

FIRST PRELIMINARY REPORT OF THE 1989 TELL NIMRIN PROJECT

by
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Background

With the authorization and support of Dr. Ghazi Bisheh, Director-General of the Department of Antiquities of Jordan, and with the assistance of Departmental Representative Mr. Sa'ad Hadidi of the Salt District, a team of fourteen archaeologists and ten local workers excavated at Tell Nimrin (South Shuneh) from May 16 until June 24, 1989.¹

Tell Nimrin is located approximately twelve kilometers north of the Dead Sea and sixteen kilometers east of Jericho (see Fig. 1). The major highway connecting Amman, Salt, Jericho, and Jerusalem runs along and cuts into the northern slope of the tell (see Pl. I,1). Although previous major scientific excavations had not been conducted at Tell Nimrin, explorers and early archaeologists such as F.M. Abel (1910; 1931), W.F. Albright (1924-25:48), C.R. Conder (1889: 237-238), A. Mallon (1929) and S. Merrill (1881: 206-207), visited and commented on the site in their publications. Because Nelson Glueck's survey in the late 1930s recovered no pottery from the site that dated earlier than the Roman period (Glueck 1945-49: 367-368), most scholars have assumed that nearby Tell Bleibel, rather than Tell Nimrin, is the ancient site of Beth-Nimrah. However, Bronze and Iron Age ceramics were found at Nimrin during M. Ibrahim, J.A. Sauer and K.N. Yassine's 1976 surface survey (Ibrahim *et al.* 1988: 189-207) and by the Jordan Department of Antiquities in a sounding at the site in 1980. In 1982 M.

Piccirillo published his findings of a Byzantine church that was unearthed on the southwest corner of the tell during the construction of a house.

Planning for the current project began in 1985 when Dr. Adnan Hadidi, then Director-General of the Jordanian Department of Antiquities, invited James W. Flanagan, now of Case Western Reserve University, to launch a small salvage operation at Tell Nimrin in order to preserve information that was being lost to modern development in the Jordan Valley. Flanagan accepted and David W. McCreery, then Director of the American Center of Oriental Research (ACOR) in Amman and now at Willamette University, joined the project as co-director.

In 1986, two weeks were spent reconnoitering the site, surveying its topography, and preparing drawings. This initial investigation focused on the extensive archaeological remains exposed in the road cut along the northern edge of the site, especially the documentation of an *in situ* wall. This wall consists of approximately nineteen courses of mudbrick on top of six stone courses, preserved to a height of approximately four meters (Fig. 2). No excavation was undertaken in 1986 and thus no attempt was made to date the wall.

A full season was made possible in 1989 through the generosity of the H.M. O'Neill Charitable Trust of Cleveland, Ohio, the Catholic Biblical Association (Washington, DC), and the S.H. & Helen R. Scheuer Family Trust (New York). Smaller grants and assistantships were

1. The 1989 Tell Nimrin staff included: James W. Flanagan, co-director; David W. McCreery, co-director and paleoethnobotanist; Mr. Sa'ad Hadidi, Department of Antiquities representative; Thomas R. Lee, surveyor/draftsman; Rudolph H. Dornemann, ceramist; Ronald West, geologist; Paula M. McNutt, area super-

visor; Kathleen Nash, area supervisor; Dixie L. West, area supervisor and osteologist; Janice L. Reiff, computer specialist; Carol H. Corgan, Jeffrey J. Youde and Damon Ogden, assistants; and Basil Milhem, Department of Antiquities Trainee.

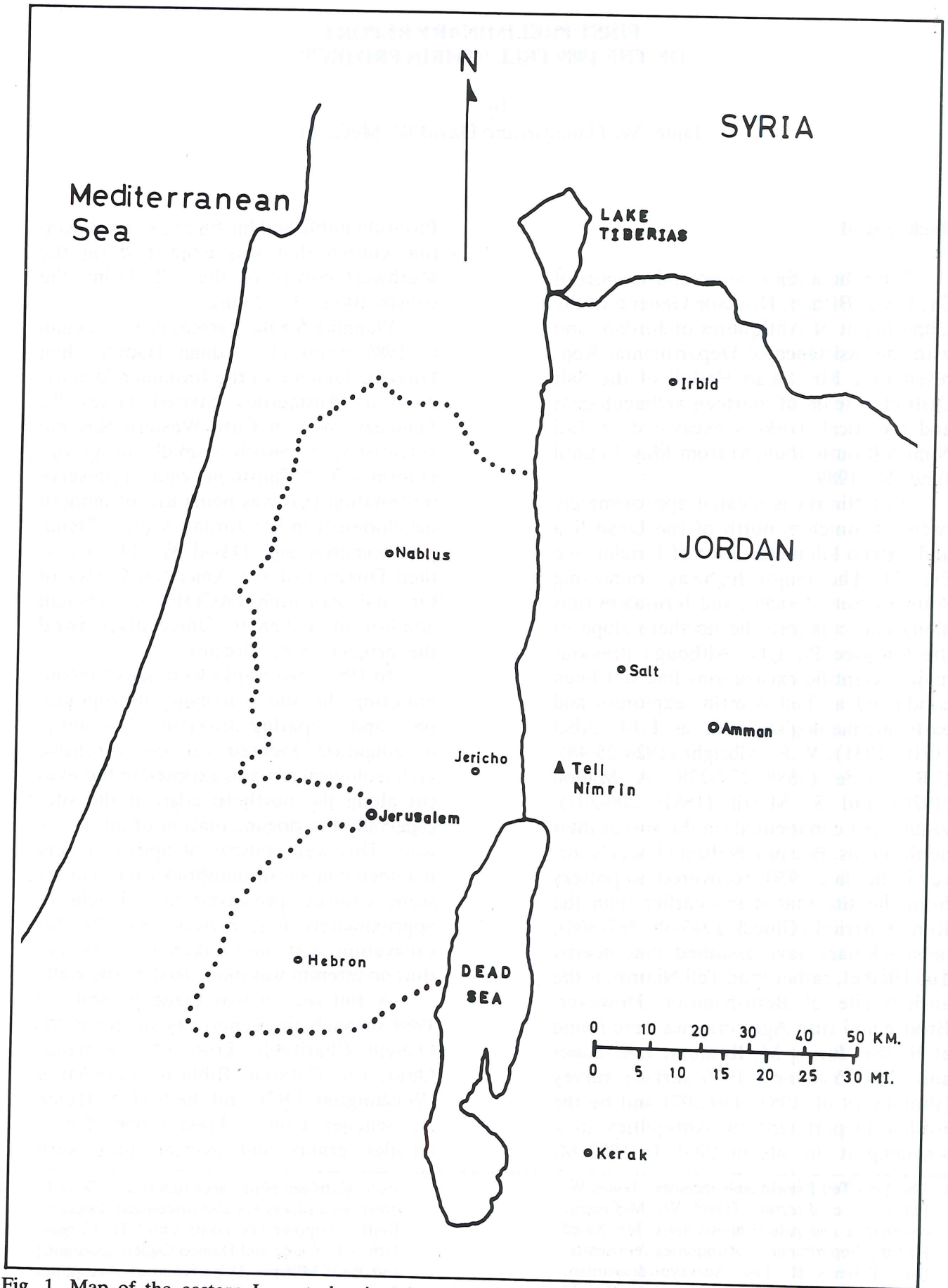


Fig. 1. Map of the eastern Levant showing the location of Tell Nimrin.

TELL NIMRIN, JORDAN
 SECTION XX/YY
 TRIMMED AUGUST 1986
 DRAWN BY THOMAS R. LEE
 11/29/87

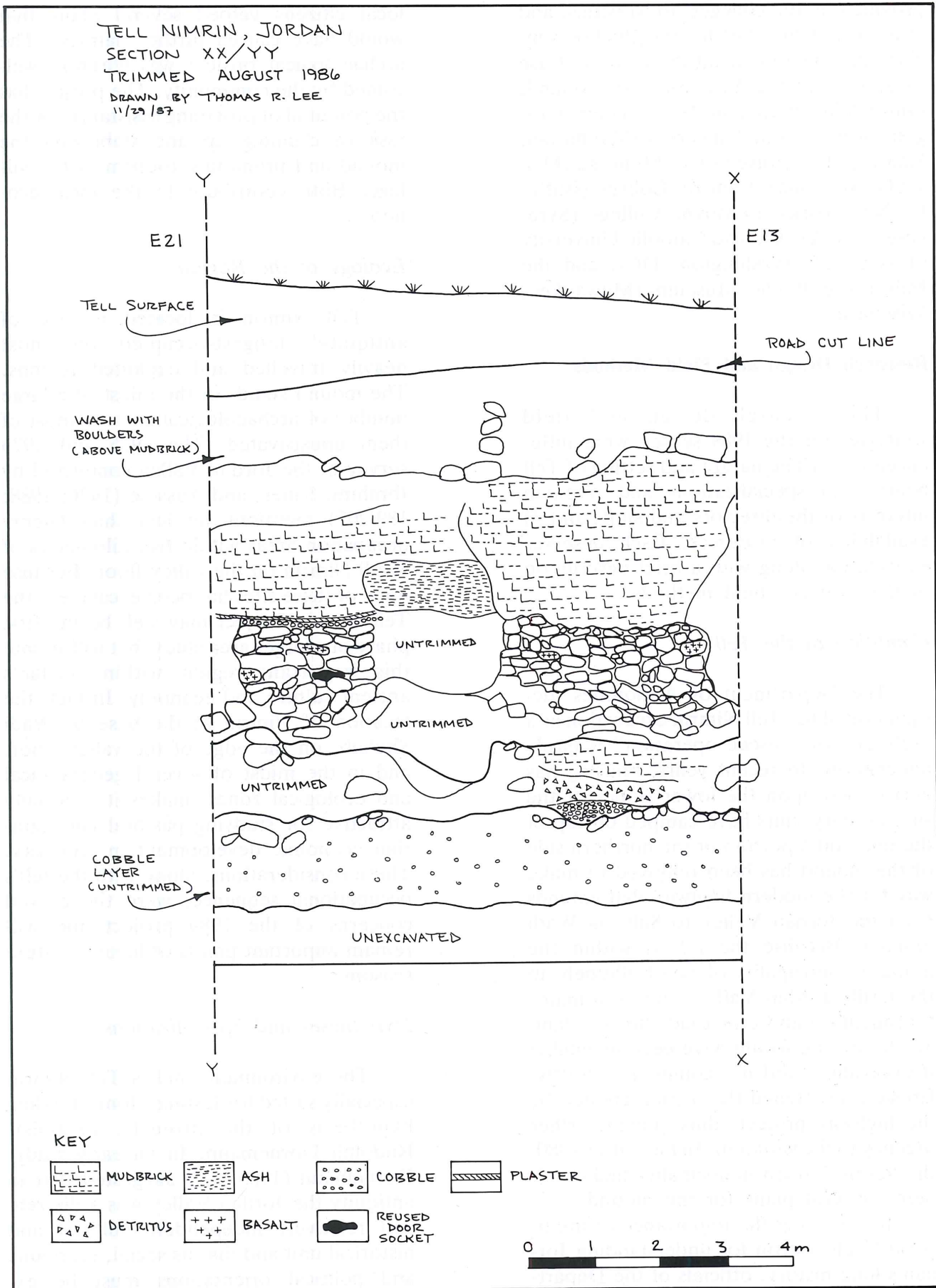


Fig. 2. 1986 section drawing of the large wall in the road cut.

provided by the colleges, universities, and museums of the staff for the 1989 season. The participating institutions were Case Western Reserve University (Cleveland, Ohio), Willamette University (Salem, Oregon), Kansas State University (Manhattan, Kansas), The University of Montana (Missoula, Montana), Canisius College (Buffalo, New York), LeMoyne College (Syracuse, New York), The Catholic University of America (Washington, DC), and the Milwaukee Public Museum (Milwaukee, Wisconsin).

