

THE UNIVERSITY OF CHICAGO  
ORIENTAL INSTITUTE PUBLICATIONS  
VOLUME LXXXV



THE UNIVERSITY OF CHICAGO  
ORIENTAL INSTITUTE PUBLICATIONS  
VOLUME LXXXV

A BYZANTINE CHURCH  
AT  
KHIRBAT AL-KARAK

*BY*

*PINHAS DELOUGAZ AND RICHARD C. HAINES*

*with contributions by Carl H. Kraeling and Florence E. Day*



*Library of Congress Catalog Number: 59-13607*

THE UNIVERSITY OF CHICAGO PRESS, CHICAGO 37  
Cambridge University Press, London, N.W. 1, England  
The University of Toronto Press, Toronto 5, Canada

© 1960 by *The University of Chicago*. Published 1960. Com-  
posed and printed by THE UNIVERSITY OF CHICAGO PRESS  
*Chicago, Illinois, U.S.A.*

*Plates printed by PHOTOPRESS, INC., Broadview, Illinois*

## PREFACE

ARCHEOLOGICAL research in the Holy Land had a high priority in the program of the Oriental Institute as envisaged by its founder and first director, the late Professor James Henry Breasted. Consequently, work in Palestine followed soon after the beginning of work in Egypt, and the excavation of the ancient mound of Megiddo "marked the beginning of systematic and detailed field work by the Oriental Institute in Asia."<sup>1</sup> While the years between Dr. Breasted's death in 1935 and the second World War brought drastic reductions in and finally liquidation of most of the other field operations in Western Asia, work at Megiddo continued uninterrupted from 1925 to 1939. After the war the political changes in Palestine, on the one hand, and the greatly reduced resources of the Institute, on the other, combined to postpone work in the Holy Land. In the winter of 1951/52, however, an opportunity arose for a season's excavation through compensation paid by the Government of Israel for damage caused during the war to the Institute's expedition house and equipment at Megiddo and through the Government's offer to defray two-thirds of the labor cost.

Megiddo was naturally the first site to be considered, not only because of the previous work done there by the Institute but also because it is still one of the most important archeological sites in the region of the eastern Mediterranean. Although it is one of the most thoroughly and conscientiously excavated sites in Palestine, its archeological possibilities are by no means exhausted, and further work there is bound to yield new information and fill gaps in our present knowledge. It was felt, however, that the limited budget and the small staff available for the new operation, as well as other circumstances, precluded the resumption of work at Megiddo. These considerations and the fact that in recent years the sphere of interest of the Institute has broadened to include the late periods of Near Eastern history led to the decision to undertake a season's limited operation on a different site, preferably one containing remains of the Hellenistic and later periods. Several sites were considered and explored, including the great Hellenistic site of Saffuriyah (Sepporis-Zippori), northwest of Nazareth, where the University of Michigan conducted preliminary excavations in 1931. Finally, the famous site of Khirbat al-Karak was selected.

During Dr. Kraeling's visit to Israel in 1951, as well as during the writer's visit in 1949, attention was drawn to this site, where excavations had been conducted both by the Israel Exploration Society and by the Department of Antiquities of the Government of Israel (see p. 2). The Department of Antiquities had indicated that it would welcome the Institute's participation in further exploration of Khirbat al-Karak, which still remained largely unexplored. The northern end of the mound seemed likely to contain remains of the Hellenistic and later periods. Accordingly, an application was made by the Oriental Institute, which was granted a concession to dig at the north end of the site, between an area previously excavated by the Department of Antiquities on the south and a modern cemetery situated at the north edge (see Pls. 1-2). The Institute staff consisted of two regular members, the writer as field director and photographer throughout the campaign (October, 1952, to July, 1953) and Mr. Richard C. Haines as field architect from November 4, 1952, until March 24, 1953. Mrs. Delougaz joined the staff as a volunteer from October to February. Work began on October 19. Two days later the expedition was joined by Mrs. Miriam Tadmor, of the regular staff of the Department of Antiquities, whom its director, Mr. Shmuel Yeivin, kindly assigned as a

<sup>1</sup> See Breasted, *The Oriental Institute* (Chicago, 1933) pp. 74 ff.

## PREFACE

field assistant. Mrs. Tadmor helped in supervising the dig and was responsible for the registration of finds. Professor Kraeling found time to visit the site early in 1953 (January 27 to February 3) and during his brief stay took active part in the work, especially in copying the mosaic inscriptions in the church. Mrs. Trude Dothan, who joined the expedition for several weeks early in 1953, helped in clearing some of the tombs and made a preliminary examination of the pottery which was left in Jerusalem. Mrs. Elisheva Ballhorn, a resident of Kinnereth who had had some previous archeological experience at Khirbat al-Karak, was kind enough to help the writer during the final stages of the campaign, after the departure of all other members of the staff.

After Mr. Haines's departure in March, work continued on a reduced scale through April, chiefly in the trench and the tombs west of the mound (see pp. 27-29). Early in May the number of workmen was further reduced, and only a few remained to clear various parts of the buildings for photography and further examination. The final stage of the campaign was devoted to removal of the mosaics from the church and their preparation for shipping and, simultaneously, to a study of the bulk of the pottery which could not be shipped to Chicago. These tasks continued until about the middle of June. The last three weeks were devoted to packing the finds and the equipment. The camp was closed July 7, 1953.

During its relatively short stay in Israel, our small expedition incurred debts of gratitude too numerous to be fully acknowledged here. The Government of Israel not only contributed two-thirds of our labor cost but by innumerable considerate and generous acts made our work more effective and more pleasant. His Excellency the President of the State of Israel, Mr. Izhak Ben-Zvi, was kind enough to receive us on various occasions and to take personal interest in the progress of our work, as did the then minister of education, Professor Ben-Zion Di-nur. The director of the Department of Antiquities, Mr. Shmuel Yeivin, and his entire staff gave us all possible help and encouragement. The Administration of the Sick Fund of the Israeli Federation of Labor (Kupath-Holim) most generously put at our disposal, rent-free, the house reserved for its dentists in the village of Kinnereth. The Administration of Oholo, a cultural center of the Federation of Labor in the Jordan Valley, put at our disposal for the duration of the campaign a room in one of the buildings on the site itself and on numerous occasions several rooms at a time to accommodate our staff and visitors. Though food was still scarce and strictly rationed, the Central School of the Jordan Valley Settlements at Daganiyah undertook to feed our whole party in the school's dining room for several weeks before our own supplies reached us. To those mentioned and to many more of our good friends and neighbors in Israel the expedition owes much of its success.

At home, Mrs. John Livingood first volunteered to unpack and sort out the antiquities when they reached Chicago and later helped in mounting the plates for the present volume and in compiling the tables facing them. The objects were photographed by Mr. Luin Hough, Mrs. Ursula Schneider, and Mr. Robert H. Hanson. Tables I-II were compiled by Mr. Buford L. Knowles, who also helped in preparing the manuscript. Mrs. Elizabeth B. Hauser, the Editorial Secretary of the Oriental Institute, edited the manuscript with her usual care and skill.

In preparing this report the writer also enjoyed the assistance and collaboration of several colleagues. The important contributions of Mr. Haines, co-author, who, in addition to preparing all architectural drawings, undertook to describe the architecture, and of Professor Kraeling and Miss Florence E. Day speak for themselves. The help of other specialists is gratefully acknowledged as occasion arises in the report itself.

P. DELOUGAZ

## TABLE OF CONTENTS

	PAGE
LIST OF ILLUSTRATIONS . . . . .	ix
LIST OF ABBREVIATIONS . . . . .	xi
INTRODUCTION. <i>P. Delougaz</i> . . . . .	1
THE EXCAVATIONS . . . . .	4
The Main Area. <i>Richard C. Haines</i> . . . . .	4
Post-Church Remains . . . . .	4
The Western Part of the Area . . . . .	4
The Arab Building . . . . .	4
The Church . . . . .	6
General Description . . . . .	6
The Southern Entrance . . . . .	8
The Loggia . . . . .	8
The Atrium . . . . .	9
Subsidiary Rooms around the Atrium and South of the Narthex . . . . .	10
The Narthex . . . . .	12
Rooms K 10:1 and K 10:2 . . . . .	12
The <i>Domus</i> . . . . .	12
The Anteroom of the Diaconicon . . . . .	16
The Diaconicon . . . . .	17
The Rooms South of the <i>Domus</i> . . . . .	18
The Growth of the Church . . . . .	20
Inferences from Comparisons with Other Churches. <i>Carl H. Kraeling</i> . . . . .	22
Pre-Church Remains . . . . .	25
Miscellaneous Worked Stones and Mosaic Fragments . . . . .	25
Soundings outside the Church . . . . .	27
The Trench. <i>P. Delougaz</i> . . . . .	27
The Tombs West of the Mound. <i>P. Delougaz</i> . . . . .	28
THE OBJECTS. <i>P. Delougaz</i> . . . . .	30
Pottery . . . . .	30
Hellenistic Sherds . . . . .	30
“Late Roman” Wares . . . . .	31
Cooking Utensils . . . . .	32
Dark Red Ware . . . . .	33
Juglets . . . . .	33
Bag Jars . . . . .	34
Painted Wares . . . . .	34
Light-on-dark Ware . . . . .	34
Dark-on-light Wares . . . . .	35
Craters with Dark and Light Bands and White Blobs . . . . .	35
Pilgrim Flasks . . . . .	36
Lanterns? . . . . .	36
Large Vessels with Plastic Decoration . . . . .	37

## TABLE OF CONTENTS

	PAGE
Gray Ware . . . . .	37
Soft Buff Wares . . . . .	37
Plain Buff Ware . . . . .	37
Buff Ware with Plastic Decoration . . . . .	37
Lamps . . . . .	39
Islamic Glazed Wares. <i>Florence E. Day</i> . . . . .	40
Miscellaneous Pieces . . . . .	47
Metal Objects . . . . .	48
Iron . . . . .	48
Bronze . . . . .	49
Gold and Silver . . . . .	49
Lead . . . . .	49
Bone and Shell Objects . . . . .	49
Glass Vessels . . . . .	49
Stone Objects . . . . .	50
Coins . . . . .	50
THE MOSAIC INSCRIPTIONS. <i>Carl H. Kraeling</i> . . . . .	53
CONCLUDING REMARKS. <i>P. Delougaz</i> . . . . .	56
CATALOGUE OF OBJECTS FOUND IN THE TOMBS . . . . .	60
GENERAL INDEX . . . . .	65



## LIST OF ILLUSTRATIONS

## PLATES

1. VERTICAL AIR VIEW OF KHIRBAT AL-KARAK
2. MAP BASED ON AIR VIEW
3. *A.* GENERAL VIEW OF SITE. *B.* EASTERN PART OF ARAB BUILDING. *C.* STONE PAVING IN ROOM L 11:1 OF ARAB BUILDING. *D.* STEPS(?) IN COURTYARD OF ARAB BUILDING
4. *A.* GENERAL VIEW OF CHURCH. *B.* BLOCKED DOORWAY IN SOUTHERN WALL OF LOGGIA. *C.* STONE WELLHEAD OF CISTERN AND MOSAIC PAVING IN ATRIUM. *D.* COLUMN BASES IN OPENING BETWEEN LOGGIA AND ATRIUM. *E.* THE NARTHEX
5. *A.* THE *domus*. *B.* NORTHWEST CORNER OF ROOM K 11:4. *C.* STEPS AT SOUTHEAST CORNER OF ROOM K 11:4
6. *A.* EASTERN PART OF CHURCH. *B.* SOUTHERN AISLE AND APSE
7. *A.* NAVE AND CENTRAL APSE. *B.* WEST END OF *domus*. *C.* DOORWAY IN SOUTH WALL OF *domus*. *D.* ROOM L 11:7. *E.* SOUTHWEST CORNER OF *domus* AND ABUTTING NARTHEX WALL. *F.* SOUTHERN END OF SOUTHERN APSE WALL LAID AGAINST NORTHERN JAMB OF EXTERIOR DOORWAY TO ROOM L 11:7
8. *A.* CRUDE STONE WALL BETWEEN SOUTHERN WALL END OF CENTRAL APSE AND EASTERNMOST COLUMN. *B.* REMAINS OF RELIQUARY(?) IN FLOOR OF CHANCEL. *C.* MOSAIC BORDER AND VINE DESIGN IN UPPER FLOOR AT NORTHERN END OF EXTENDED CHANCEL. *D.* SOUTHEAST CORNER OF ANTEROOM OF DIACONICON, SHOWING MOSAIC FLOOR EXTENDING UNDER WING WALL. *E.* TOMB K 11:15. *F.* COVER STONES OF TOMB L 11:23
9. *A.* THE DIACONICON. *B.* EXTERIOR FACES OF NORTHERN APSE OF *domus* AND ABUTTING WALL OF DIACONICON. *C.* EXTERIOR FACE OF DIACONICON APSE AND ITS FOUNDATION. *D.* CIRCULAR BASIN IN CENTER OF DIACONICON. *E.* SUNKEN BASIN OR FONT IN DIACONICON APSE
10. VIEWS OF CHURCH AFTER EXPLORATORY TRENCHES WERE DUG BELOW FLOOR
11. EXCAVATION PLAN OF ARAB BUILDING AND POST-CHURCH REMAINS TO WEST
12. RECONSTRUCTED PLAN OF ARAB BUILDING
13. EXCAVATION PLAN OF CHURCH
14. EXCAVATION PLAN OF PRE-CHURCH REMAINS
15. RECONSTRUCTED PLANS OF CHURCH. ORIGINAL BUILDING, SECOND PHASE, AND THIRD PHASE
16. RECONSTRUCTED PLAN OF CHURCH AFTER LATEST ALTERATIONS
17. SECTIONS OF CHURCH WALLS
18. *A.* SECTIONS THROUGH MAIN EXCAVATION. *B.* PLANS OF SOUNDINGS NORTH AND EAST OF CHURCH
19. POSITIONS AND DETAIL OF VERTICAL PLASTER RIBS ON EXTERIOR OF CHURCH, DOORWAY IN WEST WALL OF ARAB BUILDING, NORTHERN DOORWAY IN WEST WALL OF *domus*
20. STONE AND TILE DRAINS UNDER ATRIUM FLOOR, COLUMN BASES IN OPENING BETWEEN LOGGIA AND ATRIUM, BASIN AT WEST END OF ATRIUM, STUB OF PARTITION WALL AND WALL END BETWEEN CENTRAL AND NORTHERN APSES OF *domus*, CISTERN IN ATRIUM
21. REMAINS OF RELIQUARY(?) IN CHANCEL FLOOR, SUNKEN BASIN OR FONT IN APSE OF DIACONICON, TOMBS K 11:15 AND L 11:23
22. MISCELLANEOUS WORKED STONES FROM MAIN EXCAVATION
23. RECONSTRUCTED PLAN OF NARTHEX AND WEST END OF *domus*, WITH MOSAIC FLOOR PATTERNS
24. RECONSTRUCTED PLAN OF EAST END OF *domus*, WITH MOSAIC FLOOR PATTERNS
25. RECONSTRUCTED PLAN OF EXTENDED CHANCEL, WITH MOSAIC FLOOR PATTERNS
26. RECONSTRUCTED PLANS OF EAST END OF DIACONICON AND ROOM L 10:12, WITH MOSAIC FLOOR PATTERNS
27. EXCAVATION VIEWS OF BYZANTINE TOMBS IN RIDGE WEST OF MOUND
28. SUCCESSIVE STAGES IN EXCAVATION OF TRENCH
29. PLAN AND SECTION OF TRENCH
30. HELLENISTIC SHERDS
- 31-44. PHOTOGRAPHS OF POTTERY

*LIST OF ILLUSTRATIONS*

- 45-46. SMALL OBJECTS FROM TOMBS 3, 4, AND 7
- 47. COINS AND BONE OBJECTS
- 48. IRON AND BRONZE OBJECTS
- 49. STONE OBJECTS
- 50. GLASS VESSELS
- 51. MOSAIC INSCRIPTIONS FROM CHURCH
- 52-58. DRAWINGS OF POTTERY
- 59. GLASS VESSELS
- 60. GLASS VESSELS AND POTTERY LAMPS
- 61. "LATE ROMAN" STAMPED DESIGNS AND RECONSTRUCTED IRON SPADE BIT WITH MODERN PARALLEL
- 62. ISLAMIC GLAZED POTTERY OF THE Umayyad and 'Abbasid Periods

TABLES (*at end of book*)

- I. DISTRIBUTION OF POTSDHERDS IN MAIN AREA OF EXCAVATION
- II. DISTRIBUTION OF POTSDHERDS IN UPPER LEVELS OF TRENCH

## LIST OF ABBREVIATIONS

- AASOR* American Schools of Oriental Research. Annual (New Haven, 1920—).
- Beth-Shan* FITZGERALD, GERALD M. Beth-Shan excavations 1921–1923. The Arab and Byzantine levels (Publications of the Palestine Section of the Museum of the University of Pennsylvania III [Philadelphia, 1931]).
- BMC* WROTH, WARWICK. Catalogue of the imperial Byzantine coins in the British Museum (2 vols. consecutively paged; London, 1908).
- COCBM* POOLE, STANLEY LANE. The coins of the eastern Khaleefehs in the British Museum (Catalogue of Oriental coins in the British Museum I [London, 1875] and Add. I [London, 1889]).
- Gerasa* KRAELING, CARL H., *editor*. Gerasa: City of the Decapolis (New Haven, Connecticut, 1938).
- Gezer* MACALISTER, R. A. STEWART. The excavation of Gezer 1902–1905 and 1907–1909 (3 vols.; London, 1912).
- IEJ* Israel exploration journal (Jerusalem, 1950—).
- IGLS* JALABERT, LOUIS, and MOUTERDE, RENÉ. Inscriptions grecques et latines de la Syrie I–IV (Bibliothèque archéologique et historique XII, XXXII, XLVI, LI, LXI [Paris, 1929–55]).
- Lavoix* LAVOIX, HENRI. Catalogue des monnaies musulmanes de la Bibliothèque nationale. I. Khalifes orientaux (Paris, 1887).
- Nebo* SALLER, SYLVESTER J. The Memorial of Moses on Mount Nebo (2 vols.; Jerusalem, 1941).
- NNM* Numismatic notes and monographs (New York, 1920—).
- PEFA* Palestine Exploration Fund. Annual (London, 1911—).
- PEFA IV* MACALISTER, R. A. S., and DUNCAN, J. GARROW. Excavations on the Hill of Ophel, Jerusalem, 1923–25 (1926).
- PEFA V* CROWFOOT, J. W., and FITZGERALD, G. M. Excavations in the Tyropoean Valley, Jerusalem, 1927 (1929).
- QDAP* Palestine. Department of Antiquities. The quarterly (Jerusalem, 1931–50).
- Samaria* CROWFOOT, J. W., CROWFOOT, G. M., and KENYON, KATHLEEN M. The objects from Samaria (Samaria-Sebaste: Reports of the work of the Joint Expedition in 1931–1933 and of the British Expedition in 1935, No. 3 [London, 1957]).
- Samaria I* REISNER, GEORGE ANDREW, FISHER, CLARENCE STANLEY, and LYON, DAVID GORDON. Harvard excavations at Samaria 1908–1910. I. Text (Cambridge, 1924).



## INTRODUCTION

*By P. DELOUGAZ*

ONE of the largest and most important sites in Israel, Khirbat al-Karak, is situated at the southwestern tip of the Lake of Tiberias (Sea of Galilee), just north of the present mouth of the Jordan River and about five miles south of the town of Tiberias. An air view (Pl. 1) shows the site before the Oriental Institute's excavations began, and Plate 2 is a sketch map based on the air view. The site is a roughly crescent-shaped mound bounded on the east by the lake, on the south by the Jordan, and on the west by a depression which contains fishponds to the south and a date-palm grove to the north. The maximum width and length are about 1,200 and 350 m., respectively, and the area is over 54 acres. The surface is not level. The two groups of modern buildings seen in Plate 1 were constructed during the 1940's. The group on the north comprises Oholo, a cultural center maintained by the Israeli Federation of Labor to serve the Jordan Valley communities. It includes a library, assembly and lecture halls, three hostels, a dining room, and kitchen and service facilities. The group of buildings to the south, to which several have been added since the photograph was taken, houses the Beth Yerah Agricultural School.

As the Arabic name Khirbat al-Karak ("Ruin of the Fortress") implies, the local inhabitants have long been aware that the mound contains ancient settlements. It did not come to the notice of modern archeologists, however, until the early 1920's, when the British Mandatory Government built a road through it (seen in Pls. 1-2 parallel to the shore of the lake and *ca.* 120 m. from it) in connecting the town of Tiberias and the then existing railroad station at Samakh on the line between Haifa and Damascus. The southern part of this road now serves only the agricultural school, while a wider new branch runs straight south to a new bridge over the Jordan, which contains water-control gates that regulate the level of the lake.

In the two places where the road cut deepest into the mound, near its northern and southern ends, various layers of accumulation were exposed; these, as well as the escarpments along the lake shore, soon attracted the attention of archeologists. Notable among them was Professor W. F. Albright, then director of the American School of Oriental Research in Jerusalem, who visited the site on several occasions and who, on the basis of the pottery collected, identified its main periods of occupation.<sup>1</sup> The strategic location of the site, commanding a road along the western shore of the lake, at the foot of the abruptly rising hills to the west, as well as roads east and south along the Yarmuk and Jordan valleys, must have been fully realized by the ancient occupants. Indeed, one can but accept Albright's view that ". . . we must suppose that it owed its importance primarily to its position . . ."

The first coherent archeological find of importance associated with Khirbat al-Karak, although not on the mound itself, came in 1941 when an Early Bronze Age tomb cave was discovered in the settlement of Kinnereth and excavated by Dr. B. Maisler (now Professor B. Mazar, president of the Hebrew University).<sup>2</sup> Excavations on the mound itself were begun by Drs. Maisler and M. Stekelis in the spring of 1944 preliminary to the erection of the buildings of Oholo. The second campaign, under the direction of Dr. Stekelis and Mr. M. Avi-

<sup>1</sup> See Albright, "The Jordan Valley in the Bronze Age," *AASOR* VI (1926) 27-31.

<sup>2</sup> See *Bulletin of the Jewish Palestine Exploration Society* X (1942) 1-9.

Yonah, was conducted in 1945/46.<sup>3</sup> Further excavations, under the auspices of the newly established Department of Antiquities of the Government of Israel, were begun in 1950 by Mr. P. L. O. Guy, who was joined in 1951 by Mr. Bar-Adon as an assistant. After Guy's death in 1953, several campaigns were conducted by Bar-Adon, chiefly at the southern end of the mound. The results of these excavations are as yet unpublished.

In spite of these archeological activities, this enormous site is by no means fully explored. Only small areas have been excavated to various depths, while most of the site has not been touched and even the periods of occupation have not been determined in some areas. One thing, however, stands out in the light of our present knowledge, namely that, while occupations during the Hellenistic, Roman, Byzantine, and Early Islamic periods seem to have been restricted to certain parts of the site, Early Bronze Age remains have been found wherever excavations have been undertaken. This would indicate that the Early Bronze Age occupation was more extensive than that of any of the late periods; and should it be proved that the whole site was occupied during that early period, it would be established as one of the largest Early Bronze Age settlements in Western Asia. Apparently the site was not regularly inhabited during the Iron Age, for no remains of that period have yet been found on it.

The prominence of the site has naturally led scholars to attempt to discover its ancient name or names. It has been identified with Taricheae, Philoteria, and Beth Yerah, the last mentioned in the Talmud.<sup>4</sup> Beth Yerah is the name used by the Department of Antiquities of Israel. If we retain in this report the modern name, it is not because we have valid reasons to differ with this identification. Our motive is rather an archeological one, for a very distinctive class of pottery which was first found on the site and thus became known as "Khirbat Karak ware" has since been found in other localities, notably Syria and Anatolia, and a considerable literature discussing it has developed. It seems reasonable to retain the association between the ware and the site of its first discovery. Moreover, since the various parts of this enormous site were not all inhabited during the same periods, it may be presumed that it was known by different names at different times as indicated by the various identifications mentioned above.

The aim of the present publication is neither to present an extensive study based on the results of all excavations which have been conducted on the site nor even to offer a full comparative study of our own finds. Rather our intent is to discharge the basic duty of any excavator by making our finds available for such studies in the future. Thus we have attempted to present our material as concisely as possible without neglecting any of it. Only occasionally are references made to other sites. The two with which comparisons are most frequently drawn are both in the Jordan Valley south of Khirbat al-Karak, namely Baisan and Khirbat al-Mafjar.

To locate the various parts of the excavations and to record the finds, we introduced the type of grid-and-loci system which we had employed elsewhere with satisfactory results. The grid of 20-m. squares was laid out by Mr. Haines without relation to any of the survey points of previous excavators; the grid lines were oriented with magnetic north of November 12, 1952. Within each square the loci are numbered from 1 upward. A locus can be a room, a structure, or any other architectural feature. The designation L 11:10, for example, means simply locus No. 10 in square L 11. Our finds were recorded by locus and absolute elevation. Our elevations were obtained from two known elevations in the ancient synagogue to the south of our excavations (see Pl. 2) and refer to a datum set up by the previous excavators,

<sup>3</sup> See Maisler, Stekelis, and Avi-Yonah, "The excavations at Beth Yerah (*Khirbet el-Kerak*) 1944-46," *IEJ* II (1952) 165-73 and 218-29.

<sup>4</sup> See e.g. George Adam Smith, *The Historical Geography of the Holy Land* (25th ed.; New York, 1932) pp. 451-55; L. Sukenik, "The ancient city of Philoteria (Beth Yerah)," *Journal of the Palestine Oriental Society* II (1922) 101-8; Albright in *AASOR* VI 30.

which in turn is based on the mean level of the Sea of Galilee below the Mediterranean.<sup>5</sup> Thus all our elevations are preceded by a minus sign. Even though the bench marks for our grid may disappear, the modern buildings on the site can be used to extend it. As to the elevations, datum points are marked in paint on some of the larger stones in the masonry of the synagogue.

A brief summary of the results of our excavations is here indicated in order to explain the plan adopted for their publication. In the main area (squares L 11 and K 11) two large public buildings were uncovered. The upper one is an Arab structure of the Umayyad period (see p. 59). Beneath it, and almost entirely covered by it except for the northeast corner, is a church whose architectural history we were able to recover in considerable detail through several stages prior to its desertion and final ruin. Soundings below the church floor exposed parts of earlier buildings, which were not investigated, and yielded some Early Bronze Age material (see p. 25). In the vicinity of the church, we made a few limited soundings to obtain an idea of the character and date of the ruins at the north end of the mound. In the hope of securing some objects contemporary with the church, which yielded practically no such small finds (see p. 59, n. 6), we explored the area for contemporary tombs and were fortunate in locating a number of them in a low ridge a few hundred meters west of the mound, where the hills of lower Galilee begin to rise from the Jordan Valley (see Pl. 3 A). Though apparently repeatedly plundered, some of these tombs still contained a sufficient number of small finds, especially glass vessels, to have made their clearing worth while.

Finally, in order to establish the various periods of occupation of the north end of the site prior to the building of the church, we dug a small trench in squares L-N 11-12 (Pls. 28-29). The trench yielded a large number of stratified sherds, and virgin soil was reached at a few points.

Roughly speaking, then, the material obtained during our campaign can be divided into "late," meaning all finds dated to the Hellenistic period or later, and "early," for all those antedating the Hellenistic period. In fact, the early material is confined almost exclusively to the Early Bronze Age, and there is thus a considerable gap between the two groups. Since nowadays the interest of scholars rarely covers both extremes, it seemed practical to divide the material into two parts. The present report covers the late material, including the architecture and the tombs. Since the division is not based on areas of excavation, the early pottery found in and beneath the church will be treated with the other early finds, while the Hellenistic and later material found in the trench is included in this report. Tables I-II provide a numerical record of the potsherds from each findspot except the tombs, for which a catalogue is given. It should be noted, however, that sherds which at the time the count was made could not be recognized as belonging to any of the groups or types of pottery discussed on pages 30-48 are not included in Tables I-II.

Museum accession numbers prefixed by "A" refer to the Oriental Institute Museum in Chicago, those prefixed by "Jer." to the Department of Antiquities of Israel in Jerusalem.

<sup>5</sup> Although two different surveys, one by the British Mandatory Government and the other by the Palestine Electrical Corporation, yielded different results for the mean level, the excavation datum seems to follow the survey of the latter, in which the mean level of the Sea of Galilee below the Mediterranean is taken to be ca. 212 m.

## THE EXCAVATIONS

### THE MAIN AREA

*By* RICHARD C. HAINES

#### POST-CHURCH REMAINS

**T**HE post-church remains cover the entire area of the main excavation. Those at the west give no idea of the buildings to which they belong, but the rest of the area is occupied by a single structure which we call the "Arab building."

#### THE WESTERN PART OF THE AREA

Outside the Arab building three different periods of post-church building activity are indicated (see Pls. 11, 18 A). The lowest occupation is represented by fragments of two stone walls. One on the north, 75 cm. wide and partially destroyed by construction of a later wall, is founded less than 20 cm. above the floor level of the church. The second wall, about a meter wide, is at the south and built directly on a church wall.

The middle period of building activity is represented by walls inclosing three sides of a rectangular area about 10 m. wide and more than 11 m. long. A wall stub projecting from the southern wall of this complex and a wall fragment at right angles to the stub indicate that this area was originally partitioned into smaller units. The walls (*ca.* 60 cm. wide) are built of unshaped face stones and rubble fill laid with mud mortar. They are founded well within the present tops of walls belonging to the church. For instance, in the southern part of the excavation, the east wall of locus J 11:3 abuts a church wall lying at right angles, but it crosses over the church wall and continues in a southerly direction. The wellhead of a cistern in the atrium of the church was continued upward with unshaped stones (locus J 11:5). It was covered with a pile of fallen stones which came within a few centimeters of the surface of the mound, but no indication of a capstone was found. Since there are no doors, floors, or other signs of habitation within the area, it is probable that the walls of the middle period are foundations lying in part, if not entirely, below floor level. Although there is no connection between the architectural remains in this area and the Arab building to the east, the alignment of walls suggests that they are contemporary.

The latest or third occupation is represented only by remains of a circular clay oven which partly overlies the southern wall of locus J 11:3.

#### THE ARAB BUILDING

The only known entrance to the Arab building (see Pls. 11, 12, 18 A) is on the west, where a doorway opens into a passage leading to a large interior courtyard. The single ranges of rooms to the west and south of the courtyard were only partially excavated. On the north, although the digging did not extend beyond the courtyard wall, a doorway in that wall indicates that there are rooms to the north also. East of the courtyard are three ranges of long, narrow, connecting rooms with walls roughly parallel to the edge of the mound and the shore line of the lake (Pl. 3 B). They lie at an oblique angle to the rest of the building, which generally follows the orientation of the church below.

The building is constructed with straight, well laid stone walls (60-70 cm. wide) which have large face stones, many of them squared, and smaller rubble fill. Since the squared stones were



used indiscriminately in conjunction with unworked stones, it is probable that they were taken from an earlier structure rather than cut for this particular building. The face stones are laid with mud mortar in horizontal courses that were brought to a level with small stones and large pebbles such as are found on the shore of Lake Tiberias. The jambs of most of the door openings are formed with large worked stones placed vertically. Although the walls are now devoid of surface treatment, this fact does not preclude the previous existence of such, since they were immediately under the surface of the mound and thus subjected to the continuing effects of rain. The walls are built on stone foundations which project slightly and are not always oriented exactly with the superstructure. The foundations vary in depth but usually consist of one course of large stones laid on a bed of small stones and stone chips. Where walls rest directly on preserved walls of the church, the foundations continue to and abut the upper parts of the earlier walls. The only preserved floors are stone-paved, but there is one small patch of stone mosaic. The stone pavings are well laid on dirt beds, with squared and irregularly shaped stones appearing in the same paving (Pl. 3 C). The fragment of mosaic pavement is laid on a bed of lime mortar and small stones.

Immediately outside the entrance to the Arab building the floor slopes downward from the doorway and is paved mainly with reused squared basalt stones. About 1.80 m. west of the doorway the paving stones stop, and the rest of the area is covered with small unshaped stones, pebbles, and packed earth. The doorway is 1.62 m. wide with rabbeted jambs (not preserved) and a rabbeted stone sill with the outer part raised 9 cm. above the inner (Pl. 19:2). Rectangular depressions, one on each side of the doorway, received the pivots of two door leaves, and a depression near the center of the opening held a vertical locking bar. The inner part of the sill is paved with rectangular stones and is, in turn, raised about 10 cm. above the paving of the passage leading to the interior courtyard. The north wall of the passage has completely disappeared, and only part of the south wall is preserved. At the east end of the passage a wall stub extends beyond the south wall and suggests an opening between the passage and the courtyard equal in width to the doorway at the west end of the passage. The stone paving of the passage, however, continues into the east opening with no apparent provision for a door.

The courtyard is an irregularly shaped quadrangle about 25 m. from north to south and varying in its east-west dimension from 13 to 19.5 m. No regularly laid floor was found in the courtyard except for a patch of pebble paving a few centimeters below the elevation of the stone pavings in the rooms on the east and west and level with the top of the broken-plaster and small-stone debris which covered the church below. The northern part of the west wall of the court does not line up with the southern part, but how this difference was resolved is uncertain. One possible answer is a row of stones east of the northern part of the wall, which could be part of a stairway to the roof (Pl. 3 D). It is about 80 cm. high at the laid exterior corner on the south and steps downward uniformly to a double course of stones on the north, where the finished face of a return is preserved almost to the west wall of the court. All these stones are laid with only one exterior face. The south wall of the courtyard is broken at each side of what seems to be an intrusive construction. Although the north wall of the latter is of the same width as and in line with the wall of the court, its two preserved corners are laid with large, partially worked stones and appear to be exterior corners. In the northeast corner of the courtyard a wall fragment parallels its northern and eastern walls. It is not founded quite so deeply as the courtyard walls and rises about 10 cm. above the one patch of floor that is preserved. It could represent a later alteration or possibly a bench.

Of the three ranges of rooms to the east of the courtyard, only those of the middle range are not paved with stones. In room L 11:3 the topmost preserved stones of the southern apse of the church are incorporated in the paving. In room L 10:4 there are fragments of a later paving about 20 cm. above the original one. The only actual evidence of a floor in the middle

range of rooms is a fragment of mosaic pavement in the southwest corner of room L 10:2. It is made of large white tesserae with no design apparent in the small fragment which is preserved.

#### THE CHURCH

In the second level below the surface, a Christian church covers the entire excavated area (Pl. 4 A). The main parts of the church were completely cleared, though a few post-church walls were left standing above the narthex and the atrium where they do not obscure the plan. The rooms to the north and west of the atrium were partially dug, and the southern boundary of the complex apparently was reached, although it can be determined with certainty only by further excavation. The church as it is now exposed is the result of many rebuildings, restorations, and alterations. The major changes and additions were noted, but an exhaustive study to obtain a complete picture of the building could not be made without destruction of many of the later architectural features.

#### GENERAL DESCRIPTION

The church is approached from the south, where an entrance opens into a loggia (J 11:2) facing on a large atrium (J 11:1) with subsidiary units on its periphery; the rest of the complex lies to the east (Pl. 13). An open narthex (K 11:3), with two subsidiary rooms (K 10:1-2) on the north, has three doorways which lead into the *domus*. The latter is basilican, with a nave and two aisles terminating at their eastern ends in external apses. From the northern aisle a doorway opens into the anteroom (L 10:12) of a diaconicon (L 10:9), also with an external apse. From the southern aisle a doorway opens into room L 11:13, which provides circulation to two other rooms on the south (L 11:7 and 11) and to the exterior (Pl. 6 A). This rather extensive plan is the result of additive growth rather than of a preconceived *partie*; in later years the process was reversed, and circulation was considerably constricted by intentional blocking of many of the door openings.

