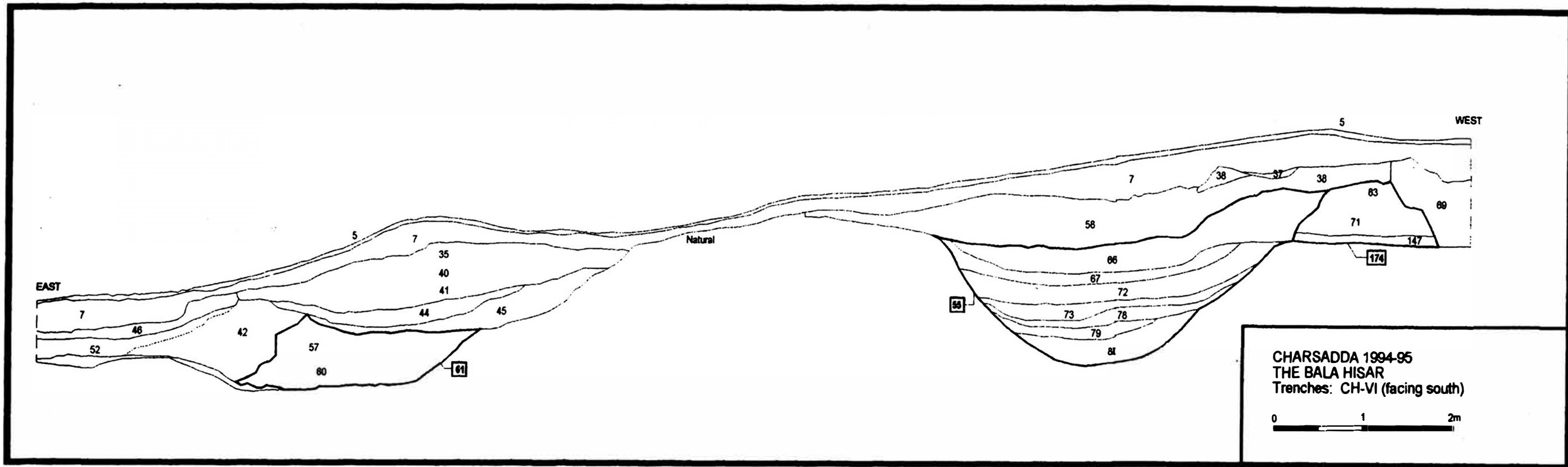


Figure 5. Section of trench Ch. VI

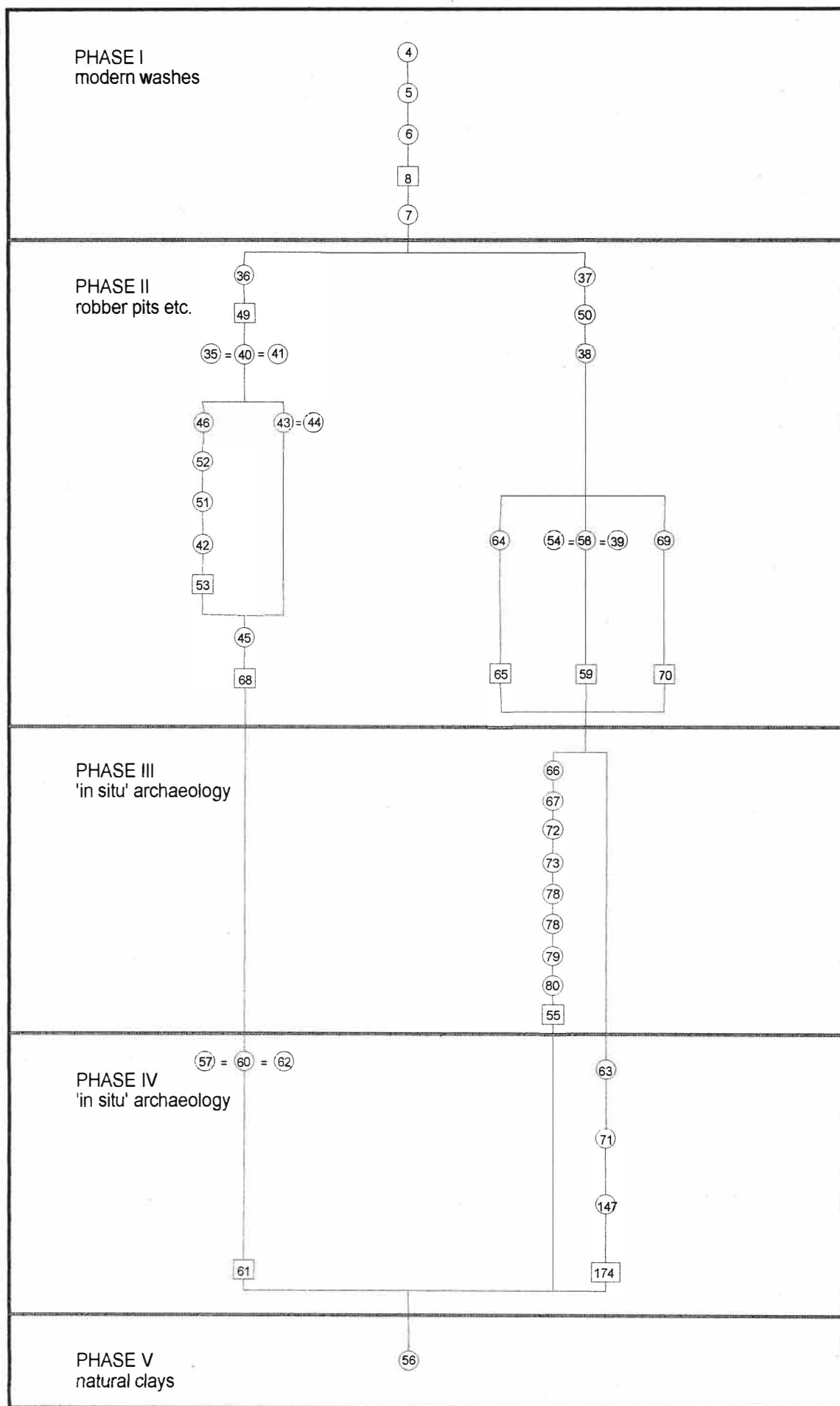