Research Design and Field Methods

The research design and field strategies for the 1989 season were influenced by: 1) The nature and setting of Tell Nimrin, 2) specializations and research interests of the directors and staff, and 3) availability of resources. Each deserves explanation along with a brief description of the project's field methods.

Condition of the Tell

The Department of Antiquities' designation of the Tell Nimrin excavation as a "salvage" or "rescue operation" is easily understood. In recent years, housing has encroached upon the lower slopes of the site, military units have camped on top of the tell, and a portion of the northern side of the mound has been removed to make way for the modern highway that extends from the Jordan Valley to Salt via Wadi Shu'aib. Because the tell is within the modern municipality of South Shuneh, in the fertile Jordan Valley, and on a major thoroughfare and crossroad, further damage to the site would have been inevitable if excavations did not commence shortly. Erosion threatened the section created by the highway project, thus adding further urgency to the situation. In fact, after 1980, the South Shuneh municipality had considered several plans for the mound.

Recognizing the importance of multi-period Tell Nimrin for understanding Jordan's long history, officials of the Department of Antiquities, municipal officers and

local citizens vetoed several plans that would have caused further damage. The archaeological project was warmly welcomed by the community. The project has the potential of providing assistance for the task of cleaning up and stabilizing the mound and promoting tourism in the village. Both contribute to the local economy.

Ecology of the Region

Tell Nimrin is located in one of antiquity's longest-occupied and most heavily travelled and exploited regions. The mound stands in the midst of a large number of archaeological sites — most of them unexcavated. The 1975 and 1976 survey of the Jordan Valley conducted by Ibrahim, Sauer, and Yassine (1976; 1988: 189-207) mentions no less than twenty occupation areas within five kilometers of Wadi Nimrin on the valley floor. Because none of these sites has been excavated, the Tell Nimrin Project may well be the first phase of a larger area study that will situate this important region within Jordan's ancient culture and economy. In fact, the location of Nimrin at the base of Wadi Shu'aib, on the edge of the valley floor, and in the midst of several geographical and ecological zones, makes it especially attractive for studying pastoral and agrarian economic development in antiquity. These considerations, along with the tell's occupational sequence, were the central concerns of the 1989 project and will remain important points of focus in future seasons.

Hypotheses and Specializations

The environment makes Tell Nimrin especially suited for testing a long-standing hypothesis of the project's ceramist, Rudolph Dornemann. In an early study, Dornemann (1983: 4-7) suggested that in antiquity the Jordan Valley was a discrete and relatively independent cultural and historical unit and that its social, economic and political orientations must be examined period by period. That hypothesis

dictated staff specializations for the 1989 season: geology, osteology, palaeoethnobotany, ceramics, architecture, computer programming and publications. Team members share interests in agriculture, metalworking, social systems, epigraphy, and history. Over several seasons, the data will be used to reconstruct Tell Nimrin's ancient ecology, social structure and economic base during all periods of occupation. Computer models that will expedite the dissemination of results by reducing the steps between field operations and final publication are being developed.²

Field Methods

Excavation and recording procedures are similar to those employed by other American projects in Jordan. The Nimrin field procedures are a modified version of the so-called Wheeler-Kenyon method of stratigraphic excavation. Elements from the manuals and procedures of the Gezer, Bâb edh-Dhrâ' and Qarqur excavations are incorporated in the Tell Nimrin excavation and recording system.

The Tell Nimrin grid, composed of ten-meter squares on a polar point system, represents a departure from conventional Near Eastern grid layouts as well as area and square designations. In order to streamline recording systems and facilitate computer analyses, spatial relationships among objects, layers and excavated plots are described according to their positions on x, y and z axes. This allows locations and relationships among them to be identified immediately. Moreover, three-dimensional representations of the entire site can be constructed quickly and accurately

by computers. The system facilitates integrating disparate information and, in turn, leads more quickly to publication. Raw data from the project is also readily accessible and intelligible to colleagues on other projects who need the data for their own research.

The system changes the way in which areas and squares are commonly identified. What would be an area on another project is at Nimrin a ten-by-ten-meter square identified by a polar point (i.e., the corner stake) closest to 00/00 on the y/x axes. Standard surveying conventions rather than the nomenclature of mathematics is followed in identifying the location of points. Thus, points are defined by their position along the N-S (y) axis, the E-W (x) axis, and the vertical (z) axis. In this recording system, N45/W25 (or NW 45/25), identifies a point 45 meters north and 25 meters west of the reference point 00/00. The three "Areas" that were opened during the 1989 season are N50/W00, N20/W20, and N40/W20. During excavation, each ten-by-ten-meter square is divided into four five-by-five-meter quadrants, numbered again according to the point closest to 00/00. For example, N40/W20 is comprised of N40/W20 (the five-by-five-meter quadrant adjacent to the polar point), N45/W20, N40/W25, and N45/W25. Each quadrant is excavated in turn, resulting in a "moving" or "open" balk system that affords maximum exposure within each ten-by-ten-meter square while guaranteeing the control offered by a "standing" balk system.

Because the polar point for a ten-by-ten-meter "Area" also designates a five-by-five-meter "Square" adjacent to the

2. Analyses of the materials is progressing at several locations. Flanagan is overseeing the laboratory analyses of metal, ceramic, and carbon-14 samples at Case Western Reserve University and McCreery is studying the botanical samples at Willamette University. Rudolph Dornemann is processing the ceramics at the Milwaukee Public Museum, while Carol Redmont is conducting a ware analysis of a random sample of ten per cent of the survey pottery at the American Center of Oriental

Research in Amman. Deidre Dempsey is working on the Aramaic ostrakon in Germany, and Peter Warnock is studying the pollen, wood, and charcoal samples at Texas A. and M. University. At Kansas State University, Ronald West is analyzing the geological samples, and Dixie West is working on the faunal remains. Janice L. Reiff is developing the computer systems for analyses at Case Western Reserve University.

point, in this report the terms "Area" and "Square" are used in order to guide the reader. Hence, for example, area N40/W20 comprises square N40/W20 and three other quadrants. The terms, however, are not needed for interpreting the excavation records.

RESULTS OF THE 1989 SEASON

Surface Survey

The first week of field work was devoted to surveying the surface thoroughly and producing a topographic map of the site.³ The survey yielded some 41,000 sherds from the following periods: Early Bronze (EB) IV, Middle Bronze (MB), Late Bronze (LB)?, Iron I?, Iron II, Persian, Hellenistic, Roman, Byzantine, Umayyad, Abbasid, Ayyubid, Mamluk, Ottoman, and Modern.⁴ Thus, with the possible exceptions of the Late Bronze and early Iron Ages, the survey indicates that Tell Nimrin was occupied continuously from approximately 2,000 B.C. to the present.

The distribution pattern does not identify areas of specialized use during any period, but it does indicate that bulldozing has altered the surface layers of the tell significantly in recent years. The eastern end of the site appears least disturbed, but there are clear signs that soil from the top of the mound has been pushed to and beyond the northern, southern and western slopes of the ancient tell. The survey enabled three promising areas to be selected for excavation.

Geology

The project's geologist examined the immediate geological and geographical environs of Tell Nimrin and collected samples

to be used by other geologists, ceramists and metallurgists in interpreting the finds from the site. Particularly important was the geological assessment of the archaeological bedrock exposed in Area N40/W20 during the excavations. The tell rests upon an alluvial deposit — identified in the geological literature as "the lower terrace." Several studies suggest that this stratum was deposited as recently as 4500 B.P. In any case, Tell Nimrin initially rested on an alluvial slope where water from rain and springs in the hills to the east passed nearby.

The first season demonstrates that the site was originally founded on a relatively flat alluvial plain, not upon a 'natural mound' (*pace* Glueck 1945-49: 367-338). The discovery of a ten to twenty centimeter layer of travertine (tufa), immediately above the alluvial deposit and below occupational layers, implies that fresh water sources were important and may have influenced the ancient inhabitants' choice of the location. If the wadi floor has eroded approximately ten meters during the past four thousand years, as is proposed for wadis in other regions of Jordan, the earliest occupants of the site chose a pebble, cobble, and boulder "plain" that was near abundant water resources, including perhaps a fresh water spring at the site. The setting gave access not only to the fertile plains nearby, but, because of the terrain, also guaranteed access to routes that reached up and down the Jordan Valley, across the river and into the hills to the west, and through Wadi Shu'aib to the eastern plateau. The inhabitants of Nimrin were advantageously situated for cultivation, pastoralism, trade, travel, defense and the development of crafts and industries that required access to wood, water and minerals, when appropriate technologies came available.

3. The expedition's ability to produce a highly accurate topographic map of the site was possible because of a digital theodolite, EDM, and other survey equipment provided by a grant from the Canadian Government. We express

our appreciation to the Canadian Embassy in Amman and ACOR for making this equipment available to the Tell Nimrin Project and other archaeologists working in Jordan.

4. See Dornemann's report following this article.

Stratigraphy and Architecture

Three areas were chosen for excavation during the first season. Together, they promised to reveal the full diachronic occupation sequence in the undisturbed portion of the tell and to guarantee that archaeological bedrock would be reached in 1989 (see Figs. 3 and 4). Area N40/W20 is located where the road cut has exposed massive architecture that from the beginning seemed to extend down to the alluvial base of the tell. Area N50/W00 promised to yield stratified architecture and occupational layers twenty meters east of, and slightly above, Area N40/W20. Area N20/W20 was placed on the summit of the tell, twenty meters south of, and approximately seven meters above, Area N40/W20.