The walls of the church are built either on the stone walls of an earlier building or on foundations which are an integral part of the church construction. In most instances where excavation was carried below the church floor, the walls there found appeared to belong to the earlier building. The earlier walls are laid with mud mortar and rest on stone foundations laid not to a face but apparently in trenches dug for the purpose (Pl. 17, section B-B). Although most of these walls are preserved to within a few centimeters of the church floor, they must belong to a building constructed prior to the church as it is now preserved because similar walls were found outside the church as well. The foundations that are an integral part of the church construction are laid with lime mortar and do not have proper faces below the church floor. One such foundation is clearly superimposed upon an earlier wall laid with mud mortar (Pl. 17, section A-A).

All four of the apses are built with projecting foundations, but all differ in construction. All but the topmost 25 cm. of the foundation below the apse which terminates the nave is laid with reddish mud mortar containing some lumps of lime. This mortar is noticeably different from that used in the other mud-mortared foundations. The lowest 55 cm. of the foundation is not laid to an exterior face, and the topmost 25 cm. is laid with lime mortar in the same manner as is the apse wall itself (Pl. 17, section F-F). A reinforcing ring added later to strengthen the apse wall is laid entirely with lime mortar, as are the foundations of the side apses. Of these two, only the northern apse was excavated to the base of its foundation, which is not so deep as that of the central apse but deeper than the latter's reinforcing ring. Here, too, the lower part of the foundation is not laid with an exterior face (Pl. 17, section E-E). Sometime after the foundation of the southern apse had been built and the reinforcing ring

had been added to the central apse, a ring of varying projection and without a laid face was built upon the foundation projection of the southern apse (Pl. 17, section *G-G*). The foundation of the diaconicon apse is laid without an exterior face and seemingly was limited only by the earth sides of an area dug to receive it (Pl. 9 *C*). The stones were apparently dumped into the excavation and then, at approximately every 30 cm., covered with a thin layer of ash and lime mortar which seeped into the crevices and held the mass together. Each layer of mortar was brought to a fairly uniform level before the process was repeated (Pl. 17, section *C-C*). From two test pits dug inside the diaconicon, it appeared that this foundation extended under the entire apse and was finished off with a laid face at the chord of the apse. This type of construction was not noted elsewhere in our excavations.

The walls of the church are built of rather large unshaped face stones and rubble fill laid with lime mortar. The width varies from 60 to 65 cm. except for the apsidal walls, which are about 90 cm. wide in the *domus* and 1.20 m. wide in the diaconicon.

Enough plaster was found intact to reveal that the interior faces of the walls were covered with lime plaster usually applied in two coats, a base coat 1–1.5 cm. thick and a finish coat 5 mm.–1 cm. thick. In only a few instances was color noticeable. A light buff finish coat was used in the apse of the diaconicon. Pinkish plaster was used for the sunken basin or font in the diaconicon (see p. 18) and for a basin in room L 10:12 (see p. 16), and fragments of pinkish plaster were found in the debris above the floor of the *domus*. No traces of actual painting were discovered.

It is possible that the exterior walls were not given a separate plaster coating. They were found with mortar applied so as to bring the wall surface to the line of greatest projection of the face stones; where there was sufficient depth, pebbles measuring 5–10 cm. in their greatest dimension had been pressed into the mortar while it was wet. This treatment is particularly noticeable on the apses of the *domus* (Pl. 9 *B*) but can be seen on other exterior walls as well. The only decoration preserved on the exterior is a series of vertical plaster ribs near the southern end of the central apse, on the southern apse (Pl. 7 *F*), and on the wall south of the exterior entrance to room L 11:7. The ribs are triangular in section, with a base of 6 cm. at the wall and a projection of 1.5 cm. from the wall face; those on the apses are in pairs, with the members of each pair spaced 38 cm. apart, and the rib south of the doorway to room L 11:7 is a single one (Pl. 19:1). Quite probably, similar ribs were once present on the northern apse and near the northern end of the central apse, but no traces could be found.

Most of the doorways are 0.87–1.00 m. wide, although the doorway from the narthex to the nave is considerably wider. The main doorways are framed in cut stone with sill and splayed jambs rabbeted to provide stops for door leaves. Just inside the raised portion of the sill, grooves about 7 cm. wide terminate in circular depressions to receive posts attached to the door leaves. A rectangular slot in the sill gives the position of a vertical locking bar that secured the left-hand leaf as one enters (Pl. 19:3). In one doorway (Pl. 7 *F*) there are indications that the jamb stones are reused, and it is possible that none of the jambs were cut for this particular building.

The openings which are not provided with cut-stone frames have no sills other than the tops of the foundation walls, and their jambs are formed by courses of large stones laid alternately across the entire width of the wall and parallel to the wall face (Pl. 7 *D*). In two doorways a socket stone was placed within the opening. Since these two openings provide no visible means for stopping the swing of a door, the use of a wood frame set within the opening should be considered, although no trace of such a frame was found.

Various types of floor construction were used. The simplest is a tamped-earth floor, which is easily discernible only when covered with ash or occupational debris. Most of the subsidiary

rooms are paved with flat unshaped stones laid on a dirt bed. In two rooms (K 11:4 and 11), however, the floors are of very soft limestone cut in large, thin, rectangular blocks and adzed to a smooth surface (see p. 10). The floors of the atrium, the narthex, the *domus*, and the diaconicon and its anteroom were originally covered with mosaics, but only small patches are preserved. The mosaics are laid in lime mortar over a subfloor consisting of a layer of small stones covered with about 5 cm. of stone chips and lime mortar brought to a level and fairly smooth surface.

No evidence of window openings or roof construction was found in the debris in the rooms. Flat terra-cotta roof tiles used in the construction of a basin (J 11:9) at the western end of the atrium (see p. 10) perhaps give some indication of the roofing material.

#### THE SOUTHERN ENTRANCE

Since the church is located at the northern end of the mound and extends almost the entire width of the mound at that point, it is only logical to expect an entrance on the southern or town side. The possibility of such an entrance exists in the south wall of the loggia (J 11:2), where removal of a laid blocking of stones (Pl. 4 B) revealed two jambs formed by large stones lying the entire width of the wall, with a second course at the western jamb laid parallel to the wall face. Two large stones edged on one side with smaller stones form a satisfactory sill. While this opening is not so well defined and impressive as an entrance should be, it is the only place where there could have been a doorway in the wall as it is now preserved. The western third of the wall, however, was rebuilt with the top of the present foundation slightly above the paving stones in locus J 11:7, and an earlier doorway may have been destroyed.

Only a small part of the area (J 11:7) south of the loggia was excavated. It could be part of a room or courtyard belonging to the church or part of a public area. It is bounded on the east by a wall that abuts the south wall of the loggia and on the west by a continuation of what seems to be the west exterior wall of the church complex. The floor is covered with unshaped paving stones laid at a somewhat higher elevation than those inside. It is about 15 cm. above the sill of the doorway, which, in turn, is about 25 cm. higher than the floor of the loggia. A similar condition exists at the two other exterior openings (in rooms K 11:4 and L 11:7) and suggests that, in its later phases, the entire church complex was below the rising level of the street.

#### THE LOGGIA

Most of the west wall of the loggia (J 11:2) is destroyed to within a few centimeters above the floor, and only the southern jamb of an opening into J 11:6 is preserved above the sill. The opening into the atrium (J 11:1) is about 9.50 m. wide and is divided into three parts by two apparently reused basalt column bases (Pl. 4 D). The eastern base has a flat circular top and a roughly circular unfinished lower part, which is set below the floor level (Pl. 20:4). The top of the base is 42 cm. in diameter, and its dressed vertical side is 5 cm. high. The lower part is 48 cm. in diameter, and the entire stone is 11 cm. high. The western base is a truncated cone on a square plinth (Pl. 20:3). The upper diameter is 44 cm., the lower diameter is 56 cm., and the height is 11 cm. The plinth is 58 cm. square and 7 cm. high, with its top at the level of the floor. No stone column drums were found, and, considering the nature of the building, it is quite probable that only wooden posts were used.

The floor is made of tamped earth and pebbles, which level off a sublayer of larger stones. Above the floor is an accumulation of mixed dirt and ash, which slopes slightly downward from the entrance to the opening into the atrium. In the northeast corner of the loggia a fragment of stone paving was found about 15 cm. above the earth floor, but, since this corner was not entirely excavated, the reason for a paving at this place is not apparent.

## THE ATRIUM

The atrium (J 11:1) is a rectangle (10.50 × 21.00 m.) with its long axis slightly askew from that of the rest of the building. The mosaic pavement is of large white tesserae measuring about 2.5 cm. on the average (i.e., 25 cm. for ten rows). There is no pattern, but a border 30–50 cm. wide parallels the walls, and the field is laid at a 45° angle to the border (Pl. 4 C). In the west-central area of the paving an incompletely preserved panel, outlined in black tesserae, contains a short inscription (pp. 54 f., Inscription 4).

In the middle of the atrium is an underground cistern (J 11:5), elliptical in plan with axes that measure 3.94 and 4.45 m. (Pl. 20:7). It is 4.91 m. deep from the underside of its roof slabs to its floor, which dishes an extra 10 cm. in the center. The longer axis is divided into five bays by semicircular arches (42.5 cm. thick) that die into the wall. The spandrels of the arches are built up to form a level wall rising 35 cm. above the crowns of the arches, and the roof is formed of stone slabs (18–20 cm. thick and 30–32 cm. wide) that span from one arch wall to the next, a distance of about 55 cm.<sup>1</sup> The entire cistern, including the floor, is undoubtedly built of stone, but the plaster inside is in such excellent condition that in no place does the construction show. At the time of discovery the cistern was empty except for about 20 cm. of mold covering the bottom. The wellhead of the cistern is cut from a single stone, 90 cm. in diameter, 55 cm. high, and pierced with a hole 38 cm. in diameter (Pl. 4 C). It rests on the subfloor of the mosaic pavement, but omission of the usual stones in the subfloor (cf. p. 8) allows the necessary space between the bottom of the wellhead and the top of the cistern roof slabs for drains to empty into the cistern.

The drains under the atrium floor are built either of stones or of baked-clay tiles, but, since all the outlets into the cistern are constructed of stones, it can be surmised that if the two types are not contemporary, the stone-built drains are the earlier. In the latter, small stones form the sides and bottom, which are coated with lime plaster, but larger lintel stones were used to cap them (Pl. 20:1). These drains average 15 cm. in width and 10 cm. in depth. All the drains in the eastern part of the atrium are constructed in this manner. The baked-clay drain tiles are 23 cm. long, slightly elliptical in section, with axes of 15.5 and 16.5 cm., and 1.4 cm. thick (Pl. 20:2). They are laid in a bed of lime mortar and covered with a layer of mortar 3–5 cm. thick. Except for an 80-cm. section at the outlet into the cistern, the drain in the western part of the atrium is constructed of tiles. It extends to the west wall of the atrium and then, by means of an L-shaped tile, turns southward and parallels the wall before disappearing under a plastered basin (J 11:9) built against the wall.

The main drain runs approximately east-west and about 1.50 m. from its outlet is joined by a branch coming from a catch basin at the mid-point of the south wall of the atrium. Apparently somewhere in the unexcavated area in the eastern part of the atrium the main drain forms a Y, with one branch going to a catch basin in the southeast corner of the atrium and the other turning northward and continuing beyond the limits of the excavation, where it is beginning to curve in an easterly direction as if to round the corner and continue along the north exterior wall of the church. The catch basin in the southeast corner of the atrium is elliptical in plan, with axes 50 and 80 cm. long. It is built of unshaped stones covered with lime plaster except at the bottom, where the plaster is destroyed. The top of the basin is 24 cm. above the mosaic paving; the bottom, level with the drain leading from it, is 38 cm. below the paving. The basin is built against the west wall of the narthex and against blocking which was laid in an opening in the south wall of the atrium. Although the blocking abuts

<sup>1</sup> This method was not unusual for roofing Roman and early Christian buildings in southern Syria. It was used in the cistern of the Convent of SS. Sergius and Bacchus; see Howard Crosby Butler, *Early Churches in Syria, Fourth to Seventh Centuries* (Princeton, 1929) p. 85 and Ill. 90.

the narthex wall, the corner thus formed is integrally plastered as high as the wall is preserved. Stones ring the top of the basin except in the corner, where a vertical channel extends to within 26 cm. of the bottom of the basin. The sides and bottom of this channel are also plastered. The catch basin at the mid-point of the south wall of the atrium is similarly constructed, but there are no indications that it rose above the mosaic floor.

Basin J 11:9, against the mid-point of the west wall of the atrium, is built on the mosaic paving (Pl. 20:5). It measures 1.12 m. in length and 58 cm. in width and is set out about 10 cm. from the wall by means of large roof tiles placed on edge and coated with lime plaster 1–1.5 cm. thick. The tiles are 52 cm. long and 3 cm. thick, but in no case is the width known. The side walls and the front wall of the basin are built of small stones and mortar and are preserved to their full width only where the side walls join the west wall. The inside of the basin is coated with lime plaster. There is no drainage hole in the bottom, although the tile drain comes from beneath the basin.

The present rate of fall of the drains varies from 1 in 10 to 1 in 130. The drain in the western part of the atrium actually slopes away from the cistern, but this slope can be attributed to sinkage of the paving in the northwest corner.

At the east end of the atrium, against the narthex wall, a bench or step of unworked stones rises about 17 cm. above the near-by mosaic paving. It is laid with mud mortar, except for a more or less square area at its southern end where lime mortar was used, and must have been added after the opening into the narthex was narrowed (see p. 12).

Near the southeast corner of the atrium a stone construction built directly on the mosaic paving abuts the south wall. Four dressed basalt blocks are *in situ* and appear to be all that remains of three steps. If they are so considered, a large basalt block to the east might be the beginning of an archway under the run of a stairway leading to the roof or to a second story above the rooms south of the atrium. Such a stairway would necessarily have been built after the opening into the narthex was narrowed and after an opening in the south wall of the atrium was blocked (see below). Another possibility is a series of steps placed across the east end of the atrium to form a raised terrace in front of the narthex, but that seems improbable, since no evidence of a corresponding higher floor was found inside.

#### SUBSIDIARY ROOMS AROUND THE ATRIUM AND SOUTH OF THE NARTHEX

Except for the colonnade between the loggia and the atrium, the means of access to the rooms around the courtyard are not very clear. In some cases, walls are not preserved above sill level; in others, openings are blocked; and, in still others, what appear to be blockings in openings could also be interpreted as integral to the wall construction.

It is certain, however, that the south wall of the atrium had a wide opening extending westward from the west wall of the narthex. Its span was broken by two freestanding piers, one of which had definitely plastered faces on its eastern and southern sides (Pl. 5 B). Later the opening was completely blocked with a lime-mortared wall, and two rooms (K 11:4 and 11) were formed east of the loggia with no apparent access to the rest of the complex.

The wall dividing these two rooms abuts the east pier but does not quite line up with it. The jambs of a connecting doorway are certain, although the sill stones are poorly laid and uneven. The division wall, the south wall of both rooms, and the west wall of K 11:11 are all laid with mud mortar. The rooms are paved with large, thin, rectangular slabs of very soft limestone chiseled to a flat surface. From the width of the cracks between them it seems probable that some of the slabs, especially those in the westernmost two rows in room K 11:11, were broken before they were laid. Stones along the south wall of room K 11:11 rise above the level of the floor and form the southern limit of the paving. They belong to an earlier wall that was not completely destroyed when the present wall was built.

In room K 11:4 stone steps (Pl. 5 C) leading up to a doorway in the south wall still have some plaster on the risers and treads. The risers average 21 cm. in height, and the treads 25 cm. in width. The cut-stone sill is 1.03 m. above the floor and was originally built at that level, for the wall continues unbroken below the doorway. The high level of the sill and the mud-mortared walls suggest that the rebuilding of the south wall occurred at a time when the level of the town was already well above the church floor. The fact that the door swung into the room favors the opening's being an exterior one rather than one giving access to a further extension of the complex. Steps at the east end of the room lead to room K 11:2, and the plastered face of an opening is preserved at the southern edge of the third tread. The lower treads line up with this jamb, and the space between the treads and the south wall is filled with small stones laid on the rake of the stairway and plastered over. Indications of a similar condition exist against the narthex wall to the north of the steps, but the stones are not preserved to a height which would reveal the other jamb of the opening.

No floor was found in room K 11:2 at the normal floor level of the church, and neither the east wall nor the west wall has a face, but both are irregularly laid with boulders and small stones. The steps rising from K 11:4 suggest that we found only the retaining walls and fill below a continuing stairway or a floor which might have leveled off somewhere near the present top of the east wall of K 11:2. The east wall abuts the north and south walls and must represent a comparatively late alteration that involved partitioning the original long passageway.

There is no apparent opening into room K 11:8. Its east wall is bonded with its southern one but abuts the *domus* on the north. In the southwest corner of the room the walls were burned badly enough to start calcification, and the few paving stones still preserved indicate the floor level.

There is no evidence of openings in the north wall of the atrium. However, since the floor level of the area to the north is either above, or at the level of, the present top of the atrium wall, evidence of openings cannot be expected. Very little excavating was done north of the atrium. The small area K 10:3 is bounded on the north by a wall which abuts the west wall of room K 10:2 and on the south by the north wall of the atrium, part of which was accidentally destroyed during excavation. It is evident, nevertheless, that the latter was bonded into the west wall of the narthex. Area K 10:3 is paved with a subfloor of small stones on which is preserved a mosaic fragment laid with large white tesserae like those in the atrium. A similar patch of mosaic is preserved farther westward, and it is possible that the entire area north of the atrium is undivided.

There appear to be two openings, each 2.45 m. wide, in the west wall of the atrium. Jamb-like stones extend the entire width of the wall, and there are through joints between the wall and what appears to be blocking in the openings. The "blocking" is not preserved above floor level. However, since there is a definite change in the elevation of the base of the wall at each place that seems to be a jamb, such a series of through joints might result from the method of wall construction.

Neither the northern nor the western limit of the building was determined, although the westernmost wall at J 11:13 has the appearance of an exterior wall. Except in a few places, the walls northwest of the atrium are not preserved as high as the presumed floors. The east and west walls of locus J 11:8 have well laid face stones at the west, while, at the same elevation, the east faces of these walls are definitely foundations. This variation might be the result of a stepping-down of the floor level to the west to conform with the slope of the ground.

A partition wall divides the area west of the atrium into two parts, with loci J 11:8 and 11 on the north and loci J 11:10 and 6 on the south; there are no indications, however, that the two parts were actually divided into the smaller units to which locus numbers have been

assigned. Most of J 11:11 is stone-paved; a tile drain now slopes downward to the north-northwest, although it is laid for water to flow south-southeast into the atrium. No floor was found in J 11:10, but in J 11:6 there is a patch of paving stones at approximately the same level as the floors of the atrium and J 11:11.

#### THE NARTHEX

The narthex (K 11:3) appears to have been added after the *domus* was built. Its south wall, although seemingly a continuation of that of the *domus*, has a slightly different orientation and abuts the southwest corner of the *domus*, which has the character of a well laid exterior corner (Pl. 7 E). A corresponding northwest corner does not exist; there is a through joint where the west wall of the *domus* adjoins its rebuilt north wall, which continues westward to form the north wall of the narthex.

The opening between the atrium and the narthex underwent several changes. Originally the end walls of the narthex returned and formed an opening 8.55 m. wide facing the atrium (Pl. 4 E). The jamb stones, but no sill stones, are still in place. From the length of the span it is reasonable to assume that the opening was divided into three parts, but whether by stone piers or columns is not known; no column fragments were found in the debris in this area. The opening was later narrowed to 2.30 m. and could have been closed with door leaves, though neither socket stones nor a cut-stone sill was found. Still later, the opening was either intentionally blocked or the sill was raised some 60 cm. above the mosaic paving of the atrium to the top of the stones that are now preserved in the opening.

Three entrances in the east wall connect the narthex with the *domus*; a large central doorway opens into the nave, and smaller doorways open into the aisles (see below). At the place where there should be a doorway in the north wall, the latter is destroyed below the level of a possible sill, so that an opening cannot be reconstructed with certainty. However, the necessity of access to rooms K 10:1-2 is apparent from the plan.

The mosaic floor of the narthex is preserved only at the southern end and in the northwest corner. At the south the tesserae are smaller than those in the atrium and laid (10 rows in 17 cm.) in a geometric pattern of red and black on a white background. A border of alternating rectangular and circular motifs incloses a field of banded squares with diamond centers (Pl. 23). The mosaic is patched in several places with larger white tesserae similar to those in the atrium; the size of these tesserae indicates that the bit of mosaic in the northwest corner is part of the patching. A border fragment with its ancient patching is now in the Oriental Institute Museum (A 30492).

An incompletely preserved stone bench(?) against the south wall of the narthex is laid on the subfloor of stone chips and lime mortar and rises about 35 cm. above it. The existence of a corresponding structure against the north wall is negated by the small patch of mosaic paving found in the northwest corner.

#### ROOMS K 10:1 AND K 10:2

The floor level of the two subsidiary rooms north of the narthex is indicated by an oblong area of stones in the center of K 10:1 and a few stones at the southwest in K 10:2. The former appears to be pavement and the latter the foundation for a plaster or mosaic floor, although no fragments of either plaster or mosaic were found. A row of large basalt stones at the southeast in room K 10:2 rests on dirt above the presumed floor level and could be an accidental row formed at the time the church was destroyed.

#### THE *Domus*

The *domus* is basilican in plan, with a central nave and single side aisles ending at the east in three horseshoe-shaped apses (Pls. 5 A, 7 A-B). The room is approximately 11.50 m. wide



and 12.50 m. long and is divided lengthwise into six bays. The aisles are about half as wide as the nave.

The present walls are the result of at least one major rebuilding. The west and south walls are bonded together and appear to be part of the original structure. The foundation of the west wall was not investigated, but the south wall is built on an earlier wall laid with mud mortar (see p. 6). The three doorways in the west wall and the single one in the south wall have cut-stone jambs and sills (see p. 7 and Pls. 7 C, 19:3). Of the three in the west wall, only the southernmost is completely preserved; the southern jamb stones of the other two are gone, and the northern doorway is blocked by a crude stone wall laid in the opening. The doorway in the south wall also is blocked with stones laid between the jambs.

The north wall, not bonded into the west one, is a rebuilding not quite in line with an earlier wall, which is superimposed on a still earlier wall laid with mud mortar (Pl. 17, section B-B). A single doorway in the present north wall has jambs of unshaped stones and a door socket within the opening.

The wall of the northern apse is a continuation of the north wall of the room and apparently dates from the time the latter wall was rebuilt. The central apse, however, was constructed before that time. Its foundation abuts an earlier mud-mortared wall running north-south under the room just inside the chords of the apses (see p. 25), and the ends of the central apse wall extend beyond their own foundation and rest on the earlier transverse wall (see Pl. 14). The southern apse also was added later, and both side apses abut the exterior face of the central apse. The southern end of the southern apse wall is laid against the northern jamb of the exterior doorway to room L 11:7 (Pl. 7 F) and narrows perceptibly, so that it does not project into the opening. When the side apses were built, the exterior face of the central apse was torn away at both ends and made to conform with the interior curved faces of the side apses. At the southern apse the narrowing continues below the depth of the excavation, but at the northern apse the original exterior face of the central apse foundation continues below the floor and abuts the earlier wall.

Remains of seven of the ten columns that divided the nave from the aisles are still *in situ* and rest on roughly oval foundations of stones laid in lime mortar. The six foundations that were examined are 40–75 cm. deep; their north-south axes vary from 65 to 75 cm., and their east-west axes from 0.90 to 1.40 m. In four instances walls of an earlier building were partially destroyed so that the new foundations could be built. The column drums, all apparently reused, are made of basalt and vary in diameter from 41.5 to 55 cm. and in height from 0.50 to 1.10 m. The tops vary 31 cm. in absolute elevation; one drum was unusually long and was incased in the foundation rather than set upon it. Four of the columns have a cincture at the bottom, and the others seemingly are drums from the middle parts of shafts. Fragments of plaster still adhere to two columns; it consists of a base coat 6 mm. thick and a finish coat 4 mm. thick. No fallen drums were found in the room, and either the upper parts of the columns were of a different material, or they had been carried away.

Only patches of the mosaic floor are preserved; the lime-plaster base covers a much larger area, and the subfloor of small stones is almost complete. Two small patches of mosaic in the westernmost bay, one near the south wall and the other just inside the doorway to the northern aisle, do not correspond in design to those found in the rest of the room. They are laid (10 rows in 12 cm.) in a diaper pattern with diamond centers in black, red, and pink-tan tesserae on a white background (Pl. 23). The bit at the doorway suggests that this pattern was divided into panels. The four bays to the east are floored with tesserae laid (10 rows in 13 cm.) in an imbricate design with a banded guilloche border and diamonds in a white surround (Pl. 24). The border bands are pink and red, the guilloche of two intertwining bands is in white and graduated tones of red and yellow on a black background, and the field is white

with flowers in black and graduated tones of red at the intersections of the imbrications. A fragment of mosaic in the easternmost bay is in line with the columns between the nave and the northern aisle and shows that the entire floor was treated as a unit without intercolumnar panels. At the east end of the northern aisle the mosaic continues under the present north wall for about 12 cm. and abuts the face of an earlier wall. The floor had been burned, and there was black ash over the central and western parts of the room. Since both patterns of the mosaic were affected, the probability of their being contemporary must be considered unless two burnings are presumed. Except for that in the southwest corner of room K 11:8 (see p. 11), no other evidence of heavy burning was found in the church.

A circular sump pit or basin, 42 cm. in diameter and 27 cm. deep, is built into the floor at the southwest corner of the southern aisle. It is made of stones covered with a base coat of lime plaster and two finish coats, each of the latter about 5 mm. thick. No plaster remains at the rim and in the bottom of the pit, but no exit for water was found and it is doubtful that the pit was connected to a drainage system.

The floor of the southern apse was laid after the apse wall was plastered, but in the northern apse the floor was laid first and the wall plastered afterward. Just south of the center line of the northern apse is a marble slab ( $13 \times 18 \times 2$  cm.) set flush with the lime-plaster base for the mosaic paving. If the slab is the bottom of a boxlike depression similar to one found below a higher floor of this apse (see p. 15), the box would have been very shallow unless it projected above the floor. The only mosaic in the northern apse at the normal floor level is against the southern part of the wall and extends into the aisle (Pl. 20:6). It is, very evidently, a patching and does not join well with the mosaic in the northern aisle just south of the apse. The outer bands of color are not continued in the patch, and three black tesserae preserved in the patch perhaps indicate the border of a separate unit laid in the apse. The tesserae in the patch lay up 10 rows in 11 cm. instead of 10 rows in 13 cm. No mosaic was found in the small area in the southern apse which was excavated to the normal floor level.

In the central apse a bench paralleled the curve of the apse wall. It is preserved to its full width of 1.03 m. only at the north, and its southern end is entirely destroyed. At present the top of the bench is 17 cm. above the chancel floor, but a small fragment of marble facing found *in situ* about 60 cm. from the apse wall suggests that originally the bench was two tiers high (Pl. 20:6). The chancel, raised about 20 cm. above the floor of the room, is a little narrower than the central apse and extends a bay and a half into the nave. Many of the edging stones are missing, the floor is uneven, and the whole area seemed somewhat disturbed. A row of stones defines the southern edge of the chancel, against which is laid the mosaic floor of the room with enough preserved to show that the banded border followed around the chancel projection. The southwest corner of the chancel is gone, but a few stones on the west and at the northwest corner locate the west and north edges. The lime-plaster base for the mosaic floor of the room abuts the higher edging stones of the northwest corner of the chancel, and on the north a mosaic fragment bordering the chancel includes a band of red tesserae.

Almost all of the mosaic floor of the chancel is destroyed. Against the bench in the apse enough is preserved to indicate that the border is different from that in the nave and aisles and similar to that of an upper paving in the side apses (see below). The small fragment of the field is also similar to, but not identical with, that of the upper paving. The chancel border, more complicated than that of the nave and aisles, is composed of a black-banded, formalized, loop-stitch design in white and graduated tones of alternating red, gray, and yellow on a black background. The field is an imbricate design on a white background; the imbrications are outlined in black and graduated tones of red and have flower centers of the same colors (Pl. 24).

Although nothing of the altar is preserved, its probable position is indicated by remains of a reliquary or basin found on the center line of the apse and at its chord (Pls. 8 B, 21:1). The

boxlike depression, probably 29.5 cm. square and 14 cm. deep, was once lined with marble slabs backed by small stones and lime plaster. Only the marble slab on the south side is in place, although the impressions of those which lined the north and east walls are preserved. The west side can be located approximately by the length of the one slab *in situ*; since large stones which were in place before the box was built rise above the bottom of the box on the west side, an upward slope of the floor to the west must be presumed. Otherwise the west side might have been made of plaster in a semicircle or bow to conform somewhat with the curved end of the shield-shaped floor slab made of limestone and decorated with a small inscribed Latin cross (Pl. 49:8).

Since the floor of the chancel is so poorly preserved, it is not surprising that no socket holes for the legs which must have supported the mensa were found; nor were there any dowel holes for posts of a chancel railing or traces of an ambo projecting beyond the line of the chancel.

Sometime after the side apses were added to the church, the floor at the eastern ends of the aisles was raised about 20 cm. to the level of the chancel, which was thus enlarged to include the side apses and the easternmost bays of the aisles. The western limit of the new floor is indicated by remains of a plastered stone edging in line with the easternmost columns (Pl. 6 B). The upper floor is built upon the mosaics of the lower one and in much the same manner, except that the subfloor foundation stones are not so well laid and the leveling coat of lime mortar is thinner. In the northern aisle the upper floor is laid against the plastered face of the rebuilt north wall of the room. In the center of the northern apse there are remains of a boxlike depression about 35 cm. square and 20 cm. deep. The east wall of the box is built with small stones and lime plaster; its other walls are entirely gone, but its east-west dimension can be determined by the extent of its lime-plastered floor. Four unbroken marble slabs ( $19 \times 35 \times 1.5$  cm.) were found in the depression and are undoubtedly the lining of the box.

The border and field of the upper mosaic paving (10 rows in 10 cm.) are similar to those originally laid in the chancel, but small differences in design and proportions (Pl. 25) indicate that the original chancel paving was matched when the floor of the side apses was raised rather than that a new paving was laid over the entire enlarged chancel. In the southern apse there is an inscription (p. 54, Inscription 3) in the surround between the border and the apse wall (Pl. 51 C). A vine design was introduced in the surround between the border and the north wall of the room (Pl. 8 C); whether other areas were decorated in a similar manner is not known because so little of the upper paving is preserved.

A small stub of a plastered masonry wall abutting the northern wall end of the central apse indicates that the central and northern parts of the extended chancel were separated by a partition (Pl. 20:6). The wall stub is 28 cm. thick and founded on the mosaic of the lower floor. Against the two wall ends of the apses were found fragments of marble slabs set in front of the normal plaster face and held in place by lime-mortar backing. Even though the fill for the upper floor is laid against them, the marble slabs are set 4–15 cm. above the lower floor and must have been installed when the chancel was enlarged. These are the only places where marble wall facing was found, and it is quite probable that such treatment was confined to the central part of the enlarged chancel. In the side apses the upper mosaic floor is laid against the wall plaster and precludes the possibility of similarly constructed additional facing.

A crudely built wall (Pl. 8 A) which extends from the southern wall end of the central apse to the easternmost column on the south side of the nave must be very late and might even date from a time when the building was no longer used as a church.

Two tombs were found in the *domus*, one (K 11:15) near the western end of the northern aisle and the other (L 11:23) in the western part of the nave. The former contained fragments of several skeletons and a few objects (see p. 63), but the latter was empty.

At the level of the subfloor, Tomb K 11:15 was marked by a fragment of limestone set on

edge at its west end and by three basalt stones above two fragments of a cover slab which were not *in situ* (Pl. 21:3). The only cover stone which was in place, at the east end of the tomb, is made of very soft limestone similar to that used for the floors of rooms K 11:4 and 11 (see p. 22, n. 2). The slab is 62 cm. wide, 1.14 m. long, and 7 cm. thick. It rested on the walls of the tomb, which were built up around it so that the tops of the walls were level with the top of the cover stone. A few basalt stones over the central part of the tomb appeared to be later and probably date from the time that it was opened in antiquity. The walls are built of small stones laid with lime mortar, and, except at the west end, the tomb is lined with slabs of the soft limestone held in place by bronze cramps (Pl. 48:17). The tomb is 76 cm. wide, 1.93 m. long, and 72 cm. deep (Pl. 8 E).

Tomb L 11:23 was marked by several unworked paving stones, larger than the usual ones in the subfloor, laid on a dirt fill above the tomb (Pl. 21:4). The cover stones, about a meter below the church floor, are unshaped basalt stones which were well laid and chinked (Pl. 8 F), so that little dirt had sifted into the cavity before it was opened. The tomb is 42 cm. wide, 1.90 m. long, and about 25 cm. deep; its walls are built of basalt stones, and it has a dirt floor.

#### THE ANTEROOM OF THE DIACONICON

From the northern aisle there is an opening into room L 10:12, the anteroom or vestibule for the diaconicon (L 10:9). The room underwent several changes, not all of which can be related to one another or placed in their proper sequence.

Two phases in the construction of the south wall are easily discernible; it was not torn down to floor level before it was rebuilt in a slightly shifted position, so that remains of its first phase show inside the room. Apparently such "ledges" did not disturb the builders, for they were usually left and covered with lime plaster. A basin, built against the original south wall, was cut by the foundation of the present west wall, and only 50 cm. of its east-west dimension is preserved. It extends 78 cm. into the room and is set 26 cm. below floor level. It is built of small stones laid with lime mortar and plastered in a pinkish color (see p. 7) with a base coat 1-2 cm. thick and a finish coat 1.5 cm. thick. All the angles are rounded, and, except on the south, the walls slope inward 6 cm. in their preserved depth.

The west wall of the room is built on its own lime-mortared foundation, which not only cut through the basin but also destroyed the western edge of a bit of mosaic floor in the northwest corner of the room. A trace of diamonds in a white surround indicates that there must have been an earlier wall a little to the west of the present one to contain the mosaic on that side. In addition to the diamonds in the surround, the mosaic (10 rows in 16 cm.) shows only a black-banded guilloche border of white and graduated tones of red on a black background (Pl. 26:2). None of the field is preserved.

The north wall is built upon, but not exactly aligned with, a mud-mortared wall, a "ledge" of which shows above floor level and is coated with lime plaster. The north wall also is later than the mosaic floor in the northwest corner; it partially overlies the floor, and the plaster floor of a drain through the wall is laid directly on the mosaic. The north and west walls appear to be bonded together, but a nonbonding joint between them and the north wall of room K 10:1 was not recorded. The west wall of the anteroom is bonded to the north wall of the *domus* as it was rebuilt when the side apses were added, but the north wall of the anteroom appears to be a continuation of the north wall of the diaconicon, which is built against the northern apse of the *domus*. In addition to the fact that no door openings were found in the north wall of the diaconicon and its anteroom, the drain mentioned above also suggests that this wall is an exterior one.

No trace was found of the north wall that existed at the time the mosaic floor of the anteroom was laid, nor is there any indication of an east wall of the room. A bit of mosaic floor

in the southeast corner can belong with the bit in the northwest corner, since each fragment has a black band two tesserae wide. At the western edge of the southern of the two wing walls (see below) which separate the anteroom from the diaconicon, the mosaic design changes to a pink-and-white checkerboard which continues under the wing wall for an undetermined distance (Pls. 8 *D*, 26:2).

