PELLA / TALL AL-ḤUṢN EXCAVATIONS 1993
THE UNIVERSITY OF SYDNEY - 15TH SEASON

by

Pamela Watson and John Tidmarsh

Introduction (P. Watson)

The University of Sydney's excavations at Pella (Ṭabaqat Faḥl) in the winter of 1993 were concentrated on the summit of Tall al-Ḥuṣn, the southern of the two talls which make up the urban settlement of ancient Pella. The main city mound of Khirbat Faḥl, on the northern side of the Wādī al-Jirm, has been extensively excavated since the Joint Sydney-Wooster Project began in 1978. Investigation of the summit of Tall al-Ḥuṣn (Area XXXIV), south of the Wādī al-Jirm, was undertaken in an extended season in 1988 and a second season in 1989 by Pamela Watson.[1] This resulted in the partial exposure of a large Late Byzantine complex on the upper summit, Late Byzantine domestic structures on the south-western and mid-northern areas of the lower summit and remnants of a major Early Roman public building in the south-west. Early Roman/ Hellenistic architecture and deposits were exposed beneath the Byzantine surfaces on the lower and upper summits in some areas. In other areas the Byzantine levels immediately overlaid substantial Early Bronze Age architecture and deposits.[2]

Aims

The aims of the 1993 season on Tall al-Ḥuṣn were as follows:

1) to determine the plan of the Byzantine complex on the upper summit;
2) to date the earlier building of this complex, which comprises a largely stone-built structure on the highest point, and a later series of stone-walled rooms with mudbrick superstructures, attached in the sixth century AD;
3) to clarify the Early Roman phases exposed previously;
4) to investigate the Hellenistic occupation of the summit, with the hope that phases not represented on the main city mound, especially early Hellenistic deposits, will be found here;
5) to record the major wall lines visible over the entire summit.

Strategy (P. Watson)

Delineation of the plan of the Byzantine complex was accomplished in three ways (see Fig. 1 for Plot locations):

1) Strategic plots were fully excavated to floor level and selected soundings continued below the floors (Plots A, C, E, F, G, H, L, N, and O). This enabled full exposure of walls within these plots and established the stratigraphic sequence of collapse, occupation and construction of the structures. These excavations made it clear that the depth of collapse debris

1. Reported in Edwards *et al.*, Preliminary Report on the University of Sydney's Tenth Season of Excavation at Pella in Jordan, *ADAJ* 34 (1990): 76-80, and Walmsley *et al.*, The Eleventh and Twelfth Seasons of Excavations at Pella (Tabaqat Fah) 1989-1990, *ADAJ* 37 (1993): 198-210.

4. The season was directed by Pamela Watson, who concentrated on the Byzantine complex and its earlier phasing, and John Tidmarsh, who investigated the Early Roman and Hellenistic occupation of the site. The team comprised Ruba Abu-Dalu (Department of Antiquities representative), Ben Churcher (field director), George Findlater (surveyor), Geoff Stennett (architect), Erin Crumlin, Jenny Lindbergh, Helen Nicholoson and Margaret O'Hea (Trench supervisors), Rachel Sparks (small finds cataloguer), Noël Siver (conservator), Catriona Sparks (photographer), Paul Donnelly and Judith Sellers (illustrators), as well as two sequential groups of enthusiastic volunteers.

was considerable, ranging from four to two metres.

2) Continuing wall lines visible on the surface were planned, but many of these disappeared beneath an overburden of topsoil, necessitating a third approach.
3) Narrow plots were laid out over the assumed lines of wall continuations, and these were excavated only as far as was necessary to clear the top of the wall for planning purposes, and to establish the position and width of doorways (Plots J, K, P, Q, R, S, U - Z, AA - HH). Only topsoil and upper collapse deposits were removed in this operation.

Previous work on Tall al- Ḥuṣn had established that the Byzantine complex was built in a number of phases. The earliest building showed evidence of renovations, as well as being enlarged by the addition of numerous rooms to the north and west. These additions were dated in the 1989 season to the sixth century, on ceramic evidence from the associated construction deposits. This season, soundings were made below the floors of the earlier building in order to date this building.

Two plots were continued below the Byzantine phases, exposing Roman and then Hellenistic architecture (Plots B and G). Removal of a large Hellenistic deposit exposed in Plot F in 1989, revealed Middle Bronze Age features immediately below. These were not investigated further at this time.

The entire upper summit was field-walked and planned. Although the exposed wall lines are not necessarily all contemporary, the major lines seem to form a coherent pattern consistent with the established Roman/Byzantine layout of the area.

Plot Investigations (Fig. 1)

Area XXXIV Plots A, C, E, F, G, H, J, K and L had been excavated in 1988 and 1989; only B, C, F, G and L were continued in 1993.

The new plots opened in 1993 were M - Z and AA - HH. Of these, all are wall-tracing plots, except for M (a small 0.5m^2 trench excavated on the west slope for the placement of the site toilet), N and O (Byzantine complex), and T (for the investigation of a possible entrance through the citadel circuit wall).

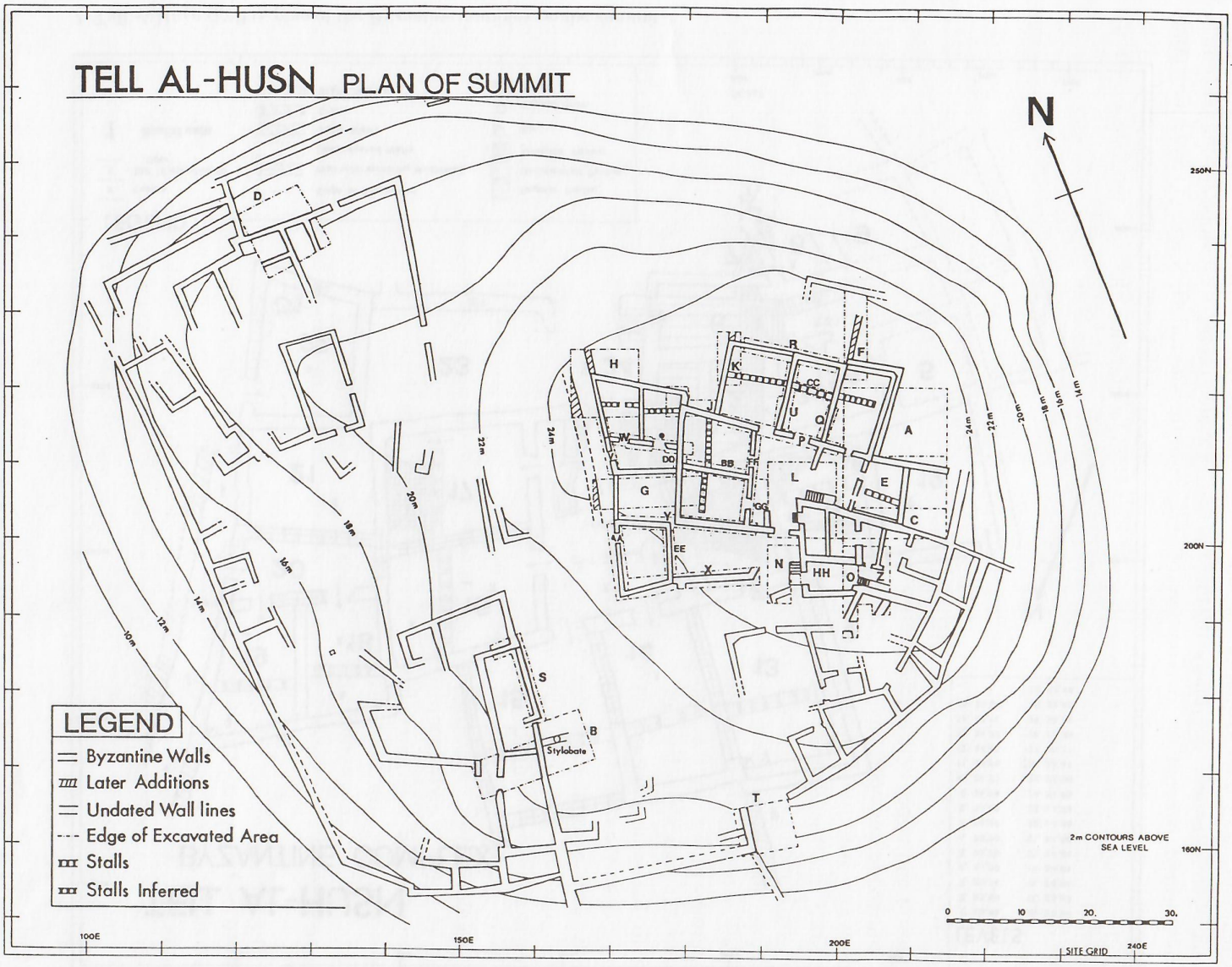
RESULTS

The Byzantine Complex (Figs. 1 and 2) (P. Watson)