This strategy adopted was an attempt to "link" the three areas in order to reveal the entire vertical occupation sequence in a single season. The z or vertical axis at the end of the first season would extend approximately ten meters from ca. 188 to ca. 198 meters below sea level. The first season would also give considerable lateral exposure, so that the areas' locations on the tell's grid would make it possible to connect them in a second season. This would provide long sections on both east-west and north-south axes. Such exposure along the x, y and z axes would be exceptional by any standard and would be unprecedented for two seasons of excavation by a small team.

Area N40/W20

Area N40/W20 provided the best stratigraphic information for the site's earliest occupation (see Pl. I, 2). Two five-meter squares (N45/W20 and N45/W25) and a portion of a third (N40/W25) were excavated in this area. EBIV/MBI (ca. 2,000 B.C.) pottery was recovered from two loci: a pit cut into the alluvial deposit (L81, in N45/W20), and a compact layer of clay (L61 in N45/W25; see Fig. 5). In the limited area of excavation, no architectural features were firmly tied to EBIV/MBI ceramics.

Immediately above, a complex series of occupational surfaces and architectural phases was encountered. Two superimposed compact pebbly surfaces (L52 and L53) appear to date to early MBI. Overlying these surfaces were two compact soil layers (L50 and L51), associated with the earliest architectural remains, walls L20 and L27 (see Figs. 5 and 7). The former, L20, consists of only four small superimposed limestone boulders exposed in the section. Further excavation of L20 to the south is needed to determine its nature, but the presence of an *in situ* door socket at its base, and resting on the L50 surface, indicates that L20 is an *in situ* element of a structure.

In N45/W20, walls L70 and L68 appear to have been contemporary with L20 and L27 in N45/W25 (see Fig. 6). The limited area of horizontal exposure prohibits determining the association of these loci in the two squares. Preliminary pottery readings from surfaces associated with the structures suggest that they all date from early MBII.

N45/W20 yielded solid information pointing toward a second MBII construction phase. Wall L55 was constructed at this time (see Figs. 7 and 8). This locus abuts wall L27 and extends west to east across square N45/W20 to the east section. The wall is similar in construction to L70, with two rows of small limestone boulders with rubble fill. Unlike L70 that comprises only two stone courses, five courses of L55 are preserved, except for a portion where three courses of stone were removed by later construction — by foundation trench L23 in antiquity and a bulldozer ripper during modern road construction (see Fig. 9).

Wall L78, of which only one stone course is preserved, abuts and appears to be contemporary with L55. Abundant mudbrick debris (L58) in this area suggests that L78 may have served as the foundation of a mudbrick wall. Two fragmentary *ṭawabeen* embedded in surface L76 are associated with walls L55 and L78, suggesting that all of the loci are related to an enclosed courtyard. Field readings of the

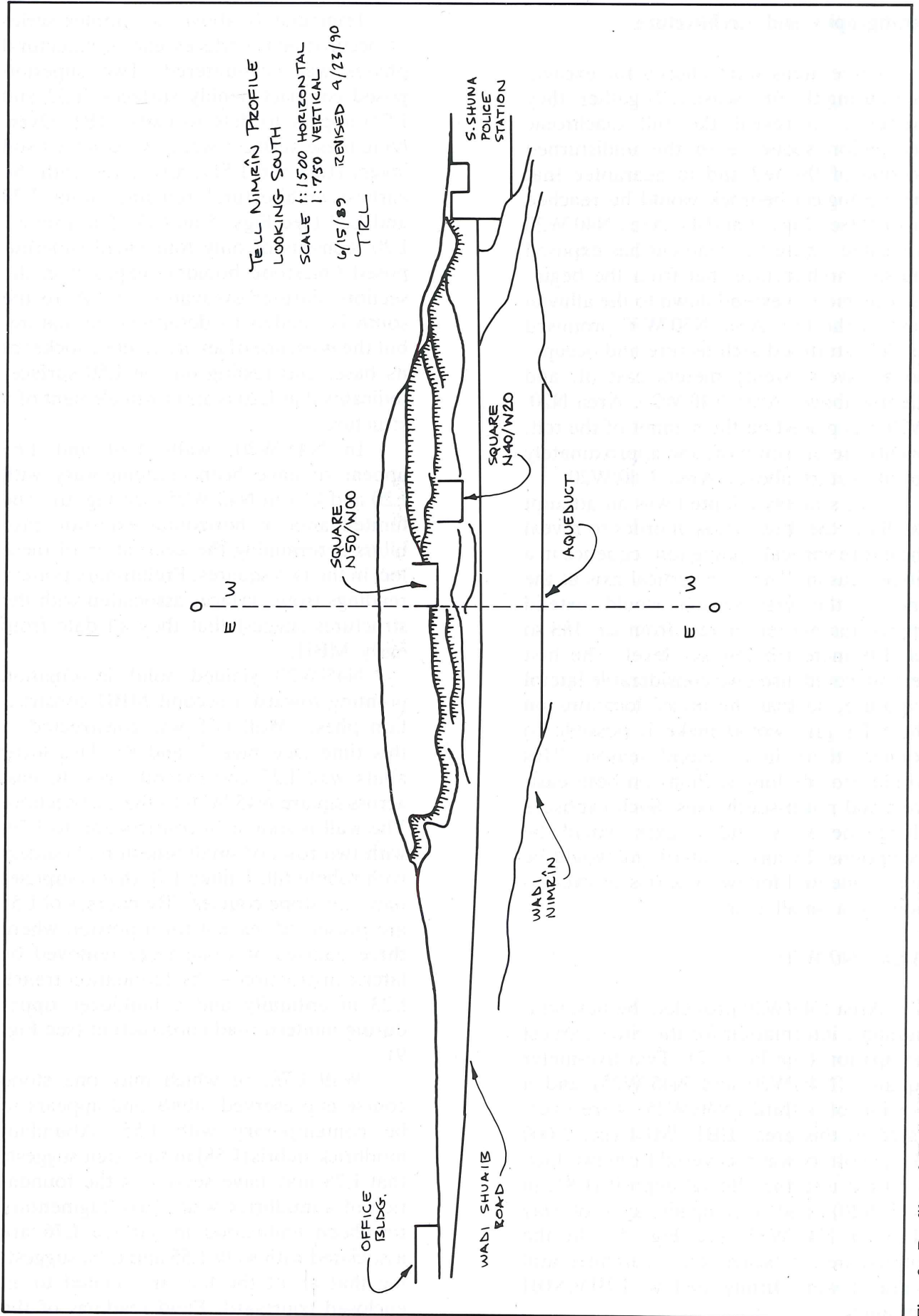


Fig. 3. Profile of Tell Nimrin looking south. Note location of excavation Areas N40/W20 and N50/W00.

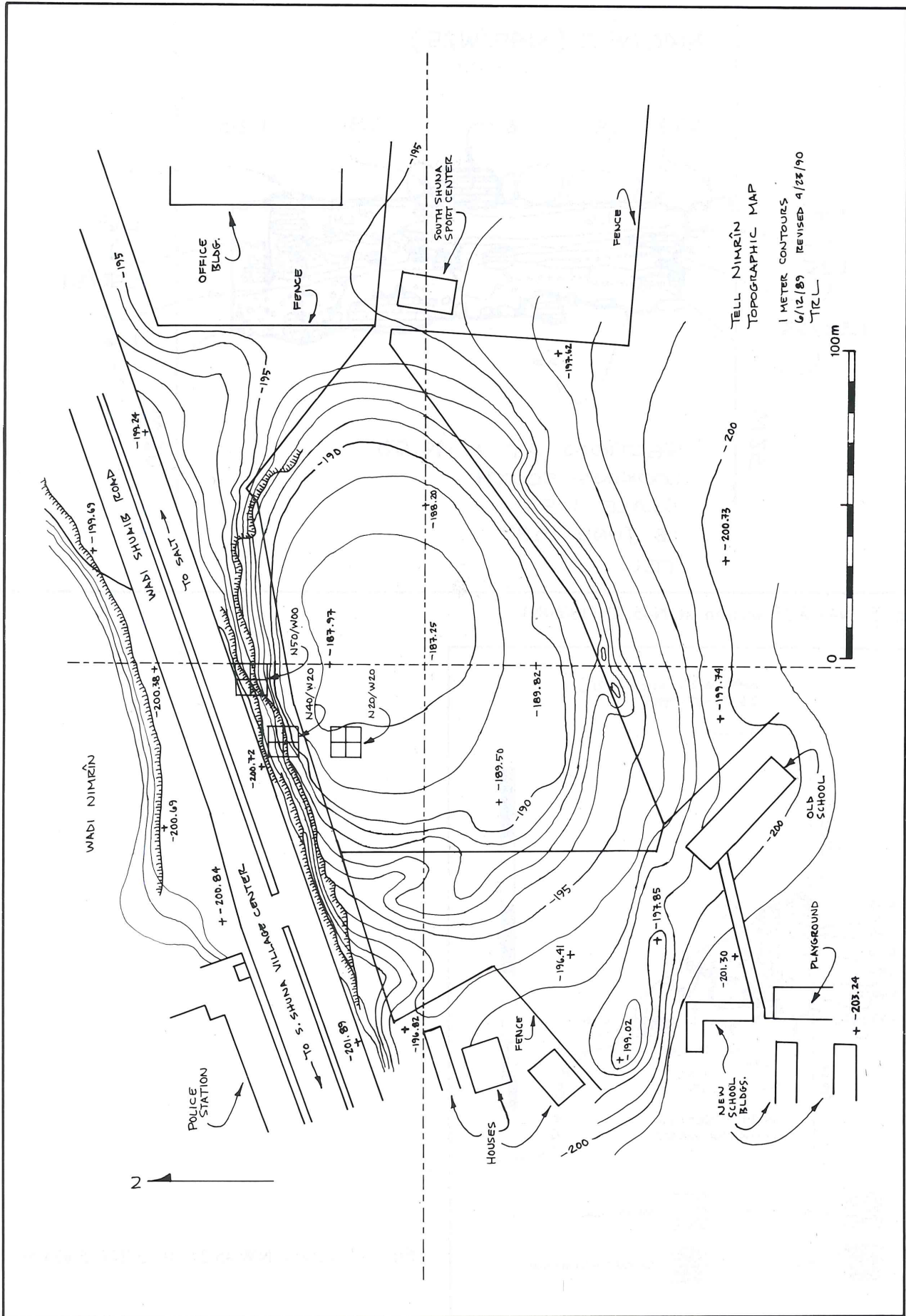


Fig. 4. 1989 topographic map showing one meter contours of Tell Nimrin and the location of the 1989 excavation areas.