Figure 6. Matrix of trench Ch. VI

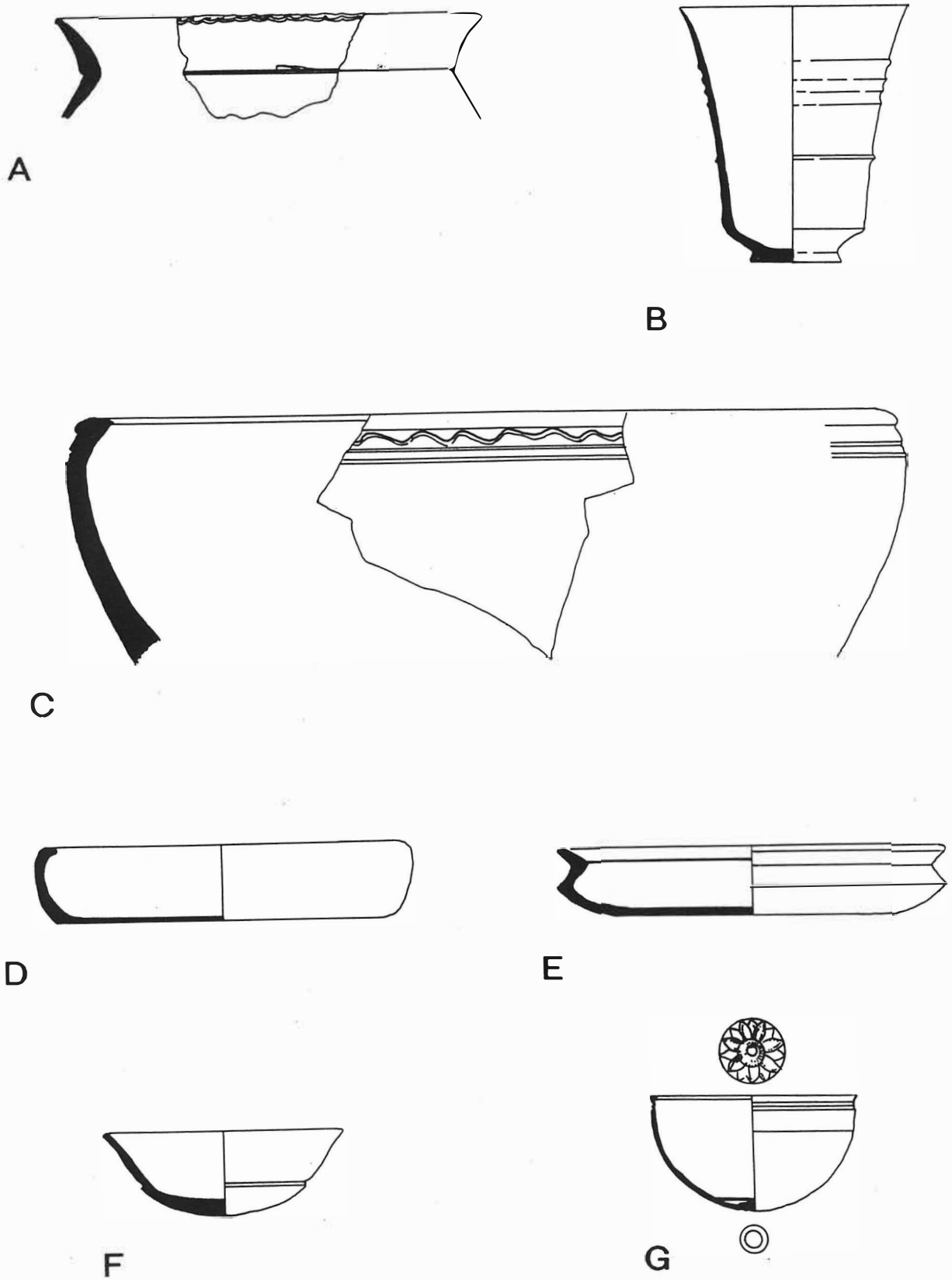


Figure 7. Selected ceramics from