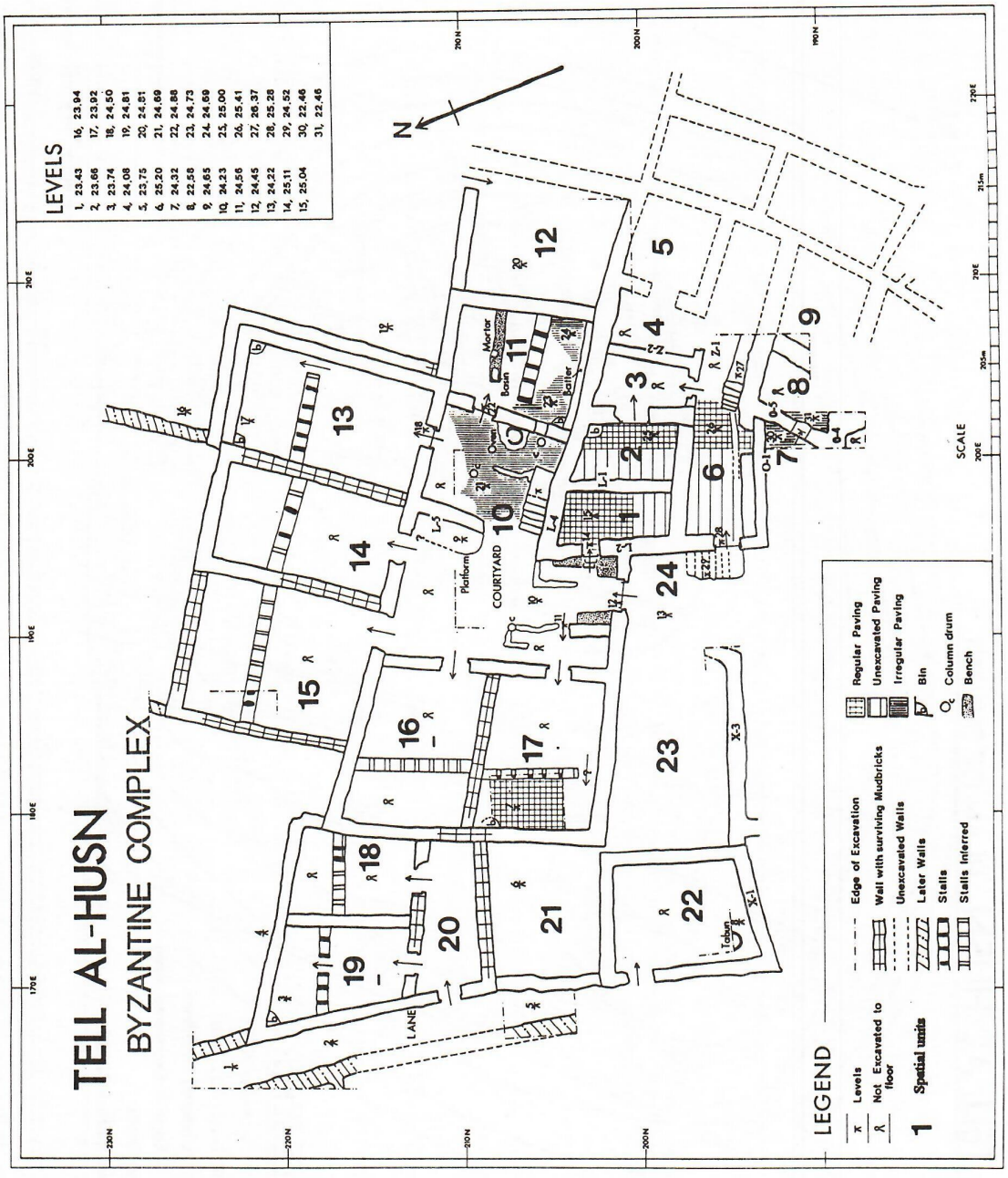
(i) *The Earlier Core Building* (Plots C, L, N, O, Z, HH, units 1-9)

The southeastern quarter contains the earlier building which has revealed successive phases of construction and rebuilding. It was exposed to floor level in Plots C, L, N and O, and delineated by wall-tracing in Plots Z (which was also extended in parts to floor level) and HH. The remaining walls planned were visible on the surface.

Only one room, unit 1, opens into the sixth century complex. The remaining rooms open into each other or to the south, where a long paved corridor space (unit 6), running east-west, contains staircases ascending from the lower exterior surface on the west (unit 24, in Plot N), to a higher level at the eastern end (Plot Z, Fig. 3). South of this corridor, in units 7, 8, and presumably 9, the surface level drops sharply, with roughly 3.0m difference in height (Fig. 4). The corridor surface is also higher than the floors of the rooms to the north, by approximately 0.5m. The corridor and three of the five rooms excavated to floor level (units 1, 2, and 8), were paved with stone slabs (Fig. 5). In the mid-northern room, surface level was only reached in a small 1.0 m^2 sounding. In this area it was hard-packed earth. A similar surface was reached in Plot O in the room directly south of the corridor (unit 7), although there was some evidence of paving further



1. Tall al-Ḥuṣn (Pella), plan of summit, showing wall lines identified in the survey and excavation 1993, and location of the excavated plots (Area XXXIV).



2. Tall al-Ḥuṣn (Pella), plan of the Byzantine complex on the summit.



3. Byzantine complex, staircase at the eastern end of corridor, unit 6, with pavement in foreground, view east.



4. Byzantine complex, wall O-1 and associated floor, with wall O-5 on the right, view north.



5. Byzantine complex, partly exposed stone-paved room, unit 1, view west.

out from the wall here.

The northern wall of the core building runs the entire east-west length of the building and contains no doorways. It is a roughly-coursed wall of rubble-stone construction and has become very unstable over time. This was even apparent in the sixth century, when a sloping stone buttress (batter) was built to reinforce part of its northern face (in unit 11).[3] At its eastern end, the north face had collapsed outwards, while falls from the mid-southern face proved to be quite dangerous for work in the loci south of the wall. A broad staircase flanks its north face at the western end (in unit 10, Fig. 6), presumably ascending to an upper floor. The considerable height of the extant walls of this building and the amount of stone tumble in the collapse suggests that there was a second stone storey to the structure.

Three principal styles of masonry are evident in this building:

(a) The first, as described above, is uncoursed rubble construction held together with mud mortar. It is rough and uneven and was probably hidden from view by a thick mud pisé plaster, judging from the quantity of this material within the stone collapse. The tops of these upper walls may well have been in mudbrick, as these were also found within the collapse, although not in the same density as found in the collapse of the sixth century rooms, which definitely had mudbrick superstructures.