Although the mosaic floor in the southeast corner of the anteroom was laid before the diaconicon was built, there seems to be some indication that it was still in use afterward. The position of the wing walls (see below), approximately in line with the change in mosaic design, could have been planned so that the bordered panel in the rest of the room would be used. Intention to continue use of the mosaic paving and a desire not to damage it during the rebuilding of the walls might also explain why the "ledges" at the north and south walls were tolerated (see above). The necessity of the reversed condition seems apparent at the north wall of the *domus*, where overlapping the rebuilt wall onto the existing mosaic floor (see p. 14) was seemingly considered preferable to chipping away the floor to conform to the new alignment.

A bit of mosaic paving in the northeast corner of the anteroom seems to be limited by the northern wing wall and probably represents a later floor, though it is at the same level as the other mosaic fragments. It is laid (10 rows in 15 cm.) with a white guilloche on a black background surrounding an additional border or field of uncertain design in black, gray, and red (Pl. 26:3). It is patched at the west with large white tesserae, and an area farther westward is similarly paved with large white tesserae but with a border in which the tesserae are laid parallel to the walls and with a field laid at an angle of 45°. The patching was certainly done late in the life of the church, perhaps even after the diaconicon was finished and in use, for it does not harmonize with the diaconicon mosaics in either design or colors.

#### THE DIACONICON

The diaconicon (L 10:9) is a rectangular room (5.20 × 6.80 m.) with a stilted semicircular apse (4.75 m. in diameter) at its east end (Pl. 9 *A*). Although the normal location of the diaconicon in early churches is near the western entrances, our diaconicon is at the northeast corner of the church and extends eastward beyond the central apse of the *domus*.

The diaconicon is separated from the anteroom by two wing walls, the northern one of which ends in a column drum resting on a base of basalt stones. There is a corresponding base at the other wing wall and space for a second column drum that undoubtedly once existed (Pl. 9 *A*). Since the wing walls, built of squared and unworked stones, are not bonded into the side walls, it is possible that two freestanding columns formed the original partition and that the wing walls were inserted after the diaconicon was in use. The north and south walls are founded on mud-mortared ones which project slightly on the exterior. The apse is bonded into the side walls and is set on its own foundation, which abuts and in places steps over existing walls of an earlier building. The south wall was started with its exterior face flush with that of the lower wall and then stepped in about 28 cm. above its base; traces of lime plaster are still visible on the upper and lower faces as well as on top of the "ledge" (Pl. 17, section *D-D*). About a meter east of the northern apse of the *domus*, the wall upon which the south wall of the diaconicon is founded was torn out, apparently so that the foundations of the diaconicon apse could be laid; the space is now closed with a filler wall which abuts the lower wall to the east and the foundations of the northern apse to the west. The diaconicon wall continues unbroken over the filler wall and abuts the northern apse (Pl. 9 *B*).

The mosaic floor of the diaconicon, about 25 cm. higher than the floor of the anteroom, apparently came to the edge of a plastered riser between the column drums, since the basalt-block bases under the wing walls do not extend across the opening. The area between the

wing walls is filled with the typical subfloor of the room, but its western edge is destroyed and the face of the step is not preserved. In the western half of the room there is a slope of about 20 cm. to the east that cannot be attributed to sinkage, but the rest of the floor, including that in the apse, is approximately level. The mosaic paving is divided into two distinct patterns, one in the hall and the other in the apse.

The mosaic in the hall is laid (10 rows in 12.5 cm.) with diamonds in a white surround, a black-banded meander border in red and gray-pink, and a field with an all-over geometric flower pattern in the same colors on a white background (Pl. 26:1). In front of the apse, a panel (0.50 × 3.85 m.) contains an inscription in black tesserae (pp. 53–54, Inscription 1). The inscription panel, with parts of the border and field, is now in the Oriental Institute Museum (A 30490). In the center of the room is a circular basin (80 cm. in diameter and *ca.* 30 cm. deep) formed by small stones topped by two courses of baked bricks (22 × 22 × 2 cm.), with part of a third course preserved at the west at about floor level (Pl. 9 *D*). The bottom and the wall are covered with lime plaster; there are no signs of a drain, but the depression is broken at the east. It was filled with debris containing broken plaster and pieces of roof tiles and baked bricks, but, since the mosaic floor was destroyed in this area, it is not known whether the basin was intentionally filled and then floored over.

Whereas only one floor was laid in the hall of the diaconicon, there are indications of two floors in the apse. The lower one has a subfloor and a lime-plaster bed for mosaics, although no tesserae were found on it; the upper floor consists only of the lime-plaster bed on which the existing mosaics are laid. A thin layer of dirt separates the two layers of lime plaster. The mosaic in the apse is laid (10 rows in 12.5 cm.) with diamonds in a white surround, a black-banded guilloche border in white and graduated tones of red on a black background, and a field consisting of a squared lattice in black and red decorated with Greek crosses in black, white, and graduated tones of red on a white background (Pl. 26:1). A small section of this mosaic also is in the Oriental Institute Museum (A 30491). In front of a sunken basin or font (see p. 21) which is placed well back of the chord of the apse are remains of a black-bordered panel containing, in black tesserae on a white background, recognizable Greek letters of an inscription (p. 54, Inscription 2), perhaps commemorating the laying of the second floor in the apse.

In plan the font is a semicircle (93 cm. in diameter) with an added rectangle (45 × 48 cm.) centered on its straight west side (Pls. 9 *E*, 21:2). It is contained within a square, 1.50 m. on a side, and is slightly askew from the axis of the apse. It is built of baked bricks (22.5 × 22.5 × 2.5 cm.), a few roof tiles, and one block of basalt, all laid in pinkish mortar. The front of the square and a 30-cm. return on each side are faced with marble slabs; they are now in many small pieces with an occasional vertical joint showing, and it is doubtful that they were cut for their present use. The rest of the square is finished in lime plaster. The bottom of the font is 22 cm. below the level of the upper apse floor, and there is no evidence to show how high the font rose above the floor. The floor and the walls of the font are plastered in pinkish mortar (see p. 7). The floor is canted around the curve and slopes down about a centimeter to a drain at its west end, where there is a red terra-cotta pipe (inside diameter, 3 cm.; outside diameter, 3.8 cm.) to draw off water.

#### THE ROOMS SOUTH OF THE *domus*

The narrow room L 11:13 is little more than a corridor to room L 11:7 and the exterior doorway at the east end of the church (Pl. 7 *D*). The east and west walls of L 11:13 are not bonded into the south wall of the *domus*, nor is the south wall of the room bonded into its east wall. Only the south and west walls are bonded together; they are built of rather large stones and boulders, poorly laid in mud mortar. In the south wall is a drain opening (22 cm.

## THE EXCAVATIONS

wide and 32 cm. high) with traces of lime plaster on its walls. Its floor is more than 45 cm. below the floor of the room, for it was not reached at that depth of excavation. The floor of the room is covered with lime plaster (3 cm. thick) laid on a bed of small stones and large, water-smoothed pebbles.

Room L 11:7 is bounded on the north by the south wall of the *domus*, which is founded on an earlier mud-mortared wall and seems to be part of the original structure (see p. 13). The south wall of room L 11:7 also is founded on a wall laid with mud mortar; the other two walls were not investigated below floor level. The east wall is definitely part of the original building; the northern jamb stones of the doorway are integrally laid with the south wall of the *domus*, and the wall of the southern apse abuts them (see Pl. 7 *D*). But the east wall of the room abuts its south wall, whose west end forms the southern jamb of the opening into room L 11:13; the northern jamb is laid with large unworked stones, near which is a pivot stone within the opening and at the eastern edge of the sill. The exterior doorway in the east wall of room L 11:7 is constructed with cut-stone jambs and sill. The sill is cut for two door leaves and has a rectangular hole near the center to take a vertical locking bar for the southern leaf. Various holes in the jamb stones were apparently cut to receive horizontal locking bars but probably represent earlier use, for their positions in the two jambs do not correspond and they would be on the wrong sides of the door leaves to block the entrance effectively from the outside (Pl. 7 *F*). A laid stone blocking was found in both this doorway and the opening in the west wall of L 11:7. In the eastern part of the room the floor is covered with unshaped paving stones. From the east doorway steps ascend to locus L 11:12, an area outside the church. The stairway consists of three risers (18–24 cm. high) and two treads (*ca.* 30 cm. wide). Since the doorway was blocked after the stairway was constructed, to compensate for the rise of the exterior ground level, it must have been done near or at the end of the church's occupation. Three occupational levels are evident in area L 11:12. The lowest floor, with stone chips and construction debris, is about level with the bottom of the church walls. The middle floor, 30 cm. higher, is characterized by bits of broken plaster, stone chips, and occasional mosaic tesserae rather than by tamped-earth layers of a much-traveled way. The highest floor is determined by a paving just under the paving in room L 11:3 of the Arab building (see Pl. 11). The paving stones, laid in a rectangular area abutting the southern apse and the east wall of room L 11:7, are about 70 cm. above the level of the floor of that room and serve as a landing for the steps.

The east wall of room L 11:11 and the north wall east of the doorway are laid with mud mortar; the other walls of the room are laid with lime mortar and abut the mud-mortared ones. It might be that the mud-mortared walls are remains of an earlier building which was incorporated in the church, but this possibility was not confirmed during the excavations. The floor is of tamped earth covered with black ash, and the debris above it contained much ash and many potsherds. A stone chancel post (p. 26, No. 5; Pls. 22:12 and 49:4) was found on the floor in the southeast corner of the room. A chiseled line near the bottom of the post apparently indicates that it was set with 69 cm. of its length above the floor. One face is not polished and supposedly was placed against a wall; in the middle of the opposite face a vertical channel (4 cm. wide and 1.5 cm. deep) runs from a V-cut near the top to the bottom; the other two faces are decorated with inset panels finished off at top and bottom with concave arcs. On the floor in the northeast corner of the room was a circular basalt stone with a center inset of iron (6 × 7 cm.) showing a circular turning area 3 cm. in diameter and 1 cm. deep (p. 26, No. 17; Pl. 22:8). This object appears to be a millstone with a top edge which curves upward but is so broken that it is now impossible to tell whether it was continuous or contained an exit from the grinding surface.

## THE GROWTH OF THE CHURCH

Having described the remains of the church at Khirbat al-Karak as they came to light in the course of the excavations, we can now attempt to trace the growth of the building. This covers a considerable period of time and moves from the simple to the complex in familiar fashion. Three main phases can be distinguished, the second of which is marked by the most drastic alterations, but supplementary building activities continued for some time after the major structural developments had been completed. Only in connection with the third phase are we in position to associate relative and absolute chronology, by virtue of the inscription in the diaconicon that gives the date A.D. 528/29 for the laying of the mosaic in this chamber (see pp. 53-54, Inscription 1). But the deficiencies that we face on this score can be made up in part by comparison of structural form and structural change with what is known of church architecture in Syria and Palestine generally (see pp. 22-25). A word of caution needs to be added here, however, namely that not all the changes can be associated definitely or exclusively with one or another of the three definable stages in the development of the structure.

The original church was built over earlier building remains which excavation did not seek to define because the remains of the church itself were deemed worthy of preservation. Only this is known, that many of the church walls were founded directly on earlier walls. The plan of this early Christian edifice was relatively simple. It was a basilica, almost square in its outward dimensions, with the nave divided into six bays and ending in a single external horseshoe-shaped apse (Pl. 15:1). A bench conformed to the inside curve of the apse. Although only part of one riser is preserved, there is evidence to suggest that it had two tiers. The rear face of the bench is not preserved, and there are no indications of special provisions for a bishop's throne at the center of the bench. There is nothing to suggest that at this time the floor of the apse and that of the chancel were at different levels, and the remains of a reliquary(?) on the chord of the apse almost preclude the possibility of a step at that place. The chancel was contained within the columns separating the nave and the aisles and extended one and one-half bays into the nave.

The eastern ends of the aisles were blank, and there were no side rooms flanking the apse. The three doorways in the west wall possibly led to a portico, since the existing narthex is of late construction. Single doorways in each of the side walls provided circulation to rooms on the north and south. The east wall must have been built on an earlier wall which was discovered under the church floor and which is abutted by the apse (see Pl. 14). The east wall may have extended northward to form the east wall of room L 10:12, for the present wing walls are built on a mosaic floor whose eastern limit is unknown. If other rooms existed on the north side of the church, there are no indications of them now. South of the *domus* the east wall of the church abuts the slightly projecting and supposedly earlier north wall of room L 11:11. This room was separated from the *domus* by a passage whose western limit is unknown. The mosaic floors in the nave and the aisles, the chancel, and room L 10:12 belong to the original construction. There is no evidence to show whether the columns carried architraves or arches, and the method by which the building was roofed is unknown (but see p. 8). The apse, because of its thicker wall, was probably covered by a half-dome of stone.

The second phase in the history of the building is marked by drastic changes (Pl. 15:2). For reasons unknown to us, the north wall of the *domus* was torn down, and a new wall was built not quite in line with the original one. As a part of this rebuilding, the new wall was continued at its eastern end on an arc southward and made to abut the outer face of the original apse, forming an apse at the end of the northern aisle. At the same time an apse was contrived at the east end of the southern aisle by a wall running from the east end of the south wall of the *domus* to the outer face of the original apse. Thus the plan of the building was radically altered. It became a triapsidal basilica, with all three apses projecting separately



from the body of the *domus*. The original mosaic paving continued in use in the nave and the aisles but was partially overlaid by the new north wall and patched where the side apses were added.

Important changes were likewise undertaken at this time at the west end of the building. West of the *domus* a large area was added to the ecclesiastical precinct. This was developed as an atrium with centrally located cistern and surrounding rooms. In the course of this construction the church was supplied with a narthex. This was done by continuing the new north wall of the *domus* westward beyond the west wall of the basilica and by adding an extension to the south wall of the *domus*. Save for short wings projecting from its north and south walls, the narthex remained open toward the west. At the same time two new chambers (K 10:1 and 2) were added on the north side of the church, to which access was afforded presumably by a doorway in the north wall of the narthex. It is possible that the passage south of the church, connecting with room L 11:11, was extended to the atrium at this time. If the stones of an earlier wall that rise above the paving in room K 11:11 (see p. 10) represent the original south wall of that room, the earlier wall, extended eastward, would be in line with the north wall of room L 11:11 and provide the southern face of the corridor.

The third phase in the development of the church is marked by the addition at its northeast corner of a diaconicon. The diaconicon was built at the east end of the range of rooms on the north side of the church in such a manner that its south wall abutted the northern apse of the *domus* (Pl. 15:3). The addition is dated A.D. 528/29 by the inscription (pp. 53-54, Inscription 1) in the mosaic floor at the east end of the chamber. When the diaconicon was constructed, room L 10:12 was rebuilt as an anteroom, with new walls on the north and west and with two columns in the opening between it and the diaconicon. Probably the wing walls between the columns and the side walls came later, for they were not bonded into the new construction.

The diaconicon ends at the east in an apse, where, in contradistinction to the rest of the room, there are indications of two mosaic floors. The upper represents a further development of the room and seems to be related to the introduction into the apse of the sunken basin that we venture to call a font. This possibility is suggested also by the emplacement of the basin, which is slightly askew in relation to the axis of the room, and by the presence of an inscription in the floor directly in front of the basin (p. 54, Inscription 2). If more of the inscription were preserved, it might well give a clue as to the later use of the chamber.

Our reconstructed plan of the church (Pl. 16) shows the building as we found it, with all the changes that were made after the completion of the third main building phase. These include many simple instances of the blocking of openings, upon which we will not comment in detail. At the east end of the church reinforcing rings were set against the central and southern apses. The main apse was reinforced first, after the side apses were built. Subsequently a similar ring was built on the projecting foundation of the southern apse. This ring corresponds in time to a street level about 20 cm. above the floor of the church. The stone paving at the top of the steps leading down to the exterior doorway into room L 11:7 was added after the street had risen an additional 50 cm.

Inside the church the chancel was enlarged so that it spanned all three aisles. That part of the enlarged chancel that was taken from the side aisles was raised to the level of the original smaller chancel and paved with mosaics matching those of the original chancel floor. The wall stub abutting the northern wall end of the central apse indicates that the enlarged chancel was divided into three parts by partition walls. Since no dowel holes or other evidence of a chancel railing were found in either the wall stub or the chancel edgings, we have reconstructed the railing shown in Plate 25.

At the west end of the church other important changes occurred. The narthex was inclosed,

so that henceforth access to it was by means of a single doorway. At the same time perhaps, the wide portico at the east end of the south wall of the atrium was closed in, and a catch basin was built where the blocking wall abuts the narthex. The area south of the blocked opening was divided into two rooms (K 11:4 and 11) and paved with very soft limestone slabs.<sup>2</sup> What raises doubts about the relation in time between the closing of the narthex and of the portico at the east end of the south wall of the atrium is the fact that circulation was so severely restricted after the rooms on the south were constructed.

The south wall of the passage along the southern side of the church was eventually rebuilt, and the passageway itself was partitioned. A doorway was provided into room K 11:4. Its sill was placed about a meter above the floor of the room, apparently for adjustment to the rising ground around the church, and steps led to it, just as steps up to street level were added outside the entrance to room L 11:7.

Then came the blocking of doorways throughout the church. The exterior doorway to room L 11:7, the doorway between rooms L 11:7 and 13, and the southern doorway of the *domus* were all blocked. The blocking of the doorway from the narthex to the northern aisle and the construction of the crude stone wall in line with the southern row of columns (see p. 15) probably occurred later still.

Since the plaster debris and stones from the destruction of the church appeared immediately below the floor level of the courtyard of the Arab building that succeeded it and since the top stones of the destroyed wall of the southern apse were in fact incorporated in the paving of room L 11:3 of that building, it seems logical to assume that the church had not long been abandoned or destroyed when the Arab building was constructed.

#### INFERENCES FROM COMPARISONS WITH OTHER CHURCHES

By CARL H. KRAELING

The story of the growth of the church at Khirbat al-Karak finds close analogies elsewhere in Syria and Palestine, wherever churches are known through the reports of systematic excavation. Simple structures regularly became more and more elaborate, and many of them were eventually incorporated in ramified ecclesiastical establishments. At the same time, the form and organization of our building and the salient features added in its development also have parallels in the history of church architecture in the Near East. Some attempt should therefore be made to compare the building with other churches, and some benefit might well be expected to accrue for our understanding of its character and importance. More especially the comparison might make it possible to transcend the limits of what can be said about the date of the earlier phases of the building with only the inscription of the diaconicon to work from. This inscription belongs, as we have seen, to the third main phase in the history of the structure and associates it with the year A.D. 528/29 and thus with the reign of the Emperor Justinian.

The existence of the projecting apse and the persistence of this feature in the later development of the building dissociates the church at Khirbat al-Karak from the type that was dominant in northern Syria and eventually quite general in Palestine, the type in which the apse is completely inclosed within the rectangle of the basilica and flanked by small chambers at the ends of the aisles.<sup>3</sup> On this score the original building has affinities with the interesting "hall churches" characteristic of southern Syria, where they occur as early as the 4th Christian

<sup>2</sup> Since Tomb K 11:15 (see p. 16) is the only other place in which such limestone slabs were used, these two features may well be contemporary.

<sup>3</sup> On this type see, fundamentally, Butler, *Early Churches in Syria*, pp. 187-93, and Jean Lassus, *Sanctuaires chrétiens de Syrie* ("Bibliothèque archéologique et historique" XLII [Paris, 1947]) pp. 78-100.

century.<sup>4</sup> Indeed, there existed in a narrowly defined section of southern Syria, at Tafha and Shaqqa, a special variant of the hall church with transverse arches, whose ground plan matches the almost square shape of the original building at Khirbat al-Karak (Pl. 15:1) and seems to be related to that of secular buildings in the vicinity.<sup>5</sup>

The existence of a hall church in the immediate vicinity of Khirbat al-Karak has now been documented by supplementary excavations under the floor of the Church of the Multiplication of the Loaves and Fishes at al-Tabgha, only a few miles farther north along the shore of the Sea of Galilee.<sup>6</sup> Yet the original church at Khirbat al-Karak was not a hall church, since it lacked the transverse arches, but a basilica with the characteristic rows of columns running the length of the building. With this feature goes, of course, the division of the building into nave and side aisles, the three-door façade, and the provisions made for an inclosed chancel at the east end and a synthronus in the apse. Whether under these circumstances it should be regarded as a basilican variation of the southern Syrian hall church, as a basilican church modified by the use of a projecting apse, or, indeed, as an immediate derivative of the secular basilica with projecting apse is a question that does not need to be answered here. What is important is that the original building at Khirbat al-Karak was fully developed as an instrument of ecclesiastical usage, having all the essential features for the performance of worship in the Christian manner. It was therefore much more "advanced" than the hall churches and in all probability later than the 4th Christian century in origin.

What other features we can still distinguish suggest, however, that it would be improper to argue on this account for too late a date. Relatively unimportant in this connection is the preference shown for the horseshoe type of apse. Such apses appeared in various parts of Syria and at many different dates, so that no inference can properly be drawn from their use.<sup>7</sup> Worthy of mention, however, are the simple portico at the west end of our church instead of the characteristic narthex, the fact that the arrangement of the chancel is suited to the earlier liturgical usage that was common throughout the area of Syria and Palestine,<sup>8</sup> and perhaps also the simple squarish room (L 10:12) to the north of the northern aisle near its east end. Its position and the basin that was its only early distinguishing feature (see p. 16) suggest that it might have been just such a simple baptistery as was recently shown to be a part of the church at Brad in Syria which belongs to the years between A.D. 395 and 402.<sup>9</sup> Hence we propose for the original church of Khirbat al-Karak a date during the first half of the 5th Christian century.

Sometime between the erection of the original building and the addition of the diaconicon, the structure underwent a drastic transformation. It would be natural to associate this transformation with the period of Justinian, marked as it was by so many building enterprises of religious and secular type throughout the Near East. But this possibility is precluded by the fact that the diaconicon belongs to the early years of Justinian's reign (specifically A.D. 528/29). We must therefore find for the major transformation of the structure an equally propitious but earlier historical context.

The outstanding feature of the second and major phase in the development of the church at Khirbat al-Karak is undoubtedly the triapsidal organization of its eastern end. Triapsidal

<sup>4</sup> The most familiar examples of this type are the church of Julianus (A.D. 345) at Umm al-Jimal, the Tafha church, the Lubbai church (A.D. 417), the southeast and southwest and double churches at Umm al-Jimal, and that of the Umm al-Jimal monastery (see Butler, *op. cit.* pp. 17-24, 41-47, 84-86, and Lassus, *op. cit.* pp. 56-66).

<sup>5</sup> See Butler, *op. cit.* pp. 22-24.

<sup>6</sup> See Alfons Maria Schneider, "Neue Funde in et-Ṭābġa," *Oriens Christianus* XXXIV (1937/38) plan on p. 60.

<sup>7</sup> See e.g. Butler, *op. cit.* p. 193, n. 352.

<sup>8</sup> On this organization of the chancel see especially J. W. Crowfoot, *Early Churches in Palestine* (London, 1941) pp. 46-51.

<sup>9</sup> See Lassus, *op. cit.* p. 169, Fig. 77.

churches were by no means common in Syria, and in Palestine they seem to have been favored especially in the extreme southern section of the country.<sup>10</sup> Still less common are triapsidal churches with projecting apses. For this type virtually the only parallel is the famous cruciform church dedicated to St. Simeon Stylites and probably built between A.D. 450 and 470.<sup>11</sup> But so important was this structure in a period of growing attention to the ascetic and monastic ideal and so important was the veneration accorded by countless pilgrims to Simeon the Stylite himself that the influence of this one example of an innovation should not be underestimated. As it is now generally admitted that the triapsidal form had nothing to do with any requirement or development of the liturgy and therefore represents largely the builders' choice of an aesthetically pleasing form, we may not be wrong in assuming that its occurrence at Khirbat al-Karak belongs to the period after the construction of the famous shrine at Qal'at Sim'an and is not unrelated to the impressions received there by those who made the journey to visit it. To associate the rebuilding of our church with the period of Zeno and Anastasius recommends itself also on general grounds, for it was only during the last quarter of the 5th century and the first years of the 6th that the troubles which followed in the train of the Council of Chalcedon began to abate and that the internal strife in the life of the Patriarchate of Jerusalem was for the time being reduced. What we know about the development of special prothesis chapels near the entrances to churches would agree with this general dating and would explain the construction of the two chambers K 10:1-2 at the north of the Khirbat al-Karak church.<sup>12</sup> So also would the association of the church with the building to the south, which became organic in connection with the creation of the atrium. This southerly structure is unexcavated, but, since ultimately it became the only means of access to the church, it must have been an ecclesiastical, probably a monastic, establishment.

The third phase in the life of the church, the one that begins with the addition of the diaconicon in A.D. 528/29 and continues with the extension of the chancel and the closing of the narthex, represents in all three particulars preoccupation with the importance and the proprieties of usage. The diaconicon provides a separate and specially appointed place for the preparation of the oblation and for the proper robing of the clergy; the enlarged chancel adjusts to the rite of the prothesis and to the formal processions that precede the two "entrances," while the closed narthex becomes a special house for the catechumens, from which they attend upon the offices performed in the church. Here we are quite properly in the 6th century and are dealing with developments covering the period from the reign of Justinian through that of Justin II, as parallels in sundry other churches of Palestine indicate.<sup>13</sup> Whether it was the extension of the chancel, presumably in the second half of the 6th century, and the provision thus made for the preparation of the unconsecrated elements in the church proper (at the east end of the northern aisle) that released the diaconicon of A.D. 528/29 for use as a baptistery, if such it actually became, and where baptism was performed during the second phase of the building are questions to which no positive answer can be given.

The last developments in the history of the church can be assigned with some assurance to the end of the 6th and the early part of the 7th centuries. The rings set against the out-

<sup>10</sup> Crowfoot lists thirteen examples (*op. cit.* pp. 69-72), of which seven are in southern Palestine and three in Transjordan. Outside Palestine, in Syria, the familiar examples are the church built into the temple at Baalbek (Daniel Krencker, Theodor von Lüpke, Hermann Winnefeld, *et al.*, *Baalbek II* [Berlin and Leipzig, 1923] 134) and the church of St. Simeon Stylites at Qal'at Sim'an (Butler, *op. cit.* p. 99, Ill. 100).

<sup>11</sup> On the date of construction see Butler, *op. cit.* p. 98.

<sup>12</sup> See Crowfoot in *Gerasa*, pp. 175-79. The prothesis chapel, located off the narthex and originally called "diaconicon," is documented in Syrian usage beginning in the 5th century and is known from several examples at Jerash. At Khirbat al-Karak, at least by the time of the third phase in the development of the church, more particularly by A.D. 528/29, the name "diaconicon" was already applied to a different type of chamber, the one constructed at the northeast corner of the building.

<sup>13</sup> See in general Crowfoot, *Early Churches in Palestine*, pp. 46-55.

sides of the projecting apses do not necessarily represent repairs made after earthquake shocks, though earthquakes caused great devastation in Syria and Palestine, for instance in the 6th century.<sup>14</sup> They may have been intended rather to keep the building from settling where it all but overhung the lake. The foundations of the diaconicon's apse were constructed more heavily, perhaps on that very account. The blocking of doorways may reflect the disturbed conditions that prevailed especially in the 7th century, and, as the Arab building soon constructed upon the site indicates, the church did not long survive the Islamic conquest that these disturbances brought in their train.

#### PRE-CHURCH REMAINS

In order to clear up some of the details of the church construction, we dug several holes below the church floor and exposed parts of earlier buildings (Pls. 10, 14, 18 A). Further digging to obtain comprehensible plans would have led to the destruction of parts of the church, contrary to the policy of the Department of Antiquities, and would have extended our operations beyond their intended scope. Consequently, the types of buildings on whose walls so much of the church construction was founded remain largely unknown.

The latest of the buildings below the *domus* is represented by a north-south wall just east of the chords of the apses, an east-west wall which bonds into it, and another north-south wall below the western part of the nave. They are preserved to the underside of the church floor construction. No floor belonging to these walls was found, but, because of the level of the foundation projection, their floor must have been not more than about 30 cm. below the floor of the church. Another set of walls, without a corresponding floor, partially surrounds locus L 11:17 (see Pl. 14) and can be identified as earlier only because a southeast corner underlies the north-south wall on the east. In locus L 11:20 a still deeper wall, also without a corresponding floor, was partially cut by this construction.

All the wall fragments and stone pavings that were found south and northeast of the *domus* probably belong to these three periods of building activity. Although the pavings in L 11:22 and L 10:15-16 are some 30-65 cm. below the level of the assumed floor of the latest pre-church building under the *domus*, it is not improbable that they are contemporary with it, especially if an earlier structure occupied a comparatively small area below the central part of the excavation.

Locus K 11:9 is the only place where the excavation was carried deeper than the pre-church buildings.<sup>15</sup> Unfortunately, in the northern part of the locus a large refuse pit appeared immediately under a layer of yellow earth at the top of the foundation of the pre-church wall and continued below the depth of the excavation. Only in the southern part of the locus is the stratification undisturbed. About 1.35 m. below the yellow earth a layer (6 cm. thick) of small pebbles represents the highest of three series of street levels. The middle series is 50 cm. deeper and consists of three thin layers, spaced about 8 cm. apart, of pebbles and potsherds. The lowest series is 40 cm. deeper than the middle series and is made up of typical street striations of hard-packed dirt, pebbles, and potsherds. This series totals 35 cm. in depth; below it a soft dirt fill was found again, and the excavation was terminated.

#### MISCELLANEOUS WORKED STONES AND MOSAIC FRAGMENTS

In the church, as well as in the post- and pre-church buildings, pieces of worked stone were found in the debris or reused in the wall construction. Some of the stones can be parts of the furnishings or decoration of the church and can give clues to features which are missing.

<sup>14</sup> See F.-M. Abel, *Géographie de la Palestine I* (Paris, 1933) 50-57; what is known from inscriptions about repairs in churches elsewhere may also be pertinent (see e.g. *Nebo*, pp. 262-63).

<sup>15</sup> [The fact that this locus yielded the greatest number of Early Bronze Age sherds (see Table I) indicates that here we penetrated into the prehistoric occupation of this part of the site.—P.D.]

## A BYZANTINE CHURCH AT KHIRBAT AL-KARAK

## POST-CHURCH

1. Base of white marble columnette (Pl. 22:7). Part of a leg that carried the mensa? Found in debris.
2. Pier base, 31 cm. deep (Pl. 22:14). Reused as building stone.
3. Basalt block (Pl. 22:6). Crown molding returning to face of stone at one end. Reused as building stone.
4. Slotted basalt slab (Pls. 22:10 and 49:5; see p. 50). Found in debris in room L 11:2.

## CHURCH

5. Chancel post (Pls. 22:12 and 49:4). Topped with plain pineapple, paneled on two opposite faces, vertical channel in third face (see p. 19). Found on floor in room L 11:11.
6. Fragment of white marble post (Pl. 22:13). Vertical channel (5 cm. wide and 35 cm. deep) on two opposite sides, horizontal V-cut 11 cm. from complete end on other sides. Found in debris.
7. White marble slab, 11.5 × 12 cm. (Pl. 22:3). Series of grooves cut in both faces. Part of chancel railing? Found in debris.
8. White marble slab, 12.5 × 13.5 cm. (Pl. 22:2). Both faces polished, one flat and one undulating. Found in debris in locus L 11:9.
9. Marble slab, 13.5 × 13 cm. (Pl. 22:5). Border moldings and recessed center. Found in debris.
10. Marble slab, 14.5 × 27 cm. (Pl. 22:4). Border moldings and recessed center. Found in debris in room L 11:7.
11. Limestone Corinthian capital (Pl. 49:3), 20 cm. in diameter at base, 27.5 cm. high. Bell adorned with four acanthus leaves, abacus similar to ribbon drawn into knot on each of four sides. Found in narthex (K 11:3).
12. Fragment of column, 13.5 cm. in diameter (figured from less than half of circumference), 24 cm. long. Dowel hole (3.5 cm. in diameter and 3 cm. deep) at one end. Found in debris in diaconicon (L 10:9).
13. Fragment of white marble column (Pl. 22:1). Flare and fillet at one end. Found in debris in narthex (K 11:3). Two other fragments of similar column (17.8 cm. in diameter and totaling 72 cm. in length) found in same locus.
14. Fragment of pink marble column, 26.7 cm. in diameter (figured from arc of two-fifths of circumference), 28 cm. long. Found in debris in northern apse of *domus* (L 10:11).
15. Fragment of column (Pl. 22:9). Astragal and torus at one end. Found in debris.
16. Fragment of white marble column, 29.5 cm. in diameter (figured from arc of more than two-fifths of circumference), 21 cm. long. Found in debris in room K 10:1.
17. Basalt millstone (Pl. 22:8). Found on floor in room L 11:11 (see p. 19).
18. Three stones worked to a radius. Plaster still adheres to one face and the soffit of one of the stones. By figuring the prolongation of its radiating sides we obtained a diameter of 2.35 m. However, there is such a large difference between the two similar triangles that this figure is only a rough approximation. If the stone was part of the church construction, it would have come from an arch over one of the side apses. The two other stones were figured in the same manner, with resultant diameters of 3.51 and 3.54 m., but there is no known span in the church which approximates these figures. Found in debris in western part of nave and northern aisle.

## PRE-CHURCH

19. Basalt millstone (Pls. 22:11 and 49:6). Dowel hole (4.5 cm. square and 2 cm. deep) in top. Found in stone fill below floor of locus L 10:15.

There were also indications that parts of the church were decorated with wall mosaics, for both in the nave and especially in the debris below the south end of room L 11:3 of the Arab building were found fragments of much finer mosaics than those used for flooring. The tesserae are of stone (white, bluish white, yellow, and red) and opaque (dark and pale turquoise blue) as well as transparent (light green, light amber, and bluish) glass. Some of the glass tesserae

are gilded. These tesserae vary between 4 and 10 mm. in size and are thus roughly only half as large as those used even in the finer floor mosaics. Their arrangement in the few preserved bits of mosaic suggests representational rather than geometric designs.

The debris beneath the south end of room L 11:3 also contained a considerable amount of marble, mostly fragments of flat tiles (*ca.* 12–25 mm. thick), a large proportion showing burning. Obviously these fragments were dumped before the stone pavement of room L 11:3 was laid, and presumably they all derived from the ruins of the church. But the variation in size, color, and degree of wear suggests that they were in secondary use in the church.

#### SOUNDINGS OUTSIDE THE CHURCH

Five soundings were made north and east of the church (Pl. 18 *B*). None of them was carried very far below the surface, and none contained anything of architectural interest.

Locus M 10:1, on the slope of the mound east of the church, contains no architectural remains.

Locus L 9:1, on the edge of the mound northeast of the church, seemed to be the western end of a stone-paved room.

Locus J 9:1, a triangular area north of the church, is bounded on the south-southwest by a high-founded wall and on the east by a lower wall associated with the stone paving which covers the area.

Locus H 9:1, north of the church, contains no architectural remains.

Loci J 8:1–2 and K 8:1, north of the church, refer to trenches which outline part of a rectangular structure. The walls are built of stones laid with mud mortar and are founded on stone foundations about 40 cm. deep. At the exterior east corner is a stone doorsill in what seemed to be a continuation of the southeastern wall. No doorways into the building were found in the excavated portions of the walls.