the Bala Hisar of Charsadda (33%)

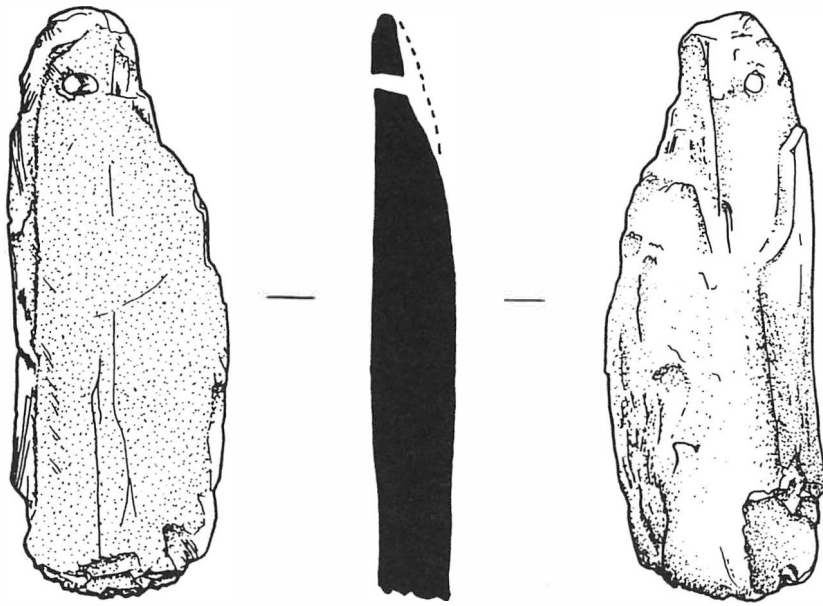


Figure 8. Schist object (sf. 495)