(b) The second masonry style is bifacially constructed, with an occasional bonding stone running between the faces. It consists of large roughly-squared stones arranged with smaller snecking stones into rough courses. It is contemporary with the first style, as walls of both construction bond with one another, and the one construction can blend with the other within one wall.

(c) The third masonry style is also bifacial, of well-cut and squared ashlar blocks in regular courses, with rubble core. The

3. In Plot C, locus 2, see 1988 Report in *ADAJ* 34 (1990): 79.



6. Byzantine complex, eastern wing of courtyard, unit 10, showing the staircase abutting wall L-4 with the cantilevered seventh and eighth steps removed, the courtyard pavement, and the protective wall around the oven (the oven has been removed). View south.

blocks are generally medium large but irregular in size; courses are levelled by a layer of small stones. Walls in this style were identified in Plot Z (walls Z-1 and Z-2, bonded, Fig. 7)[4] and form the lower two courses of wall L-1 (unit 1). Wall Z-1 becomes wall C-3 in Plot C (excavated 1988). Another wall of well-coursed, squared (but not ashlar) blocks is found in wall O-1, whose extant height from the floor is 4.0m (Fig. 4). This well-built wall may belong to the third group, although it is less regular and contains some snecking stones. It appears that this third style forms part of the original building which has been rebuilt, and possibly radically altered at some stage prior to the sixth century additions.

The evidence for this is based on two forms of analysis:

1) A descriptive assessment of the masonry styles and their structural relationships, and 2) A sounding placed beneath the pavement in unit 1.

1) As described above, masonry styles (a) and (b) are contemporary. Most of the walls excavated to any depth in this building conform to these styles. Style (c) walls are cut by the construction of (a) and (b) walls, and in notable cases the latter types represent rebuilds on top of the finer walls, for example walls L-1 and O-5. Wall O-5 contains an earlier doorway between units 7 and 8. This

4. Walls are numbered from 1 in each plot. In the text, references to numbered walls are preceded by the plot letter. Thus wall 1 in Plot Z is referred to as wall Z-1.



7. Byzantine complex, wall Z-2 in unit 4, view north west.

doorway was blocked and then the whole wall was rebuilt above it at lintel-height, although no spanning lintel remains. The rebuilt wall rests on the blocking material where it runs over the doorway.

2) The sounding in unit 1 revealed a foundation trench for wall L-2 cut from underneath the pavement packing (Fig.8). However wall L-1 has a small foundation trench cut from the same level, but the wall itself continues down. This foundation trench must be for a rebuilding of wall L-1 at the time wall L-2 was built and the pavement floor was laid. The finer masonry of the lower two courses of wall L-1 continues down to an earlier floor level which meets this wall (Fig. 9). Removal of this floor revealed the base of the wall which partly lay on top of an earlier wall emerging at an angle at the south end of the sounding (Fig. 10). Excavation ceased at this point and the sounding was backfilled. Pottery from the earlier floor can be dated generally to the Roman period (first - second centuries AD), but a more specific identification awaits a full analysis of the finds.

Thus, three major phases are evident. The earlier building of generally ashlar masonry dates originally to the Roman period. It was extensively rebuilt in the Late Roman/Early Byzantine period in a rather rough manner, and finally, major well-built additions were constructed in the sixth century at the same time that repairs were made to the poorly-built walls.



8. Byzantine complex, the foundation trench and foundations of wall L-2, with the paved floor on the left, in unit 1 sounding. View west.



9. Byzantine complex, wall L-1 lower courses and earlier floor, in unit 1 sounding. The later paved floor is on the left. The wall face of the upper courses had collapsed into the room, exposing the rubble and mud core. View east.

The earlier core building, as rebuilt, is characterized by its largely stone construction, probably faced in pisé, a predominance of stone-paved floors, and considerable changes in surface level from one spatial unit to another, necessitating the use of staircases. As our excavation of most rooms was only partial, these sometimes have to be assumed. It was clearly intended for human use only.

(ii) *The Sixth Century Additions* (Plots A, E, F, G, H*, J*, K, L, M, N, P, Q, R, S, U, V*, W*, X*, Y, AA*, BB, CC, DD, EE*, FF, GG*; units10-20)



10. Byzantine complex, sounding below the paved floor in unit 1. Wall L-1 is on the left and L-2 on the right. The collapsed wall stones and pisé fallen on the paved floor are visible in the background. A wall of an earlier period, on a different alignment, is appearing beneath the scale. View south.

Plots marked by an asterix (*) contain structures that seem to have been added later to the main sixth century structure. This supposition is based primarily upon visual assessment rather than stratigraphical investigations below the surface levels.

The sixth century additions to the original building were first identified and dated in the 1988-9 seasons. The 1993 season was devoted to tracing the full plan of the structure and establishing the access systems. The structure forms a northern and north-western addition to the original building and centres around an L-shaped courtyard in Plot L (unit 10, Fig. 2, Figs. 11 and 12). The only access to these additions is from the south, leading directly into the courtyard. Six rooms were built around the courtyard, each with one door opening onto the yard (units 11, 13-17). A seventh room, unit 1 of the core building, also opens onto the courtyard, east of the entrance. None of the rooms are neatly squared or rectangular in shape, but rather rhomboidal. All six rooms conform to a standard design: they are divided crossways by a bench standing approximately 0.70 - 0.90m in height, two-thirds of the way down the length of the room, away from the door. The top of the bench is partitioned into compartments by pairs of upright orthostat blocks placed at regular intervals, one upon the other. Each bench has an access through it, either at one end, or in the centre. All of the rooms except one, have their doorway in the short side opening onto the courtyard. The exception is unit 11 which has a doorway towards one end of the long side facing the courtyard. This room is also distinguished by the presence of a window opening onto the courtyard from the smaller section of the room, behind the bench.

These additions form one coherent sector of occupation. A smaller sector, using the same standard room design, abuts the western side of the complex, with no access between the two (Plots H, J, V, W, and DD, units 18-20). It consists of two rooms with



11. Byzantine complex, eastern wing of courtyard, unit 10. Wall L-5 and abutting platform are on the mid-left, the staircase abutting wall L-4 on the right. View east towards unit 11.



12. Byzantine complex, courtyard, unit 10. View south-east towards the entrance and unit 1.

orthostat benches, each with a doorway in the short side opening south to a broad entrance corridor. This corridor opens westwards onto a narrow lane which runs along the western side of the complex. The lane itself belongs to the latest additions to the entire complex (see (iii) below).[5] The system of access prior to these arrangements is unknown.

(iii) Final Phase Additions and Reorganization

The space to the south of this smaller sector (unit 21 in Plot G) seems to have been an open exterior area whose surface ran to the top of the retaining wall which defined the eastern side of the lane at this point. South again of the open area lies a single-room structure placed on its own at the south-west corner of the complex (unit 22, in Plots X, Y, AA, and EE). The enclosing walls bond with each other but only barely abut the south-west corner of the core building. There is no evidence of a bench dividing the room, although only the tops of the walls were exposed and a small sounding made to floor level at the southern end (in Plot X). The depth of deposit is uncharacteristically shallow here (c. 0.30m). A beaten earth surface was reached in the south-west corner of the room associated with a *ṭābūn* and ash deposits. The ground surface in this area is sloping down towards the south and west. The room appears to be a later addition to the main complex, and, as its only opening is to the western lane, has no integral relationship with the core building in terms of either room design or systems of access.

The rough tumble of a rubble wall continues the eastward line of wall X-1, as wall X-3. The latter abuts the former, and is similar in appearance to the latest-phase walls of the lane. This wall was not fully investigated, but probably belongs with the latest additions to the entire complex as identified in Plots F, G, and H (see 1989 report,n.5).