#### THE TRENCH

*By* P. DELOUGAZ

In order to ascertain the stratigraphy at the north end of the mound without destroying the architectural remains which we had uncovered, we dug a trench adjoining and running eastward from the south walls of rooms L 11:1–3 of the Arab building (see Pl. 11). The trench (3 × *ca.* 30 m.) was divided into Plots A to J (Pl. 29). The west side (Plot A) cuts the corners of squares L 11, L 12, M 11, and M 12, but the main length is in squares M 11 and N 11. All the finds were recorded in the field by plot and absolute level, but, in examining them for listing in Table II, we found it possible to simplify the table, without affecting the results, by combining plots into “areas” and levels into 25-cm. intervals (see Pl. 29, section). The section shows that virgin soil was reached at only a few points and thus that excavation was not completed. We believe that excavation of the trench could be completed with very moderate expenditure of time and money and that the results would be worth while. As already explained (p. 3), only the late material from the trench is presented in this report.

A glance at Table II will show that most of the pottery types listed occurred at lower levels in Areas III–IV than they did in Areas I–II, a circumstance which confirms our impression that in the late periods the occupations followed the slope of the site toward the lake.

The architectural remains uncovered in the trench—bits of walls, stone pavements, and columns—were too scanty to yield coherent plans (Pl. 28). It was clear, however, that even the uppermost walls were lower and earlier than the foundations of the Arab building and thus apparently contemporary with some phase or phases of the church. It is not impossible

that the three columns in Plot C (Pl. 28 *D-E*) actually came from the church, in which case the date of the structure in which they were used would correspond to the final phase of the church, when presumably it had ceased to be a place of worship (see p. 58). On the other hand, one cannot exclude the possibility that the columns in the trench originated in an earlier building which also provided the columns for the church (see p. 13).

Several tamped-earth floors and bits of stone pavement were found, but most of them could not be related to wall fragments within the trench area. The dating of these floors, then, depends on the character of the pottery found on them or in the debris between them. Table II shows that late sherds appeared in Area I at about  $-197.50$  m., that is, about 5 m. above virgin soil. In Areas III-IV, on the other hand, late sherds began to appear at about  $-199.50$  m. The few exceptions were probably intrusive as a result of burrowing by animals. The bulk of the sherds found below these levels represent Early Bronze pottery types, and a thin wall uncovered in Plot B at about  $-200.75$  m. belongs to an Early Bronze construction.

Pits and pockets with loose rubbish were found in various parts of the trench. They appeared to be the burrows of animals (badgers?), but it is possible that they were originally man-made and that animals found it easier to burrow through them than through the more compact undisturbed soil. To the best of our ability, we separated the material contained in the pits from that found in the more solidly packed stratified debris.

Somewhat to our surprise, virgin soil was found at a lower level in Plot B than in Plot E, an indication that here the contour of the site at the time of the earliest occupation does not parallel the modern contour. The probable early contour is indicated by a broken line in Plate 29.

#### THE TOMBS WEST OF THE MOUND

*By P. DELOUGAZ*

In the spring of 1953 when work in the main area was coming to an end and only a few workmen were employed there, mainly in removing the mosaics and in clarifying some architectural problems, it became possible to undertake a small operation to the west of the mound in an attempt to locate graves contemporary with either the early (Bronze Age) or the late occupations of the site. We did not succeed in locating Early Bronze Age burials,<sup>16</sup> but on the west slope of a low ridge (see Pl. 3 *A*), which was originally across the Jordan from Khirbat al-Karak (see p. 57, n. 4), we noticed some irregular stonework that, upon investigation, proved to be a tomb of the Byzantine period. The grayish color of its fill was markedly different from the reddish color of the surrounding soil. In scraping the slope of the ridge (Pl. 27 *A*) in a shallow narrow trench at the height of this tomb, we discovered six more tombs in its vicinity. An eighth tomb was located at the north spur of the ridge, on its summit (Pl. 27 *B-D*). Undoubtedly more tombs would have been located if the operation had been continued. All the tombs found had been thoroughly plundered, and, in fact, in five (Nos. 1, 2, 4, 6, and 8) out of the eight not a single object worth recording was recovered.

All the tombs were of the same type, consisting of a narrow vertical shaft. The shafts varied in length, width, and depth. The walls were crudely built of small unworked stones and plastered with lime. Some tombs had stairs leading into them (Pl. 29 *E*), while others had either holes left in the masonry or a few projecting stones on either side to serve as footholds (Pl. 27 *F*). Some were still partially covered with large crudely worked limestone slabs (Pl. 27 *B-D*). The same method of covering was noted in Tomb K 11:15 (see p. 16 and Pl. 21:3), which is contemporary with the church, but in that case the tomb was much narrower and

<sup>16</sup> An Early Bronze Age burial had been discovered accidentally within the limits of Kinnereth in 1941 (see p. 1, n. 2).



the slabs were shorter. We did not find openings from the shafts into subterranean chambers, which are common in other Byzantine tombs. The thick layers of disintegrated bones in some of the tombs would indicate that they were used for burials for a considerable length of time, but plundering prevented any certain conclusions in this respect.

As mentioned above, only three of the tombs—Nos. 3 and 4 on the west slope of the ridge and No. 7 on top of its north end—yielded any objects worth recording. Most of these, especially the complete glass vessels, came from the corners of the tombs, which were not reached by the robbers. These objects are catalogued on pages 60–63, and, since they cannot be considered as forming consistent “tomb groups,” those which are mentioned in the text are discussed along with similar objects from other parts of the dig.

## THE OBJECTS

*By P. DELOUGAZ*

### POTTERY

THE "late" pottery derives from various parts of the excavations (see p. 3), and the following distinctions are made: (1) the surface and immediately below in the main dig; (2) the post-church remains, which include the Arab building; (3) the church (see p. 56, n. 6); (4) the pre-church remains; (5) the soundings outside the church (see p. 27); (6) the trench (pp. 27 f.); and (7) the tombs west of the mound (pp. 28 f.). In discussing the pottery, however, we found it preferable to consider classes or types from the excavations as a whole. For the sake of brevity, we confine ourselves to the definition of the classes or types and to some general remarks about them. The main record consists of the plates and the information given in the tables facing them. Some examples of each of the types are illustrated, while Tables I–II account for all the recorded sherds which could be assigned to the various classes or types at the time the sherd count was made. In addition, both the main dig and the trench yielded fragments which could not be recognized as belonging to any of the types discussed. These fragments include bases of various kinds, and for the record it should be mentioned that flat (64), disk (201), ring (24), string-cut (26), rounded (5), and concave (12) bases were found in the main area.

Since the aim of this report is to present a record of our finds rather than to use them in a comparative study from which generally valid conclusions might be drawn, we refer but occasionally to material from other sites. The two sites to which reference is most frequently made are both in the Jordan Valley south of Khirbat al-Karak, namely Baisan and Khirbat al-Mafjar. Indeed, in recording our finds in the field, the known material from these sites was constantly in our minds for purposes of comparison, as is reflected especially by the use of the term "Khirbat Mafjar ware" in Tables I–II. This designation, adopted early during our campaign, is not so precise as it would be if it could have been based on a more detailed critical examination of all the excavated material from Khirbat al-Mafjar. Relatively little of our late pottery was brought home. However, nearly 200 sacks of sherds from the main dig were transported to the Department of Antiquities headquarters in Jerusalem, where Mrs. Dothan made a preliminary sorting. This material was included in the sherd count.

Roughly speaking, the pottery is presented chronologically. Since several of the groups and types are contemporary, however, various other sequences of presentation would be justified.

#### HELLENISTIC SHERDS

In undertaking exploration of the north end of Khirbat al-Karak we hoped to find a settlement of the Hellenistic period and through it to gain some information about the conditions in this part of Galilee during that period. In this we were thoroughly disappointed, however, for not only did we not locate any architectural remains of the Hellenistic period within the area of our concession, but the scarcity of Hellenistic potsherds would seem to indicate that the northern part of the site was abandoned at that time.<sup>1</sup>

<sup>1</sup> On the other hand, several rooms of private houses were discovered during the winter of 1952/53 at the south end of the mound in the excavations conducted on behalf of the Department of Antiquities by Mr. Bar-Adon. These, in addition to Hellenistic remains discovered earlier (see *IEJ* II 166–67 and Fig. 1), and the fact that a thick fortification wall which protected the southern end of the mound and for a time was taken by the excavators to be of the Middle Bronze Age proved to be of Hellenistic times would indicate that the Hellenistic settlement was concentrated at the south, extending possibly to the center of the mound.

Some of the Hellenistic sherds are shown on Plate 30, and the distribution of recognized Hellenistic sherds is indicated in Tables I–II. In addition to sherds which can be identified by their fabric and surface treatment (black or brown glaze), some of the elongated stump bases (Pl. 38:7–9, 11, 13–14) may belong to Hellenistic vessels. It should be noted that the fragment shown on Plate 38:10 looks like an elongated stump base but actually belongs to a thin-walled vessel with hollow base (see Pl. 54:18).

Fragments of Rhodian jar handles were found in all levels of the main dig, but the stamp is preserved on only one of these (Pl. 30:33). Three other stamped fragments (Pl. 30:31, 32, 34) came from other areas. They represent typically large handles (4–6 cm. across). Miss Virginia R. Grace, of the American School of Classical Studies in Athens, was kind enough to examine photographs of the four stamped fragments, and we are indebted to her for the following notes.<sup>2</sup>

## No. 31

[Επ]ἰ Εὐ  
κλεῦς

Many handles are known with the name of this eponym.

Parallels for this particular type have been found in Palestine (cf. *Samaría* I 313, No. IV 21, and *Gezer* II 357, No. 218, the reading of the latter having been corrected). Date: probably first quarter of 3d century B.C.

## No. 32

Σωκράτ(ης)  
Πανάμου

The ΣΩΚΡΑΤΗΣ whose name appears combined in the same stamp with the month name (ΙΑΝΑΜΟΣ as here) worked in the 3d century B.C., possibly as early as the first quarter. The handle from Khirbat al-Karak provides a new type. For analogous types from Palestine see *Gezer* II 362, No. 436, and Palestine Exploration Fund, *Quarterly Statement for 1901*, p. 142, No. 302 (from Tell Sandahannah).

## No. 33

Επ[ἰ] θε]υδαισιου  
(circular stamp with rose in center)

The preserved name is that of another of the Rhodian months. Without a parallel for the fragmentary stamp, it is impossible to restore the name of the eponym. Date: 3d or 2d century B.C.

## No. 34

[Ε]π[ἰ] Ἰππο  
[κ]λεῦς

The eponym ΙΠΠΟΚΛΗΣ is of rare occurrence and is known to me otherwise on less than a dozen handles from Rhodes, Alexandria, Samos, and apparently also South Russia. His term probably fell in the late 4th century B.C. An unpublished example of this particular type exists in the British Museum (BM 1925, 1–19, 250), and I am indebted to the Keeper of the Department of Greek and Roman Antiquities for permission to mention it.

“LATE ROMAN” WARES<sup>3</sup>

In both the main dig and the upper levels of the trench were found large numbers of sherds of open forms such as plates, dishes, and bowls.<sup>4</sup> Only a few forms could be completely recon-

<sup>2</sup> For an introduction to the subject of stamped jar handles Miss Grace refers us to *Hesperia* Supplement X (1956) 117–19, 138–40, 175–76, and 187 (list of Rhodian months). She informs us that a forthcoming publication by H. D. Colt and others, *Excavations at Nessana I*, will contain a chapter on stamped jar handles which will probably be more useful to orientalist.

<sup>3</sup> We use this term because it is often applied to the type of pottery under discussion, but we do not think that it is valid in the sense of precise dating.

<sup>4</sup> The fact that such sherds represent only open forms but apparently no such vessels as jars, jugs, and bottles has been observed in other excavations (especially in the Agora at Athens and at Antioch, where similar sherds have been found in great profusion).

structed (e.g. Pls. 33:1-2 and 54:2-9). Although these sherds have certain features in common, they fall naturally into two groups.<sup>5</sup>

The first group consists of sherds of a finely levigated, hard-baked fabric of various hues from pink to red. They are almost always covered with a fairly thin red slip, often somewhat darker than the body, smoothed nearly to polish on both surfaces, but usually more carefully so inside. Occasional dark red and rich brown sherds of the same consistency and profiles occur. Rim profiles of this group are shown on Plate 52:1-66.

The second group, which at first glance does not appear to differ greatly from the first, consists of sherds of a fairly soft tan to light brown fabric, covered with a slightly thicker red slip, usually well smoothed and glossy on the inside with the polish extending over the rim for a short distance on the outside. A considerable proportion of the plates of this group seem to have been burned in use and to have become dark brown or dark gray on the surface, which still retains some of the original gloss; occasionally only part of the vessel is thus affected. Rim profiles of the second group are shown on Plate 53:1-22 and 27. Examination of the rim profiles seems to confirm the division into two groups, for the angular and more elaborate rims (see Pl. 52) are confined largely to the hard red ware while the simpler rounded rims seem to be preferred in the soft tan ware. There is, however, considerable overlap. Thus, for instance, the rims shown on Plate 53:1-2 are of the soft tan ware but are very similar to those shown on Plate 52:42-46 and 34-38, respectively, which are more characteristic of the hard red ware.

All the forms of these two wares seem to have had ring bases (Pls. 52:67-69, 53:41-43). The bases vary in thickness as well as in the proportion of the diameter to the maximum diameter of the vessel. Our material is too limited, however, to allow any conclusions as to the association of such features with others such as ware, rim profile, and decoration.

The very typical decoration known as "rouletting" (Pls. 32:1-9 and 54:7-8) occurs on the hard red ware but not on the soft tan ware, though occasionally it is found on sherds of a light pink-tan fabric which is not very hard but of very fine consistency. Gray patches, probably caused by secondary burning, are to be seen on some specimens. This type of decoration seems to be confined to vessels with fairly elaborate rim profiles. It is usually applied on the outside, but a few examples show it on the inside also.

Another well known type of decoration which is confined to "Late Roman" open forms consists of stamped designs applied on the inside near the center of the bottom (Pls. 31 and 61:1-6). These designs, either singly or in groups, are often framed by concentric grooved or plastic circles. Geometric patterns, plant designs, crosses, vases, and animals appear. They seem to occur on both hard- and soft-ware specimens. Again, no conclusion can be reached on the basis of our limited material as to whether there was any tendency to associate certain types of designs with either certain wares or certain profiles. A careful examination of all known material from other sites might elucidate this matter.

A presumably new type of pottery, which does not seem to have been recorded elsewhere, is related in fabric to the soft ware. It has painted decoration consisting of dark and light bands and white blobs (see pp. 35 f.).

#### COOKING UTENSILS

A large proportion of the pottery as represented by complete or fragmentary examples consists of so-called cooking plates, bowls, and pots. They are of a fairly well baked but rather granular fabric varying in color between dull red, brown, and gray-black. Nearly all specimens show traces of fire on the outside, and most of them have ribbing on various parts of the surface.

The plates usually are fairly large, reaching over 30 cm. in diameter, with two horizontal

<sup>5</sup> An attempt to follow the detailed classification into "wares" which was introduced by Frederick O. Waagé in his reports on the pottery from the Agora and Antioch (see *Hesperia* II [1933] 293 ff. and *Antioch-on-the-Orontes* IV 1 [Princeton, 1948] pp. 43 ff.) was abandoned, for it appeared that his system is both overelaborate for our purposes and built on rather tenuous stratigraphic and typological data.

ridged handles, low vertical wall, and lip cut at an angle to the wall (e.g. Pls. 33:3, 54:11). Sherds of smaller and shallower plates of the same fabric but without handles and with simple obliquely cut rim may have served as lids (Pls. 33:16 and 54:16-17). These are often decorated on the outside (i.e., convex side) with simple patterns of incised-line bands (Pl. 43:34-36); one specimen is ridged (Pl. 43:33). Occasionally a small hole (ca. 2 mm. in diameter) occurs a little off-center near the top of the lid. Some of the sherds show projections near the lip. Similar examples with a knob at the top have been found elsewhere, and some of our fragments (e.g. Pl. 54:16) may represent such knobbed lids.

The cooking bowls (Pls. 33:4 and 7-8, 53:24-25, 28-29, and 31, 54:10 and 12-13) are considerably deeper and somewhat smaller in diameter than the plates and occasionally have vertical instead of horizontal handles (Pls. 33:8, 54:12) or no handles at all (Pl. 54:13). Some have a short neck set slightly inward (Pls. 33:8, 54:12).

The cooking pots (Pls. 33:5-6, 53:33 and 35-40, 54:14), more closed than the bowls, are globular with rounded bottom and occasionally a short neck. Their handles seem always to be affixed vertically.

Both the horizontal and the vertical handles are usually sharply ridged (Pls. 33:9-10) and are thus similar to the handles of bag jars (see p. 34), though occasionally smaller and not so thick. One may assume that, in general, the horizontal handles listed in Table I represent cooking plates and bowls and that the vertical ones belong to cooking pots, but it is possible that some of the vertical handles belong to other types of utensils such as jars and flasks.

Small conical (Pl. 56:5-6 and perhaps 14) and cylindrical (Pls. 34:7-9, 56:7) lids with wide ledge rims are made of a fabric very similar to that of the cooking utensils. Bowl-shaped lids with a knob inside are also represented (Pls. 34:11-12, 56:3-4).

#### DARK RED WARE

Vessels of dull dark red or brown-red fabric, somewhat finer than the usually granular fabric of the cooking utensils and occasionally with fine white inclusions, occur in a variety of forms. Some are globular jars with rounded bottoms and short necks (Pls. 32:10, 57:1). These jars are entirely or partially ribbed, and their walls are rather thin. They have two rather small but fairly wide strap handles, less pronouncedly ridged than the handles of the cooking vessels or entirely smooth (Pls. 33:14-15, 53:32 and 34). A globular spouted jar of the same ware (Pls. 32:13, 57:3) was assembled from numerous fragments found scattered over a small area in the trench. A jug with a small spout (Pls. 32:11, 57:2) may be included in this group.

The upper parts of bowls with two rudimentary "pinched" handles (Pls. 33:11-12, 53:30 and 26) are of a fairly fine brick-red fabric. The surface near the rim is either plain or slightly ribbed, and it is possible that the ribbing characteristic of the dark red ware occurred on the missing lower parts of such bowls. A fragmentary neck or cup with two rudimentary "pinched" handles (Pls. 33:13, 54:15) is thin-walled and of a hard fabric which is closer to that of some of the cooking utensils.

#### JUGLETS

Of the very few complete vessels found, one may note two juglets which came from burials; one (Pls. 34:1, 56:8) is from Tomb K 11:15 (see pp. 15 f.), the second (Pls. 34:3, 56:11) from Tomb 4 (see p. 29). Each has rounded body, short stump base, loop handle, and incisions on the shoulder. One, however, has a thickened rim around a rather narrow neck, while the other has a somewhat wider neck, pinched to form a pouring lip. Many such juglets are known from other sites, in as well as outside Palestine, and are considered typical of the Byzantine period.<sup>6</sup>

The base and body fragments shown on Plate 34:2 and 4-6 (see also Pl. 56:9, 10, 12) may represent such juglets, though the best preserved specimen shows no traces of the characteristic incisions.

<sup>6</sup> See e.g. Calvin W. McEwan *et al.*, *Soundings at Tell Fakhariyah* ("Oriental Institute Publications" LXXIX [Chicago, 1958]) Pl. 33:75; *Gezer* III, Pl. CXIII 24.

## BAG JARS

Very common in all parts of the main dig and in the upper levels of the trench were sherds of fairly large jars in the form of an inverted ovoid with a rounded base which sometimes has a slight knob in the center, a shoulder usually defined by a plastic ridge below it, a roughly cylindrical neck, and two ridged loop handles (Pls. 35:1-5, 55:1-4). Most of the surface of such jars is ribbed, while finer ribbing often occurs on the shoulder or just below the plastic ridge. Very often the surface is decorated also with white paint in simple patterns of straight or curved lines (Pls. 35:1-5, 55:1-2). In one case, in addition to loops painted in white, there is a short inscription, probably a name, painted in red (Pl. 35:5).

These jars are usually rather thin-walled for their size, and they are well baked. The outer surface is light red, brick red, or of various shades of brown and gray. The variation in color is largely the result of firing, for frequently red and gray occur on the same vessel. In our sherd count made in the field the various colors were distinguished, but all are listed together in Tables I-II. It is interesting to note that, while different parts of the exterior of a single jar may differ greatly in color, the whole interior of each vessel is usually of a single and often quite individual tint, for instance rich brownish gray, purplish gray, etc. The interior color was often the only clue for sorting out sherds belonging to a single vessel, even when they were widely scattered and mixed with sherds of other vessels. Most of the examples shown on Plate 55 were assembled from numerous scattered sherds. This type of vessel is very common in Palestine, and parallels from many sites could be mentioned.<sup>7</sup>

Somewhat smaller jars of the same general form occur in light buff and drab clay. The fabric is fine, though less well fired, and the walls are comparatively a little thicker. Two such jars assembled from fragments found in Sounding J 8:1 are shown on Plate 55:5 and 7 (see also Pl. 35:6). A vessel of somewhat more cylindrical shape but of similar fabric and with the characteristic ribbing and loop handles was found in the fill of Tomb 4 (Pls. 35:8, 55:6).

The large number of bag jars found in the main area (see Table I) would indicate that they were in use both before the last main phase of the church and after its abandonment as a place of worship. Perhaps a careful observation of the variation in such features as the sloping of the shoulder, the ribbing, and the color would reveal tendencies pertinent for absolute dating. Roman jars of the same general shape are known.<sup>8</sup> Continued use of bag jars after the Arab conquest seems certain (see Table I), but a change in fabric from hard gray to soft drab or buff is indicative of Islamic date.

## PAINTED WARES

Painted pottery was found throughout the excavations. It can be divided roughly into two classes—one with paint, usually white, lighter than the surface of the vessel and one with dark paint on a lighter surface. In addition, there is a small group of sherds with both light and dark paint. Since these three types were not distinguished in the field, all painted pottery except the bag jars comes under one heading in Tables I-II.

## LIGHT-ON-DARK WARE

In addition to the bag jars (see above), there is a two-handled juglet with white painted decoration on a reddish surface (Pls. 34:10, 56:1). Sherds belonging to vessels of undetermined shapes also have this type of painting (Pl. 36:8-13).

<sup>7</sup> E.g. Baisan (*Beth-Shan*, Pl. XXXII 18, and especially examples found in the as yet unpublished excavations of Mr. Zori) and Khirbat al-Mafjar (*QDAP X* [1944] 77, Fig. 3), where, however, the individual specimens are attributed to various "wares."

<sup>8</sup> See e.g. *Gerasa*, pp. 558-59 and Fig. 37:79.

## DARK-ON-LIGHT WARES

The majority of the sherds decorated with dark paint on a light surface are of buff fabric with buff slip, sometimes poorly fired. The designs include straight and wavy bands, festoons, loops, spirals, concentric and dot-centered circles, and "stars" (Pl. 37:1-30, 58:4). The paint is usually red, varying into reddish brown, purplish gray, brown, or black. The bulk of these sherds are undoubtedly of the Early Islamic period, that is, the 7th and 8th centuries of our era.

A smaller group of sherds are of reddish-brown fabric, sometimes with pink or orange slip, usually well fired and occasionally with gray core. A narrow neck with traces of a loop handle and decorated with irregular horizontal bands belongs to this group. The photograph (Pl. 37:31) shows the join of the neck and body. Another sherd of this group (not illustrated) is a small spout with irregular painted decoration around it. A larger fragment of a small spouted jar (Pl. 57:4) is of very similar fabric but has no traces of painted decoration.

Yet another group of sherds, which may be related to the small group just described, are of a very fine hard-baked fabric, reddish buff or light brick red in color, with clean sharp breaks. Most of them have a brownish slip, irregularly applied, and dark brown painted lines or bands. While these sherds do not allow reconstruction of complete shapes, some apparently belong to fairly large bowls (over 30 cm. in diameter) with horizontal ridged handles placed close under the rim. A sherd from the surface of Sounding J 9:1 has a small spout and a wide strap handle with a finger indentation at the top. The fact that sherds of this group occurred in Plot A of the trench at a depth of 0.50-1.80 m. (i.e., -195.80 to -197.10 m.) would indicate that it has to be dated to pre-Islamic times.

A rather unusual vessel is shown on Plates 36:1 and 57:7. Though the upper and lower parts do not actually join, the dimensions of each and the quality of the fabric leave no doubt that they belong to the same vessel. It is of ovoid form, tapering sharply toward the bottom and ending in a tall, rather narrow ring base. There are four horizontally pierced lugs on the shoulder. The fabric is tan, with cream slip, and the paint is black and dark purplish red. The design consists of at least three horizontal bands with horizontal lines between them. Solid circles were placed apparently irregularly over some of the lines and above the middle band. The lugs are daubed with paint, and between them are irregular circular patterns. Unfortunately, no traces of the neck or rim were found. I know of no exact parallels, but in terms of general features and the character of the decoration, this vessel may be related to some pottery found at Mount Nebo.<sup>9</sup> Its findspot, in debris above the floor in room L 11:11 (see p. 19), would indicate that it is later than the church but earlier than the Arab building, which overlies the church.

## CRATERS WITH DARK AND LIGHT BANDS AND WHITE BLOBS

This type of pottery is very similar in fabric to the "Late Roman" soft tan ware with thick red slip (see p. 32) but differs in that it is painted with dark bands over the red slip, which in turn are painted over with irregular blobs of white paint. All such sherds seem to belong to craters like that shown on Plates 36:2 and 54:1. The form consists of two distinct parts separated by a sharp carination. The upper part is a little narrower at the bottom than at the top and is slightly concave. The lower part tapers sharply toward the bottom and is rather convex; in fact, it is identical in shape to medium-deep bowls. The whole has a distinct rim, two horizontal loop handles, and a ring base. The decoration of the restored crater consists of two wide loops of dark paint and very faint traces of white blobs on the loops. There are rim sherds from this type of vessel which show the decoration more distinctly (Pl. 36:3-7). The rims vary in profile, with diameters between 14 and 22 cm. One, for instance, is fairly flat with a series of grooves in it (Pl. 36:7). There are traces of a dark painted band

<sup>9</sup> *Nebo*, Pl. 148:5-8, 14.

on most of the rims. In addition to dark bands with white blobs, some of the sherds show traces of white bands apparently parallel to the dark ones (Pl. 36:5-7). One sherd (Pl. 36:5) is different from the others in that its slip is buff rather than red, but it is clearly from the same type of vessel.

Since sherds of this type of painted pottery were not counted separately in the field, some are undoubtedly included under the general heading "Painted Wares" in Tables I-II. Thirty-five such sherds were identified among the material from the trench which was brought to Chicago. They are mostly rims, and no two belong to the same vessel. Their distribution in the trench was as follows:

Plot	Level	No. of Sherds
A	-196.30 to -197.10 m.	15
B	-197.00 m.	6
	-197.40 m.	1
	-197.75 m.	1
C	-196.70 m.	6
D	-197.40 m.	6

The lowest trench level which yielded sherds of this type was in Plot B at about 2 m. below the surface. Since the rest of the pottery from comparable levels in the trench is of the Byzantine period, this new type of painted pottery can be identified as Byzantine rather than Early Islamic.

#### PILGRIM FLASKS

Among the few complete forms which we succeeded in assembling from numerous sherds are two pilgrim flasks (Pls. 39:1-2, 57:5-6), both of buff fabric and ribbed. The body was made in two parts, which were thrown on the wheel separately and then joined together. One part is much shallower than the other, thus producing the characteristic asymmetrical lenticular form. A small hole at the joint of the two parts received a short neck with a thickened vertical rim, and two loop handles were attached at the shoulder.<sup>10</sup>

Of the broken-off necks shown on Plate 39:3-8 (see also Pl. 57:10-13), Nos. 5, 6, 8, and possibly 3 belong to pilgrim flasks. Such necks are typical also of small bottles and juglets, but these usually show traces of an attached handle.<sup>11</sup> Hence the vessel types to which such necks belong can be ascertained only when either part of the shoulder or traces of a handle are preserved. The combination of soft light-colored fabric and ribbed neck (Nos. 5 and 8) is indicative of Early Islamic date.

#### LANTERNS?

The incomplete vessel shown on Plates 32:12 and 57:9 is assembled from a number of sherds that fit together and obviously belong to a single utensil, though they differ considerably in color, some being light buff or pinkish and others brown or gray. The darker colors may be due to the character of the debris in which they were found or to secondary burning. The complete form apparently consisted of a roughly spherical body with a short neck. Impressed decoration of alternately straight and wavy lines is preserved. The most interesting feature is a series of round holes cut in the wall before firing. A few isolated sherds do not fit those assembled but represent a vessel or vessels of the same type. The use of such vessels is some-

<sup>10</sup> Such flasks have been found e.g. at Baisan (*Beth-Shan*, Pl. XXX 33) and Khirbat al-Mafjar (*QDAP* X 81, Fig. 5:10, 13, 14).

<sup>11</sup> See e.g. *Beth-Shan*, Pls. XXX 23 and XXXII 2.



what puzzling, but I am indebted to Father Sylvester J. Saller for his suggestion that they may have been lanterns.<sup>12</sup>

#### LARGE VESSELS WITH PLASTIC DECORATION

Fragments of large jars and basins with thick walls (18–26 mm.) are shown on Plate 38:1–6. No. 1 has a ledge rim and a “roped” ridge below it. Nos. 2–6 are of softer fabric and have combed decoration. No. 3 is part of the shoulder of a vessel which was perhaps similar in shape to that shown on Plates 38:12 and 58:8. The latter is a thick-walled, hole-mouth jar with slanting shoulder, ovoid body, and tall thick ring base. It is of soft fabric with a pronounced admixture of straw or chaff. The wavy line around the shoulder and the loops above it were incised with a pronged tool. The sherds from which this jar was restored were found scattered in Sounding J 9:1, which contained some material apparently comparable with that found in the debris above the stone pavements of the Arab building. One may conclude, then, that this jar is of Early Islamic date.

#### GRAY WARE

A number of relatively thick, well fired gray sherds belonging to large bowls (up to 35 cm. in diameter) occurred in various parts of the main area. The fabric is ash gray with a dark gray slip. Such sherds are usually decorated below the rim, and sometimes on the rim itself, with irregular straight or wavy comb-incised bands (Pl. 33:17–18); occasionally there is “roped” or “rocking” decoration. Apparently vessels of this ware were valued by their owners, for some sherds have drilled holes with remnants of wire in them which indicate ancient mending (e.g. Pl. 33:18). Since the gray ware listed in Table I is not confined entirely to this type of pottery, asterisks indicate the findspots in which its occurrence has been verified. It may be noted that probably its earliest occurrence was in K 11:3, more than 1.70 m. below the surface.

#### SOFT BUFF WARES

Throughout the excavations there were found large numbers of sherds of soft light-colored fabrics. The most common are light buff and drab, but occasionally light tan and pinkish-buff fabrics were encountered. These sherds nearly always have a light-colored slip, usually light buff or cream, and many have plastic decoration. In addition to pilgrim flasks, the forms consist largely of one- or two-handled vessels such as jars and jugs. The handles as well as the vessels themselves vary greatly in size and shape. Handles were found in great numbers because they are usually thicker and therefore more solid than the walls of the vessels and thus often preserved whole when the rest of the vessel is broken.

#### PLAIN BUFF WARE

Only a few forms could be identified—for instance, the upper part of a bowl with plain rim (Pl. 56:15) and a fairly large bowl with everted ledge rim (Pl. 58:6). A tall neck (Pl. 57:8) had a loop handle, probably of the type shown on Plate 43:24 but considerably larger. It thus belongs to a fair-sized vessel, probably undecorated. Two broken-off necks (Pl. 39:4, 7) may belong to pilgrim flasks, small bottles, or juglets (see p. 36). Some of the plain sherds may have come from vessels with plastic ornamentation, for often such decoration did not cover the whole surface. Although the plain buff ware is not accounted for in Table I, some 400 buff sherds without any distinctive features were found in the main area.

#### BUFF WARE WITH PLASTIC DECORATION

It is this ware which we called “Khirbat Mafjar ware” in the field, and it is chiefly this type of pottery that is represented under that heading in Tables I–II, though possibly occasional

<sup>12</sup> A few sherds with cut-out holes and smaller punctured holes were found at Mount Nebo (*Nebo*, Pl. 157:26–30).

other buff sherds for which good parallels occurred at Khirbat al-Mafjar are included. All specimens of our "Khirbat Mafjar ware" are wheel-made. There are no examples of mold-made vessels, with the various parts formed separately and then joined together,<sup>13</sup> which are common in the Early Islamic period, nor was the plastic decoration on our pottery produced by molds or large stamps.

Though sherds with plastic decoration are rather numerous, few forms could be completely or even partially reconstructed (e.g. Pl. 35:7). Of the few nearly complete vessels, the pitcher shown on Plates 39:9 and 58:3 is characteristically thin-walled, with flat base, nearly cylindrical body, and slightly splayed neck. Part of the body has shallow ribbing. The handle shows traces of a clay pellet at the top (see below). A deeply ribbed neck fragment is shown on Plate 43:28, and ribbed pilgrim flasks (Pl. 39:1, 2, 5, 8,) are discussed above.

Another nearly complete thin-walled vessel has an ovoid body with a series of indentations around it (Pls. 39:11, 58:2). The neck is decorated with three rows of incised lines. A small vertical loop handle still has a clay ring attached to it, apparently in imitation of a metal vessel. Presumably a second handle was attached to the opposite side of the neck but has broken away. A neck sherd with a very similar loop handle (Pl. 43:1) probably also had a ring attached to it, and a separate small clay ring (Pl. 43:2) undoubtedly comes from the same type of vessel.

Thin-walled buff-ware vessels were often decorated with applied plastic bands, ridges, or pellets and with a great variety of incised patterns made with a single point (Pl. 40:1, 4-6, 9-11), a double point (Pl. 40:2, 7), or a multiple-pronged instrument with three to ten more or less evenly spaced points (Pl. 40:12-13, 15-16). A blunt point was often used to produce shallow straight or undulating grooves (Pl. 40:1, 3, 7, 9, 14) as well as more intricate patterns combining shallow grooves and impressions (Pl. 41:13).

The single-point incisions consist of straight lines, sometimes crossing (Pl. 40:1, 5), and short slanting strokes, usually in bands between horizontal lines (Pl. 40:4, 6, 10). Sometimes bands of strokes slant in opposite directions and produce a "herringbone" pattern (Pl. 40:4). Single-point incisions were sometimes irregularly spaced (Pls. 40:1, 8 and 41:4) and sometimes produced plantlike patterns (Pl. 40:11) as well as more intricate designs and perhaps even inscriptions (Pl. 41:9).

The multiple-point, or combed, decoration formed straight, usually vertical but sometimes horizontal, bands and undulating or zigzag bands of varying regularity (Pls. 40:12-13, 15-16 and 42:8). There are also crossing bands and occasionally small S- and 8-shaped patterns and ovals (Pl. 41:1-3, 5-8). A number of sherds have pricked decoration (Pl. 42:15), presumably produced with the same type of tool that was used for comb-incision. A sherd of a very large vessel has both incised and pricked decoration (Pl. 43:8).

Comb-incision was often combined with ribbing (Pl. 41:12), applied plastic ornaments (Pl. 41:7, 10-12), and impressed circles, either single or concentric and usually dot-centered (Pl. 42:1-4, 9-14). Occasionally circles were arranged in clusters to form flower-like patterns (Pl. 42:5-7). Two partially restored vessels of inverted ovoid form with fairly elaborate rims and short necks show the combination of combed bands and impressed circles (Pls. 39:10, 12 and 58:7, 1). One has two loop handles, each with a small clay pellet at the top, a feature which is very common in this ware (see below). The applied plastic elements consist usually of horizontal ridges at the rim or shoulder, which may be plain (Pls. 40:2, 42:2 and 13), notched (Pl. 42:5), or "roped" (Pls. 39:10, 12 and 58:7, 1). There are also irregular bands (Pl. 41:11, 14) and single (Pl. 41:10, 12) or multiple (Pl. 41:7, 11) pellets.