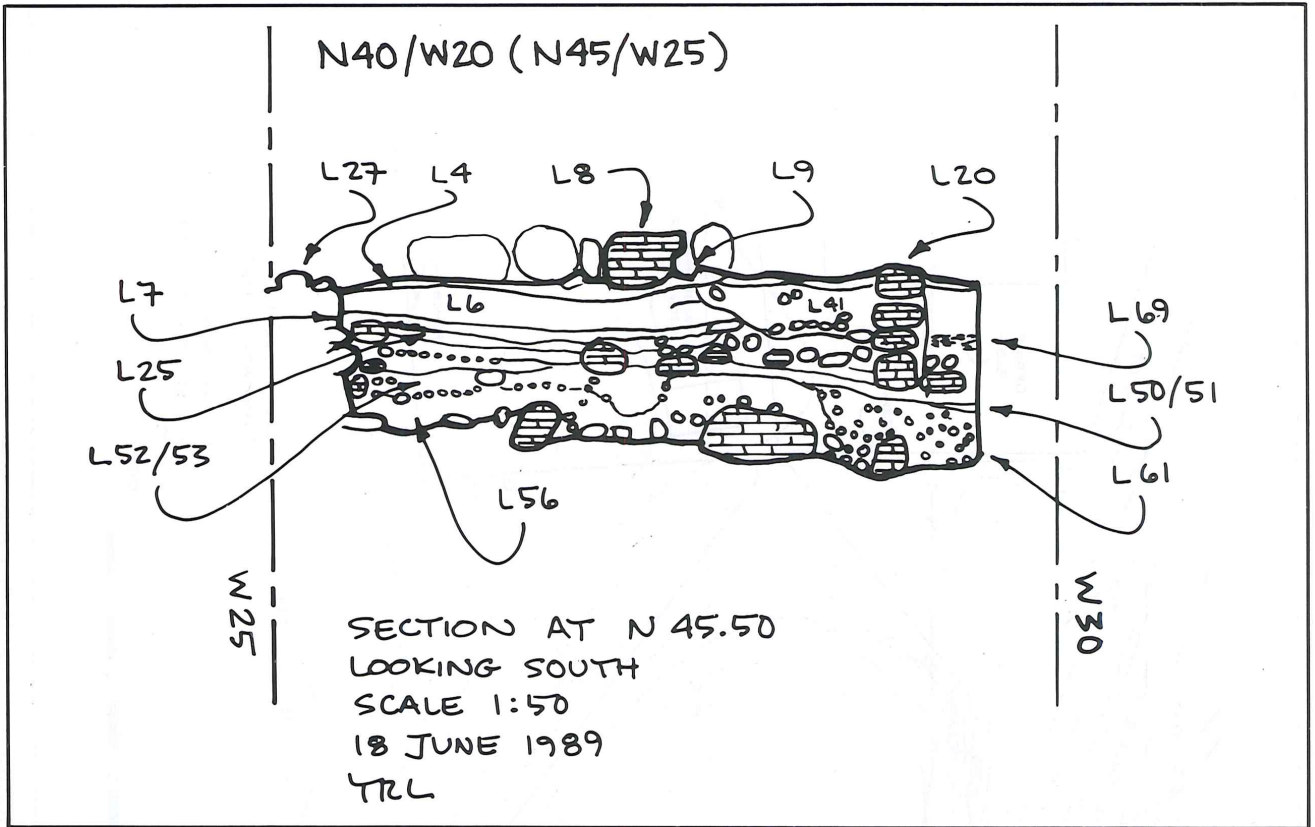


Fig. 5. N45/W25 section at N45.50 (18/6/89).

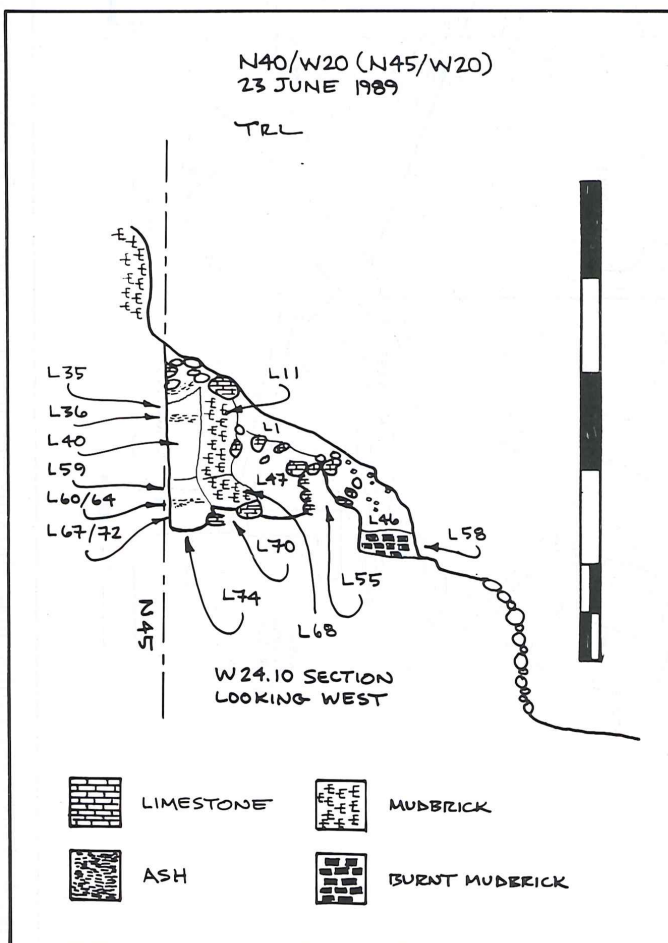


Fig. 6. Section NW 45/24.50 to NW 50/24.50.

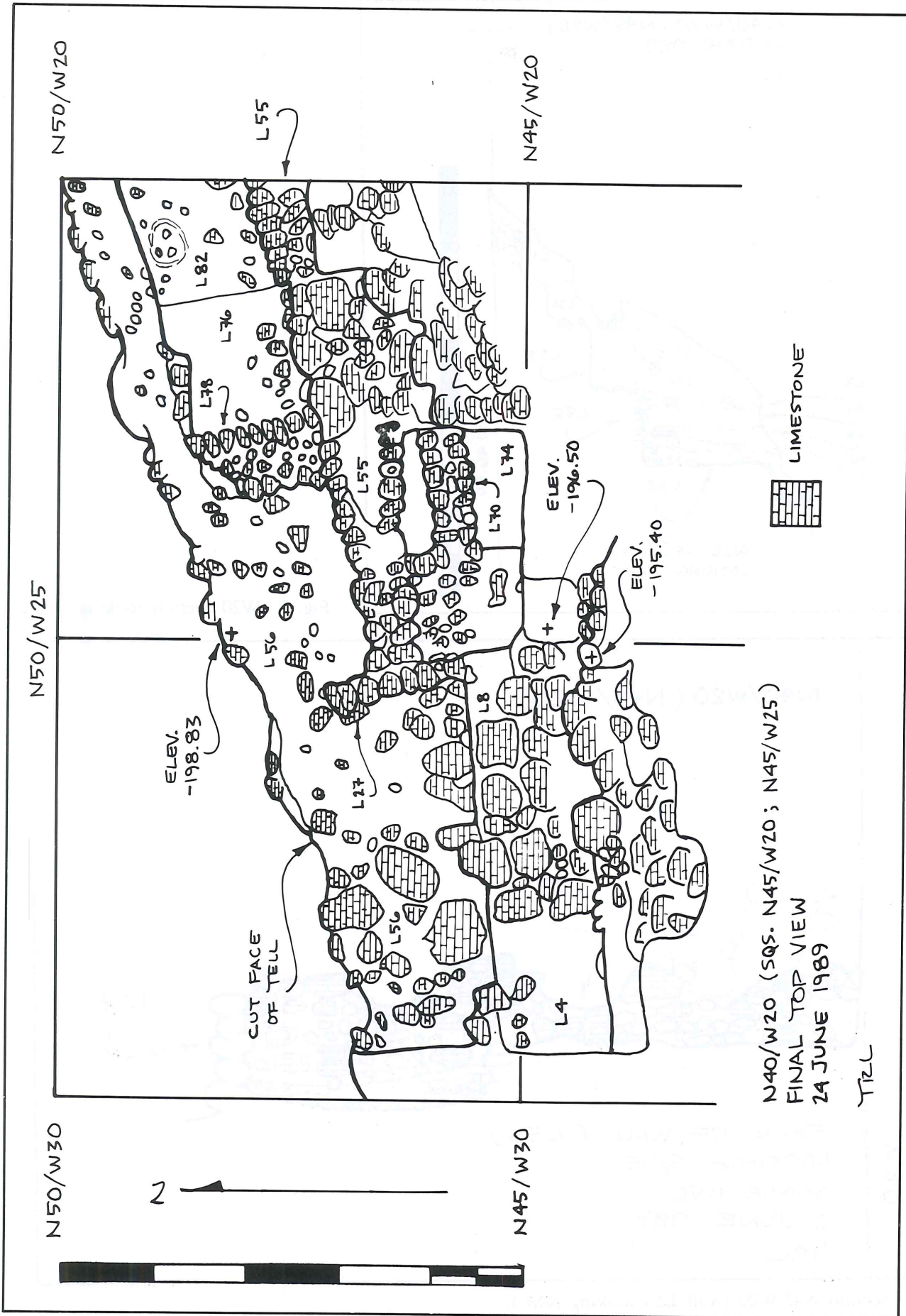


Fig. 7. N40/W20 final top plan.