The existence of a final building phase marked by rubble-wall additions to the major enclosure walls and the definition of a laneway, has been identified and discussed in the 1989 report.[6] Other features identified in 1989, such as the second, kitchen-like bench in Plot E (unit 11) and the large oven outside this room, bounded by a protective wall which inhibits easy access to the rooms of units 11 and 13, suggest that the function of the complex may have altered in its final phase. The 1993 season revealed more features, principally in Plots L and GG, which seem to have been added at a later stage and were in use at the time of

5. Discussed in the 1989 report, *ADAJ* 37 (1993): 203.

6. *Ibid.*

the destruction of the complex. All these features have a distinctive domestic aspect. Again, the fact that they encroach upon major spaces and normal routes of access as originally designed for the complex, supports the hypothesis that they represent a functional change in the use of the building.

In Plot L, a protective wall around the large oven in Plot E (unit 10) was fully exposed. When the baulk between the two plots was removed, the small rough wall to the north of the oven in E was found not to continue around the oven to the south, but to extend in a south-westerly direction as a retaining wall for a roughly paved courtyard surface in the eastern wing of the courtyard. North of this pavement the surface drops 30 - 40cm leading to the doorway into unit 13. The nature of this lower area is difficult to determine as it lies outside the excavated area and there was no time to extend this. A feature emerging from the north baulk just to the west appears to be part of another cooking facility, although too little has been revealed to be sure. Whatever the case, access into units 11 and 13 is thereby rendered narrow and awkward.

The southern termination of wall L-5 which extends for a short way south into the courtyard, is ill-defined, due to collapse. The wall has no return at this point, and merely acts as a dividing mechanism rather than an enclosure. The eastern courtyard pavement ends here and the surface becomes one of gravelled clay, full of small pottery fragments. This has been eroded by a shallow wash gully which runs westwards, exposing what appears to be an earlier wall continuing exactly along the line of wall L-5, as if the latter were built directly on top of an earlier wall.

The staircase against wall L-4 proved to be partly solid and partly to span an open space about a metre wide, below the seventh and eighth steps from the bottom (Fig. 6). Remnants of these upper steps were cantilevered over a large amount of collapse. How this space was originally spanned is not immediately evident. No wooden timbers survived, and no shaped voussoir blocks indicating vaulting, were present in the collapsed mass. However the courtyard surface continued beneath the stone tumble into this space.

A stone platform abuts wall L-5 in the north of the plot, continuing into the north baulk. Another platform lies against the west face of wall L-2 and forms part of the step up to the doorway into the paved room behind. A small low enclosure lies to the north of this step/platform. The partial excavation of Plot GG revealed that the western wall of the courtyard entrance passage formed the south jamb of a rough threshhold which was flanked on the north by a narrow structure. This has proved to be the eastern side of a large bin-like structure whose north-east corner is defined by an upright column drum. The opening through the rough threshhold permitted access to the doorway into unit 17, although the arrangement is again, clumsy and narrow. Benches abut both the western and eastern walls of the passage into the main courtyard.

A fine, soft grey occupation deposit covered the courtyard surface in patches, tending to mound against and within some of these features. It would seem to be the remains of general sweepings and rubbish accumulation in the yard.The artefacts found in the collapse deposits present a similar domestic picture. More water jars, coarse storage jars and fine ware plates have been added to the corpus of pottery apparently in use at the time of the destruction.[7] As found in the previous seasons, there is little suggestion that people were caught unawares. The relatively low density of domestic artefacts other than pottery indicates that the occupants had packed up and left the building,

7. *Ibid.*, figs. 19-21.

probably quite recently.

The final demise of all the buildings on the summit of Tall al-Ḥuṣn has been attributed to an earthquake, based on the strong indications that the collapse occurred as a single event (see 1989 report). On the basis of comparative analysis of the pottery with coin-dated corpora from similar collapse deposits in the main tall excavations, this has been dated around the middle of the seventh century, and attributed to the earthquake of AD 659. Coin evidence from this season of excavations still awaits detailed analysis.

Conclusions

The history of the latest building complex to occupy the summit of Tall al-Ḥuṣn has proved to be far more extensive and complicated than first thought. At present, five major architectural phases and their approximate dates are tentatively proposed (closer dating awaits full analysis of the finds):

Phase 1 - The Roman period. Parts of the original building, constructed of ashlar blocks, are extant. The building style is reminiscent of other walls on Tall al-Ḥuṣn which have been dated to the early Roman period (in Plots B and T).[8]

Phase 2 - Late Roman/Early Byzantine. Major repairs were made to the original building, which must have stood in ruins at the time, as whole walls were either replaced or rebuilt from the lower courses. The long northern wall is an entirely new addition, as if the northern extent of the original building was too damaged to merely renovate, and it had to be abruptly truncated.The quality of the rebuilding was poor, although quite large in scale.

Phase 3 - sixth century Byzantine. An extensive series of well-built rooms was added to the original building, at the same time as repairs were made to the Phase 2 walls. The new complex was centred around an internal courtyard and the rooms were built to a standardized design.

Phase 4 - Later Byzantine (?). Other sectors were added to the main complex, in the west and south-west, but these were not linked internally to it. Units 18-20 follow the standard sixth century design and directly abut the main complex. The sequence of construction may have been quite close in time, if not contemporary. It is possible that units 22 and 23, which do not conform to the sixth century design, belong to Phase 5 rather than Phase 4.

Phase 5 - Early Islamic, pre-AD 659. Rough additions were made in the form of wing walls to the north and along the southern perimeter, and a lane along the eastern flank. Domestic accoutrements were added to the central complex.

The interpretation of the final phase, for which we have the most evidence, has been discussed above. The interpretation of the main architectural phase (Phase 3) has been discussed in the 1988 and 1989 reports, and should be reconsidered in the light of the most recent information. As the surfaces and living areas remained the same or were extended throughout Phases 3-5, we cannot rely on the evidence of the artefacts associated with Phase 3, as none survive. Our primary source for any interpretation of the function of this complex in the sixth century must be the architecture itself.

As described above, the plan of the new structure is quite distinctive, being composed of a characteristic type of room repeated around three sides of a central courtyard. The entire new complex had a single entrance from the exterior. The standard room is characterized by the presence of a bench divided into regular compartments by upright orthostat blocks. The bench subdivides the room at a ratio of one-third to two-thirds, and the entrance to each room is generally in the short side of the larger part

8. For Plot B, see *ADAJ* 34 (1990): Pl. VI.2; for Plot T, see below and Fig. 21.

of the room. Thus access to the larger area of the room is quite easy from the courtyard, whilst the smaller area is at the far end, through a relatively narrow opening in the bench. Each exposed threshhold in these benches has revealed a pivot stone, indicating some kind of door or gate was used to close this opening. In Plot G, the smaller area behind the bench was paved in mudstone, and a large storage jar (in chaff-tempered coarse ware) was broken *in situ* on the floor. In Plots A, E, G, and H, whose rooms were excavated down to the surface, small corner platforms or bins were found in one or both of the rear corners of the small areas. No bins were located in the large areas of these rooms. These features suggest that the small areas were used for storage and human working activities.

Two main explanations of the function of the orthostat benches have been proposed. The first is that they were designed as manger stalls for large animals such as horses or cows, which would have been stabled in the large areas of the divided rooms, with easy access from the central courtyard. Parallels for such usage are readily available on the main tall at Pella, where the AD 747 earthquake destruction caught large animals in rooms containing this orthostat bench feature. The same feature is found in the extant remains of the basalt towns in the southern Ḥawrān, the Golān and the northern Galilee. Similar stables have been found in good condition in the Roman/Byzantine towns in the Negev. In some of these cases the benches are not merely flat tops but have inset stone basins or troughs. This does not mean, however, that every time this feature occurs it must have functioned as a stable.

The second explanation, which has been proposed by some archaeologists working in the Galilee, is that these are "window walls", so constructed to let in light and air.[9] The problem with this interpretation in the Tall al-Ḥuṣn context, is that these structures are evidently two-storeyed, with little opportunity for light and air to be facilitated by the presence of this feature on the ground floor.