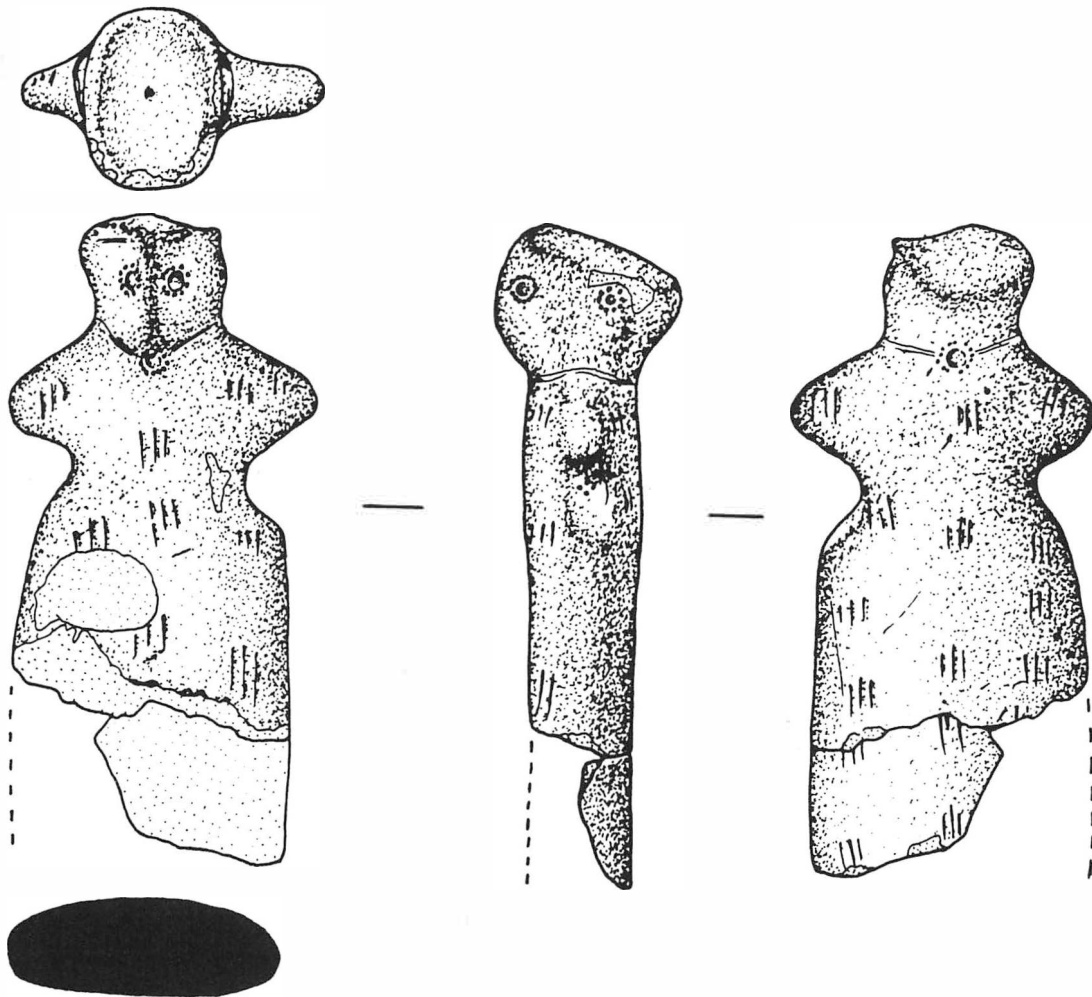


Figure 9. Ceramic female figurine (sf. 344)