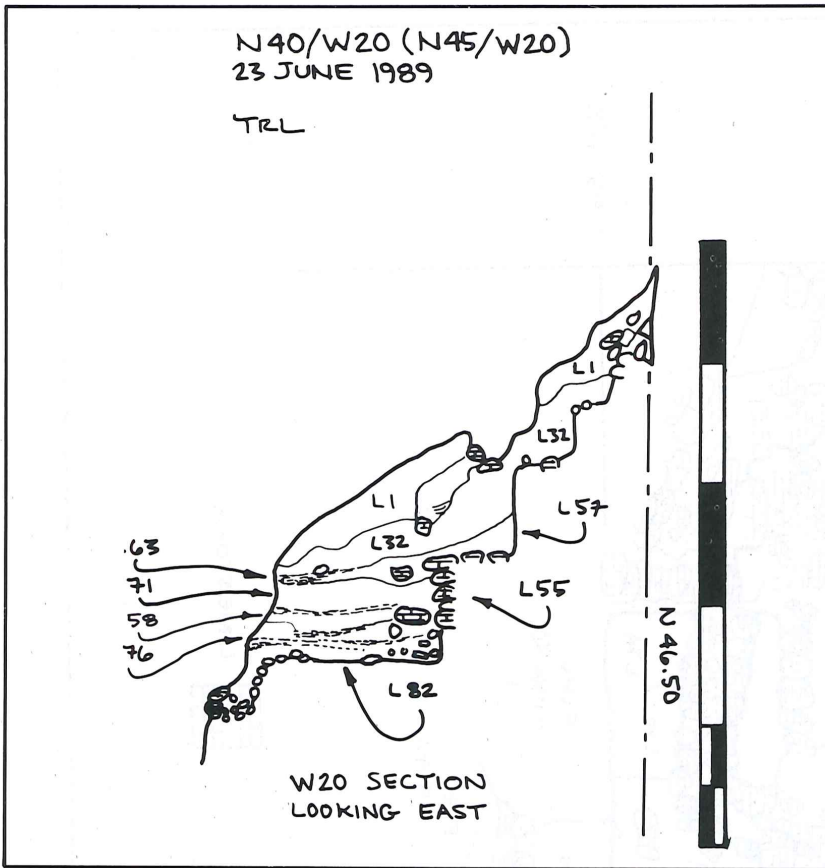


Fig. 8. W20 section looking east.

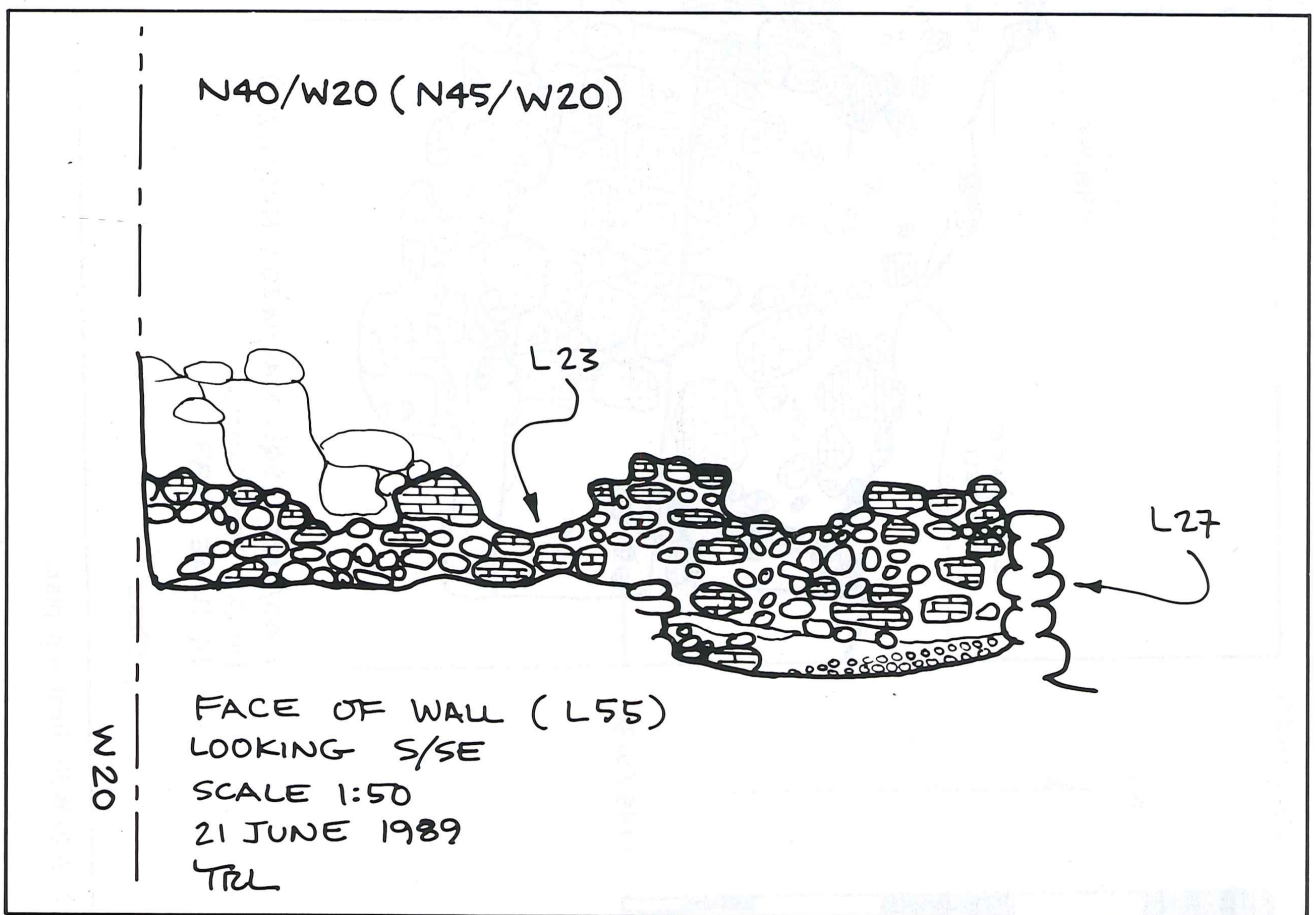


Fig. 9. Section N45/W20 (wall L55 looking S/SE).

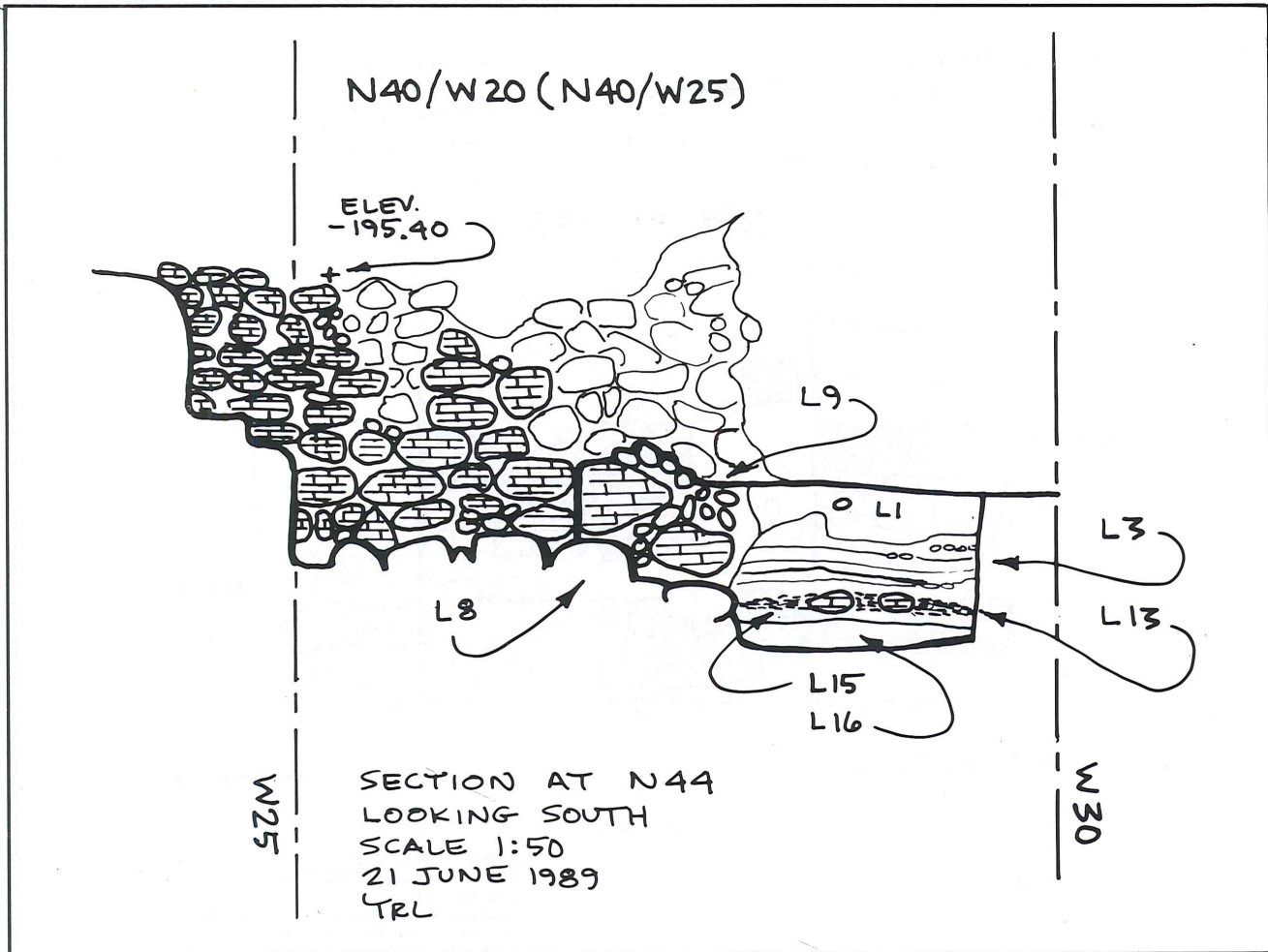


Fig. 10. Section N40/W25 at N44 looking south.

pottery indicate an early MBII date for this supposed "courtyard."

Mudbrick wall L11 and its associated surface L59 (see Fig. 6), appear to be contemporary with the construction of L55 and the deposit of mudbrick detritus fill, between L11 and L55, comprising L47. To the west of L27 in N45/W25, surfaces L7 and L25 overlie surfaces L50 and L51. The former appear to be contemporary with L76 and the other "courtyard" loci (see Fig. 5).

Locus 40 in N45/W20 and L4 and L6 in N45/W25 represent the latest undisturbed soil layers in Area N40/W20. Later occupational layers are evident in N45/W25 (e.g., L3, L13, L15, and L16; see Fig. 10), but these loci have all been cut by foundation trench L9. In N45/W20, foundation trench L23 has cut into the later occupational layers (i.e., L32, L57, L63, and L71).

Foundation trenches L23 (N45/W20), L9 (N45/W25), and the boulders they contain represent the latest architectural phase exposed during the 1989 season of excavation in Area N40/W20. During the bulldozing of the northern edge of the site in the modern highway project a great deal of soil and stone was removed from L9 and L23. As a result, it is impossible to ascertain the exact dimensions of the foundation trenches, but both appear to have been approximately 2.5 meters wide and one meter deep (see Fig. 11).