Vessels with handles are characteristic of the buff wares, as noted above, and most of the handles have plastic decoration. One type of handle, affixed to the lip and shoulder of the

<sup>13</sup> See e.g. *QDAP*, Pl. XX 1-2.

vessel, is fairly long and crook-shaped with a single or double clay pellet at the top (Pl. 43:24–27, 29–32). The pellets are disklike, rounded, or pointed. Shorter, horseshoe-shaped, loop handles, joined to the neck and shoulder, are usually somewhat thicker but also have an applied pellet (Pl. 43:5–7, 14–16). These two types of handles are combined under “knobbed handles” in Table I. They have close parallels at Khirbat al-Mafjar and Baisan.<sup>14</sup> One of the shorter handles (Pl. 43:6) is decorated with impressed circles, which, as we have seen, are very common as body decoration on this ware.

A horn-shaped lug and a stirrup-shaped handle with elaborate top are shown on Plate 43:20–21.

Somewhat larger, flatter, and occasionally ridged handles have a plastic projection decorated with applied pellets (Pl. 43:22–23). Still larger handles are bands with a notched plastic ridge in the middle which sometimes consists of separate pellets applied one overlapping another (Pl. 43:3–4, 8). They seem to have had three larger pellets at the top and the bottom.<sup>15</sup>

Many features of this ware are to be found not only in Palestine but also in Early Islamic pottery from distant areas such as Afghanistan and Iran.<sup>16</sup>

#### LAMPS

Fragments of lamps turned up in all parts of the excavations. Some forms could be reconstructed from sherds, and a few complete specimens were found (see Pls. 44 and 60:27–32).

All seem to have been mold-made, with the upper and lower parts formed separately and then joined together. Only one mold,<sup>17</sup> for a lower part, was actually found, but it indicates that lamps were manufactured on the site. No two specimens from the same mold were observed, however. With few exceptions (Pl. 44:9, 12) the plastic decoration is confined to the upper part. A dark red mat slip is fairly common and seems also to be confined to the upper part. The frequent occurrence of the red slip on the inside as well as the outside of the upper part (e.g. Pl. 44:6) suggests that it was applied before the two parts were joined. The handles, especially loop handles, seem to have been attached after the joining.

Apart from a fragment of a Hellenistic lamp (Pl. 30:12 and 29), the earliest type from our excavations seems to be the multiple-wick lamp (Pl. 44:1–5),<sup>18</sup> with five or six wick holes. Some show traces of loop handles, and there is one example (Pl. 44:4) with a lug handle.

The single-wick lamps vary considerably in fabric and decoration. Some (e.g. Pl. 44:10, 13) are well fired and have thin walls, while others are of relatively soft fabric and have thicker walls; some are tan or reddish with traces of a dark red slip, and others are of a soft buff fabric with a light cream slip. None show traces of loop handles. The handles vary from hardly perceptible knobs to well formed lugs of various shapes. With few exceptions (Pl. 44:8–9) the single-wick lamps have a channel between the filling hole and the nozzle. The channel may be plain (Pl. 44:15), but more often it bears simple plastic decoration; one has a cross (Pl. 44:10), our only lamp with a Christian symbol.

It may be of interest to note that, while ovoid lamps with a single wick hole and a channel between the filling hole and the nozzle are common among our finds, we have none of the type with “spatulate” nozzle or of the “candlestick” type, though both these types and especially the latter frequently occur with types represented in our finds.

<sup>14</sup> Cf. *QDAP* X 99, Fig. 14:3, and Pl. XX 2; *Beth-Shan*, Pl. XXXIII 3–4.

<sup>15</sup> Cf. *QDAP* X 81, Fig. 5:15, and Pl. XIX 3.

<sup>16</sup> Cf. e.g. J.-C. Gardin, *Céramiques de Bactres* (“Memoires de la Délégation archéologique en Afghanistan” XV [Paris, 1957]) Pls. VI 11a, d(1), d(2), e(1), g; Erich F. Schmidt, *The Treasury of Persepolis and Other Discoveries in the Homeland of the Achaemenians* (“Oriental Institute Communications,” No. 21 [Chicago, 1939]) p. 112 and Fig. 78.

<sup>17</sup> BY 287 (A 30343) from debris in the narthex of the church (K 11:3).

<sup>18</sup> Usually attributed to the 2d and 3d centuries; see e.g. J. H. Iliffe in *QDAP* III (1934) 84.

## ISLAMIC GLAZED WARES

By Florence E. Day

UMAYYAD PERIOD, SYRIA (A.D. 650-750)

## Glazed Green, Ocher, and Brown Bowls, Painted and Splashed

This class of pottery was first identified at Tarsus and has also been excavated at Baisan (1921), Khirbat Minyah (1932, 1936), 'Auja' al-Hafir (1933), Khirbat al-Mafjar (1935), Antioch (1936), and now at Khirbat al-Karak.<sup>19</sup> Briefly, these sites, including Tarsus in Cilicia, all fall within the area of historic Syria and of Syrian Umayyad art. This class of pottery has very distinctive clay, glazing, and shapes, and it has never been found outside Syria.

The clay is pink-red, varying to paler pink-buff; it is full of speckles, grits, and very characteristic tiny red stones, rounded like pebbles and nearly a millimeter in diameter.<sup>20</sup> The glaze is a lead glaze.<sup>21</sup> A white slip generally is present all over both surfaces but sometimes is not used under the monochrome green and brown glazes. When it is not mixed with pigments, the glaze is of a very pale straw color and appears as background. The colors due to pigments mixed into the glaze are a true deep leaf-green (never a blue-green), a very dark manganese brown, and a pale ocher, umber, or amber. The more frequent painted designs and the rarer splashed and running colors are found inside the bowls, while green or manganese spots, sometimes both, are used outside. Occasionally the exterior has only a thin wash of glaze, with neither slip nor colors. Besides the painted and the splashed varieties, there are some monochrome bowls with no glaze on the outside except for a few drops running over the rim. This type of pottery has so far been found in only two bowl shapes. The more frequent of the two has a flat or slightly concave base (not a ring base), and the wall bends up at a definite angle and then flares straight up to the rim.<sup>22</sup> The profile is very subtle, swelling slightly above the angle and then tapering again toward the rim. The second shape has no angle in the wall but a continuous curve up and into the rim.

The historic significance of this Umayyad pottery is very great, for it represents an Islamic revival of two distinct Syrian pottery types, both probably no later than the 1st century of our era and both having left no discernible traces in the intervening pre-Islamic centuries. The lead glaze and the combination of colors are derived from the molded pottery made at Tarsus in the Augustan period.<sup>23</sup> The painted patterns and the splashed effects, however, are derived from the unglazed painted Nabatean pottery found all over southern Syria nearly

<sup>19</sup> The reasons for its dating and the analysis of its style will be fully discussed by the present writer in one of Miss Hetty Goldman's excavation reports, *Islamic Tarsus*. The writer is greatly indebted to the American Philosophical Society for a grant to go to Jerusalem in 1954, where she was able to study the pottery in the Palestine Archaeological Museum. The pottery of this class from Baisan, al-'Auja', and Antioch is in the United States.

<sup>20</sup> X-ray diffraction tests of one Khirbat al-Karak sherd (BY 298; see No. 1 below) and one Tarsus sherd (Is. 7) show that these two Umayyad sherds have basically the same clay; that is, both are from the same clay pit, though probably from different spots in it. The final report on the clay minerals is not yet ready but will be published in *Islamic Tarsus*.

<sup>21</sup> According to a test made in 1940 by Dr. Frederick R. Matson, now of Pennsylvania State University, and spectrographic analyses (see p. 41) made in 1957 at the Brookhaven National Laboratory by Mr. Maurice Slavin, of the Chemistry Department. The work of these gentlemen is gratefully acknowledged.

<sup>22</sup> *Beth-Shan*, Pl. XXXIII 32, the only good profile drawing that has been published, shows well the typical angle of the wall, but the base is not exactly drawn, for it suggests a ring foot. Actually, the base has a groove, never more than a millimeter deep, parallel to the edge. For such bowls from Antioch see *Antioch-on-the-Orontes* IV 1, Pls. XVI 1260a and XVII H; Waagé did not realize that these two specimens represent the same shape or that they are Umayyad, and in the text the pottery is not adequately described.

<sup>23</sup> See the "lead glazed ware" described by Frances Follin Jones in Hetty Goldman, *Excavations at Gözlü Kule, Tarsus I* (Princeton, 1950) 191-96 and Nos. 633-77 on pp. 260-64. The color there called "yellow" is the same as the ocher-umber-amber of the Umayyad pottery, not a chrome or lemon yellow.

up to Damascus.<sup>24</sup> The painted patterns are the leafy palmette, groups of small brown dots (like berries), a pointed-oval motif, slanting bars inside the rim, and a chain or cable around the center. Thus the style as a whole is Syrian, autochthonous, and Arab. A historical parallel in epigraphy is the direct derivation of the classic Arabic script from the older Nabatean script of Arabia and Syria. Further, recent excavations show that, as the style of three-color green, ocher, and brown glazes over a white slip is due to Syria and is Umayyad in date, it is this pottery which inspired the similar later 'Abbasid pottery of Mesopotamia. The 'Abbasids added only one detail, namely incised lines through the slip before glazing, to produce a second variety, the well known sgraffito pottery. When Sarre published the splashed-glaze and the sgraffito pottery of Samarra, he believed that both were due merely to Chinese inspiration and classed them as "Nachahmung ostasiatischer Keramik."<sup>25</sup> His theory of Chinese imitation has unfortunately been widely quoted but, as regards these two types, may now be abandoned,<sup>26</sup> for the Syrian Umayyad pottery sheds an entirely new light upon the genesis and development of Islamic art.

In the spectrographic analyses (see n. 21) of the glazes of this Umayyad pottery samples were used from Tarsus, Antioch, 'Auja' al-Hafir, Baisan, and Khirbat al-Karak. Aside from silica and other usual constituents in any glaze, the results are summarized by color, thus:

Straw color (background) . . . . .	Lead and a little tin
Ocher-amber . . . . .	Lead, a little tin, and vanadium
Dark brown . . . . .	Lead, manganese, copper, tin, and vanadium
Green . . . . .	Lead, copper, and a little tin

The tin was in such small proportions that it may perhaps have been a natural impurity in the raw material. We have not yet been able to determine where in Syria the pottery was made, but, because of the identity of the clay and the glazes, I believe at the present moment that it was all made at one center. If we knew where that site was, we might be able to suggest where and in what form the potter got his materials. At any rate, the potter had full control over his materials and knew just what was necessary to produce the color for each part of the design: green leaves, brown berries and tendrils, straw-colored background. The use of a white slip throughout was a technical advance over the prototype, the Tarsus Roman lead-glazed pottery, for it made all the colors clearer and fresher; if put directly on the red clay they would be deeper and duller. A second improvement was that, while the Tarsus Roman potters painted pigments on the clay under a colorless glaze, the Umayyad potters mixed the different coloring materials into the glaze and thus accomplished the design at one stroke.

No. 1. Nearly half of bowl with straw-colored, green, and brown glaze. The main section consists of several sherds joined and restored with plaster and paint (Pl. 62:1),<sup>27</sup> and there is a small separate rim sherd. The clay is in every respect characteristic of this type. The shape is the more frequent

<sup>24</sup> For parallels see e.g. G. and A. Horsfield, "Sela-Petra, the Rock, of Edom and Nabatene," *QDAP* IX (1941) 105-204, especially Figs. 22-24 and 27 (the leafy palmette and groups of small dots), 34 (pointed-oval or "cone" motif), 49 (chain or cable pattern around center of bowl), Pls. XXXVII 313 (slanting bars or pointed ovals inside rim), XX 153 (splashed and running pigment). The most recent work on Nabatean pottery is by Dr. Philip C. Hammond, Jr., whose thesis (Yale University) is not yet published.

<sup>25</sup> Friedrich Sarre, *Die Keramik von Samarra* ("Die Ausgrabungen von Samarra" II [Berlin, 1925]) pp. 66-74. Concerning one specimen of another class, "Keramik zweifelhafter Herkunft (Ostasien oder Mesopotamien?)," he remarked (p. 65, No. 227): "Die glänzende Glasur ist für westliche Herkunft ungewöhnlich." The glossy lead glaze of the Umayyad pottery shows the falsity of this conception.

<sup>26</sup> Chinese white porcelain and Chinese stoneware are a different matter. The pertinent question is whether there is any relation between the T'ang three-color glazed pottery (not porcelain) and the Umayyad three-color glazed pottery, for they are contemporary and date from long before the Samarra material in question.

<sup>27</sup> Restored by Mr. W. J. Young, head of the Research Laboratory of the Museum of Fine Arts, Boston, and photographed by Mr. Moore of the same museum. Their good work is gratefully acknowledged.

one, having an angle in the wall. The base is flat, as is usual with this type, but it was slightly warped in the firing and is therefore uneven. The typical groove (nearly 1 mm. deep) is about 6–7 mm. from the edge.<sup>28</sup> There are also two smaller concentric grooves set equidistantly at 2.7 cm. from the edge of the base and from each other. The wall was trimmed with a knife on the exterior while the bowl was turning on the wheel.

As to the potting, it is worth noting that the bowl is not an exact circle, for the curvature of the small separate rim sherd gives a diameter of 22 cm. while the main section indicates a diameter of 24.4 cm. Slight irregularities such as this are quite frequent but are not brought out in schematic profile drawings and are not noticeable in photographs. The white slip is extremely thin, and a streaky effect inside shows that it was smoothed on while the bowl was turning. The pale straw-colored background glaze also is extremely thin, and quite mat, though in other bowls both the slip and the glaze may be quite thick and glossy. The exterior decoration is typical: on the wall two horizontal rows of large green spots and on the base several rows of large dark brown spots going straight across parallel to the diameter. Now it is very interesting that all the spots on the exterior dripped in one direction, but inside there was no dripping or running of the glaze. Thus the exterior was painted first, then the bowl was turned over and set upright or at a slant while the inside was painted; this procedure allowed time for the exterior spots to run a little, but the bowl was put into the kiln and fired right side up as soon as the inside was finished. Indeed, on the bottom, at the "upper" ends of the brown spots, through the glaze and the clay, are some short, straight, striated impressions which suggest that the bowl rested against a stick of wood while the inside was being painted.

The painted design on the interior is typical of the class and a very good example of Nabatean influence or survival. The scheme is radiating, with a four-part repeat; other bowls have three- or five-part repeats as well. Four big green leafy sprays or palmettes radiate out, the tips of their five leaves touching the rim, and between them are four smaller single leaves, slightly lobed, inclosed between two rows of dark brown dots, like berries, ending in two short tendrils which meet at the top. In two good examples of the Nabatean prototype<sup>29</sup> the palmettes or ferns (3 and 4 in number) point in from the rim to the center of the bowl, and the brown dots are in small groups rather than long rows. The big Umayyad palmettes or sprays with five leaves are to be compared to the big Nabatean sprays with three leaves, the smaller Umayyad lobed leaves to the smaller Nabatean ferns (usually called "palmettes"). This modification of the Nabatean prototype shows a real and natural development of a single artistic tradition; it is not a slavish copy or an imitation by foreigners. Somewhere in Syria the tradition must have been kept alive during the centuries between the time of the Nabatean Arabs and that of the Umayyad Arabs.

Artistically, the painted design has great spontaneity, which is typical of the whole class, for the painting is always freehand. The bold and sure hand of the potter is revealed by the fact that the center of the radiating design is 8–9 mm. off-center rather than in the geometric center of the bowl, and the tip of one brown tendril is well below the rim while twice the tips touch the rim. The potter did not work by measure but trusted to his eye for the total effect.

This large section of a bowl is the most nearly complete example in the United States (larger than any from Antioch and Baisan) and because of its style is a very important piece to illustrate the type.

No. 2. Three rim sherds of bowl with monochrome green glaze (Pl. 62:2). The form, with the wall curving continuously up and into the rim, is the second and less frequent of the two shapes represented in this type of pottery and occurs only with monochrome glaze. Only two other examples are known, from Tarsus and Baisan. The Khirbat al-Karak bowl differs from them in being glazed inside only, while on the outside the glaze runs just over the rim. No slip seems to be present, which presumably accounts for the very dark shade of the green glaze. It is a good example of the rich, thick, smooth, and glossy glaze of this Umayyad pottery at its best and is far more thick and gleaming than that on No. 1, for instance. A brownish wash on the unglazed part of the exterior, extending about 4

<sup>28</sup> Cf. the bottom of a Tarsus bowl which has green spots all over the exterior; F. E. Day, "The Islamic finds at Tarsus," *Asia Magazine*, March, 1941, pp. 143–46 and Fig. 2. The remarks on p. 144 are to be disregarded, for in 1941 not much was known about this type of pottery and the writer had not yet recognized the Nabatean prototype. Fig. 1 shows an example of the Umayyad molded green-glazed pottery (see No. 3 below).

<sup>29</sup> *QDAP* IX 168, Figs. 22–23.

cm. down from the rim, is quite unusual. For the monochrome-glazed bowls, the presence or absence of a slip and the presence or absence of glaze on the exterior probably indicate a better or a cheaper variety rather than any particular difference in date; indeed, it has not been possible to assign a specific date within the Umayyad period to the class. Inside the Khirbat al-Karak bowl, just below the rim, is the broken edge of another bowl (*ca.* 7 cm. long) which stuck to it when the glaze was fused in the kiln. Perhaps bowls of different sizes were stacked one within another, or perhaps there was just some accident in the kiln. The adhering piece is of the same clay exactly.

#### Molded Green-glazed Condiment Dish

No. 3. This sherd of a *mudhunah* (Pl. 62:3) is of pale pink-red clay basically similar to that of Nos. 1–2 and having the same sort of fine speckles and tiny red pebbles. It is slightly whiter in color and more smooth and creamy in texture, however, so that something like chalk or lime might have been mixed into it. The glaze on the interior or top of the flat dish is a good, thick, glossy, deep moss-green lead glaze, like that of No. 2 and also of the Tarsus Umayyad molded green-glazed pottery. It runs a little over the edge onto the outside or bottom, which has a mat ocher-amber glaze. The surface of the bottom is irregular, showing slight hollows where fingers pressed it into the mold. There is no slip.

The small hemispherical depressions or cups which identify the sherd as part of a condiment dish are approximately 31 or 32 cm. in diameter; if the dish is reconstructed as square, with four such cups, the original size would be 12 × 12 cm. A sherd of another green-glazed condiment dish was excavated at Khirbat al-Mafjar.<sup>30</sup> It has traces of two pointed-oval cups and a triangular foot at the preserved corner; it is reconstructed as 9 cm. square and with four cups, but the clay is not described. Our dish might be reconstructed with similar feet at the corners. A stone prototype for the clay condiment dishes was excavated on Mt. Ophel, Jerusalem. It is of marble, originally square, with convex sides 3 inches (*ca.* 7.5 cm.) long, and must have had four cups; the fragment shows a rosette in the center and two hemispherical cups.<sup>31</sup> Whatever its date may be, this stone prototype is also Syrian.

The animal in the border of our sherd is too indistinct to be identified but is evidently a quadruped. If the reconstruction of the dish is correct, there would be just about room for three animals on a side; hence they probably all faced in the same direction about the border, since confronting pairs would not be symmetrical with the dish. There might even have been leaves or vine tendrils filling in the corners. Similar animals, some also in half-crouching position, are incised within arches on the famous bronze ewer of the Umayyad caliph Marwan II (A.D. 744–50);<sup>32</sup> this bronze is Syrian in shape and in every detail of the rich ornament, both plants and animals.

This molded Umayyad Syrian condiment dish likewise is extremely important in the history of art, for it is the forerunner of the 'Abbasid condiment dishes of the 9th century. Syria had been the center for the making of pottery in molds from Hellenistic–Roman times onward, and in all shapes—lamps, cups, bottles, and so on—for example the Tarsus Roman lead-glazed molded pottery and the miniature pilgrim bottles of Dura. At that time molded pottery was generally imported into Mesopotamia, and it was only with the coming of Islam that it began to be made there extensively; for instance, all the so-called “Parthian” and “Sasanian” lamps found in Mesopotamia are wheel-made, and any molded lamps are certainly Syrian

<sup>30</sup> *QDAP* X 103, Fig. 16:13, and Pl. XVI 21. On p. 102 it is classed as “Ware 16,” but on p. 70 it is not listed with that ware. As for dating, “Ware 16a” is considered 'Abbasid (9th–10th centuries), and 12th–13th centuries is suggested for “Ware 16b” (see p. 74), though the latter is not included in the list of wares on pp. 66 ff. This condiment dish cannot be as late as the 13th century; it might be either Umayyad or early 'Abbasid. This preliminary report on the pottery from Khirbat al-Mafjar is not to be used for the dating and analysis of Early Islamic pottery; one must go to Jerusalem and look at it. For instance, the lamps (Pls. XVII–XVIII and pp. 73–74) are divided into four groups and dated 8th century, 'Abbasid (9th–10th centuries), and 12th–13th centuries. In fact, however, they are of only two types, conical-handled and tongue-handled, and both types are Umayyad.

<sup>31</sup> *PEFA* IV 154 and Pl. XVI 31.

<sup>32</sup> See Sarre, “Die Bronzekanne des Kalifen Marwān II im Arabischen Museum in Kairo,” *Ars Islamica* I (1934) 10–15, especially Figs. 2 and 5. Sarre unfortunately considered the bronze to be Persian, a point of view quite typical of his generation of scholars.

imports. By the 9th century molded pottery was popular at Samarra (A.D. 838–83), and Yaʿqubi specifically states that to Samarra were brought “makers of glazed pottery” from both Basrah and Kufah.<sup>33</sup> A fragmentary ʿAbbasid glazed condiment dish in the Berlin Museum preserves part of the artist’s signature, “. . . Abi Nasr al-Bas[ri],”<sup>34</sup> and, being of excellent quality, was no doubt made at Samarra, though it was found at Akhmim, Egypt. Two other fragments by the same artist are known, also probably made in Mesopotamia. A fourth square condiment dish, in the British Museum, is practically complete;<sup>35</sup> its inscription is significant because it names the dish as a *mudhunah*: “This *mud[hun]ah* was made by Abu Nasr al-Basri in Misr (Egypt).”<sup>36</sup> These four ʿAbbasid dishes are more elaborate and developed than our Umayyad one; the first, probably made in Samarra, has five (not four) cups, and the fourth, the only one mentioning Egypt, has nine cups, five round and four pointed-oval. Now we learn from Khirbat al-Karak that the ʿAbbasid dishes are all derived from the Syrian original.

#### ʿABBASID PERIOD

##### Mesopotamia (9th Century)

The three sherds in this category are all typical of material excavated at Samarra, and thus we are assured of their date (A.D. 838–83). No doubt some of the Samarra types were already being made during the 8th century, from A.D. 750 onward, continuing from the end of the Umayyad period, but no excavation in Iraq has yet provided types which can be assigned exclusively to the 8th century. The excavations at al-Hirah<sup>37</sup> and Susa<sup>38</sup> were disappointing in this respect. Our three pieces are of the pale cream-yellow clay which is characteristic of the glazed pottery made throughout the Tigris-Euphrates basin during the Early Islamic period. It is slightly more rough and sandy than the fine, pale creamy-yellow “Samarra clay” used for the elegant lusters and other luxury wares of Samarra. The clay of the latter was thoroughly levigated so that all impurities were removed, while the clay of the everyday pottery is more as it was taken from the clay bed.

No. 4. Sherd of bowl glazed with yellow, amber, and green running colors (Pl. 62:4). The presumably lead glaze, which covers all surfaces, is of good quality and very glossy, with a fine crackle. This sherd indicates direct continuation of the Syrian Umayyad pottery glazed with green, ocher, and brown running colors over a white slip.

No. 5. Sherd of small ribbed jar with blue-green (alkali) glaze on both surfaces (Pl. 62:5). The glaze is, of course, essentially the same blue-green alkali glaze that appeared in ancient Mesopotamia, ancient Egypt, and Mohenjo Daro and in Mesopotamia continued uninterrupted through the

<sup>33</sup> Yaʿqubi, *Kitab al-Buldan* (2d ed.), ed. M. J. de Goeja, in “Bibliotheca geographorum Arabicorum” VII (Leiden, 1892) 264.

<sup>34</sup> See Ernst Herzfeld in Sarre, *Die Keramik von Samarra*, p. 82 and Fig. 173.

<sup>35</sup> Arthur Lane, “Glazed relief ware of the ninth century A.D.,” *Ars Islamica* VI (1939) 59 and Fig. 7. The inscription was not read correctly by Mr. Rhuvon Guest (pp. 64–65). The Berlin fragment is shown in Fig. 1 D, and a sherd from al-Minah in Fig. 2 C, both photographs.

<sup>36</sup> Dr. Giorgio Levi della Vida suggested the correct restoration of the word *mudhunah* to the writer, who presented it in a paper, “Islamic art and Arabic translation,” at the Chicago meeting of the American Oriental Society in April, 1941.

<sup>37</sup> See D. Talbot Rice, “The Oxford excavations at Hira,” *Ars Islamica* I 51–73, most of the pottery being, in fact, of the Samarra types.

<sup>38</sup> In a rather recent report by Jean Lacam, “La céramique de Suse (Iran), Campagnes de fouilles de 1946, 1947, 1948,” *Musées de France*, 1950, pp. 206–9, Level III is dated “du milieu du VII<sup>e</sup> siècle à la fin du VIII<sup>e</sup> siècle (Dynastie des Omeyyades),” and thus the change from Umayyad to ʿAbbasid, in A.D. 750, is not taken into consideration. The French archeologists also go by modern political boundaries and count Susa in Iran, though it has always been geographically and culturally within the Mesopotamian basin. See also Roman Ghirshman, “Cinq campagnes de fouilles à Suse (1946–51),” *Revue d’assyriologie et d’archéologie orientale* XLVI (1952) 1–18; an example of the importation of Syrian Roman molded pottery to the east is the relief shown in Fig. 19; or perhaps in this case the Syrian potter himself was transplanted and worked at Susa.



millenniums down to the Islamic period.<sup>39</sup> Several Mesopotamian imports into Tarsus contained 10–20 per cent of lead (tests by Matson in 1940) and may be considered typical of this blue-green glaze in the Abbasid period.

No. 6. Base sherd of large bowl (wall thickness 1 cm., base diameter *ca.* 20 cm.) with opaque white (tin) glaze covering all surfaces. Found on surface in main area. The clay is slightly more sandy than that of Nos. 4–5. The shape of the base is typically ‘Abbasid.<sup>40</sup> The Mesopotamian opaque white glaze goes back to Assyrian times, and it continued into Islamic times in spite of invasions by Parthians and Sasanians. It is basically a tin glaze, but ‘Abbasid examples from Tarsus contain a small percentage of lead. A pierced hole in our sherd indicates an ancient mend and shows that this white-glazed pottery must have been cherished and carefully reused at Khirbat al-Karak, where the absence of lusters and other luxury wares implies that the town had then neither great importance nor wealth.

#### Syria (9th–10th Centuries)

This group illustrates both the natural evolution from the Umayyad glazed pottery within Syria and the effect of contemporary Mesopotamian imports into Syria. Again, these types no doubt existed at the beginning of the ‘Abbasid period, after A.D. 750, but no excavation has yet provided precise enough data to allow us to distinguish pottery of 750–800 from pottery of 800–850. In epigraphy, of course, there is a stylistic change in the ‘Abbasid period; pottery of hard heavy red clay like that of Nos. 9–11 often has inscriptions which are certainly ‘Abbasid. The dating “9th–10th centuries” is based on the fact that the Byzantines overran Tarsus, Antioch, and a good part of North Syria in the middle of the 10th century, thus clearly ending an epoch, and the fact that the best parallels for the type represented by Nos. 9–11 are found in the north, while there is no definite end date for parallels from the Jerusalem area.

No. 7. Rim sherd of bowl (wall thickness 5–6 mm., diameter *ca.* 20–22 cm.) with dull umber and greenish glaze. Found in Sounding J 9:1. The clay is visually indistinguishable from that of the Syrian Umayyad glazed painted pottery (see pp. 40–42), having the same color, texture, fine specks and small red stones. In other words, this bowl was made at the same place. It is distinguished, however, by the poorer quality of the glaze, the absence of slip, the lack of glaze on the exterior except for green spots on the bare clay, and especially the shape. The Umayyad bowl shapes are very precise, with very delicately planned curvature. In this bowl fragment such subtlety of form is absent, and it is because of its artistic falling-off that it is assigned to the early part of the ‘Abbasid period, when Syria was reduced to a provincial country instead of being the center of Islam.

No. 8. Rim sherd (BY 31) of bowl (wall thickness 5–8 mm., diameter below rim 20–22 cm.) with dull olive-green glaze. Found in Sounding H 9:1. The clay is the same as that of No. 7. The incurving shape of the rim is comparable to that of No. 2 but is more thick and clumsy; the potting is cruder, and the exterior is not glazed except for a few drops over the rim. It is assigned to the early part of the ‘Abbasid period for the same reason as are No. 7 and two sherds from Khirbat al-Mafjar which show the same sort of artistic degeneration.<sup>41</sup>

No. 9. Rim sherd (BY 35) of bowl (wall thickness 5–6 mm., rim diameter *ca.* 28 cm.) with bright mustard-yellow glaze and a streak of green. Found in Sounding H 9:1. The clay is brick red, hard, fairly fine and smooth, with relatively little speckle. The potting is good, but rather mechanically so. The glaze (known to be lead in the Tarsus parallels) is opaque, but thin and not well molten. The yellow glaze covers the inside and runs over the rim about a centimeter on the outside, which is otherwise unglazed. The green streak comes down from the rim on the inside. This piece and Nos. 10–11

<sup>39</sup> A brief survey of ancient glazed pottery in the writer's “Mesopotamian pottery” (unpublished Ph.D. dissertation, University of Michigan, 1940) mentions the white glaze of Nuzi, which has since proved to be a blue-green glaze that had faded.

<sup>40</sup> Cf. Sarre, *Die Keramik von Samarra*, Figs. 150–51, 157.

<sup>41</sup> *QDAP* X, Pl. XVI 4–5. One must repeat the remarks made about dating in n. 30 above.

are of an early 'Abbasid type which is found all over Syria from Tarsus, Antioch,<sup>42</sup> and al-Minah<sup>43</sup> in the north down at least to Khirbat al-Mafjar,<sup>44</sup> near Jericho, and the Jerusalem area, Mt. Ophel,<sup>45</sup> the Tyropoean Valley,<sup>46</sup> and the Citadel.<sup>47</sup> This list of sites is not exhaustive, but it is representative. The designs of this type are partly continuations of those of the Umayyad painted glazed pottery, with leafy sprays and so on, and partly geometric and strapwork patterns imitating the Samarra molded pottery with luster and other Samarra patterns. The inscriptions go sometimes straight across the bowl and sometimes around the rim. This Syrian 'Abbasid pottery is not so good as the Umayyad and the imported Mesopotamian; it is peasant rather than city or court pottery.

No. 10. Base sherd of bowl with yellow glaze (Pl. 62:6). The clay is like that of No. 9, but a deeper red, and where the wall is very thick, at the base, a characteristic gray core appears. The glaze is of very dull yellow, and there is a spray of three green leaves radiating from the center; this motif derives from the Umayyad style.

No. 11. Rim sherd of bowl (wall thickness 4-5 mm., diameter below rim 22 cm.) with green and yellow glaze. Found on surface in main area. The wall curves up and inward to the rim, a shape seen in the Umayyad pottery, but not frequently, while in the 'Abbasid period it becomes one of the commonest shapes. The glaze runs a few centimeters over the rim on the outside, which is otherwise unglazed. On this sherd the glaze is very badly decayed and has an opaque white iridescence, so that the colors can be seen only when the sherd is under water. The bad decay is characteristic of this type, while I have never seen it with the Umayyad pottery, though both glazes are lead glazes.

The remaining sherds of this group are of red clay with dark brown glaze and reddish wash. They are assigned to this period by general analogy, though the writer does not know specific parallels for each one. A very glossy dark brown glaze occurs at Tarsus in this period. It is possible, of course, that these sherds are somewhat later than the 10th century.

No. 12. Complete ring base (diameter 5 cm.) of bowl (wall thickness *ca.* 3 mm.) with dark brown glaze(?) inside (BY 120). Found just below surface in main area. The clay is red and speckly, rather fine and hard. The glaze(?) is so mat that it resembles a pigment, yet it was evidently fired. The shape of this base is characteristic of the 'Abbasid period; nothing remains of the bowl itself.

No. 13. Rim sherd of jar neck (wall thickness 3-4 mm., rim diameter *ca.* 9 cm.) with dark brown glaze outside and over rim inside. Found on surface in main area. The clay is similar to that of No. 12, but with more speckles and grits. The glaze is irregular, partly glossy and partly mat. Inside is a streaky wash of red-brown pigment. The rim has a very thick downward and outward fold, rather like an arrowhead in section. This sharp and distinctive profile is found in unglazed and also green-glazed and three-color splashed jars at this time in both Syria and Mesopotamia.

No. 14. Neck (3-4 mm. thick, *ca.* 9-10 cm. in diameter) sherd of jar (BY 72). Found in Sounding J 9:1. Both surfaces have the streaky red-brown wash, and on the exterior is one streak of very glossy dark brown glaze. Nos. 13 and 14 are so similar that they might almost be from the same jar.

No. 15. Spout (BY 180) with remains of very thin dark brown glaze (*ca.* 5.5 cm. long). Found in Sounding J 8:1. The clay is red and rather like that of Nos. 12-14. This spout of an *ibriq* is included here because of its general similarity to Nos. 12-14, but this isolated broken-off specimen cannot be

<sup>42</sup> Identified from observations made in the writer's study of the sherds themselves.

<sup>43</sup> See Arthur Lane, "Medieval finds at Al Mina in North Syria," *Archaeologia* LXXXVII (1938) 37 and Pl. XIX 1.

<sup>44</sup> *QDAP* X, Pl. XVI 17-18 and 27-28 (= Figs. 11:10-11, 6:9, 9:39). These were identified by the present writer after she saw the pottery in 1954.

<sup>45</sup> *PEFA* IV 199 and Pl. XXIII 5 (diameter 5-6 inches, *ca.* 12.5-15 cm.).

<sup>46</sup> *PEFA* V, Pls. XIII 37-40 ("Lower Byzantine Level"), XV 4, 9, 24 ("Street Level"), XVI 13, 20, 21 ("Upper Level"). The "Street Level" is that of the Umayyad-'Abbasid houses; the "Lower Byzantine Level" is simply their basement and therefore of the same date. In 1942 the present writer suggested that some revision in the dating of the Tyropoean levels might be necessary (see F. E. Day, "Early Islamic and Christian lamps," *Berytus* VII 74). The Rev. Père R. de Vaux also agrees that the glazed pottery of Ophel and the Tyropoean is Islamic; see R. de Vaux and A.-M. Steve, *Fouilles à Qaryet el-Enab = Abū Ḡāsh* (Paris, 1950) pp. 120-21. The Qaryat al-Inab pottery shown *ibid.* Pl. A is stylistically related, though the clay is not red but varies from white to cream to tan (p. 120).

<sup>47</sup> See C. N. Johns, "The Citadel, Jerusalem: a summary of work since 1934," *QDAP* XIV (1950) 159-61 and Fig. 22:4-5. An Umayyad lamp is shown in Fig. 22:3. Luster is mentioned, but no photograph is given.

dated. Spouted jugs occurred in Syria as early as about the 6th century, as also in the Tyropoean Valley,<sup>48</sup> and persisted; even today every Arab in Syria drinks water from such a jug.