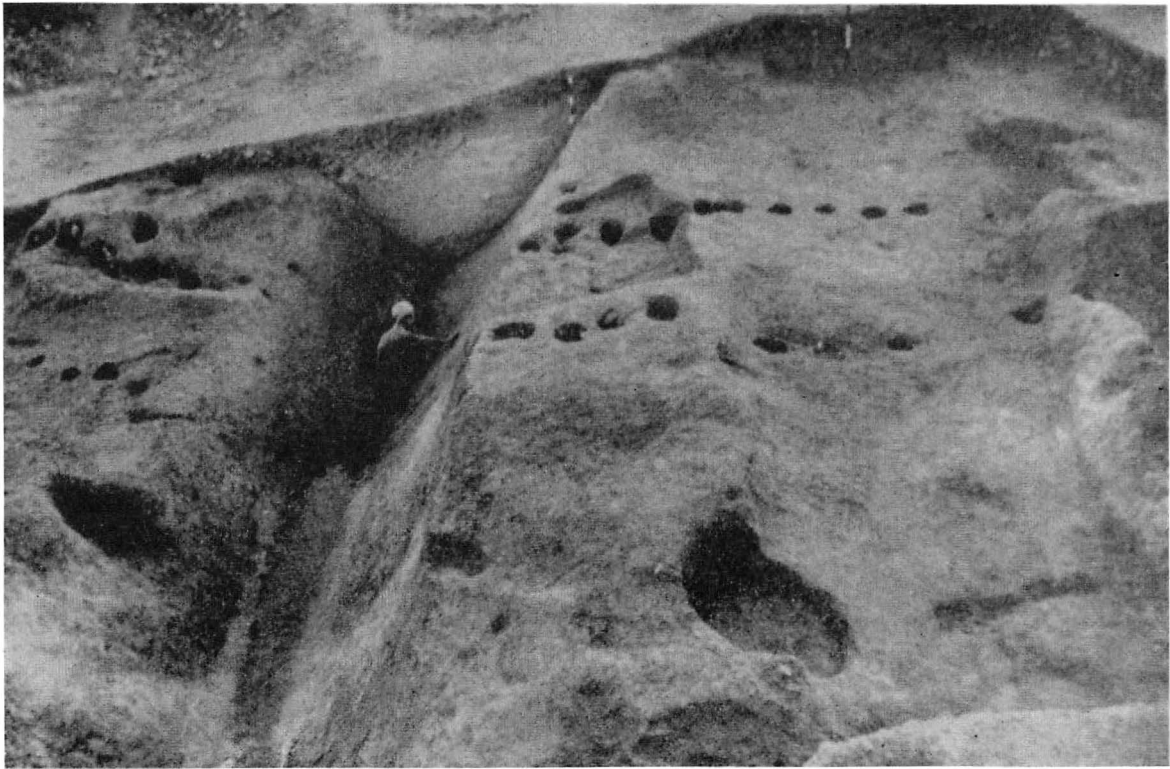


Figure 10. General view of the Ch. III defensive ditch in 1958



Figure 11. General view of the Ch. III defensive ditch in 1995

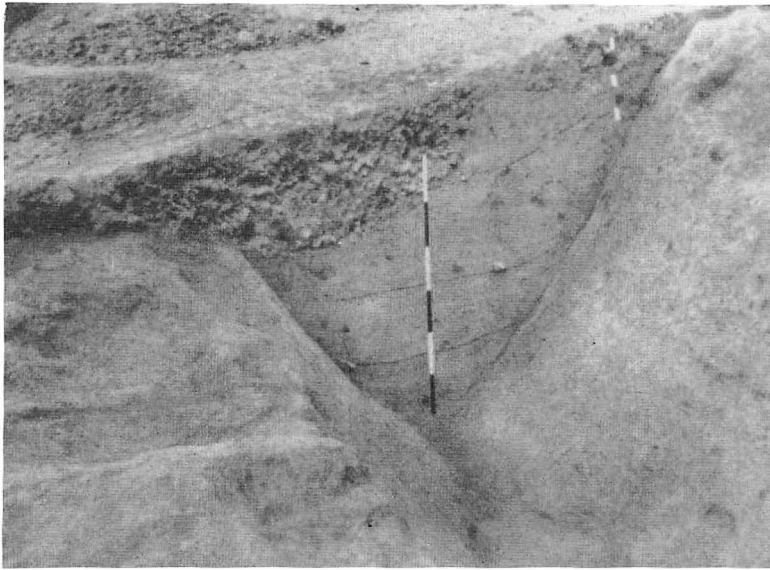