The precise relationship between these foundation trenches and the large stone and mudbrick wall identified in the bulldozer cut in 1986 has not been determined. The foundation trenches are clearly oriented along north-south axes, that is, perpendicular to the large wall exposed in the road cut which runs along an east-west axis. It seems likely that the walls that once

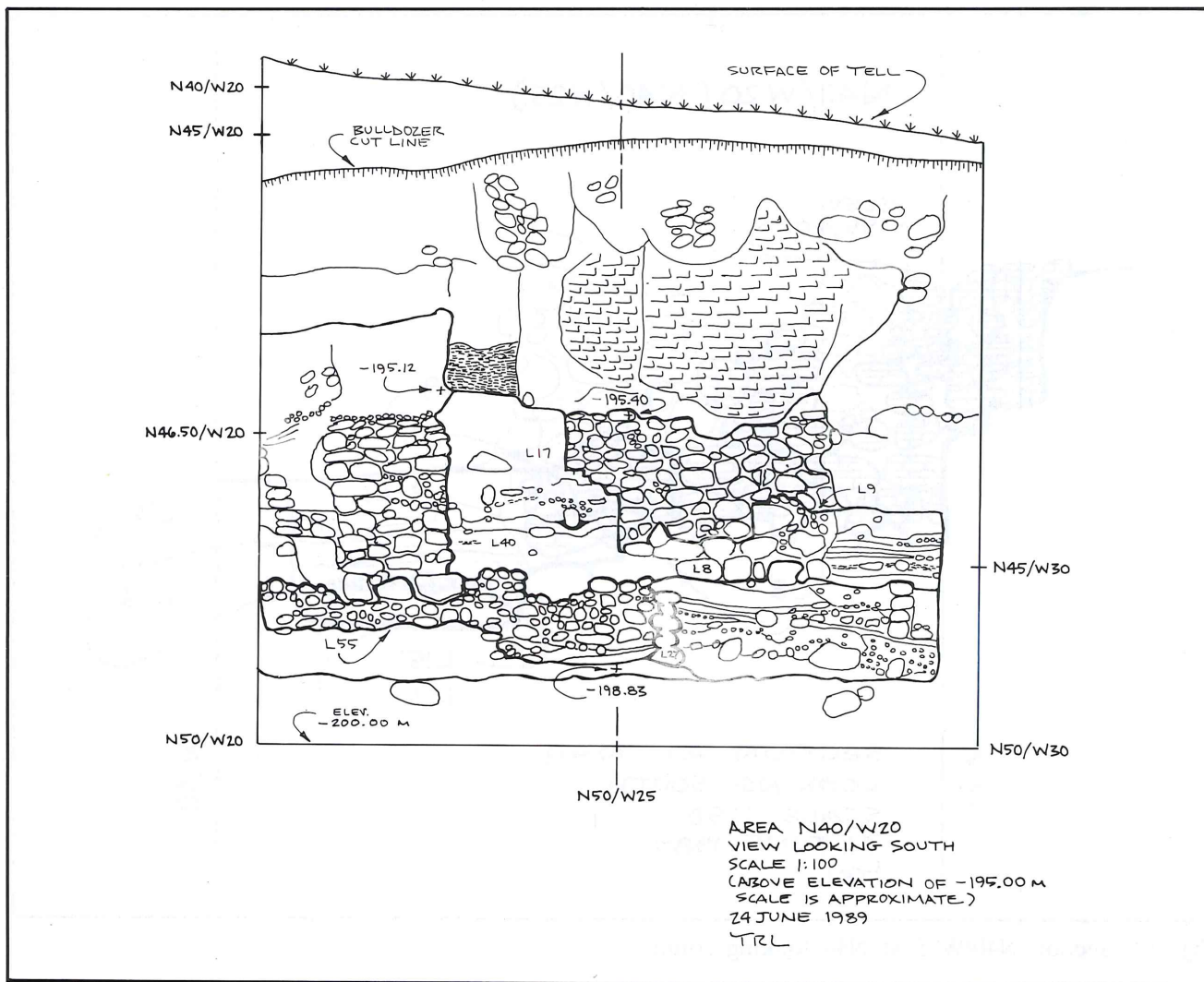


Fig. 11. View of Area N40/W20 looking south.

rested on these foundations were contemporary with the large east-west wall and constituted elements of a tower or other large structure associated with the wall. Pottery recovered from foundation trenches L9 and L23 is late MBII.

Except for the surface soil and wash layers, virtually all the stratified loci above the alluvial plain in Area N40/W20 are Middle Bronze Age. The area contains over two meters of stratified MB occupational material and approximately six meters of *in situ* MB material when measured from the earliest deposits to the top of the MBII (east-west) wall to the base of the occupation. Documenting the presence of such a lengthy MB occupation at Tell Nimrin was certainly one of the most surprising and rewarding results of the 1989 excavation season.

Area N50/W00

The excavations in Area N50/W00 confirmed the extensive MB occupation suggested by Area N40/W20. Located several meters above the sterile alluvial gravels and twenty meters east of Area N40/W20, the stratified layers of Area N50/W00 produced pure MBII pottery (L9, L12, L13, L17, L19, and L22; see Fig. 12 and Pl. II,1).

Locus 12 and L17, two of the first undisturbed loci encountered in N50/W00, contained distinctive MBIIC pottery. These loci represent the latest stratified MB deposits found at Nimrin thus far. It is noteworthy that the deposits' elevation is -195.40. This corresponds almost exactly with the top course of stones in the large east-west wall running through N40/W20,

and it lies 2.46 meters above the latest stratified layers (L3) in N45/W25. The elevations suggest approximately 4.5 meters of *in situ* Middle Bronze Age layers and surfaces preserved at Tell Nimrin.

Two meters of mixed debris pushed from the top of the tell in recent years (see Fig. 13) overlie the *in situ* MB material in N50/W00. Loci 1, 2, 3, and 6 in N50/W00 contained pottery dating from MBI through the Mamluk period. Materials from virtually all periods within this range were present, except for Late Bronze and Iron I, which were conspicuous by their absence.

Area N20/W20

The bulldozing activity in N50/W00 was also clear on the summit of the tell in Area N20/W20. The upper layers of N25/W20 (e.g., L1 and L8) were disturbed and virtually all layers in the south portion of the square have been cut by trench L13, apparently by a modern bulldozer (see Figs. 14 and 15). The layers immediately above walls L28 and L15 were also disturbed, probably during Roman occupation of the site. Except for the remains of a Roman period pit, all Roman and post-Roman strata appear to have been removed from the top of the tell in recent years.

Despite the problems created by ancient and modern activity on this part of the tell, N25/W20 yielded good stratified Iron II layers and *in situ* mudbrick walls (see Pl. II,2). Judging from the architectural remains and large quantities of Iron II pottery found there, it would appear that the Iron II period was one of substantial, dense occupation at Nimrin. It remains to be seen whether the extensive burning of the Iron II stratum in Area N20/W20 is confined to this region of the tell or is part of an extensive destruction of the site in the 9th century B.C.

By the end of the 1989 excavation season, well sealed, stratified Iron II layers were emerging from Area N20/W20. These lie approximately six meters above the latest MBII layers identified in N50/W00.

If there is Iron I and Late Bronze occupational material at Tell Nimrin, it will probably be found in layers between -189.50 and -195.50 meters. The 1990 excavation will connect N20/W20 and N40/W20 and investigate the critical ten horizontal and six vertical meters that separate these two areas of excavation.

Area N20/W20 also yielded rich floral and faunal samples, including a number of bone implements. The most notable single artifact from the area was a three-line Aramaic ostrakon, tentatively dated to the end of the fifth or beginning of the fourth century B.C.

Summary of Stratigraphy

On the basis of the present information, Tell Nimrin was first occupied around 2,000 B.C., at the end of Early Bronze Age IV and the beginning of Middle Bronze Age I. The first settlement was probably a series of domestic structures (houses and courtyards), built in close proximity to a stream and one or more fresh water springs. Eventually, near the end of the Middle Bronze Age, a massive stone wall with a high mudbrick superstructure was built on top of the earlier buildings. Then, the northern end of the site, which had previously been a private domestic area, was filled with public architecture and activity. In other words, the region of Area NW 20/40, which supports this interpretation, ceased to be a private, residential district, and earlier houses became the foundation of public structures, including elements that might have comprised a fortification system.

Area N50/W00 confirms Middle Bronze occupation over a long period of time because the area lies several meters above the alluvial plain and contains pure MB stratified material. It is not clear, however, whether the area lay outside or inside MB fortifications.

Area N20/W20 corroborates the surface survey, aerial photographs, and early topographical maps: The site has suffered much damage in recent years. Between three and five meters of the tell have been