The first explanation, for these rooms to function as stables, with storage and working facilities separated at the end of the room, seems the most likely. Is this, then, a large domestic farming complex? The location of the complex, on the summit of the citadel hill of the city, with precipitous access from all sides, through quite densely walled and terraced urban terrain, seems to work against this. It would be difficult, inefficient, and tedious to move to and from the grazing fields outside the city everyday. A more likely reason to stable large animals in such a concentrated manner, given the geographical location, is if it were to function as a cavalry stable for a small garrison. It is the most suitable site within the city boundaries, given the defensive and observatory advantages of its position. The relationship with the earlier building is then more understandable. This wing, with its solidly paved floors at different levels, staircases and corridors, is clearly limited to human traffic and may well have functioned as the administrative centre for the military or police of the city and its region. The presence of a benched vestibule at the courtyard entrance is more explicable in a public rather than a domestic context. Another point to note in this regard, is that other Byzantine domestic structures have been excavated on Tall al-Ḥuṣn, in Plots B and D,[10] and none of them were designed with the standard orthostat-bench rooms which dominate the complex on the upper summit. Nor is there any known precedent for such a concentration of this type of room in one complex, again suggesting that the whole was designed with a specific purpose in mind.

9. These two interpretations were discussed in the 1989 Report, *ADAJ* 37 (1993): 200 - for references see ns. 80-82.
10. *ADAJ* 34 (1990): 79-80.

To describe the complex as a fortress is probably misleading. It has no typical fortress planning, no towers or built defensive features, save for the double wall placed on the north-east corner of the complex. The building should be viewed as a policing and administrative garrison, rather than as a predominantly defensive building.

The change to a manifestly domestic function where the stabling of large animals was no longer required and subsequently rendered impossible, occurred in the final phase of its life. This may well reflect the changed political and administrative circumstances after the Moslem conquest. It is hoped that detailed analysis of the artefacts will enable a closer dating of the phases of this building and establish important correlations with the wider events of the region's history. This in turn, will flesh out our very generalized and imperfect understanding of the organization of one provincial Byzantine city and the impact of major political change on the society of this region.

The Hellenistic/Early Roman Occupation
(J. Tidmarsh)

Although there is evidence for a dense occupation on the main city mound (Khirbat Faḥl) during the second and early first centuries BC, no Early Hellenistic (third century BC) structures have as yet been located there. The reason for this lacuna at Pella and, indeed, throughout much of the Levant is unclear although it may be in part due to the foreign policy of the Ptolemies (rulers of Coele-Syria during the third century BC) who seem to have concentrated on defending their borders rather than extending them by means of extensive settlement outside Egypt itself.[11]

Stray finds from Tall al Ḥuṣn, such as an unstratified Attic lamp of Howland Type 25 (late fourth/early third centuries BC),[12] suggest that there may have been Early Hellenistic occupation on the tall , but this, as yet, has not been conclusively demonstrated.

The excavations of the 1993 season revealed the presence of later Hellenistic settlement on Tall al Ḥuṣn (see below) but as yet the earliest phases have not been reached. It is planned to continue this investigation in the following seasons.

Plot XXXIVG

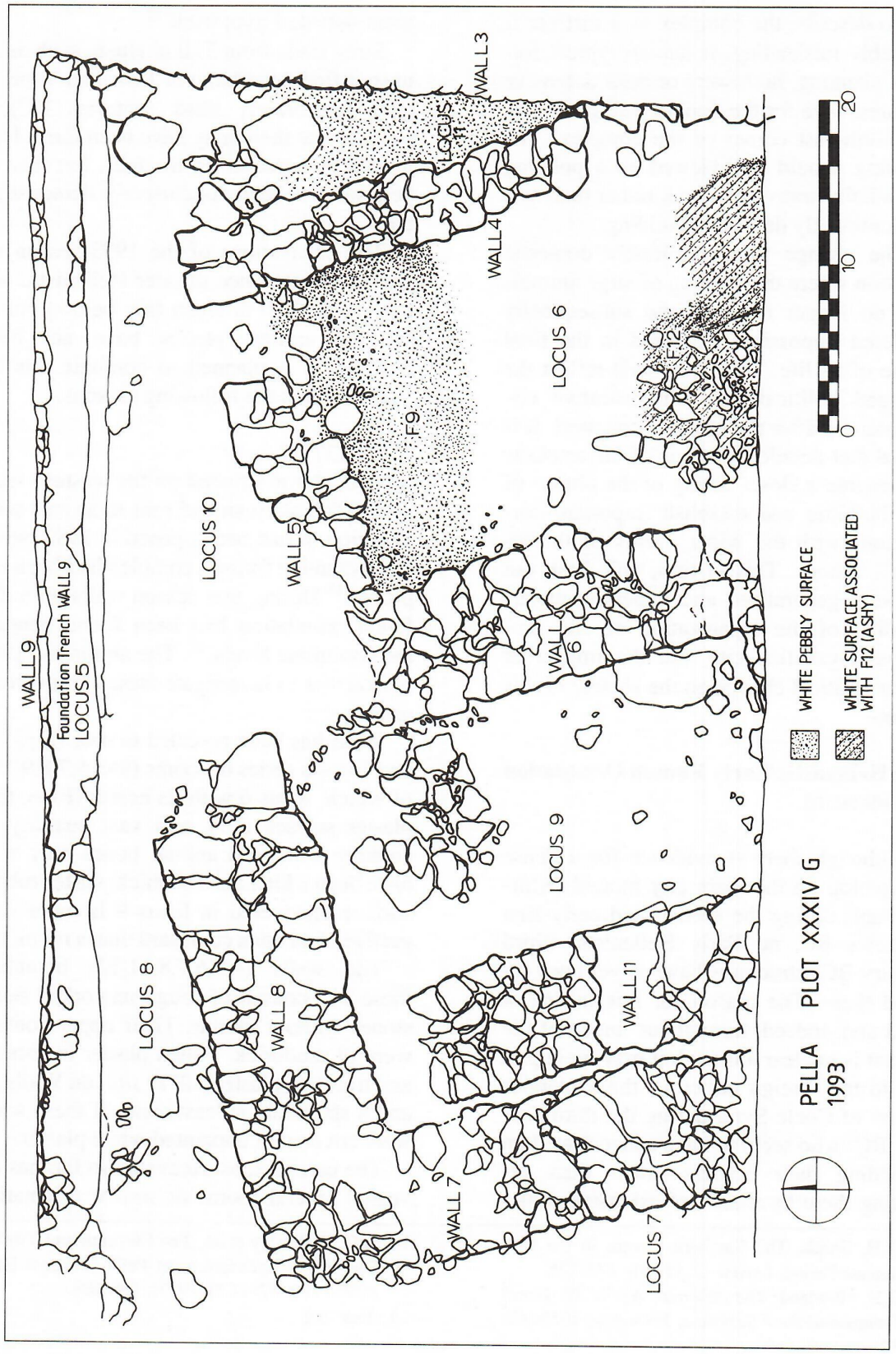
This plot is situated on the western summit of Tall al-Ḥuṣn and runs in an east-west direction. It had been opened in 1989 when the Byzantine fortress complex had been explored.[13] During that season walls on a different orientation had been found beneath the Byzantine levels.[14] The aim in the 1993 season was to investigate these earlier structures.

What has been revealed to date (Figs. 13 and 14) is a series of rooms (loci 6,7,8,9,11), of which locus 6 with its hearth (F12), thin plaster surface (F9), and vast quantity of cooking ware and animal bones may well have been a kitchen. The thick plaster/rubble surface uncovered in locus 9 is more suggestive of an open courtyard than a room.