Figure 12. Detail of the
Ch. III ditch fill
in 1958

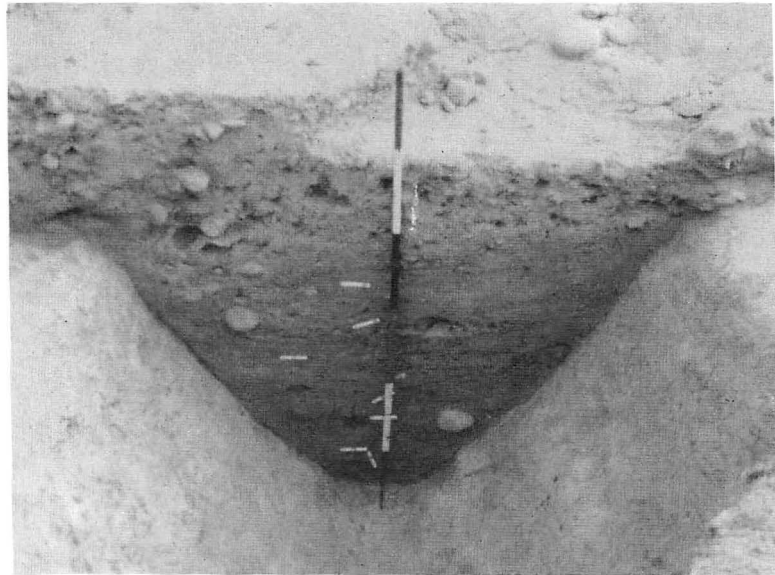


Figure 13. Detail of the
Ch. VI ditch fill
in 1995



Figure 14. General view
of the Ch. VI
defensive ditch
and wall in
1995