## UNIDENTIFIED SHERDS

Five sherds are probably later than any of those discussed above, but the writer has not identified them as representing any known types of pottery.

No. 16. Rim sherd, red clay, white slip on all surfaces, ocher-umber glaze inside and on rim, with spot running down from rim outside (13th century?). Found on surface in main area.

No. 17. Body sherd, red clay, burnt sienna glaze inside and outside (modern?). Found on surface in main area.

No. 18. Sherd (BY 442) from near base of bowl, dark brown glaze inside, brownish wash outside (modern?). Found in room K 11:11 of church complex (above floor level).

No. 19. Neck and shoulder sherd, dark olive-green glaze (misfired?) outside (like Nos. 12–15?). Found on surface in main area.

No. 20. Neck sherd (BY 131) of large jar, brown glaze over part of outside, brownish wash, horizontal wavy plastic bands and wavy incised lines outside (Mameluk or modern?). Found in room L 11:2 of Arab building.

In conclusion, one would like to stress the importance of Syria in the study of Early Islamic art. Early in the 20th century, archeologists whose interest was chiefly biblical or in pursuit of the Philistines generally ignored the Islamic pottery they found, dismissing it as "Arab" or "medieval" or even "Byzantine." Gezer, Ascalon, Baisan, Ophel—to mention only a few sites excavated before 1925—all yielded rich Islamic finds. Yet Sarre, in publishing the Samarra pottery in 1925, made no reference to any Syrian comparative material and originated the theory of Chinese imitation. In 1940 Jean Sauvaget, speaking of the origins of the 'Abbasid style, wrote: ". . . la véritable source d'inspiration est la tradition omeyyade, et à travers elle l'art hellénistique de Syrie."<sup>49</sup> Today, happily, archeologists are concerned with human civilization in all its aspects, and Syrian pottery is taking its place within the whole realm of the art of Islam.

## MISCELLANEOUS PIECES

A complete little spherical jar with knob base, narrow neck, and thick wall (Pls. 34:13, 56:2) is a "Greek fire bomb." Fragments of this type of vessel were found in Sounding J 8:2, also in K 11:1.

Plate 58:5 shows part of a relatively large jug. It may be noted that its handle extends from the shoulder to about the middle of the neck, whereas the handles of smaller jugs nearly always extend to the rim.

The only representational motif is a crude human figure with upraised arms, which is scratched on a sherd of a presumably large vessel (Pl. 43:39). The sherd shown on Plate 43:37 apparently represents a vessel in the form of a quadruped, of which only the two front legs are preserved.

Plate 43:9 shows part of a relatively large amphora, whose neck was rather narrow in relation to the body.

A fragment of a fairly large jar with flat ridged handle has combed decoration on the rim, neck, and shoulder (Pl. 43:11).

A rather wide flat handle bears two rows of irregular incisions in the middle (Pl. 43:10).

Plate 39:13 shows part of a medium-sized globular vessel with cut-out decoration on red painted bands. A round black stain on the inside suggests that it was used for boiling some liquid.

<sup>48</sup> See *PEFA* V, Pl. XII 27, "from 'Below Street' Level." As the "Street Level" is Umayyad-*c*Abbasid, the "'Below Street' Level" could be 6th century.

<sup>49</sup> *Journal asiatique* CCXXXII 51.

A base fragment of a bowl or juglet (Pl. 53:44) is unusual in that it has two distinct zones of color—light brown and dark brown—that seem to be intentional. No other examples with this feature were found.

A small bowl of hard brown fabric is shown on Plate 56:14.

## METAL OBJECTS

### IRON

Iron fragments were numerous throughout the excavations, both in the main dig and in the tombs. However, heavy rust had reduced most of the iron objects to formless lumps. Most numerous among those whose original forms can still be recognized are nails, spikes, hooks, rods, eye-hooks and bolts, bars, etc. It may be noted that no standard sizes of nails and spikes could be recognized and that usually their shanks are not round but roughly square in section and tapered gradually to a point—an indication that they were individually forged rather than mass-produced. The heads are usually rounded but occasionally rectangular with rounded corners (Pl. 48:5–6). They are relatively large, ranging from about 10 to 28 mm. in diameter. Some are fairly flat; others are nearly hemispherical, giving a mushroom-like appearance to the nail or spike.

A number of small tools could be identified, including a pickax (Pl. 48:2), a hammer-adz (Pl. 48:1), a miniature hammer (*ca.* 6 cm. long; not illustrated), and a chisel (Pl. 48:3). Knife (Pl. 48:9) and sickle (Pl. 48:7–8) blades also were recovered.

The iron tools indicate three different ways of attaching a wooden handle. Both the hammer-adz and the pick have the usual shaft hole to receive a handle perpendicular to the tool itself. A long blade (Pl. 48:4) has a long rectangular tang, sharply pointed at the end and twisted near the blade. This was obviously for insertion in a wooden handle. The third method is illustrated by the sickle and knife blades. Each of these had one end hammered and shaped into a cylindrical or slightly conical socket into which a wooden handle could be inserted. Traces of wood were actually found in two of them (Pl. 48:8–9), and each of these has an iron nail bent backward in the socket to hold the handle in position.

A horseshoe (Pl. 48:13) of the plate variety (*i.e.*, without prongs) was found in the narthex of the church (K 11:3) at floor level and thus is presumably not of very recent date. Its size suggests a rather small animal.<sup>50</sup>

In examining the numerous iron fragments from K 11:1, we noticed that some of them, which at first glance looked like broken spikes and eye-hooks, could be fitted together. The object thus formed (Pls. 48:12, 61:7), though by no means complete, suggests a bit. The curved projection from the middle of the bar presumably had a ring in the hole, a feature found in some of the spade bits commonly used in South America and probably introduced from Spain. With the reconstruction of our bit is shown a type of bit used in Argentina (Pl. 61:7–8).<sup>51</sup>

The bit and the horseshoe may be of interest in connection with the use of the horse at Khirbat al-Karak in the Early Islamic period.

Two flat iron rings (*ca.* 38 cm. in diameter, *ca.* 3 cm. thick) were found in room K 11:11 (*e.g.* Pl. 48:11). We have no suggestion as to their original use.

Among the iron objects from the tombs are bits of chains (Tombs 3, No. 37, and 4, No. 3), apparently used as ornaments, pendants (*e.g.* Pl. 45:23), a ring (Tomb 3, No. 66), and a fragmentary bracelet (Pl. 48:10). Fragments of three keys were found in Tomb 3 (*e.g.* Pl. 45:14).

<sup>50</sup> Apparently in medieval times horseshoes of more open shape rather than the slit-plate variety were used; see C. N. Johns, "Excavations at Pilgrims' Castle 'Atlit . . .,'" *QDAP* V (1936) 42–43 and Fig. 8.

<sup>51</sup> We are indebted to Mrs. Theodore D. Tieken for identifying our bit as a spade bit and for the time and effort she spent in finding a modern parallel for it.

## THE OBJECTS

49

## BRONZE

Very few bronze objects were found in the main dig, presumably because the use of the church did not come to a sudden end; more likely the building fell gradually into disuse and then perhaps was occupied by squatters who removed all valuable objects, including bronze (see pp. 58 f.). A bronze cross (Pl. 48:14) probably belonged to a church lamp. A small shallow receptacle with a piece of rod still attached to it (Pl. 48:16) is possibly part of a candelabrum. Plate 48:15 shows a small kohl spoon or ear scoop.

The tombs, though thoroughly plundered at various times, contained a number of bronze objects, chiefly ornaments. These are briefly described in the tombs catalogue (pp. 60–63), and some of them are illustrated on Plates 45–46.

## GOLD AND SILVER

Objects of precious metals are extremely rare. A gold band (BY 377; A 30368), probably a modern wedding ring, was found just below the surface in the main area. A hollow gold cylinder with beaded rim and two perforations may be part of either a ring or an earring (Pl. 45:7).

Bits of silver foil, wire (mostly in perforations of beads and pendants), earrings, and rings were found in Tombs 3 and 4. A fairly well preserved ring (Pl. 45:8) has a filigree bezel formed of four loops in a pattern reminiscent of some of the stamped designs on the "Late Roman" pottery (cf. Pl. 31).

## LEAD

A few fragments of folded sheets or bands are not recognizable objects or parts of objects.

## BONE AND SHELL OBJECTS

Such objects were extremely scarce in our excavations. Only two worked bone objects are well preserved—a pin (Pl. 47:17) and a small engraved disk (Pl. 47:16). A pendant of purplish shell (BY 445) was found in debris in room K 11:11 of the church complex.

## GLASS VESSELS

Glass fragments were abundant in the various areas of the excavations. It would seem that all the glass which we found was free-blown rather than mold-blown. The colors are pale, medium, and dark blue, pale blue-green, light yellow, amber, and brown. Plastic ornamentation consists of glass threads and bands wound around the neck (see e.g. Pls. 59:1–4, 60:5–6) and occasionally pinched lumps around the body (Pl. 50:9) or base.

Only a few complete specimens were recovered, mostly from tombs, but other complete shapes or at least characteristic features such as necks, handles, bodies, and bases could be reconstructed from fragments (see Pls. 50 and 59–60). Predominant in the church debris were "wine-glass" lamps with disk base and solid stem (Pls. 50:16 and 60:14–18), but there were none of goblet shape with beaded stems. Fragments of bottles and bowls also were found in the church, but bottles and flasks seem to have been more common in the tombs.

Large heaps of broken glass were found in rooms L 11:7 and L 11:13, a fact which may indicate that at one time broken glass was a fairly valuable material and that "scrap" was collected and melted for reuse.<sup>52</sup> Reuse of glass is demonstrated by the lower part of an unguentarium (Pl. 50:17) which was apparently made from a broken kohl tube that was heated and drawn anew at the break before the handles were added.<sup>53</sup>

<sup>52</sup> A similar situation was observed at Jerash (see *Gerasa*, pp. 514–15).

<sup>53</sup> We are indebted to Mrs. Ruth Amiran, who in turn mentioned Mr. D. B. Harden as the source of her information, for bringing this to our attention.

## STONE OBJECTS

Two fragments of sculpture, both earlier than our excavated buildings, were found imbedded in the masonry of the Arab building. They seem to be late Roman in style and carved of presumably imported marble. A small head (Pl. 49:1), the face of which seems to have been deliberately obliterated, according to Muslim practice, may perhaps be identified by the style of hair and beard. A fragment of a torso (Pl. 49:2), somewhat smaller than life-size, may be that of a female statue.

A large basalt slab with a beveled troughlike depression, which is slotted at the bottom and has a shallow depression at each end (p. 26, No. 4; Pls. 22:10 and 49:5), is similar to objects found elsewhere and interpreted as possibly window frames.<sup>54</sup> It seems to us that such a heavy slab could not be made to revolve safely as suggested but rather that it was the immobile part of a contrivance in which a basalt cylinder rotated, with its axle resting in the two end depressions (somewhat in the manner of a stamp-moistener). Such a contrivance could have served as a mill or a press. While no other objects of the kind were found in our excavations, there were numerous basalt grinding stones, fragments of flat and rotating querns, and conical (Pl. 49:6) and biconical (spool-shaped) millstones.

In addition, there were basalt mortars (e.g. Pl. 49:7), pestles (e.g. Pl. 49:11), and bowls of various shapes (e.g. Pl. 49:9, 12). Vessel fragments of finer-grained stone (sandstone?) occurred, occasionally with small lug handles (e.g. Pl. 49:13). A shallow oval container (Pl. 49:10) is of limestone.

## COINS

We found relatively few coins as compared to other excavations of ruins of the Byzantine period. As suggested above, the scarcity of valuable objects may be due to squatters who occupied the church after it ceased to be a place of worship (see p. 58). It may be of interest to note that all the coins found in tombs are perforated (e.g. Pl. 46:11-17), obviously for use as jewelry, while not a single perforated coin was found elsewhere in the excavations (e.g. Pl. 47:1-15). All identified coins are listed in the table on pages 51-52.<sup>55</sup>

<sup>54</sup> See Frederick Jones Bliss and R. A. Stewart Macalister, *Excavations in Palestine during the Years 1898-1900* (London, 1902) p. 143 and Pl. 73:2z; *Samaria* I 338 and Fig. 212.

<sup>55</sup> We wish to thank Miss Hannah Cox and Dr. George C. Miles, respectively, for identifying the Byzantine and the Islamic coins which were brought to Chicago and Mr. L. Y. Rahmani, Keeper of Coins in the Department of Antiquities of the Government of Israel, for identifying the coins from Tomb 3, which were kept in Jerusalem.

## IDENTIFIED COINS

No.	Field No. and Museum No.	Provenience	Material	Maximum Diameter (mm.)	Ruler or Dynasty	Mint	Date (Christian Era)	References	Remarks
1	BY 507 A 30402	J 11:8	Ar.	17	Julia Domna	Rome	ca. 196-211	Harold Mattingly and Edward A. Sydenham, <i>The Roman Imperial Coinage</i> IV 1 (London, 1936) p. 167, No. 548	See Pl. 47:1
2	BY 378 A 30369	L 11:12	Ae.	23	ca. Caracalla to Alex. Severus	Unknown	3d cent.		
3	BY 532 A 30422	J 11:8	Ae.	22	Licinius Sr.	Siscia	ca. 312/13	Jules Maurice, <i>Numismatique constantinienne</i> II (Paris, 1911) 317, No. I 1 <sup>o</sup>	
4	Jer. 53-122	Tomb 3 (No. 3)	Ae.	25	Anastasius I	Constantinople	491-518	<i>BMC</i> , p. 5, No. 36	Pierced; see Pl. 46:15
5	Jer. 53-127	Tomb 3 (No. 10)	Ae.	39	Anastasius I	Constantinople	491-518	<i>BMC</i> , p. 4, Nos. 24 ff.	Pierced; see Pl. 46:14
6	BY 530 A 30420	J 11:6?	Ae.	20	Anastasius I	Nicomedia	491-518	<i>BMC</i> , p. 8, No. 63	
7	BY 534b A 30424	J 11:6	Ae.	30	Anastasius I	Constantinople	491-518	<i>BMC</i> , p. 4, Nos. 24 ff.	See Pl. 47:2
8	Jer. 53-128	Tomb 3 (No. 4)	Ae.		Anastasius I?		491-518?		K coin (20 nummia), badly worn, pierced; see Pl. 46:13
9	A 30447	Tomb 4 (No. 16)	Ae.	32	Justinian	Antioch	ca. 529-39	<i>BMC</i> , p. 54, No. 270	Pierced; see Pl. 46:16
10	BY 392 A 30372B	J 11:2	Ae.	28	Justin II	Uncertain	565-78	Cf. <i>BMC</i> , p. 88, No. 149	See Pl. 47:3
11	BY 418 A 30377	K 11:11 floor	Ae.	31	Justin II	Constantinople	574/75	<i>BMC</i> , p. 81, No. 74	See Pl. 47:4
12	A 30446	Tomb 4 (No. 15)	Ae.	30	Justin II	Nicomedia	574/75	<i>BMC</i> , p. 88, No. 149	Pierced; see Pl. 46:17
13	BY 291 A 30347	L 10:7	Ae.	28	Justin II	Cyzicus	576/77	<i>BMC</i> , p. 90, No. 184	
14	BY 292a A 30348A	L 11:11	Ae.	25	Heraclius	Constantinople	ca. 634/35	Cf. <i>BMC</i> , p. 205, Nos. 163-64	Broken
15	BY 374 A 30366	Surface	Ae.		Constans II	Constantinople	ca. 641-51	Cf. <i>BMC</i> , p. 268, Nos. 101 ff.	
16	BY 293 A 30349	L 10:9 floor	Ae.	18	Constans II	Constantinople	655/56	<i>BMC</i> , p. 274, Nos. 157-58	Broken
17	BY 297 A 30352	L 11:13	Ae.	19	Umayyad	Damascus	Middle 7th cent.	Cf. Lavoix, No. 9; <i>COCBM</i> Add. I 4, No. 4	No date; see Pl. 47:5
18	BY 223 A 30336	West of church	Ae.	18	Umayyad		End 7th cent.		No mint, no date, declaration of faith only; see Pl. 47:6
19	BY 323 A 30357	Dump	Ae.	15	Umayyad		End 7th cent.		No mint, no date, declaration of faith only
20	BY 503 A 30399	J 11:1	Ae.	17	Umayyad		End 7th cent.		No mint, no date, declaration of faith only; see Pl. 47:7
21	BY 533 A 30423	J 11:6	Ae.	20	Umayyad		End 7th cent.		No mint, no date, declaration of faith only
22	BY 222 A 30335	Surface	Ae.	14	Umayyad		End 7th-early 8th cent.		Effaced
23	BY 322 A 30356	K 11:3 (in plaster floor)	Ae.	19	Umayyad		End 7th-early 8th cent.		Effaced
24	BY 10 A 30315	Sounding J 9:1	Ar.	27	Umayyad	Wasit	705/6 (86 A.H.)	<i>COCBM</i> I 27, No. 172	Part missing; see Pl. 47:14

## IDENTIFIED COINS—Continued

No.	Field No. and Museum No.	Provenience	Material	Maximum Diameter (mm.)	Ruler or Dynasty	Mint	Date (Christian Era)	References	Remarks
25	BY 290 A 30346	Surface	Ae.	19	Umayyad		1st quarter 8th cent.	Cf. Lavoix, Nos. 1542-45	No mint, no date
26	BY 504 A 30400	J 11:8	Ae.	21	Umayyad	al-Urdunn	1st quarter 8th cent.	Cf. <i>ibid.</i> Nos. 1385-86	No date; see Pl. 47:8
27	BY 393 A 30372A	K 10:2	Ae.	16	Marwan ibn Ba- shir	Hims	1st quarter 8th cent.	Cf. <i>ibid.</i> No. 1418	No date
28	BY 320 A 30354	K 10:1 floor	Ae.	25	Umayyad	al-Urdunn	1st quarter 8th cent.	Cf. <i>ibid.</i> Nos. 1385-86	No date; see Pl. 47:9
29	BY 529 A 30419	K 11:5	Ae.	19	Umayyad	Probably al-Ram- lah	1st quarter 8th cent.		Mint and date, if any, effaced
30	BY 9 A 30314	Sounding J 9:1	Ae.	10-18	Umayyad		1st quarter 8th cent.	Cf. George C. Miles, <i>Rare Islamic Coins</i> (NNM No. 118 [1950]) No. 90	36 coins (1.3-4 mm. thick); no mint, no date; see Pl. 47:10 for example
31	BY 220 A 30333	Surface	Ar.	32	Umayyad	Wasit	730/31 (112 A.H.)	COCBM I 30, No. 195	Silver plated(?); see Pl. 47:13
32	BY 221 A 30334	L 11:4	Ae.	17	Abbasid	Effaced	2d half 8th cent.		Date effaced
33	BY 20 A 30319	Sounding H 9:1	Ae.	23	Anony- mous	Constan- tinople	ca. 1081-93	See Alfred R. Bellinger, <i>The Anonymous Byzantine Bronze</i> (NNM No. 35 [1928]) p. 22	See Pl. 47:11
34	BY 21 A 30320	Sounding H 9:1	Ae.	26	Anony- mous	Constan- tinople	ca. 1081-93	See <i>ibid.</i>	See Pl. 47:12
35	BY 219 A 30332	Dump	Ar.	20		Ulm	ca. 1150-90	Cf. J. Cahn, <i>Munz- und Gelbgeschichte von Konstanz und des Bodenseegebietes im Mittelalter</i> (Heidelberg, 1911) No. 220	Bracteate of Imperial Mint of Ulm on Danube; see Pl. 47:15



## THE MOSAIC INSCRIPTIONS

By CARL H. KRAELING

THE excavations yielded four fragmentary inscriptions which formed part of the mosaic paving of the church. The texts are commemorative and devotional. Since the mortar in which the mosaic was laid was of poor quality and crumbling, it was felt that some of the sections that were still in relatively good condition should be removed and reset for preservation in a museum. Thus, Inscription 1 may now be seen in the Oriental Institute Museum.

## INSCRIPTION 1

In the hall of the diaconicon (L 10:9; see Pl. 13), directly in front of the apse. The inscription is set in a rectangular panel (0.50 × 3.85 m.) and contains three lines of text, whose letters are about 9 cm. high and composed of black tesserae set in a white field surrounded by a black border (Pl. 51 A).

- |           |   |
|-----------|---|
| 1. † [    | Θ]εοδώρω Μάγιστρ(ο)ς καὶ Θεοφιλᾶς καὶ Βασίλ[ω]              |
| 2. Ἐπισ[  | ἐγέ]νετο ἡ ψιφῶσις τοῦ μεσαύλου καὶ τοῦ διακονικῶ           |
| 3. ἐπὶ τ[ | ] πρε(σβυτέρων) Ἡλιοῦ καὶ Βασίλου ἰνδικτιῶνος Ζ' ἔτους φ̄ρα |

† [Christ help] Theodore Magister and Theophilus and Basil. [Gloriously] was executed the paving of the communicating hall and of the diaconicon under [the pious] presbyters Elijah and Basil in Indiction 7, year 591 (A.D. 528/29).

*Line 1.*—The common formula *Χρίστε βοήθι* fits the lacuna, is appropriate to the use of the dative in the names that are declined, and, incidentally, makes line 1 a separate sentence. The title *Μάγιστρ(ο)ς*, uninflected after a proper name in an oblique case,<sup>1</sup> is probably used here to designate a lesser official such as the *magister vici* or the *magister pagi*, not the important *magister officiorum* of the Byzantine court.<sup>2</sup> It is natural to suppose that the Basil of line 1 is identical with the presbyter Basil of line 3. The doubling of the *s* in Basil's name is typical of later spelling.<sup>3</sup>

*Line 2.*—Before *ἐγέ]νετο*, at the beginning of the new sentence, an adverb would be suitable. The typical *εὐτυχῶς* being out of the question, one might reconstruct *ἐπισ[ημῶς*,<sup>4</sup> which would fill the space properly, but *ἐπὶ σ[οὶ κ(ύρι)ε* and *ἐπιε[ικῶς* also would be possible. Of the two words *μεσαύλου* and *διακονικόν*, the latter must refer to the room in which the inscription has its place and the former to the anteroom (L 10:12) adjoining it to the west, through which access is provided into the *domus*. The words *μεσαύλιον* and *μεσίαυλον* are used by Theophanes<sup>5</sup> and Cedrenus<sup>6</sup> to refer to parts of church buildings, but there is little to indicate

<sup>1</sup> As in text published in *Syria* VII (1926) 106, No. 2.

<sup>2</sup> See Arthur E. R. Boak and James E. Dunlap, *Two Studies in Later Roman and Byzantine Administration* ("University of Michigan Studies, Humanistic Series" XIV [London, 1924]) pp. 131–33, and comment of Charles Diehl in *Syria* VII 116 in relation to the text referred to in n. 1 above. On the use of the long diagonal stroke as a sign of abbreviation, as after "Magister" in line 1 and after "presbyters" in line 3, see M. Avi-Yonah, "Abbreviations in Greek inscriptions," *QDAP* IX Supplement (1940) pp. 35–36.

<sup>3</sup> Cf. e.g. the parallel pair *βασσῶνις* and *βεσῶνις* in *IGLS*, Nos. 314 and 269.

<sup>4</sup> See *IGSL*, No. 1302.

<sup>5</sup> Ed. Carolus de Boor (Leipzig, 1883–85) I 176, lines 25–26, and 240, lines 20–22.

<sup>6</sup> Ed. G. B. Niebuhr (Bonn, 1838–39) I 679, line 21.

any special function for the rooms so designated, if, indeed, they were not open courts. The diaconicon was, of course, a vestiary where deacons assisted in robing the officiating clergy and where the vessels and elements of the sacrifice were prepared in advance of their use in the liturgy.<sup>7</sup> Perhaps, because of the peculiarly shaped basin or font set in its apse (see p. 18), the diaconicon at Khirbat al-Karak served also as a baptistery.

*Line 3.*—To fill the lacuna at the beginning of the line, the letters of the typical  $\tau[\eta \sigma\pi\omicron\upsilon\delta\eta]$  do not suffice. Another possibility would be  $\epsilon\pi\iota \tau[\omega\nu \delta\sigma\acute{\iota}\omega\nu] \pi\rho\epsilon(\sigma\beta\upsilon\tau\acute{\epsilon}\rho\omega\nu)$ . The date, year 591, corresponds to A.D. 528/29 if we assume that the era used is basically the Pompeian, of which the year 1 began in 63 B.C. The assumption is borne out by the agreement with the year of the indiction. The Pompeian era continued in use throughout the Byzantine period, for instance at Gerasa,<sup>8</sup> and its use at Khirbat al-Karak is made likely by the observation that in the period under discussion the site lay on the east bank of the Jordan, forming the westernmost settlement of the Transjordanian region. The script of the inscription, the architecture of the church, and the character of the finds are at one in ruling out a much earlier date.

#### INSCRIPTION 2

In the apse of the diaconicon, directly in front of the sunken basin or font (for location see Pl. 26:1). The inscription is set in a rectangular panel (0.50 × 1.67 m.) and contains three lines of text, whose letters are about 9 cm. high and composed of black tesserae set in a white field surrounded by a black border. Not enough is preserved to permit a reconstruction (Pl. 51 B).

#### INSCRIPTION 3

In the southern apse of the *domus*, in the surround between the mosaic border and the apse wall (for location see Pl. 25). The inscription covers an area about 70 cm. long and has letters (ca. 5–10 cm. high) composed of black tesserae (Pl. 51 C). It seems to consist of two proper names (or words) written one in Greek, at the left of the break in the middle of the field, and the other probably in Syriac, at the right of the break.

At left:  $\beta\alpha\pi[ \quad ]$  At right: . . . .

#### INSCRIPTION 4

In the west-central part of the atrium (J 11:1; see Pl. 13). The inscription is inclosed in a representation of a *tabula ansata*, whose field is 55 cm. high and of which a section 1.22 m. long is preserved. There are two lines of text, whose letters are about 15.7 cm. high and composed of black tesserae set in a white field (Pl. 51 D).

1. [  $\phi\acute{\upsilon}$ ]λαξον
2. [  $\pi$ ]ρ(εσβυτέρου)ς Ἀμῆν

(Lord,) protect the presbyters. Amen.

*Line 1.*—In its complete form the *tabula* could have been up to 2.22 m. long, but, since the preserved portion provides space for only five letters, we must reconstruct the line to read merely  $[K(\acute{\upsilon}\rho\iota)\epsilon \phi\acute{\upsilon}]λαξον$ .

*Line 2.*—The beginning of the text suggests the appropriate use at this point of the familiar and common quotation from Ps. 121:8 (LXX: Ps. 120:8): “The Lord will keep thy going out and thy coming in.”<sup>9</sup> But the reference, if any, is obscure. At the beginning of what is preserved of line 2 we have the loop of what can only have been *rho* followed by a short diagonal stroke

<sup>7</sup> See H. Leclercq in Fernand Cabrol, *Dictionnaire d'archéologie chrétienne et de liturgie* (Paris, 1907—) s.v.

<sup>8</sup> See C. B. Welles in *Gerasa*, p. 358.

<sup>9</sup> See *IGLS*, Nos. 223, 431, 642, 1598, 1784, etc.

slightly above the line and then a long diagonal stroke across the line. The short diagonal stroke is slightly curved at its lower end and may thus represent the sign S used, among other things, also for a final *sigma* in an abbreviated word and found in the rendering of *Μάγιστρος* in Inscription 1, line 1 (see Pl. 51 A). The long diagonal stroke thus becomes the sign for the abbreviation itself, as is proper.<sup>10</sup> The limitations of space being what they are, we can only reconstruct line 2 as [τοὺς π]ρ(εσβυτέρου)ς Ἀμῆν. The reference may well be to the presbyters Elijah and Basil mentioned in Inscription 1, line 3.

<sup>10</sup> On the S sign see Avi-Yonah, *op. cit.* pp. 37–38.

## CONCLUDING REMARKS

*By P. DELOUGAZ*

**A**N EXCAVATION report, especially one dealing with well documented historical periods, would be incomplete without some attempt to examine the archeological evidence against the wider background of historical knowledge. Such scrutiny, one hopes, may be useful in several respects. It may serve to verify the compatibility of the new evidence with known historical developments; to suggest more adequate interpretations of some aspects of this evidence; and, finally, to indicate whether some of the new evidence, in turn, contributes any sidelights to the wider historical picture.

Although prominent during the Early Bronze period and inhabited during the Middle Bronze period, Khirbat al-Karak was apparently subsequently unoccupied until the Persian period. During the Hellenistic period the site was again important, for considerable areas of private houses and a strong fortification system now dated to that period have been cleared at the south end of the mound. Sherds of Hellenistic pottery and stamped Rhodian jar handles have been found in various parts of the site (see pp. 30–31) and suggest larger areas of occupation during the Hellenistic period than those yet excavated. During the Roman period Khirbat al-Karak continued to be occupied, apparently on a considerable scale. Two important Roman buildings, probably erected at different times, were discovered and excavated prior to our campaign. These are a fairly elaborate thermal establishment<sup>1</sup> and a fort,<sup>2</sup> built of ashlar masonry on rubble foundations, which was found to contain remains of a large synagogue. The fort is only about fifty meters south of our own excavation area (see Pl. 2), and the bath adjoins it to the south. In the preliminary report the fort is provisionally dated to the 2d–3d centuries of our era; the original bath to the 4th or 5th century, since part of it rested on a wall of the fort; and repairs of the bath to the 6th century. The proximity, in both location and time, of these buildings to our church makes them of special interest to us. Fragments of marble sculptures (see p. 50) and worked stones used secondarily in the buildings which we excavated are further indications of substantial structures at Khirbat al-Karak during the Roman period.

In contrast to the Roman structures, the church, in spite of its considerable extent at the peak of its architectural development, gives the impression of relative flimsiness and poverty. This impression is gained not merely from the fact that all the worked stone parts such as column drums (see p. 13), marble facings (see p. 18), and doorjambs (see p. 19) were not made for the church itself but were reused from earlier destroyed buildings—an accepted practice in Byzantine times—but also from such features as the thinness of the walls, the poor workmanship, and the irregular alignment and neglect in bonding of newly added parts of the structure. The church remains anonymous; it is not identified in the dated dedicatory inscription (see p. 53, Inscription 1), and no other indications as to its identification were found. Its relative unimportance probably reflects the status of the Christian community that worshiped in it and perhaps that of the town in Byzantine and early Muslim times. The synagogue men-

<sup>1</sup> Excavated on behalf of the Jewish Palestine Exploration Society in 1945/46 by Stekelis and Avi-Yonah (see *IEJ* II 218–22).

<sup>2</sup> Discovered by Stekelis and Avi-Yonah (see *ibid.* pp. 222–23) and excavated by Guy in behalf of the Department of Antiquities of Israel in 1950. It has not been fully published because of Guy's subsequent illness and untimely death.

tioned above also may reflect the status of the Christian community. Located inside the Roman fort, it is considered<sup>3</sup> to have been built possibly at the end of the 5th or early in the 6th century, and thus it may have been contemporary with some phase of the church. Consequently, it would seem that a Christian and a Jewish community lived side by side and, moreover, since the synagogue was a considerably more substantial structure than the church, that the Jewish community was perhaps for a time the stronger and the wealthier of the two.

Another indication that Khirbat al-Karak was by now relatively unimportant is the fact that the Byzantine rulers located the regional capital at Scythopolis (Beth Shan), some distance to the south, and the Muslim conquerors established the administrative center of Jund al-Urdun (district of the Jordan) at Tiberias, only five miles to the north.

In tracing the growth of the church (pp. 20-22) we have seen that it reached the peak of its architectural development with the addition of the diaconicon in A.D. 528/29, early in the reign of Justinian. But, of course, enlargement of this relatively unimportant structure was not part of the great expansion of church buildings throughout the Empire which so distinguished his reign.

One feature of the expanded church which is somewhat difficult to explain is the cistern in the atrium (p. 9). With an abundant water supply available from both the river<sup>4</sup> and the lake, a cistern for the collection of rain water would seem superfluous. One may seek an explanation either in an assumption that a cistern was considered an essential element of a church complex or in a practical consideration connected somehow with a possible qualitative difference between rain water, on the one hand, and lake and river water, on the other. In this connection it is worth noting that the Roman bath mentioned above had its water supply not from the lake but through an elaborate stone and terra-cotta pipe line apparently connected with the great Roman aqueduct which supplied Tiberias and which originated in the hills to the west, in the Wadi Fajjas.<sup>5</sup> The presence of the cistern in the church would indicate either that the pipe line was no longer usable by the time the cistern was constructed or that the church community lacked the means to take advantage of it. Whatever the reasons for the building of the cistern, it provides, as we shall see, a useful clue to the history of the church in a later phase.

For an undetermined length of time after it reached the peak of its architectural development the church was apparently well tended and kept in fairly good repair. There are no indications that it was damaged by the disastrous earthquakes that shook parts of Palestine and Syria during the second half of the 6th century (especially between A.D. 551 and 555).

However, if no traces of sudden destruction by either natural forces or human hands are discernible, there are many signs first of a process of gradual impoverishment and contraction (by the blocking of doorways), then of a period of neglect and encroachment, and finally of the tearing-down of what must have been largely ruins and their leveling in preparation for the construction of the new Arab building. One may assume that the maintenance of the church in fairly good repair, after its last expansion early in the reign of Justinian, continued at least through his reign and probably through the reigns of his successors Justin II (565-78) and Tiberius II (578-82), that is, for some fifty years. Such phenomena as the crude patching of the floor mosaics in the narthex and the anteroom to the diaconicon with large white tesserae (see pp. 12 and 17), without any attempt to restore or even copy the still visible patterns of the preserved parts of the pavements, are undeniable signs of impoverishment yet at the same time indications that attention was still given to the maintenance of the church.

<sup>3</sup> By Mr. Shmuel Yeivin.

<sup>4</sup> The Jordan at that time flowed out of the lake just north of the northern tip of the mound and passed west of the site in its southerly course, so that the river was once much nearer the church than it is now.

<sup>5</sup> See *IEJ* II 222.

This process may have begun toward the turn of the century during the reign of Maurice (582–602).

It takes but little imagination to visualize a distinct correspondence between the history of the church and contemporary (i.e., in the 6th–7th centuries) historical events in this region. The play of the historical factors which affected the destiny of large territories may be seen reflected in the vicissitudes of this modest church. The constant theological controversies that, in spite of sporadic attempts at reconciliation, created the schism between the Western and the Eastern Monophysite (heretic) branches of the church, the economic instability due partly to the policies of high taxation, and the wars at the peripheries of the Empire in Europe, Africa, and Asia were among the weakening elements that had already begun during the long and eventful reign of Justinian. While his immediate successor tried to remedy some of these ills, especially the economic policies, the trend continued, and a situation of near-anarchy was reached during the reign of Phocas (602–10). The reduction in the size of our church as a result of the blocking of doorways (see p. 22) may reflect this situation. While the reign of Heraclius brought some relief to the Empire, on the whole the weaknesses continued in the province with which we are concerned. The wars with Persia lasted for nearly half a century, and in 614 Jerusalem fell to the Persians in spite of the victories of Heraclius. The widening schism between Christian factions and the new interreligious strife between Christians and Jews, which led to riots and massacres, further disrupted the stability of the province. The banning of Jews from Jerusalem in 630 and the edict of 634 for their conversion and baptism could but heighten the antagonism of the population toward their Byzantine masters. Both the Christians, declared heretics by Chalcedon, and the persecuted Jews undoubtedly felt that the theology of Islam was closer to their own than that of orthodox Western Christian dogma. Under such circumstances conversion to the new religion would not be difficult. Moreover, conversion would entail substantial economic advantages, for, while the Muslim conquerors continued on the whole the tax system of their predecessors, they also levied special tribute on infidels, from which Muslims were exempt.