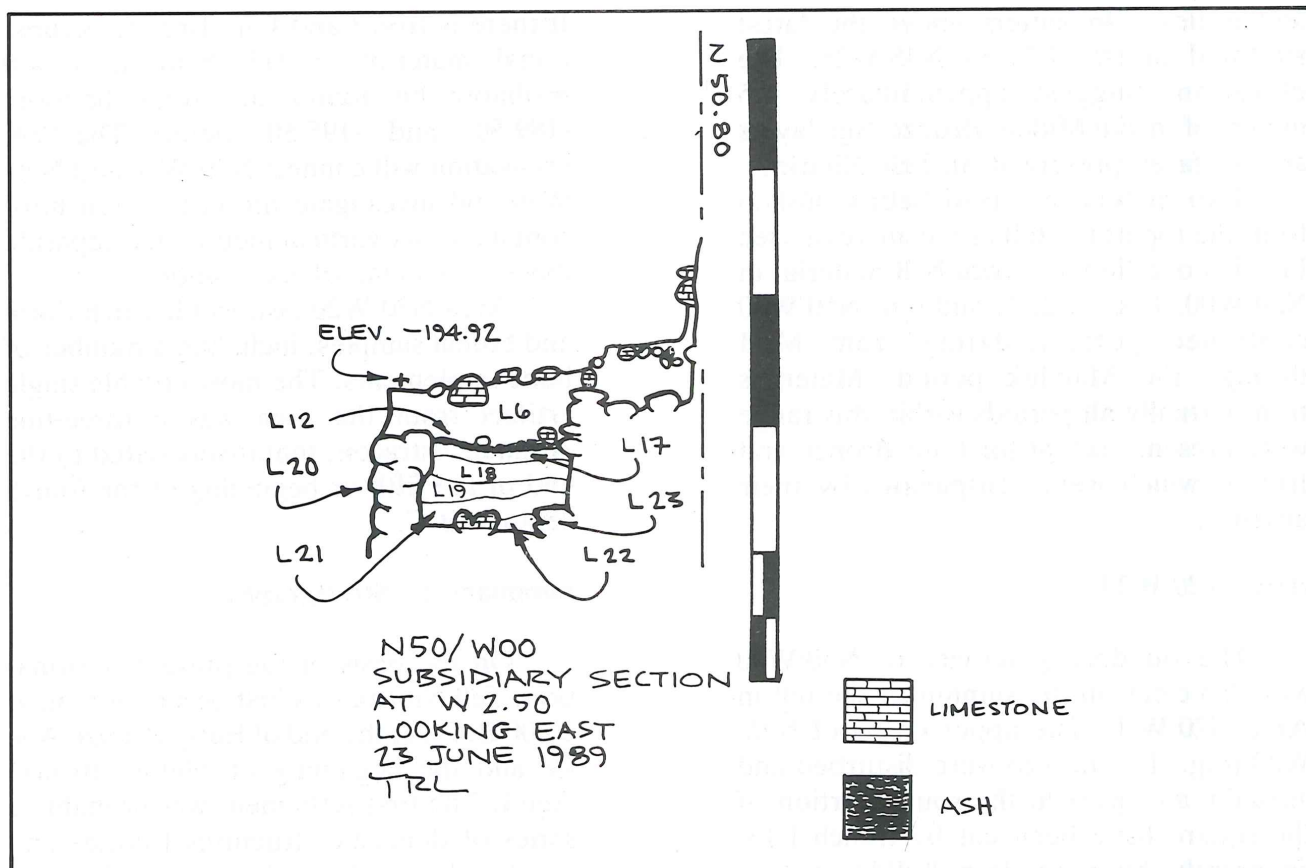


Fig. 12. N50/W00 subsidiary section at W2.50 looking east.

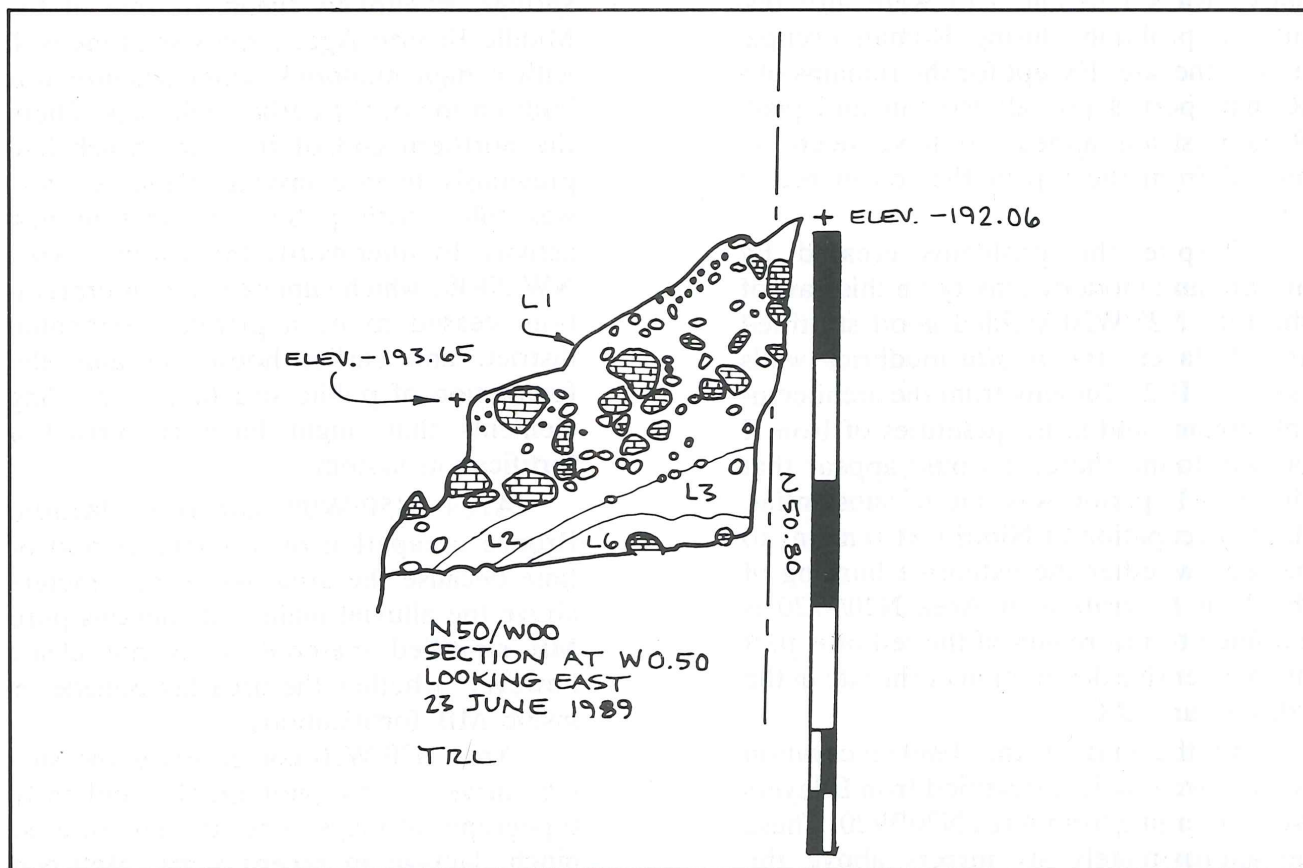


Fig. 13. N50/W00 section at W0.50 looking east.

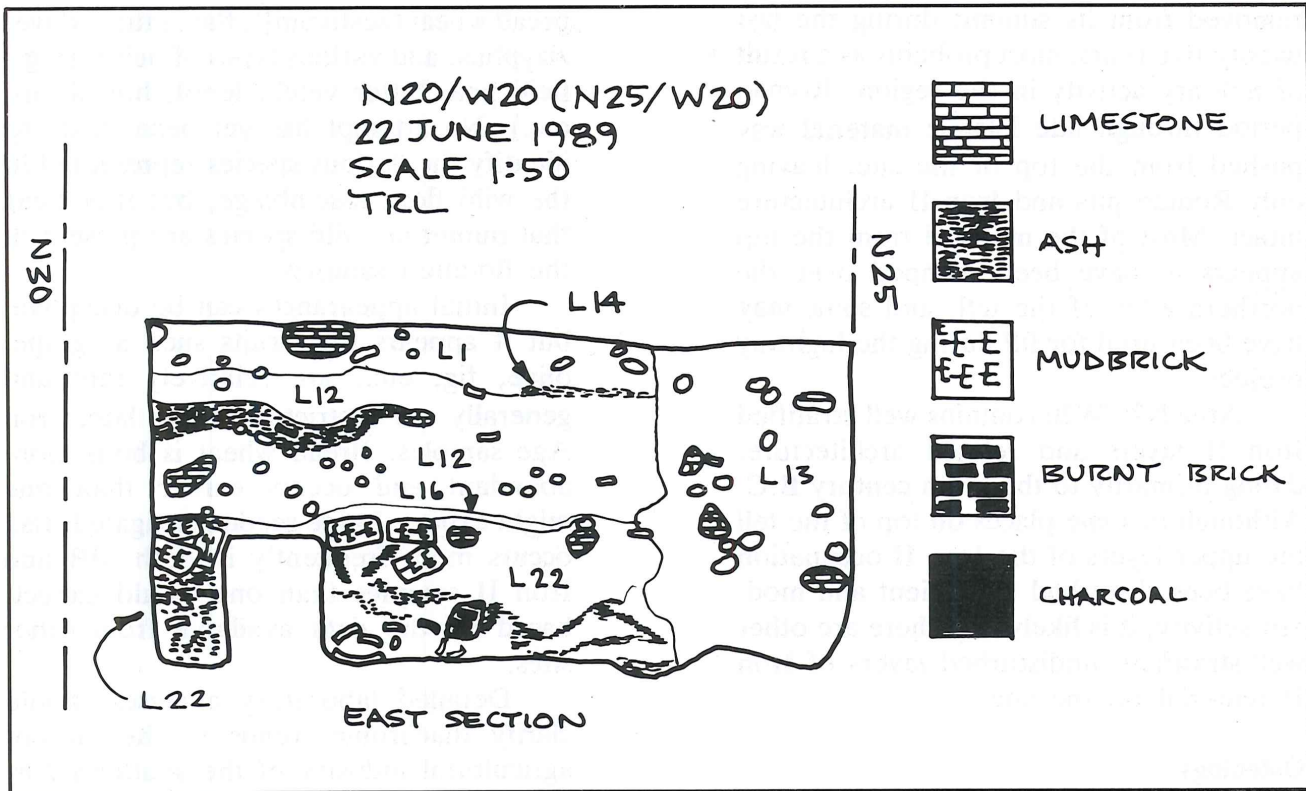


Fig. 14. N25/W20 east section.