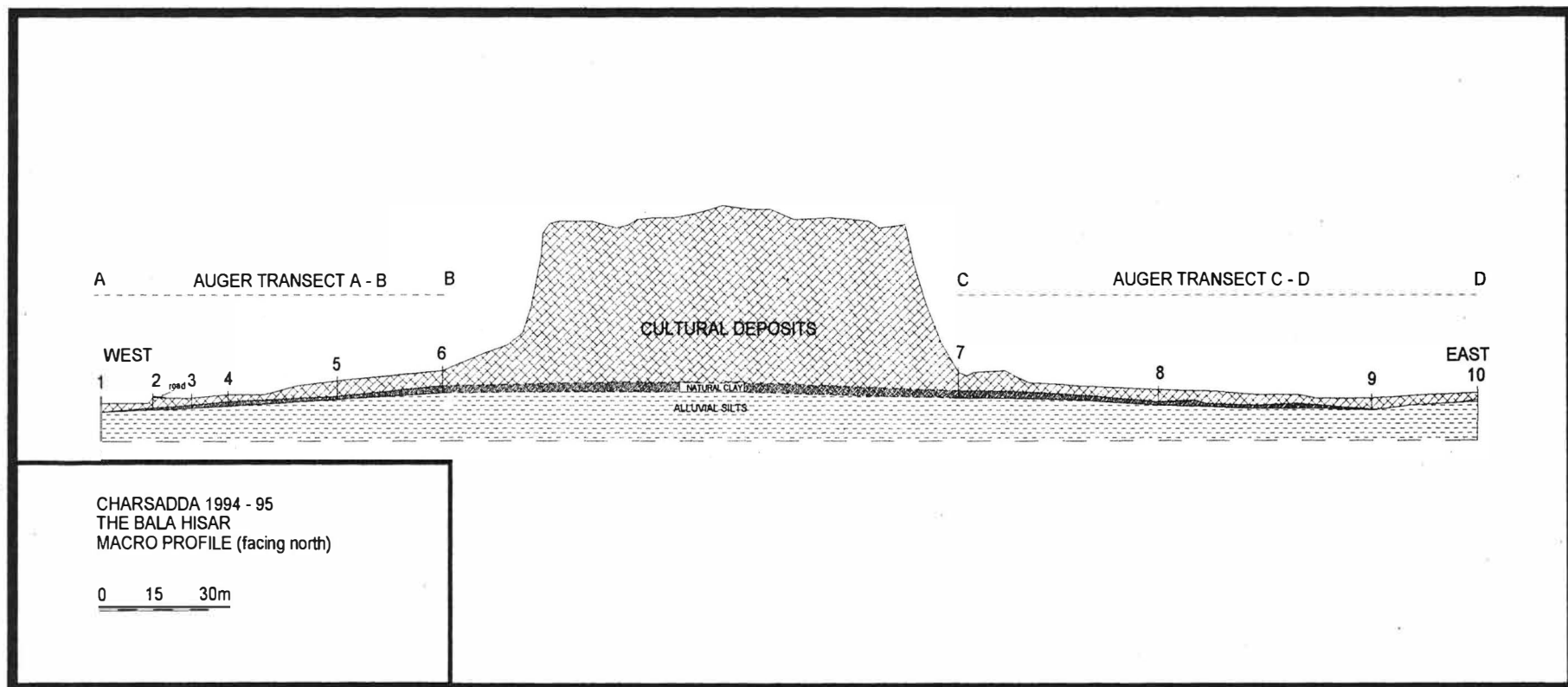


Figure 15. Syncopated auger section through the Bala Hisar of Charsadda and the eastern mound

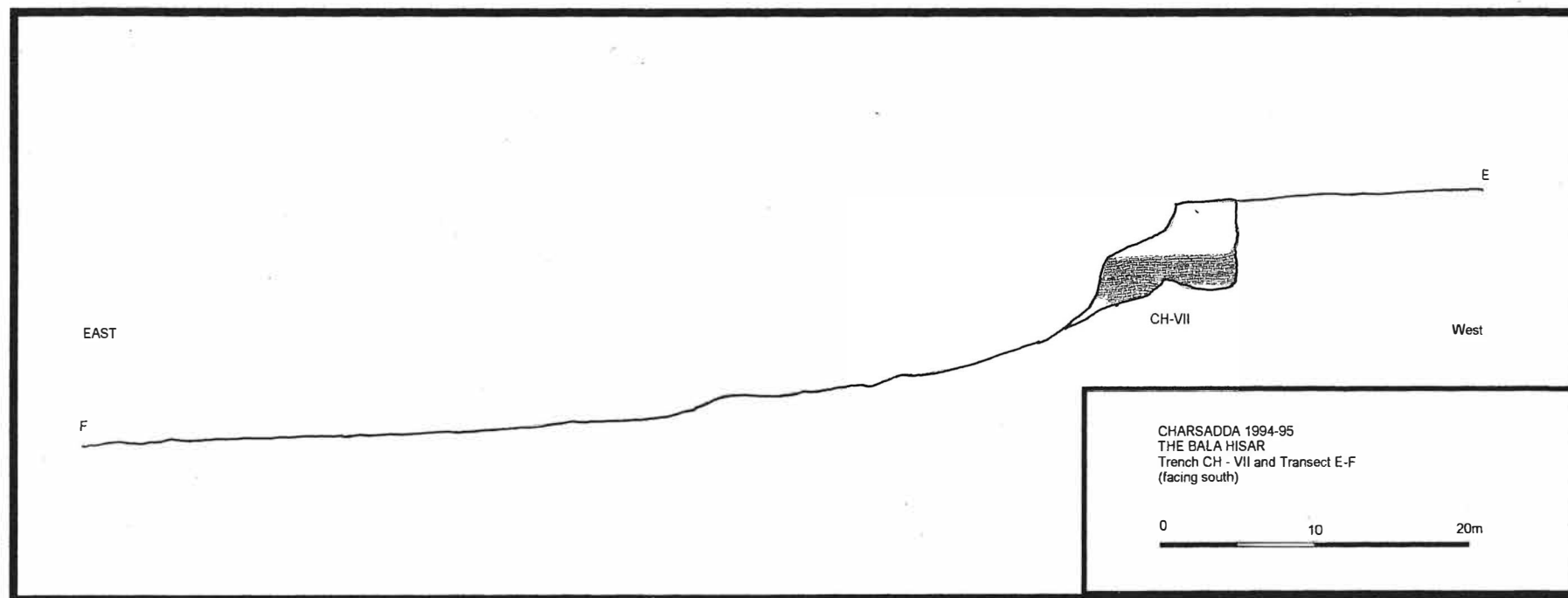


Figure 16. Elevation of trench Ch. VII