The walls (4,5,6,7,8,11,12) bounding these loci consist of rough unworked fieldstones without mortar. Their upper courses were of mudbrick Fallen plaster in locus 8 and traces of plaster still *in situ* on Walls 12 and 8 show that at least some of these walls were covered in unpainted white plaster.

The complex, as excavated so far, has revealed several rooms of similar orientation

11. R.H. Smith, The Southern Levant in the Hellenistic Period, *Levant* 22 (1990): 123-125.
12. R.H. Howland, *The Athenian Agora IV. Greek Lamps and their Survivals,* Princeton, 1958: 67-82.
13. A.G. Walmsley *et al.,* The Eleventh and Twelfth Seasons of Excavations at Pella (Tabaqat Fahl) 1989-1990, *ADAJ* 37(1993): 198-208.
14. *Ibid*: 208.



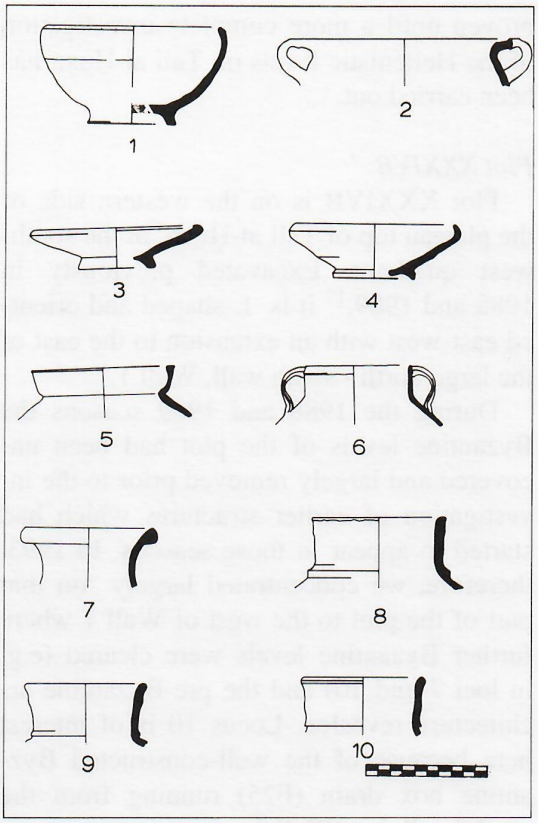
13. Plot XXXIVG, plan of Late Hellenistic / Early Roman architecture.



14. Plot XXXIVG. View to east of Late Hellenistic/ Early Roman domestic architecture.

which must represent part of one or more domestic structures. In their latest phases these rooms are associated with Late Hellenistic/Early Roman pottery (Fig. 15), notable amongst which are the jars with broad ridged collars (Fig. 15: 8,9,10).

The presence of Early Roman pottery and the absence of any destruction level in this complex or in the Hellenistic levels of Plot XXXIVB (see below) differ markedly from the situation seen on the main mound at Pella where there is strong evidence in Areas III, IV, VIII, and XXIII of a widespread Late Hellenistic destruction which must be associated with the conquests of Alexander Jannaeus in 83/2 BC.[15] Following this destruction, there is a break in occupation on the main mound lasting for at least several centuries, as shown by the fact that remains of Early Roman settlement there are virtually absent despite the ambitious late first century AD construction program undertaken in the Wādī al-Jirm.[16] It is tempting to argue, therefore, that whereas Jannaeus was able to sack the Hellenistic city on the main mound he was unable to overcome the natural and man-made defences of Tall al-Ḥuṣn. As a result, occupation on that tall continued relatively undisturbed throughout Early Roman times. This scenario must, of course, remain un-



15. Late Hellenistic and Early Roman pottery from Plot XXXIVG.

1. CN 7280. XXXIV G 3.11.Bowl. Coarse light brown ware.
   Clay 10YR 8/3. Patchy dull brown-black glaze on interior and exterior.
2. CN 7255. XXXIV G 6.10. Cooking pot. Metallic coarse terracotta ware. Clay 5YR 4/6.
3. CN 7177. XXXIV G 12.3. Bowl. Coarse light brown ware. Clay 5YR 7/4.
4. CN 7176 XXXIV G 11.4. Bowl. Coarse light brown ware. Clay 10YR 7/4. White inclusions.
5. CN 7169. XXXIV G 6.8. Cooking pot. Metallic coarse terracotta ware.
   Clay 2.5YR 6/8. Grey core.
6. CN 7285. XXXIV G 8.11. Cooking pot. Metallic coarse terracotta ware. Clay 2.5YR 7/6.
7. CN 7175. XXXIV G 11.4. Jug. Metallic buff ware. Clay 7.5YR 6/6.
8. CN 7277. XXXIV G 3.13. Jar. Hard pale ware. Clay 5YR 6/6.
9. CN 7276. XXXIV G 3.13. Jar. Metallic buff ware. Clay 10YR 7/3.
10. CN 7173. XXXIV G 6.10. Jar. Metallic buff ware. Clay 7.5YR 7/6.

15. Josephus, *Jewish Antiquities*, 13.392-397.

16. R.H. Smith and L.P. Day, *Pella of the Decapolis* II, Wooster, (1989): 4.

proven until a more complete investigation of the Hellenistic levels on Tall al-Ḥuṣn has been carried out.

Plot XXXIVB

Plot XXXIVB is on the western side of the plateau top of Tall al-Ḥuṣn, in the south-west quadrant. Excavated previously in 1988 and 1989,[17] it is L-shaped and oriented east-west with an extension to the east of the large north - south wall, Wall 1.

During the 1988 and 1989 seasons the Byzantine levels of the plot had been uncovered and largely removed prior to the investigation of earlier structures which had started to appear in those seasons. In 1993, therefore, we concentrated largely on that part of the plot to the west of Wall 1 where further Byzantine levels were cleared (e.g. in loci 7 and 10) and the pre-Byzantine architecture revealed. Locus 10 is of interest here because of the well-constructed Byzantine box drain (F25) running from the south baulk into Wall 6.

Within this plot (Fig. 16), loci 5 and 6 represent rooms bounded by walls (6,9,10/11,12,13) of unworked fieldstones. They are as yet incompletely excavated and although no definite floors or occupation surfaces have been isolated, most of the pottery recovered from the uncontaminated levels within these loci is Hellenistic in date (Fig. 17). Notable amongst this pottery is the presence of numerous fragments of floral and figured Megarian bowls (Fig. 17: 3,5,6.) of which at least one is an Attic import of high quality. Before the finds in this plot, relatively few fragments of Megarian bowls had been recovered at Pella. Locus 12, bounded by the west and north baulks as well as by walls 12 and 13, probably represents a further room which is associated with Late Hellenistic/Early Roman pottery.

Towards the end of the current season a small sondage was begun to the east of Wall 1 in locus 8 which had already been partially dug in 1988 and 1989. The aim of this sondage was to locate a foundation trench for Wall 1 on its east side. As yet this foundation trench has not been located but from 8.34 were recovered a Late Hellenistic/Early Roman juglet and cooking pot (both almost complete) as well as an Eastern Terra Sigillata dish (Fig. 17: 8,9 and Fig. 18).

It is planned to continue work in both this plot and Plot XXXIVG in future seasons in order to explore the earlier Hellenistic phases.