Thus one can imagine that the outcome of the momentous battle on the Yarmuk in 636, though it occurred only a short distance away, had no great effect on our site. Indeed, no traces of destruction that can be attributed to the Muslim conquest are discernible in the church. One may assume that, in common with large segments of the population, the community of Khirbat al-Karak abandoned Christianity and that the already impoverished church ceased to be a place of Christian worship but was not abandoned abruptly. There is some evidence that the building was used after it ceased to be a place of worship. The further blocking of doorways, which would have disrupted normal communication and isolated various parts of the building, seems hardly compatible with the functioning of even an impoverished church. Other indications are provided by the nearly complete lack of objects which can be associated with a church and by evidence of at least two phases of very poor secondary construction over the area of the atrium. The raising of the wellhead of the cistern corresponded to one of these phases (see p. 4) and indicates that the cistern continued to be used and thus, since it was supplied by rain water collected on the roof of the narthex and other units adjacent to the atrium, that at least parts of the church were still roofed and the drains leading into the cistern still functioning and in use after the secondary buildings were erected. The fact that a coin of Constans II (p. 51, No. 16), dated A.D. 655/56, was found on the floor of the diaconicon near the mosaic inscription shows that that room was still being used at least twenty years after the Muslim conquest.

One gains the impression that squatters, probably neighbors or families connected with the church, appropriated and occupied it as neglected public property. Such use would explain

not only the extreme paucity in the church of objects which can be associated with it<sup>6</sup> but also the disappearance with scarcely a trace of such features as the altar (see p. 14), the chancel posts<sup>7</sup> and railing (see p. 21), and large areas of mosaic pavement.

It is probable that during the occupation by squatters the neglect was such that parts of the church became ruins. Traces of fire in two sections of the building (see p. 14) and the disappearance of some of the columns (see p. 13), without which the roof over the basilica could not be supported, substantiate this view. This final phase in the history of the building was terminated by the tearing-down of the still-standing walls and the rough leveling of the resulting debris (see Pl. 18 A) in preparation for the construction of the Arab building.

There is no way of accurately dating the construction of the Arab building. However, it followed immediately the final phase of the church. At some points its walls rest directly on walls of the church, and at other points earlier stonework such as the leveled southern apse of the *domus* were incorporated into its paving (see p. 5). Thus it would seem that the structure is Umayyad, built possibly during the first half of the Umayyad period (i.e., around A.D. 700). The coins and the glazed pottery found in our excavations provide evidence for substantiating this date. All but one of the Islamic coins are Umayyad (pp. 51-52, Nos. 17-32), and early Umayyad glazed sherds were found in the Arab building (Pl. 62:1-2). One can imagine that when the Muslim administration of the region became firmly established and the need for a public building arose, the presence of squatters in the area of the former church was noticed, and they were moved to make way for the new building.

Some of the building material from the church was probably salvaged and reused in the Arab building. On the other hand, incorporated in it, especially in the pavements of rooms L 11:1 and L 11:3, were well cut stone blocks, jambs, sills, and other architectural elements which appeared to have come from the Roman fort and the synagogue. Whether the synagogue had a history parallel to that of the church or whether it suffered violent destruction, perhaps at the time of interreligious strife toward the end of the period of Byzantine rule, we do not know. In any case, however, the use of some of its masonry in the Arab building indicates that the latest possible date of its existence as an intact structure was before the end of the Umayyad period.

<sup>6</sup> In addition to the few objects found in Tomb K 11:15 (see p. 63), perhaps only those shown on Pl. 48:14 and 16. Thus it becomes clear that in the sections shown on Pl. 18 A, in the "level" column of the tables facing Pls. 30-62, and in Table I the designation "church" applies strictly to architectural remains, not to objects; the latter are not associated with the church as such but are later. The designations "pre-church" and "post-church" refer to remains found, respectively, below and above the church.

<sup>7</sup> The only chancel post was found outside the *domus* (see p. 19).

## CATALOGUE OF OBJECTS FOUND IN THE TOMBS

TOMB 3 (see p. 29)<sup>1</sup>

No.	Description	See Pl.	Museum No.
1	Complete glass flask	50:1	Jer. 53-120
2	Bronze ring	45:15	Jer. 53-121
3	Bronze coin reused as pendant (p. 51, No. 4)	46:15	Jer. 53-122
4	Bronze coin reused as pendant (p. 51, No. 8)	46:13	Jer. 53-128
5	Chipped gnostic gem with Greek inscription	45:1	Jer. 53-158
6	Bronze pendant in form of closed crescent; w. 5.6 cm., h. 4.8 cm.; loop: w. 0.7 cm., h. 1 cm.		Jer. 53-123
7	Bronze ring	45:12	Jer. 53-124
8	Bronze ring with broken loop; d. 2.5 cm., d. of loop 1.8 cm.		Jer. 53-125
9	Bronze ring	45:18	Jer. 53-126
10	Bronze coin reused as pendant (p. 51, No. 5)	46:14	Jer. 53-127
11	Bronze coin reused as pendant	46:12	Jer. 53-129
12	Open bronze bell (cf. No. 44); d. at base 2.2 cm., h. 2 cm., w. of loop 0.8 cm.		Jer. 53-130
13	Bronze bell; d. at base 2 cm., h. 1.9 cm., w. of loop 0.8 cm.		Jer. 53-131
14	Bronze bell, squashed; h. 1.8 cm., w. of loop 0.7 cm.		Jer. 53-187
15	Bronze bell, broken and squashed, traces of clapper; h. 2.5 cm., w. of loop 0.9 cm.		Jer. 53-160
16	Bronze hemisphere with hole at top; d. 2.4 cm., h. 1.5 cm.		Jer. 53-132
17	Bronze hemisphere with hole at top; d. 2.3 cm., h. 1.1 cm.		Jer. 53-161
18	Bronze hemisphere with hole at top, broken; d. 2.3 cm., h. 1 cm.		Jer. 53-133
19	Bead pendant	45:9	Jer. 53-134
20	Bronze pendant	45:21	Jer. 53-135
21	Bronze pendant	45:22	Jer. 53-136
22	Bronze pendant	45:20	Jer. 53-137
23	Upper part of oval pendant; l. 4 cm., w. of loop 1 cm.		Jer. 53-162
24	Upper part of oval pendant; l. 4 cm., w. of loop 1 cm.		Jer. 53-163
25	Upper and lower fragments of oval pendant, loop broken; l. 2.5 and 1.6 cm., respectively		Jer. 53-188
26	Closed bronze bell	45:32	Jer. 53-138
27	Bronze ring	45:17	Jer. 53-139
28	Bronze ring	45:16	Jer. 53-140
29	Closed bronze bell	45:28	Jer. 53-141
30	Closed bronze bell frag., decoration around neck, traces of iron clapper; h. 2.8 cm.		Jer. 53-164
31	Closed bronze bell frag., remains of iron clapper		Jer. 53-165
32	Bronze ring frag., paste bezel		Jer. 53-166
33	Bronze ring frag., iron bezel		Jer. 53-167
34	Bronze(?) bottle rim		Jer. 53-168
35	Iron key with horizontal ring, broken, badly corroded; l. 2.8 cm., d. of ring 2.8 cm.		Jer. 53-169

<sup>1</sup> Nos. 1-5 were found in fill ca. 1.70 m. below the surface near the east end of the tomb, Nos. 6-63 near the bottom of the eastern half of the tomb within a layer of crushed bones, and Nos. 64-79 near the floor at the west end. The entire yield of the tomb (except No. 79) was kept in Jerusalem. It will be noted that museum accession numbers were not assigned to some of the more fragmentary objects from the tombs and to some duplicates.



## CATALOGUE OF OBJECTS FOUND IN THE TOMBS

61

No.	Description	See Pl.	Museum No.
36	Iron key, broken into two pieces, badly corroded; l. 2.8 cm., d. of ring 3 cm.		Jer. 53-170
37	Chain of twisted iron wire		Jer. 53-171
38	Iron key	45:14	Jer. 53-142
39	Closed bronze bell	45:31	Jer. 53-143
40	Closed bronze bell (cf. No. 26)		Jer. 53-144
41	Closed bronze bell (cf. No. 26)		Jer. 53-145
42	Closed bronze bell	45:30	Jer. 53-146
43	Closed bronze bell with clapper	45:29	Jer. 53-147
44	Open bronze bell	45:24	Jer. 53-148
45	Upper part of open bronze bell (cf. No. 12)		Jer. 53-173
46	Upper part of oval bronze pendant (cf. No. 20); h. 2.9 cm.		Jer. 53-174
47	Bronze pendant	45:19	Jer. 53-149
48	Lower part of oval bronze pendant; h. 3.2 cm., w. 2.5 cm.		Jer. 53-175
49	Four fragments of bronze band (bracelet?)		
50	Iron sickle blade	48:7	Jer. 53-176
51	Iron sickle blade frag.; l. 12.5 cm., w. 2.8 cm.		Jer. 53-150
52	Carnelian signet	45:2	Jer. 53-151
53	Fifty-one beads	46:9	Jer. 53-152
54	Lower part of glass unguentarium	50:17	Jer. 53-153
55	Glass unguentarium with bronze applicator	50:18	Jer. 53-154
56	Bronze chain frag. with twisted-wire and bead pendants	46:3	Jer. 53-155
57-59	Fragments of three "wine-glass" lamps		Jer. 53-189
60	Fifteen fragments of dark blue glass handles		Jer. 53-177
61	Glass bottle		Jer. 53-184
62	Glass cup(?) fragments		Jer. 53-178
63	Glass cup(?) fragments		Jer. 53-190
64	Iron pendant	45:23	Jer. 53-156
65	Bronze ring	45:13	Jer. 53-157
66	Iron ring frag., bronze bezel		Jer. 53-179
67	Small round bronze box with traces of white crystalline sub- stance inside		Jer. 53-191
68	Iron pendant(?) frag. (cf. No. 64?)		Jer. 53-180
69	Seven fragments of bronze bracelet		Jer. 53-181
70	Three broken beads and two small beads		Jer. 53-152
71	Iron fragments		Jer. 53-192
72	Bronze fragments		Jer. 53-193
73	"Wine-glass" lamp fragments; restored h. 8.7 cm., restored d. of base 4.6 cm.		Jer. 53-182
74	"Wine-glass" lamp fragments; restored h. 8.5 cm., restored d. of base 4.4 cm.		Jer. 53-183
75	Glass bottle, broken		Jer. 53-185
76	Tall glass bottle, broken		Jer. 53-194
77	Glass jug (with handle?), broken		Jer. 53-195
78	Glass unguentarium with bronze applicator inside	50:11	Jer. 53-159
79	Glass juglet with handle, rosette design on base		A 30432
TOMB 4 (see p. 29)			
1	Iron blade	48:4	A 30433
2	Iron hammer-adz	48:1	A 30434
3	Iron chain fragments with piece of bronze ring		
4	Hollow bronze hemisphere		A 30435

*A BYZANTINE CHURCH AT KHIRBAT AL-KARAK*

No.	Description	See Pl.	Museum No.
5	Iron bracelet fragments	48:10	A 30436
6	Ribbed pottery jug in many fragments	35:7	A 30437
7	Complete pottery juglet	34:3, 56:11	A 30438
8a	Closed bronze bell	45:25	A 30440
8b	Closed bronze bell	45:26	A 30439A
8c	Closed bronze bell	45:27	A 30439B
8d	Closed bronze bell		A 30439C
9	Bronze and silver earring?		
10	Part of gold ring or earring	45:7	A 30441
11	Carnelian bezel of silver ring	45:3	A 30442
12	Carnelian signet	45:6	A 30443
13	Green glass hemispherical bezel		A 30444
14	Silver ring	45:8	A 30445
15	Bronze coin reused as pendant (p. 51, No. 12)	46:17	A 30446
16	Bronze coin reused as pendant (p. 51, No. 9)	46:16	A 30447
17	Etched carnelian bead with traces of silver wire	46:1	A 30448
18	Carnelian bead with traces of silver wire		A 30449
19	Translucent bead with traces of silver wire	46:2	A 30450
20	Black agate bead pendant	46:6	A 30451
21	Fifteen beads	46:7	A 30452
22	Two glass beads with traces of bronze chain		A 30453
23	About sixty paste and glass beads	46:4	A 30454
24	Small piece of silver foil		
25	Folded bronze foil		
26	Onyx(?) bead	46:8	A 30456
27	Very thin irregular octagon of clear colorless glass, slightly convex		A 30457
28	Bronze ring	45:5	A 30458
29	Complete glass bottle	50:9	A 30459
30	Glass bottle	50:14	A 30460
31	Glass bottle	50:7	A 30461
32	Glass bottle	50:8	A 30462
33	Glass unguentarium	50:12	A 30463
34	Glass bottle	50:15	A 30464
35	"Wine-glass" lamp fragments		A 30465
36	Green glass bottle	50:6	
37	Glass bracelet	46:11	A 30466
38	Iron sickle blade	48:8	A 30467
39	Bronze signet ring	45:4	A 30468
40	Neck of glass vessel	59:1	A 30469
41	Neck of glass bottle	59:2	A 30470
42	Lower part of glass flask	59:9	A 30471
43	Glass bottle(?) base	59:10	
44	Neck of glass bottle	59:22	
45	Neck of glass bottle	59:23	
46	Neck of glass vessel	59:24	
47	Neck frag. of glass bottle	59:32	
48	Neck of glass vessel	60:6	
49	"Wine-glass" lamp	60:23	
50	Pottery bag jar (found in fill)	35:8, 55:6	
51	Pottery jar (found in fill)	55:4	

## CATALOGUE OF OBJECTS FOUND IN THE TOMBS

63

## TOMB 4 OR 7

No.	Description	See Pl.	Museum No.
	Glass ring with glass inset	45:11	A 30486
TOMB 7 (see p. 29)			
1	Paste ring	45:10	A 30472
2	Thin glass disk; d. 1.6 cm.		A 30473
3	Long glass bead; l. 2.5 cm.		A 30474
4	Baked-clay plaque frag. with circle in relief	46:10	A 30475
5a	Fluted bead	46:5	A 30476
5b	Four oblong beads		
6	Neck of glass bottle	50:10	A 30477
7	Broken glass bottle		A 30478
8	Broken glass bottle	50:5	A 30479
9	Miniature glass bottle	50:19	A 30480
10	Complete glass bottle	50:4	A 30481
11	Complete glass vase	50:3	A 30482
12	Complete glass vase	50:2	A 30483
13	Complete glass pitcher	50:13	A 30484
TOMB K 11:15 (see pp. 15-16)			
1	Silver ring (BY 467)		A 30386
2	Three bronze cramps (BY 468)	48:17	A 31341
3	Broken iron handle (BY 469)		A 31340
4	Lead(?) frag. (BY 470)		
5	Complete pottery juglet (BY 502)	34:1, 56:8	A 30398
6	Bronze nail (BY 511)		



## GENERAL INDEX

- †Abbasid period, 41, 43–47, 52; *see also* Islamic period  
 Abel, F.-M., 25  
 Abi Nasr al-Basri, 44  
 Afghanistan, 39  
 Agora at Athens, 31, 32  
 Akhmim, 44  
 Albright, William F., 1, 2  
 Alexander Severus, 51  
 Alexandria, 31  
 altar, 14, 59  
 ambo, 14  
 American Philosophical Society, 40  
 American School of Classical Studies in Athens, 31  
 American School of Oriental Research in Jerusalem, 1  
 Amiran, Ruth, 49  
 analyses of clay and glaze, 40, 41  
 Anastasius, 24, 51  
 Anatolia, 2  
 animal burrows, 28  
 animal-shaped vessel, 47  
 Antioch, 31, 32, 40, 41, 45, 46, 51  
 apses, 6, 7, 12–14, 17, 20–24  
 Arabia, 41  
 arches, 9, 10, 23, 26  
 Ascalon, 47  
 ashes, 19  
 Assyrian period, 45  
 Athens, *see* Agora  
 Augustan period, 40  
 †Auja al-Hafir, 40, 41  
 Avi-Yonah, Michael, 1 f., 53, 55, 56  
  
 Baalbek, 24  
 badger(?) holes, 28  
 Baisan (Beth Shan), 2, 30, 34, 36, 39–42, 47  
 baked bricks, 18  
 Ballhorn, Elisheva, vi  
 baptistery, 23, 24, 54  
 Bar-Adon, Pessah, 2, 30  
 bars, iron, 48  
 basilican churches, 6, 12 f., 20, 22–24  
 basins, 8–10, 14, 16, 18, 21, 23, 54; catch —, 9 f., 22; *see also*  
   boxlike depressions  
 Basrah, 44  
 bath, Roman, 56, 57  
 beads, 49  
 Bellinger, Alfred R., 52  
 benches, 5, 10, 12, 14, 20  
 Ben-Zvi, Izhak, vi  
 Berlin Museum, 44  
 Beth Shan, *see* Baisan  
 Beth Yerah, 2; — Agricultural School, 1  
 biblical reference in Greek inscription, 54  
 bishop's throne, 20  
 bit, iron, 48  
 blades, iron, 48  
  
 Bliss, Frederick Jones, 50  
 blocked openings in church, 8–13, 19, 21, 22, 25, 57, 58  
 Boak, Arthur E. R., 53  
 bolts, iron, 48  
 Boor, Carolus de, 53  
 boxlike depressions in floors, 14, 15  
 bracelet, iron, 48  
 Brad, 23  
 Breasted, James H., v  
 British Mandatory Government of Palestine, 1, 3  
 British Museum, 31, 44  
 Brookhaven National Laboratory, 40  
 Butler, Howard Crosby, 9, 22–24  
 Byzantine period, 2, 28, 33, 36, 45, 50, 54, 57–59  
  
 Cabrol, Fernand, 54  
 Cahn, J., 52  
 candelabrum, bronze, 49  
 Caracalla, 51  
 catechumens, 24  
 Cedrenus, 53  
 chains, iron, 48  
 Chalcedon, 24, 58  
 chancel, 14 f., 19–21, 23, 24, 26, 59  
 Chinese pottery, imitation of, 41, 47  
 chisel, iron, 48  
 Christian symbol on lamp, 39  
 Church of the Multiplication of the Loaves and Fishes at  
   al-Tabgha, 23  
 Cilicia, 40; *see also* Tarsus  
 cistern in atrium of church, 4, 9, 21, 57, 58  
 coins, 50–52, 58, 59  
 colored plaster, 7  
 Colt, H. D., 31  
 columns, 8, 12, 13, 17, 20, 21, 23, 24, 27, 28, 59; *see also*  
   piers  
 Constans II, coins of, 51, 58  
 Constantinople, mint, 51, 52  
 Corinthian capital, 26  
 Cox, Hannah, 50  
 cramps, bronze, 16  
 cross, bronze, 49  
 cross motifs, 15, 18, 39  
 Crowfoot, Grace M., xi  
 Crowfoot, J. W., xi, 23, 24  
 Cyzicus, mint, 51  
  
 Daganayah, vi  
 Damascus, 1, 41, 51  
 Day, Florence E., vi, 40, 42, 44–46  
 Delougaz, Pinhas, v, vi, 1, 27, 28, 30, 56  
 Delougaz, Mrs. Pinhas, v  
 Diehl, Charles, 53  
 Di-nur, Ben-Zion, vi  
 disk, bone, 49  
 doors and doorways, 5, 7, 8, 10–13, 19, 27

- Dothan, Trude, vi, 30  
 drains, 9 f., 12, 16, 18  
 Duncan, J. Garrow, xi  
 Dunlap, James E., 53  
 Dura, 43  
 dwellings, Hellenistic, 56
- ear scoop, bronze, 49  
 Early Bronze Age, 1-3, 25, 28, 56  
 earrings, metal, 49  
 Egypt, 44  
 eye-hooks, iron, 48
- Fajjas, Wadi, 57  
 female statue, 50  
 fire, traces of, 11, 14, 19, 27, 59  
 Fisher, Clarence Stanley, xi  
 FitzGerald, Gerald M., xi  
 floor construction, 5, 7 f., 19, 28  
 foil, silver, 49  
 font, 18, 21, 54  
 fortifications, 30, 56  
 foundations, *see* wall construction
- Galilee, Sea of (Lake of Tiberias), 1, 23; —, mean]level  
 below Mediterranean, 3  
 Gardin, J.-C., 39  
 Gerasa, 54; *see also* Jerash  
 Gezer, 47  
 Ghirshman, Roman, 44  
 gilded tesserae, 27  
 glass, 3, 26 f., 29, 49  
 Goeja, M. J. de, 44  
 Goldman, Hetty, 40  
 Grace, Virginia R., 31  
 graves, *see* tombs  
 "Greek fire bomb," 47  
 Greek inscriptions, 31, 53-55, 60  
 grinding stones, basalt, 19, 26, 50  
 Guest, Rhuvon, 44  
 Guy, P. L. O., 2, 56
- hafting methods for iron tools, 48  
 Haifa, 1  
 Haines, Richard C., v, vi, 2, 4  
 hall churches, 22 f.  
 hammer, iron, miniature, 48  
 hammer-adz, iron, 48  
 Hammond, Philip C., Jr., 41  
 Hanson, Robert H., vi  
 Harden, D. B., 49  
 Hauser, Elizabeth B., vi  
 Hebrew University, Jerusalem, 1  
 Hellenistic period, v, 2, 3, 30 f., 39, 43, 56  
 Heraclius, 51, 58  
 Herzfeld, Ernst, 44  
 Hims, mint, 52  
 Hirah, al-, 44  
 hooks, iron, 48  
 Hough, Luin, vi  
 houses, Hellenistic, 56  
 horse in Early Islamic period, 48  
 horseshoe, iron, 48  
 Horsfield, Agnes, 41  
 Horsfield, George, 41  
 human figures, 47, 50
- ibriq* (spouted jug), 46 f.  
 Iliffe, J. H., 39  
 India, 44  
 inscriptions, vi, 9, 15, 18, 20-22, 38, 53-56, 60  
 Iran, 39, 44  
 Iron Age, 2  
 Islamic period, 2-6, 34-37, 39-48, 50, 57-59  
 Israel: Department of Antiquities, v, vi, 2, 3, 25, 30, 50, 56;  
 Federation of Labor (Kupath-Holim), vi; Government,  
 v, vi, 1; Jordan Valley Settlements, vi, 1  
 Israel Exploration Society, v
- Jalabert, Louis, xi  
 jambs, *see* doors and doorways  
 Jerash (Gerasa), 24, 49, 54  
 Jerusalem area, 43, 45-47  
 jewelry, 48-50  
 Jewish Palestine Exploration Society, 56  
 Johns, C. N., 46, 48  
 Jones, Frances Fallin, 40  
 Jordan River, 28, 54, 57  
 Julia Domna, coin of, 51  
 Julianus, church of, 23  
 Jund al-Urdun (district of the Jordan River), 57  
 Justin II, 24, 50, 57  
 Justinian, 22-24, 50, 57, 58
- Kenyon, Kathleen M., xi  
 keys, iron, 48  
 Khirbat al-Karak ("Ruin of the Fortress"), v, 1 f., and  
*passim*; — ware, 2  
 Khirbat al-Mafjar, 2, 30, 34, 36, 38-40, 43  
 "Khirbat Mafjar ware," 30, 37-39  
 Khirbat Minyah, 40  
 Kinnereth, vi, 1, 28  
 knife blade, iron, 48  
 Knowles, Buford L., vi  
 kohl spoon, bronze, 49  
 Kraeling, Carl H., v, vi, xi, 22, 53  
 Krencker, Daniel, 24  
 Kufah, 44  
 Kupath-Holim, v
- Lacam, Jean, 44  
 lamps, 39, 49  
 Lane, Arthur, 44, 46  
 Lassus, Jean, 22, 23  
 "Late Roman" wares, 31 f.  
 Lavoix, Henri, xi, 51, 52  
 Leclercq, Henri, 54  
 Levi della Vida, Georgio, 44  
 Licinius, Sr., coin of, 51  
 lids, pottery, 33  
 Livingood, Mrs. John, vi  
 locking bars, 5, 7, 19  
 Lubbai, 23  
 Lüpke, Theodor von, 24  
 Lyon, David Gordon, xi
- Macalister, R. A. Stewart, xi, 50  
 McEwan, Calvin W., 33  
 Maisler, Benjamin, 1, 2

- Mameluk sherd, 47  
 marble slabs, 14, 15, 26, 27  
 marble wall facing, 15  
 Marwan ibn Bashir, coin of, 52  
 Marwan II, Umayyad caliph, 43  
 Matson, Frederick R., 40, 45  
 Mattingly, Harold, 51  
 Maurice, emperor, 58  
 Maurice, Jules, 51  
 Mazar, B., *see* Maisler, Benjamin  
 Megiddo, v  
 mending holes in pottery, 37, 45  
 mensa, 15, 25  
 Mesopotamia, 41, 43–46  
 Michigan, University of, v  
 Middle Bronze Age, 56  
 Miles, George C., 50, 52  
 millstones, basalt, 19, 26, 50  
 Minah, al-, 44, 46  
 Misr, 44  
 Mohenjo Daro, 44  
 mold for lamp, 39  
 mold-made pottery, 39, 43 f.  
 Moore, Edward J., 41  
 mortars, basalt, 50  
 mosaics: floors, vi, 5, 6, 8, 9, 11–18, 20, 57, 59; inscriptions, vi, 9, 15, 18, 20–22, 53–56; walls, 26 f.  
 Mouterde, René, xi  
*mudhunah* (“condiment dish”), 43 f.  
 Museum of Fine Arts, Boston, 41  
  
 Nabatean prototype of Umayyad glazed pottery, 40–42  
 nails, iron, 48  
 Nebo, Mount, 35, 37  
 Nicomedia, mint, 51  
 Niebuhr, G. B., 53  
  
 Oholo, vi, 1  
 Ophel, Mount, Jerusalem, 43, 46, 47  
 Oriental Institute, v, 1, 3, 12, 18, 53  
 ornaments, metal, 48, 49  
 oven, clay, 4  
  
 painted plaster, 7  
 Palestine, v, 22–24, 31, 33, 39, 57  
 Palestine Archaeological Museum, Jerusalem, 40  
 Palestine Electrical Corporation, 3  
 Parthians, 43, 45  
 patching of mosaic floors, 12, 14, 17, 21, 57  
 Patriarchate of Jerusalem, 24  
 pavement, *see* floor construction  
 pendants, 48, 49  
 Pennsylvania State University, 40  
 Persian period, 50, 58  
 pestles, basalt, 50  
 Philoteria, 2  
 Phocas, 58  
 pickax, iron, 48  
 piers, 10, 12, 25; *see also* columns  
 pin, bone, 49  
 pipe, terra-cotta, 18  
 pipe line, Roman, 57  
 pivot holes, 5, 7  
 pivot stones, 7, 19  
 plaster, 7, 9, 10, 14  
 Pompeian era, 54  
 Poole, Stanley Lane, xi  
 porticoes, 20, 22, 23  
 posts, stone, 19, 26, 59  
 pottery, 3, 27, 28, 30–48; inscriptions on —, 38  
 press, stone, 50  
 private houses, Hellenistic, 56  
 prothesis, 24  
  
 Qal‘at Sim‘an, 24  
 Qaryat al-‘Inab, 46  
 querns, basalt, 50  
  
 Rahmani, L. Y., 50  
 Ramlah, al-, mint, 52  
 Reisner, George Andrew, xi  
 reliquary(?), 14 f., 20  
 reused building parts, 5, 7, 8, 19, 25–28, 50, 56, 59  
 reused glass, 49  
 Rhodian jar handles, 31, 50  
 Rhodian month names, 31  
 ribbed plaster, 7  
 Rice, D. Talbot, 44  
 rings, metal, 48, 49  
 rods, iron, 48  
 Roman period, 2, 40, 43, 44, 50, 56–58; *see also* “Late Roman” wares  
 Rome, mint, 51  
 roof construction, 9, 20  
 roof tiles, 8, 10, 18  
 “rouletting” on pottery, 32  
 Russia, 31  
  
 Saffuriyah (Sepporis-Zippori), v  
 St. Simeon Stylites, 24  
 Saller, Sylvester J., xi, 37  
 Samakh, 1  
 Samarra, 41, 44, 46, 47  
 Samos, 31  
 Sandahannah, Tell, 31  
 Sarre, Friedrich, 41, 43–45, 47  
 Sasanians, 43, 45  
 Sauvaget, Jean, 47  
 Schmidt, Erich F., 39  
 Schneider, Alfons Maria, 23  
 Schneider, Ursula, vi  
 sculptures, stone, 50, 56  
 Scythopolis (Beth Shan), 57  
 second story in atrium, 10  
 sgraffito pottery, 41  
 Shaqqa, 23  
 sickle blades, iron, 48  
 sills, *see* doors and doorways  
 Siscia, mint, 51  
 Slavin, Maurice, 40  
 Smith, George Adam, 2  
 socket stones, 7, 19  
 spikes, iron, 48  
 spoon, kohl, 49  
 stairways, 5, 10, 11, 19, 22  
 stamped designs on pottery, 32

- stamped Rhodian jar handles, 31, 50  
 Stekelis, Moshe, 1, 2, 56  
 Steve, A.-M., 46  
 stone prototype for clay condiment dishes, 43  
 Sukenik, L., 2  
 sump pit, 14  
 Susa, 44  
 Sydenham, Edward A., 51  
 synagogue, ancient, 2, 3, 56, 57, 59  
 synthronus, 23  
 Syria, 2, 9, 22-24, 40-47, 57  
 Syriac inscription, 54  
  
 Tabgha, al-, 23  
*tabula ansata*, 54  
 Tadmor, Miriam, v, vi  
 Tafha, 23  
 Talmud, 2  
 Taricheae, 2  
 Tarsus, 40-43, 45, 46  
 Theophanes, 53  
 thresholds, *see* doors and doorways  
 Tiberias, 1, 5, 57; Lake of — (Sea of Galilee), 1  
 Tiberius II, 57  
 Tieken, Mrs. Theodore D., 48  
 tombs, Byzantine, 14 f., 28 f., 48-50, 60-63  
 Transjordan, 24, 54  
 triapsidal churches, 20, 23 f.  
 Tyropocean Valley, 46, 47  
  
 Ulm on Danube, Imperial Mint of, 52  
 Umayyad period, 3, 40-46, 51 f., 59; *see also* Islamic period  
 Umm al-Jimal, 23  
 Urdunn, al-, mint, 52  
 Vaux, R. de, 46  
 vessels: glass, 3, 29, 49; pottery, 3, 27, 28, 30-48; stone, 50  
 virgin soil, 3, 27, 28  
  
 Waagó, Frederick O., 32, 40  
 wall construction, 4-7, 11, 13, 15, 16, 19, 27  
 Wasit, mint, 51-52  
 wedding ring, modern, 49  
 Welles, C. B., 54  
 window frames, 50  
 windows, 8  
 Winnefeld, Hermann, 24  
 wire, silver, 49  
 wood construction, 7, 8  
 wood handles, 48  
 Wroth, Warwick, xi  
  
 Ya'qubi, 44  
 Yarmuk River, 1, 58  
 Yeivin, Shmuel, v, vi, 57  
 Young, W. J., 41  
  
 Zeno, 24  
 Zori, Nehemiah, 34

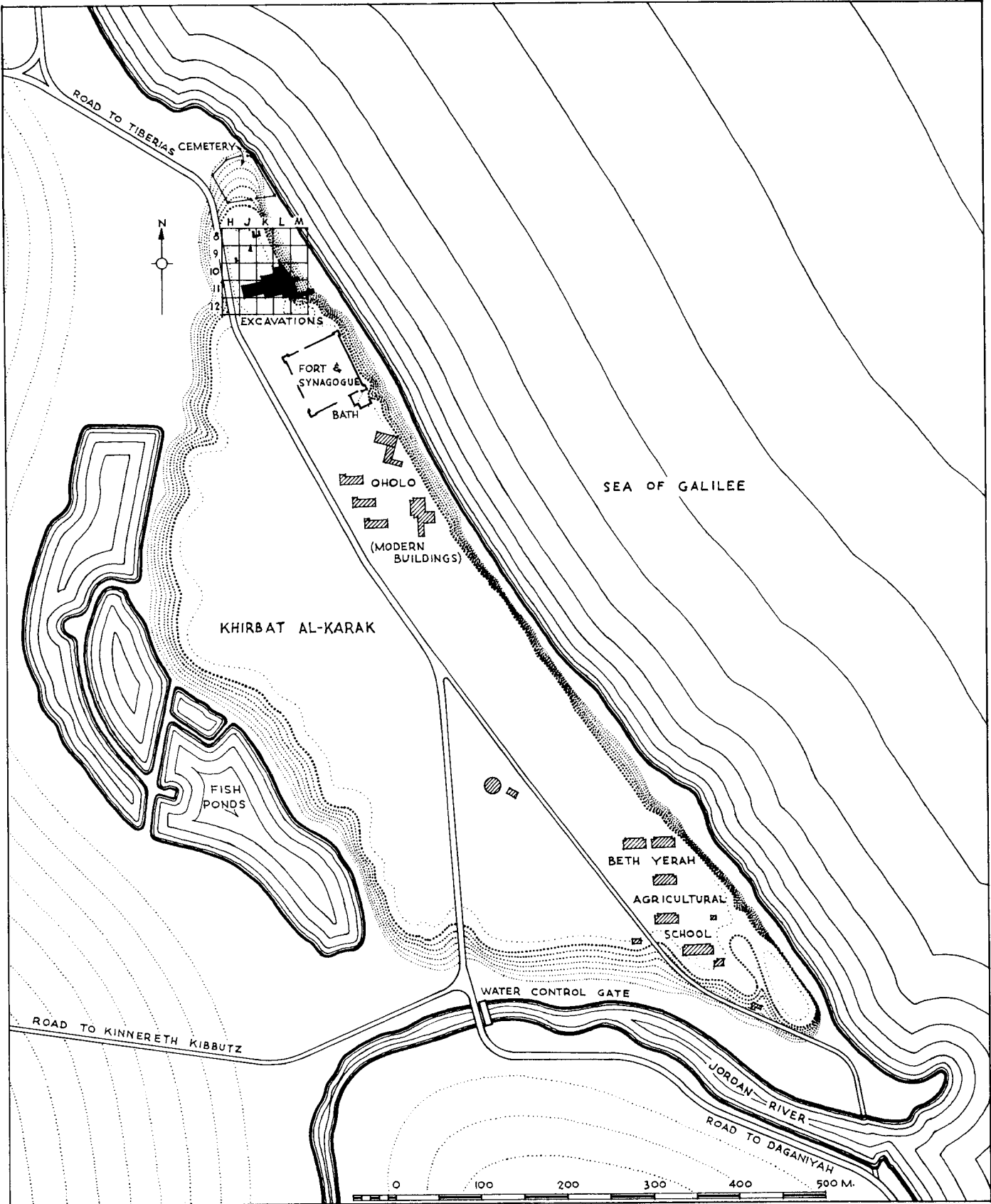


# PLATES

PLATE 1

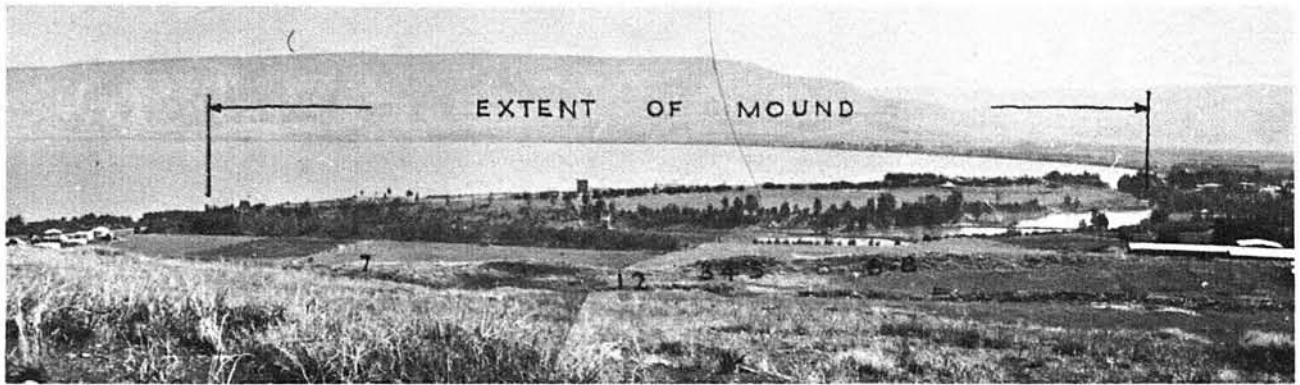


VERTICAL AIR VIEW OF KHIRBAT AL-KARAK. PHOTOGRAPH BY THE PHOTOGRAMMETRIC INSTITUTE, JERUSALEM



MAP OF KHIRBAT AL-KARAK, BASED ON AIR VIEW

PLATE 3



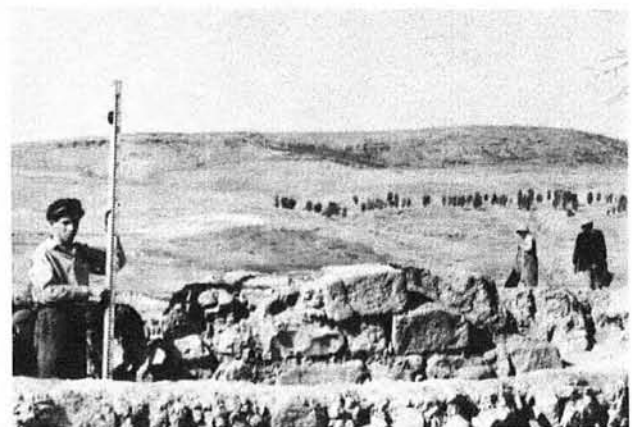
A



B



C



D

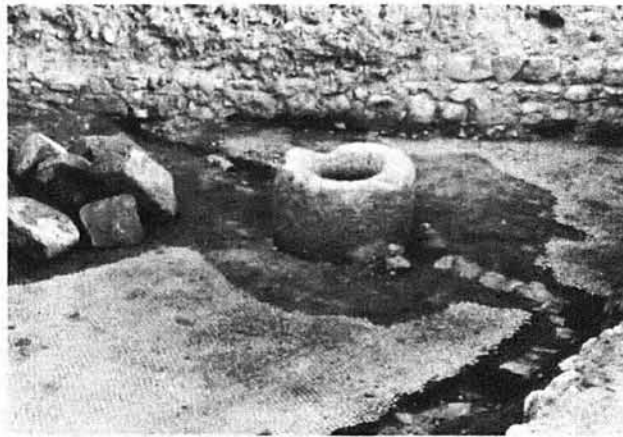
A. GENERAL VIEW OF SITE (*numbers indicate locations of tombs*). B. EASTERN PART OF ARAB BUILDING, FROM NORTHWEST. C. STONE PAVING IN ROOM L 11:1 OF ARAB BUILDING, FROM EAST. D. STEPS(?) IN COURTYARD OF ARAB BUILDING, FROM EAST