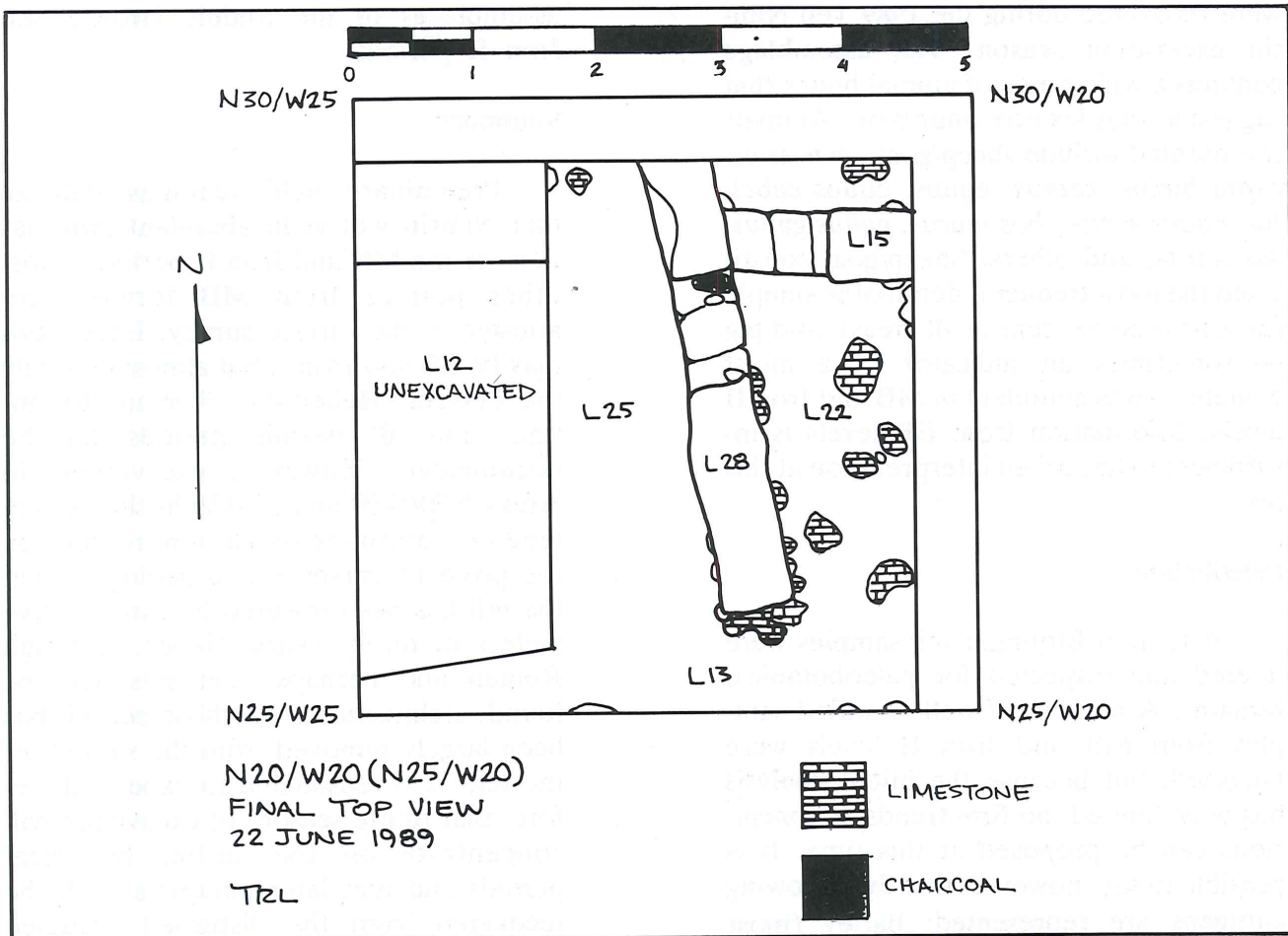


Fig. 15. N25/W20 final top plan.

removed from its summit during the last twenty-five years, most probably as a result of military activity in the region. Roman period through late Islamic material was pushed from the top of the site, leaving only Roman pits and Iron II architecture intact. Most of the material from the top appears to have been dumped over the northern edge of the tell, and some may have been used for fill during the highway project.

Area N20/W20 contains well-stratified Iron II layers and related architecture, dating primarily to the ninth century B.C. Although in some places on top of the tell the upper layers of the Iron II occupation have been disturbed by ancient and modern activity, it is likely that there are other well-stratified, undisturbed layers of Iron II material on the site.

Osteology

More than 6,200 osteological samples were recovered during the 1989 Tell Nimrin excavation season. The assemblage contains a wide range of animal bones that suggest a complex economic base. Animals represented include sheep/goat, *ovis aries*, *capra hircus*, *cervus*, *equus*, *equus caballus*, *equus asinus*, *bos taurus*, *gallus gallus*, *sus scrofa*, and others. Sheep/goat constituted the most frequent identifiable sample (at least nine per cent in all areas), and pig — sometimes an indicator of a moist climate — was abundant in MB and Iron II levels. Information from EB levels is insufficient to hazard an interpretation at this time.

Paleobotany

A total of fifty-nine soil samples were floated and inspected for paleobotanical remains. A number of well-stratified samples from MB and Iron II levels were analyzed, but because the initial analysis has been limited, no firm trends or conclusions can be proposed at this time. It is possible to say, however, that the following cultigens are represented: barley (most likely six-row), wheat (both emmer and

bread wheat [aestivum]), flax, grape, olive, zizyphus, and various types of pulses (e.g., field pea, bitter vetch, lentil, horsebean, etc.). No attempt has yet been made to identify the various species represented in the wild flora assemblage, but it is clear that numerous wild species are present in the flotation samples.

Initial appearances can be deceptive, but it appears that fruits such as grape, olive, fig, etc., are relatively rare and generally are restricted to the later Iron Age samples. Bread wheat is both more abundant and occurs earlier than one might expect. Large seeded (irrigated) flax occurs more frequently in both MB and Iron II samples than one would expect, based on the data available from other sites.

Detailed laboratory analyses should clarify diachronic trends in the ancient agricultural industry of the southern Jordan Valley and either confirm or correct initial impressions regarding the cultigen assemblages of the Middle Bronze and Iron II periods.

Summary

Preliminary field readings indicate that Nimrin will yield abundant information for the MB and Iron II periods. Most other periods from MB forward are attested in the surface survey. Exceptions may be LB and Iron I, but almost certainly the Persian, Hellenistic, Roman, Byzantine, and all Islamic periods can be documented. However, excavations in Areas N50/W00 and N20/W20 this season tend to confirm the conclusion, reached by the project's surveyor and geologist, that the tell has been lowered by three to five meters in recent years. Hence, although Roman and perhaps later pits may be found, architecture from those periods has been largely removed from the summit of the tell. It is reasonable to expect, therefore, that future seasons of excavation will concentrate on the earlier historical periods and that later materials could be recovered from the disturbed occupied fringes of the modern tell.

The results of the excavation and the surface survey give rise to the following picture of the occupational history of the site. The first MB occupation (between 2,000 and 1,500 B.C.) is well documented by a series of surfaces and related walls. There is no clear evidence of LB or Iron I occupation at this point. Iron II is well represented (especially the ninth century B.C. in Area N20/W20). There is little stratified evidence of Persian through Hellenistic occupation. Continuous occupation from Early Roman through the late Islamic periods seems very likely. Although the evidence of later occupation of the site has been removed from the top of the tell, it seems highly likely that *in situ* strata of Roman through Mamluk date will be found on the eastern, western, and southern sectors of the tell.

As a result of the 1989 excavation at Tell Nimrin, two of Nelson Glueck's conclusions must be corrected. First, the tell is composed almost totally of the "artificial" accumulation of human occupational debris, not "natural" geological deposits as Glueck asserted. Second, whereas Glueck found no sherds predating the Roman period, the excavation has documented substantial pre-Roman occupation on the site, especially during the Middle Bronze Age and Iron II period. This second point will no doubt necessitate a scholarly reassessment of the evidence for identifying Tell Nimrin, as opposed to Tell Bleibel, with the ancient site of Beth-Nimrah.

It should be emphasized that thus far only a very small portion of the site has been investigated (i.e., less than 1/50th of one per cent of the total volume of the

tell). The validity of trends that now appear will have to be tested in later seasons of excavation.

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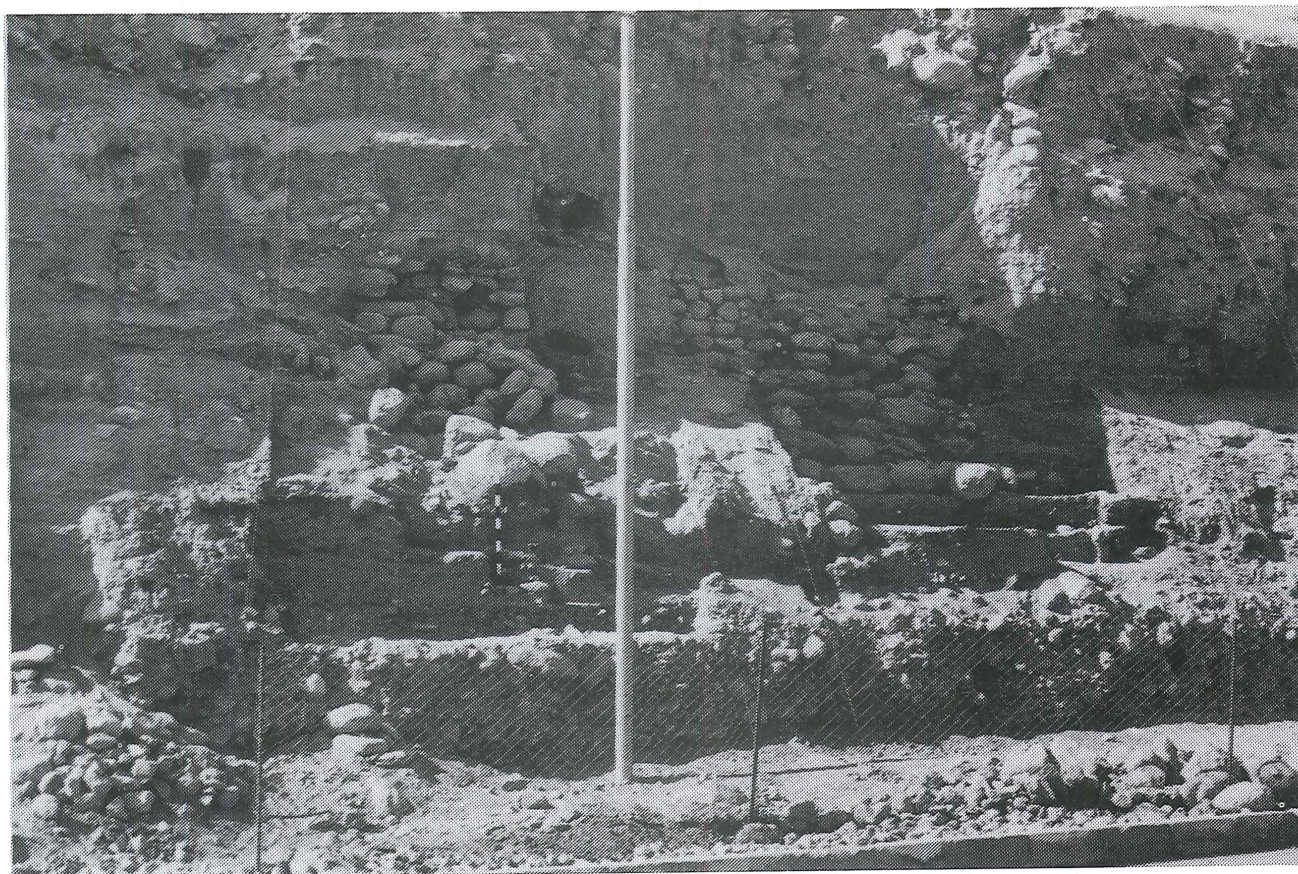
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1. General view of Tell Nimrin showing road cut on the north side of the mound.



2. 1989 final photo of N40/W20 looking south.



1. General view of N50/W00 from the highway, looking south.



2. Final photo of N25/W20 showing Iron Age walls L28 and L15.