The Bronze Age Occupation

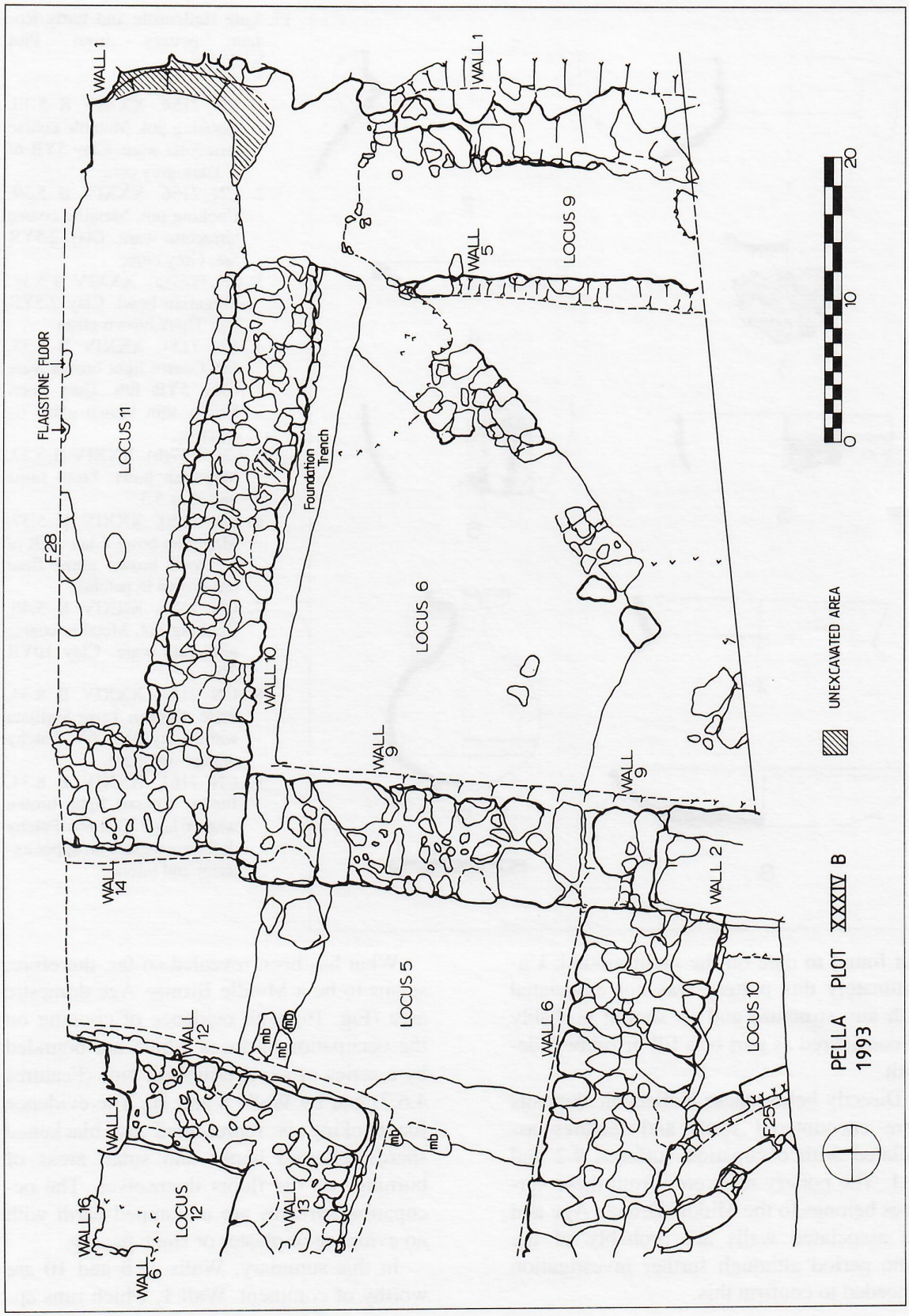
Besides Byzantine and Hellenistic, the other period which was well represented in the 1993 excavations was the Bronze Age with structures of Middle Bronze date being found in plots XXXIVF and Early Bronze remains in XXXIVT. Up until now, however, relatively little in the way of Late Bronze Age material has been found on the summit of Tall al-Ḥuṣn - an aspect which will also need further investigation in the coming seasons.

Plot XXXIV F

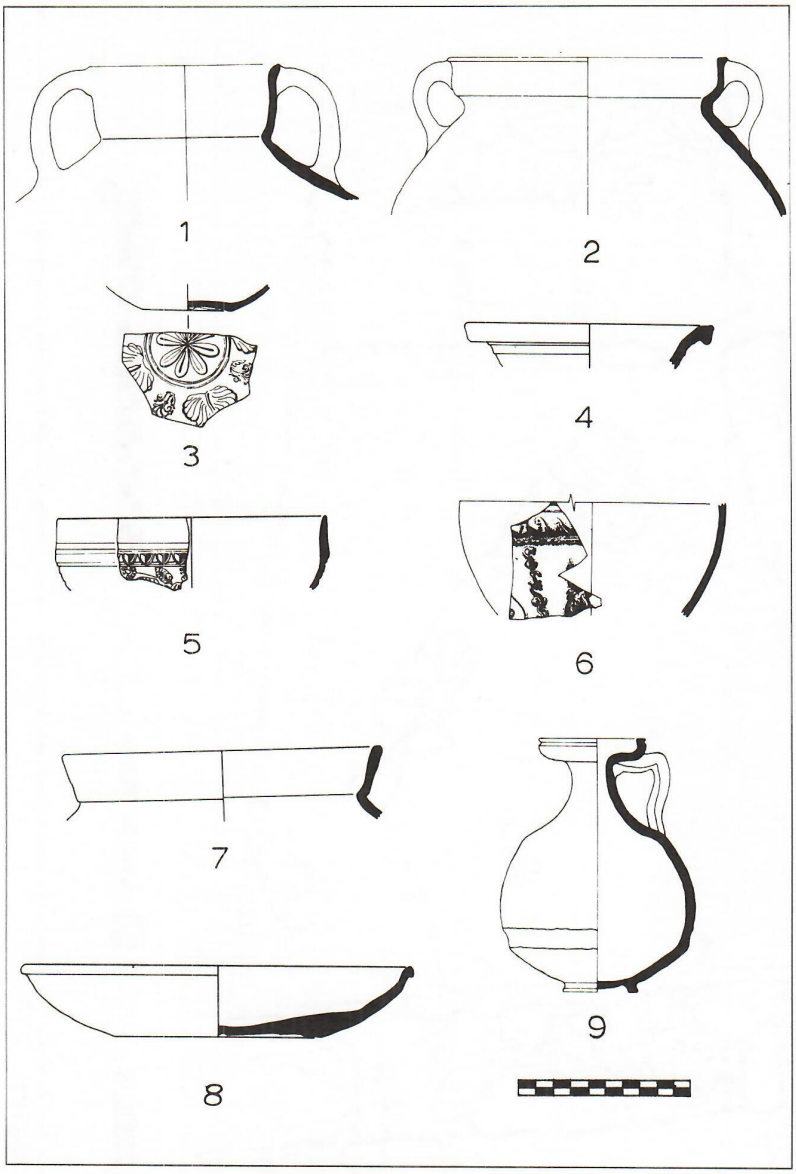
Plot XXXIVF is situated on the north side of the summit of Tall al-Ḥuṣn and runs north-south. It was originally opened in 1989 when the Byzantine levels were explored.[18] It was re-opened in 1993 in order to investigate the reason for the abundance of Hellenistic pottery found in loci 6.2 and 6.3 in 1989.

Loci 6.4 and 6.5, dug in 1993, contained large quantities of Hellenistic pottery, especially the sherds of large storage jars. On preliminary investigation, much of this material seems relatively early - possibly third century BC - and so generally earlier than

17. P.C. Edwards, S.J. Bourke *et al.*, Preliminary Report on the University of Sydney's Tenth Season of Excavation at Pella in Jordan, *ADAJ* 34 (1990): 79-80; *ADAJ* 37(1993): 204, 208.
18. *ADAJ* 37(1993): 198-208.



16. Plot XXXIV B, plan of Late Hellenistic architecture.



17. Late Hellenistic and Early Roman pottery from Plot XXXIVB.

1. CN 7154. XXXIV B 5.40. Cooking pot. Metallic coarse terracotta ware. Clay 5YR 6/8. Dark grey core.
2. CN 7156. XXXIV B 5.39. Cooking pot. Metallic coarse terracotta ware. Clay 2.5YR 5/8. Grey core.
3. CN 7147(a). XXXIV B 5.37. Megarian bowl. Clay 2.5YR 7/4. Thick brown glaze.
4. CN 7151. XXXIV B 5.37. Jar. Coarse light brown ware Clay 5YR 6/6. Grey core. Patchy thin brown glaze on exterior.
5. CN 7147(b). XXXIV B 5.37. Megarian bowl. From same vessel as 5.3.
6. CN 7150. XXXIV B 5.37. Megarian bowl. Clay 5YR 6/6. Good brown glaze fired red-brown in patches.
7. CN 7153. XXXIV B 5.40. Cooking pot. Metallic coarse terracotta ware. Clay 10YR 7/8.
8. CN 7157. XXXIV B 8.34. Plate. Eastern Terra Sigillata ware. Clay 5YR 6/6. Patchy orange-red glaze.
9. CN 7161. XXXIV B 8.34. Juglet. Coarse light brown ware. Clay 7.5YR 6/4. Patchy dull brown glaze on upper exterior and interior.

that found to date on the main mound. Unfortunately this pottery was not associated with any structure and so should probably be considered as part of a fill or rubbish deposit.

Directly below these Hellenistic deposits were encountered walls and features associated with occupation surfaces 9.2 and 12.1. The pottery recovered from these surfaces belongs to the Middle Bronze Age and the associated walls are probably of the same period although further investigation is needed to confirm this.

What has been revealed so far, therefore, seems to be a Middle Bronze Age domestic area (Fig. 19) with evidence of cooking on the occupation surfaces which are bounded by a series of storage/rubbish bins (Features 4,6,7) and by Walls 8 and 10. The evidence for cooking is represented by blackened sherds, charred bones and small areas of burning on the floors themselves. The occupation surfaces are of tamped earth with no evidence of plaster or stone paving.

In this summary, Walls 1, 8 and 10 are worthy of comment. Wall 1, which runs ap-



18. Eastern Terra Sigillata plate from plot XXXIVB.



19. Plot XXXIVF. View to north of the Middle Bronze Age domestic area. The storage bins are to the east of the plot.

proximately east-west, was uncovered in 1989 and further revealed this season. Its construction is of field stones of approximately 40 to 50 cm. in diameter with those on its south face having their exterior surface roughly worked. There is no evidence of mortar or plaster. Its north face has not been exposed although the wall's thickness is probably about 1.70 m. Although the wall remains to be fully investigated, most of the pottery found in its associated tumble (6.6) dates to the Middle Bronze Age and so this wall may well belong to the Middle Bronze occupation of the tall.

Wall 8 runs approximately north-south and forms the western boundary of occupation surfaces 9.2 and 12.1. Only several courses have been revealed so far and they consist of outer faces of unworked fieldstones with a probable mudbrick central core. Its width is about 1.0 m. Although its lower courses have not been uncovered, Wall 8 certainly seems associated with Middle Bronze Age occupation levels 9.2 and 12.1.

Wall 10 also runs more or less north - south and forms the eastern boundary of the occupation surfaces 9.2 and 12.1 where it is continuous with the walls of the three bins (Features 4,6,7) mentioned earlier. It consists of large unworked fieldstones with no evidence of mortar. As yet only partially revealed, it is possible that this wall may, in fact, be a bench or platform.

Plot XXXIVF, then, shows evidence of a significant, and previously unsuspected, Middle Bronze Age occupation on Tall al-Ḥuṣn.

Plot XXXIVT

Plot XXXIVT lies on the south side of Tall al-Ḥuṣn, just below its summit (Fig. 20). The purpose in opening this plot was to investigate the possibility that an apparent gap in the perimeter wall located during the planning of the summit this season (see below p. 15) may mark the position of a gate. The upper courses of several walls (Walls 1,4, 5) already visible prior to excavation revealed the presence of relatively well cut masonry which may have marked the position of a tower or bastion. In the event, neither gate nor tower were found.

Excavation between Wall 1 and Wall 7 revealed a large, and as yet incompletely defined, platform (F2) consisting of loosely packed unworked field stones of 10 - 30 cm in diameter which were chocked with smaller stones and clay. It is at least one metre thick and so must have had some supporting function. The platform is bounded to the north by three narrow terraces, made of rough fieldstones bonded by clay, which appear to be of



20. Plot XXXIVT. View to south. The stone platform is well seen at the south end of the plot. Wall 7 is in the north- east corner.

similar date to the platform itself.

The date of this platform, however, is still to be determined although a large amount of Early Bronze Age pottery is appearing from within its upper layers. Furthermore, it is reminiscent of the massive stone platform found previously on the east side of Tall al-Ḥuṣn in Plot XXXIVA and assigned to the Early Bronze Age.[19]

To the east of the stone platform, Wall 7 (Fig. 21) runs in a north-south direction.Its most northerly part has four courses of pseudo-isodomic masonry on its west face while its eastern face has not been revealed. There is no binding mortar or external plaster but rather a central core consisting of clay and small unworked stones. The southern part has been robbed in its upper courses although the trace can be identified by following the undisturbed rough stone foundation course (F1) underneath.

Wall 7, including its foundation course, has been cut through the stone platform (F2) as well as the three narrow terraces mentioned above and so must be later in date. On superficial examination, the latest pottery from the wall's foundation trench (14.1) seems to belong early in the Roman period and this is consistent with its style of masonry.



21. Plot XXXIVT. Wall 7 from the south-west.

On the west side of the stone platform, which abuts it, Wall 1 runs parallel to Wall 7 and has at least two phases. The earlier one is dated by the pottery in the foundation trench (7.1) to the Early Bronze Age whilst the later phase with its well cut rectangular blocks bonded with a lime mortar is probably Roman.

To the west of Wall 1 and related to its early phase is the occupation surface 8.4 with its ash lenses, burnt sherds and bone. Preliminary inspection of the pottery from 8.4 points to a date in the Early Bronze Age for the surface.

This plot, therefore, reveals evidence of Early Bronze Age activity in the southern sector of Tall al-Ḥuṣn with overlying Ro-

19. *ADAJ* 37(1993): 208-210.

man construction. There is no evidence of a gate although the well-cut masonry of Wall 7 suggests that this wall was part of an important structure which will be investigated in future seasons.

Planning of the Summit (P.Watson)

Major wall lines visible on the surface of the summit of Tall al-Ḥuṣn and outside the excavation plots were planned (Fig. 1). Some of these walls form the continuation of the earlier core building of the Byzantine complex in the south-east and need further excavation to be understood in detail. Other units are identifiable in patches over the entire area of the summit.

The most outstanding contribution the surface planning has made to our understanding of the occupation of the summit, is the revelation of a circuit wall enclosing this area. It is clearly identifiable on the east, south, and west sides of the summit, but the overburden of topsoil along most of the north side of the tall has obscured its continuation here. There was insufficient time to extend the planning below this wall, which is located somewhat below the edge of the summit and difficult to access. However it is apparent that radial walls extend down-slope perpendicular to this wall, as if forming a system of buttresses. It is hoped to continue this planning in a future season. Up-slope of the wall, a series of rooms can be identified in places, as if forming an irregular casemate structure. The wall follows the curve of the hill by turning irregularly at angles rather than curving. The date of the wall is incertain, although the excavations in Plot T have shown that there was considerable rebuilding at different times, and that the original formation of the contours of the summit may date back to the Early Bronze Age.

P. Watson
British Institute at Amman
for Archaeology and History
P.O. Box 519, Jubaiha
Amman 11941
Jordan

J. Tidmarsh
School of Archaeology,
Classics and Ancient History
University of Sydney
NSW 2006A
Australia