A



B



C



D



E

A. GENERAL VIEW OF CHURCH WITH PARTIALLY EXCAVATED ATRIUM AT LOWER LEFT, FROM SOUTHWEST. B. BLOCKED DOORWAY IN SOUTH WALL OF LOGGIA, FROM NORTH. C. STONE WELLHEAD OF CISTERN AND MOSAIC PAVING IN ATRIUM, FROM SOUTHWEST. D. COLUMN BASES IN OPENING BETWEEN LOGGIA AND ATRIUM, WITH POST-CHURCH WALL AT LEFT, FROM NORTHEAST. E. THE NARTHEX, WITH POST-CHURCH WALL IN CENTER, FROM SOUTH

PLATE 5



A



B



C

A. THE *Domus*, FROM NORTHWEST. B. NORTHWEST CORNER OF ROOM K 11:4, SHOWING LATER WALLS BUILT AGAINST FREESTANDING PIER. C. STEPS AT SOUTHEAST CORNER OF ROOM K 11:4, FROM NORTHWEST (meter stick on cut-stone doorsill)



A



B

A. EASTERN PART OF CHURCH, FROM WEST-NORTHWEST. B. SOUTHERN AISLE AND APSE, SHOWING  
STONE EDGING OF EXTENDED CHANCEL OVERLYING ORIGINAL FLOOR, FROM WEST

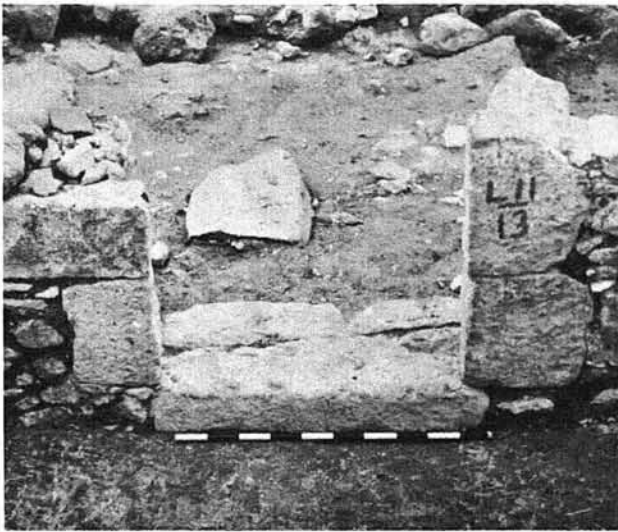
## PLATE 7



A



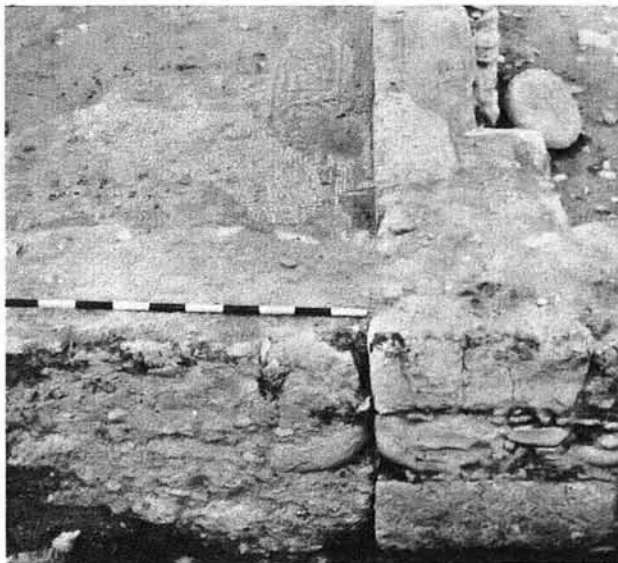
B



C



D



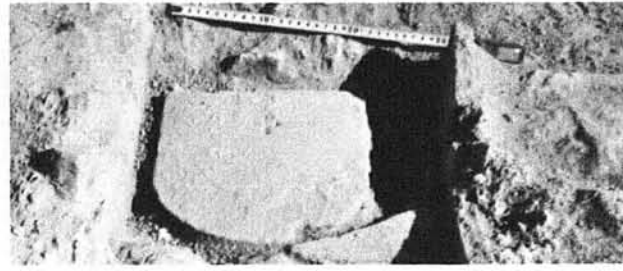
E



F

A. NAVE AND CENTRAL APSE, FROM WEST. B. WEST END OF *Domus*, FROM EAST. C. DOORWAY IN SOUTH WALL OF *Domus* AFTER REMOVAL OF BLOCKING, FROM SOUTH. D. ROOM L 11:7, FROM WEST. E. SOUTHWEST CORNER OF *Domus* AND ABUTTING NARTHEX WALL, FROM SOUTH. F. SOUTH END OF SOUTH APSE WALL LAID AGAINST NORTH JAMB OF EXTERIOR DOORWAY TO ROOM L 11:7, SHOWING VERTICAL PLASTER RIB ON EXTERIOR OF APSE AND HOLE IN JAMB, FROM SOUTH



*A**B**C**D**E**F*

*A.* CRUDE STONE WALL BETWEEN SOUTHERN WALL END OF CENTRAL APSE AND EASTERNMOST COLUMN, FROM NORTHWEST. *B.* REMAINS OF RELIQUARY(?) IN FLOOR OF CHANCEL, FROM WEST. *C.* MOSAIC BORDER AND VINE DESIGN IN UPPER FLOOR AT NORTHERN END OF EXTENDED CHANCEL. *D.* SOUTHEAST CORNER OF ANTEROOM OF DIACONICON, SHOWING MOSAIC FLOOR EXTENDING UNDER WING WALL. *E.* TOMB K 11:15, FROM WEST. *F.* COVER STONES OF TOMB L 11:23, FROM EAST

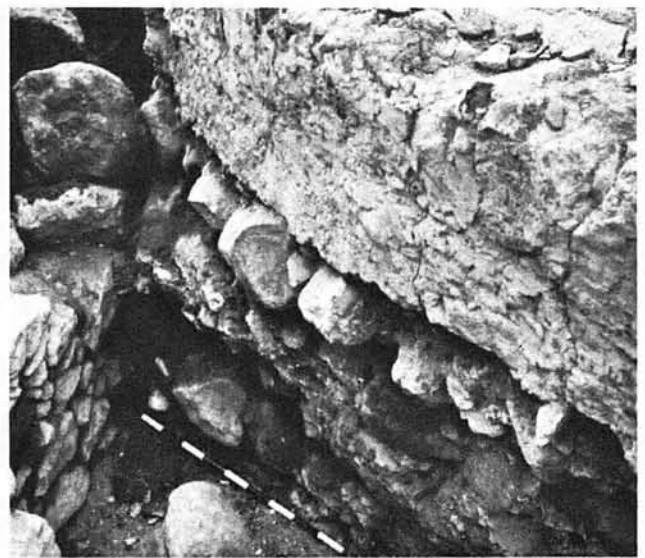
## PLATE 9



A



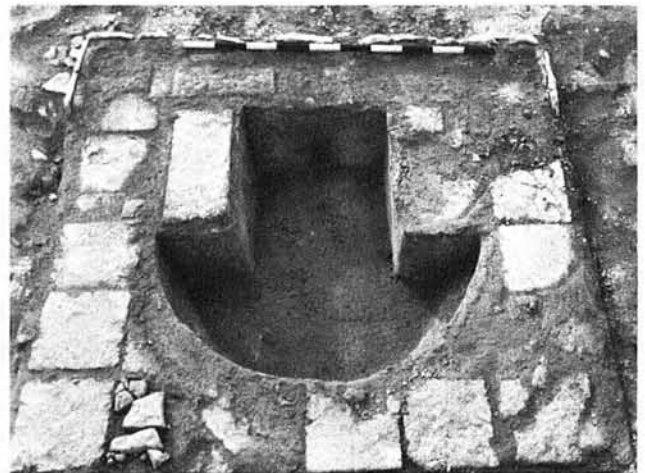
B



C



D



E

A. DIACONICON, FROM WEST-NORTHWEST. B. EXTERIOR FACES OF NORTHERN APSE OF *Domus* AND ABUTTING WALL OF DIACONICON, FROM EAST-SOUTHEAST. C. EXTERIOR FACE OF DIACONICON APSE AND ITS FOUNDATION, FROM NORTHEAST. D. CIRCULAR BASIN IN CENTER OF DIACONICON, FROM EAST. E. SUNKEN BASIN OR FONT IN DIACONICON APSE, FROM EAST



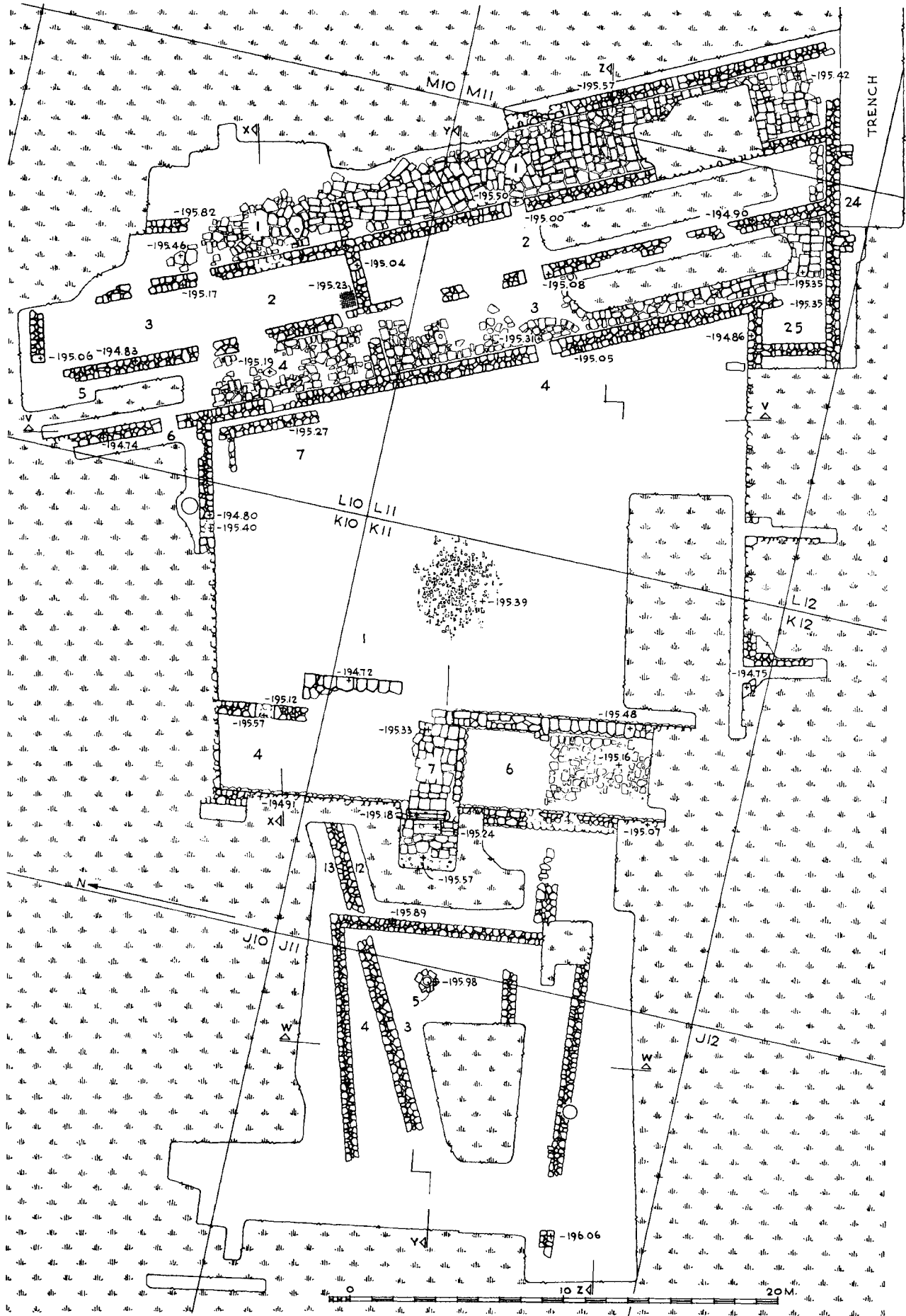
*A*



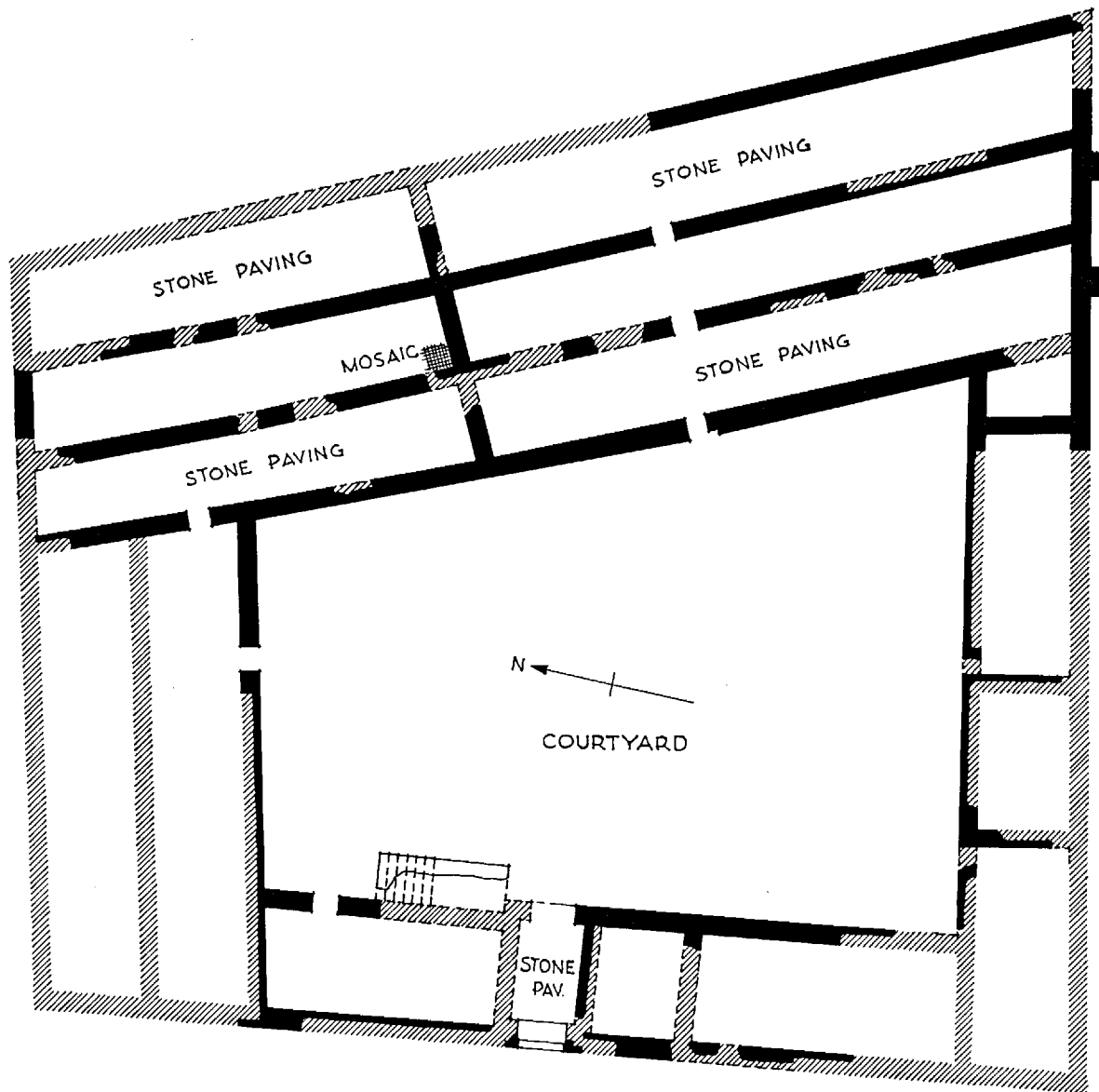
*B*

VIEWS OF CHURCH AFTER EXPLORATORY TRENCHES WERE DUG BELOW FLOOR, FROM SOUTHWEST (*A*) AND SOUTH (*B*)

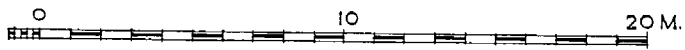
PLATE 11



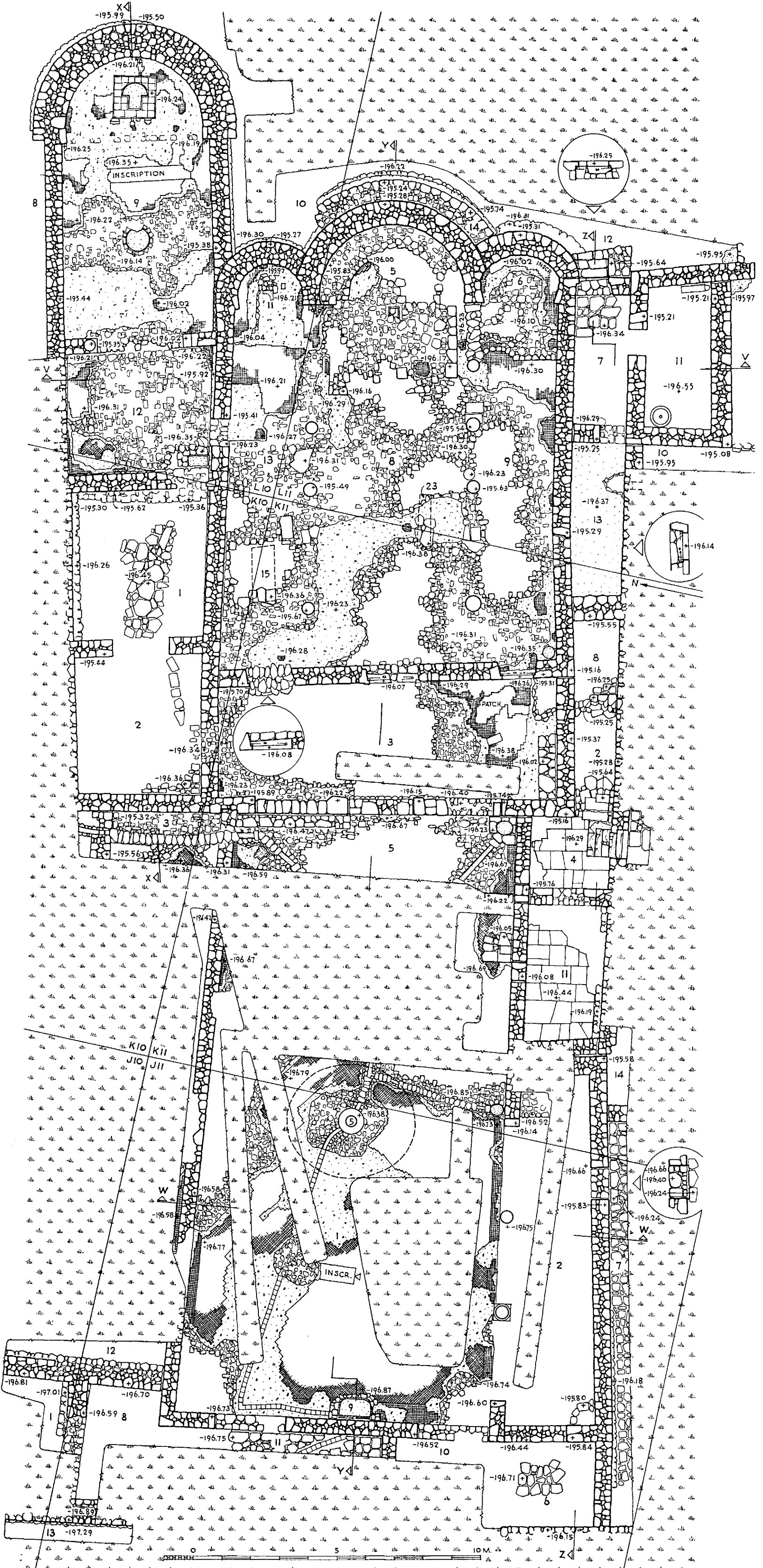
EXCAVATION PLAN OF ARAB BUILDING AND POST-CHURCH REMAINS TO WEST. SCALE, 1:250



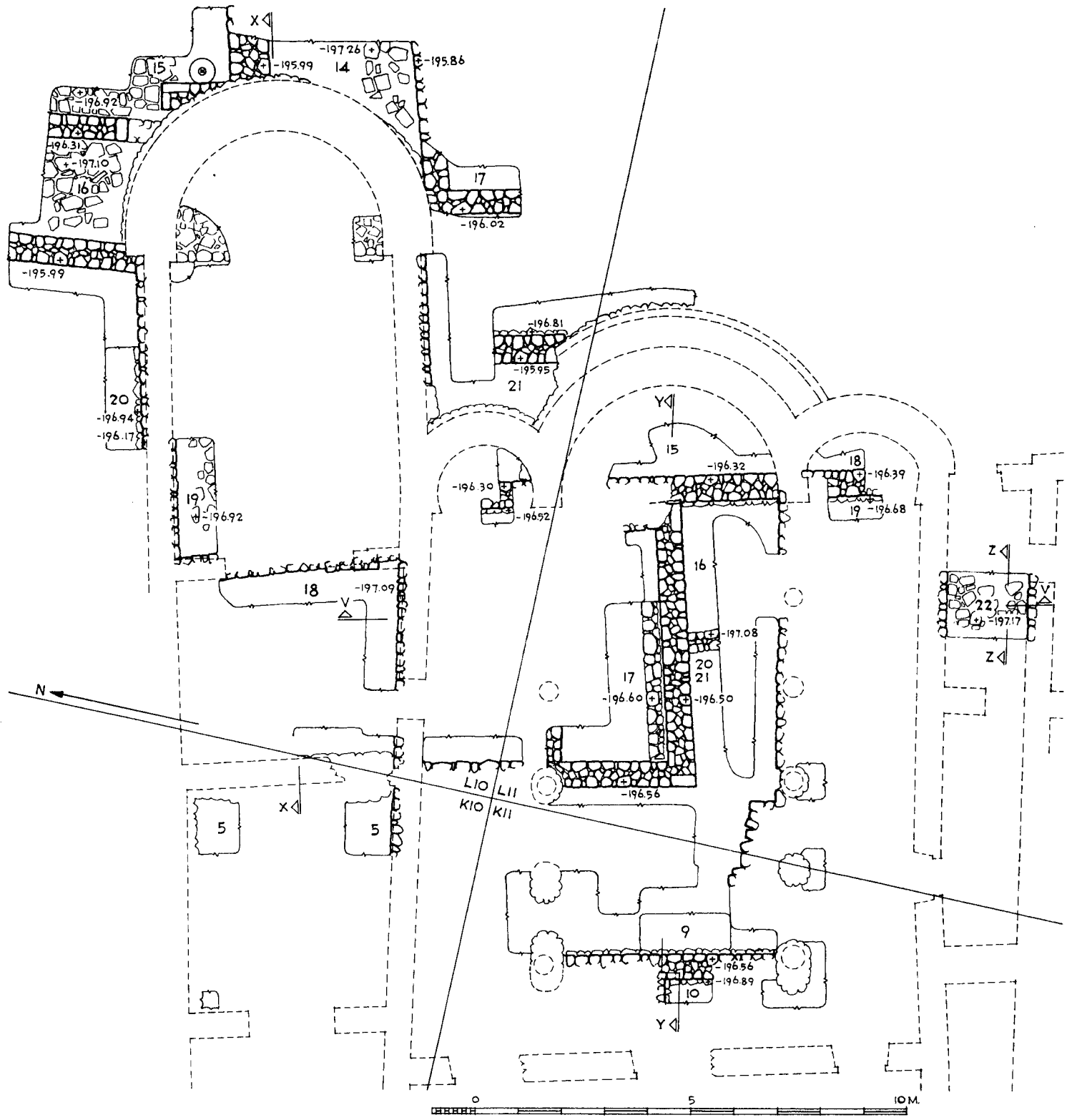
- EXCAVATED WALLS
- ▨ RESTORED WALLS
- ▩ UNEXCAVATED RESTORED WALLS



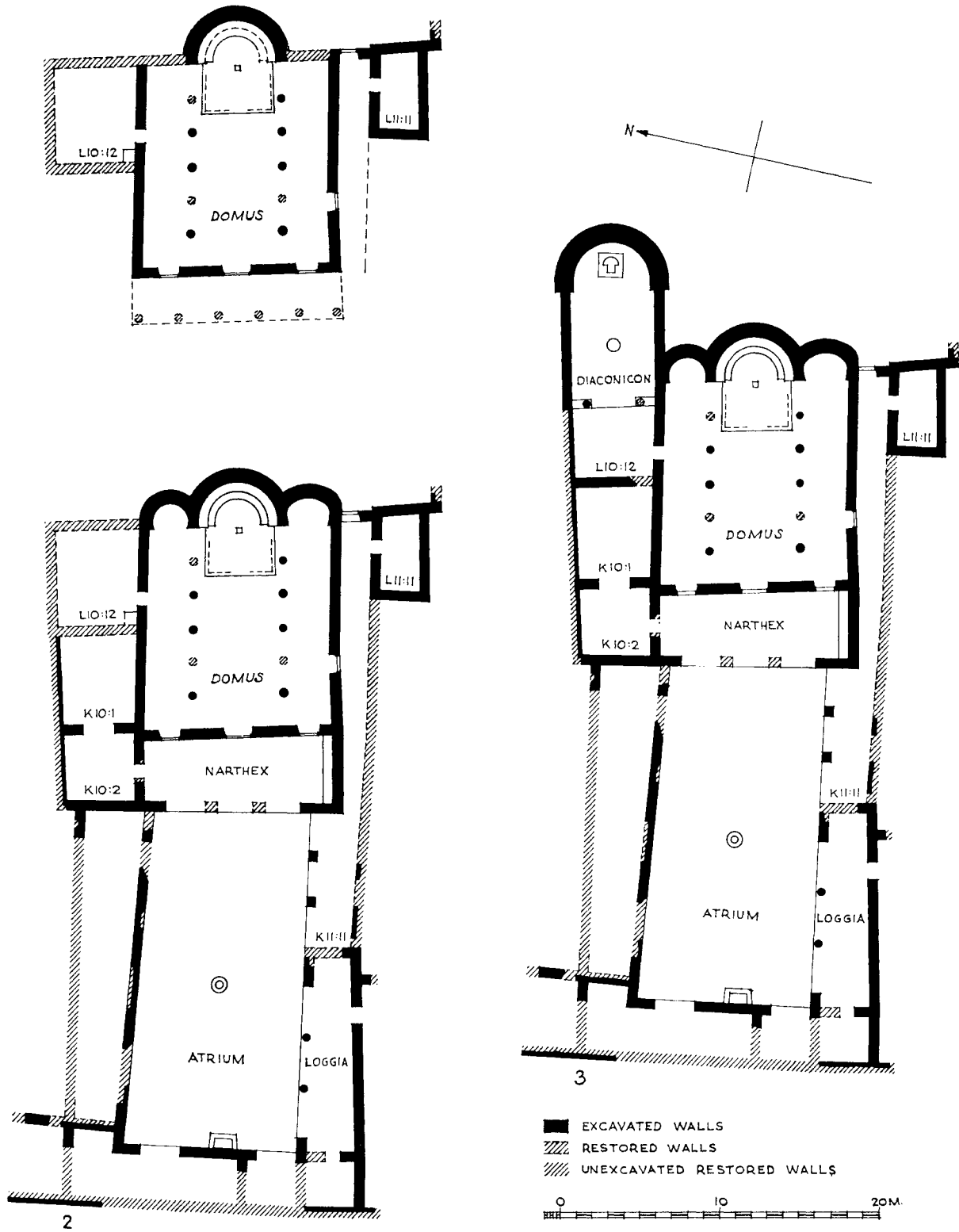
RECONSTRUCTED PLAN OF ARAB BUILDING. SCALE, 1:250



EXCAVATION PLAN OF CHURCH. SCALE. 1:125

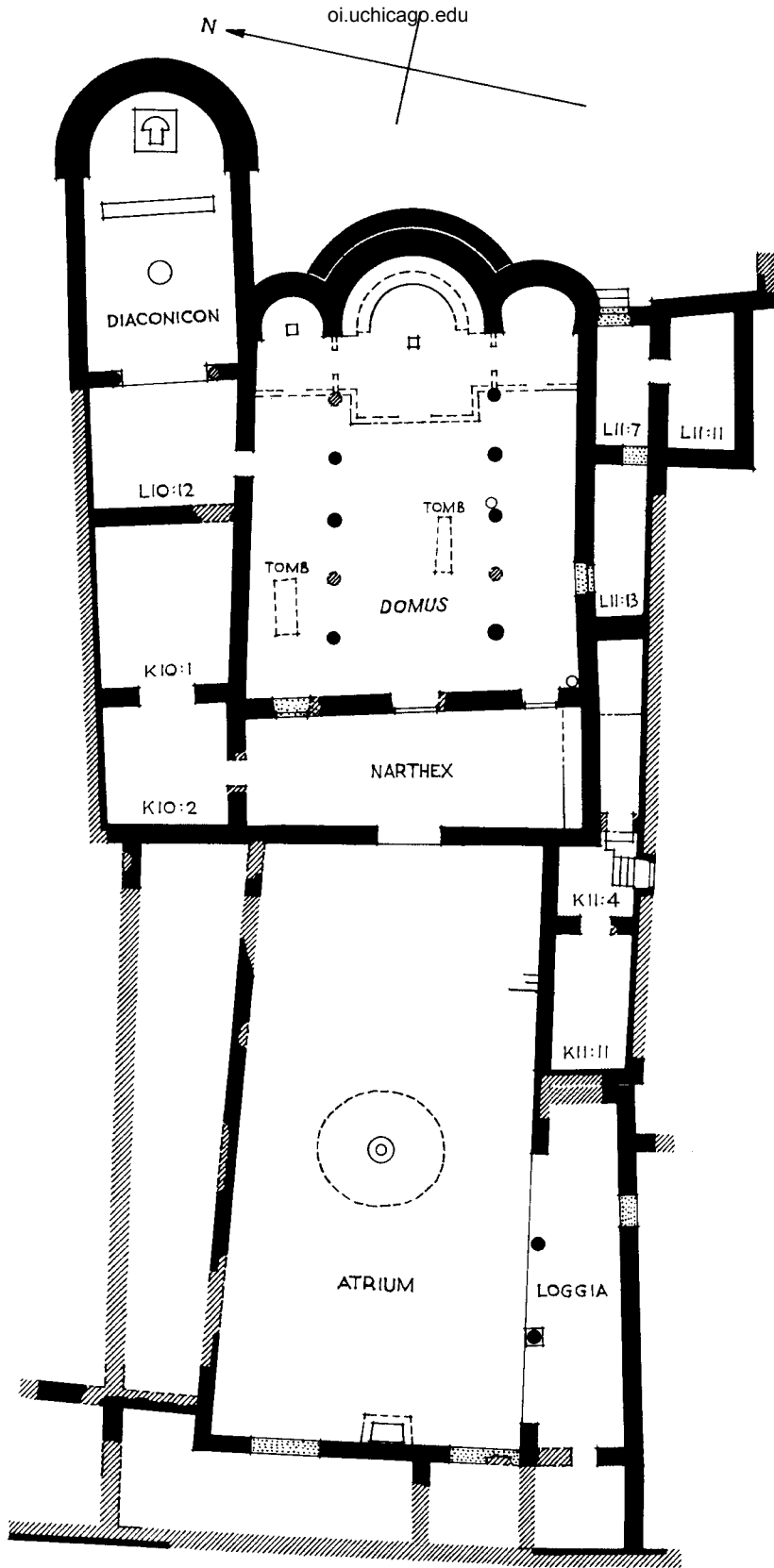


EXCAVATION PLAN OF PRE-CHURCH REMAINS. SCALE, 1:125



RECONSTRUCTED PLANS OF CHURCH. SCALE, ca.1:375. ORIGINAL BUILDING (1), SECOND PHASE (2), AND THIRD PHASE (3)

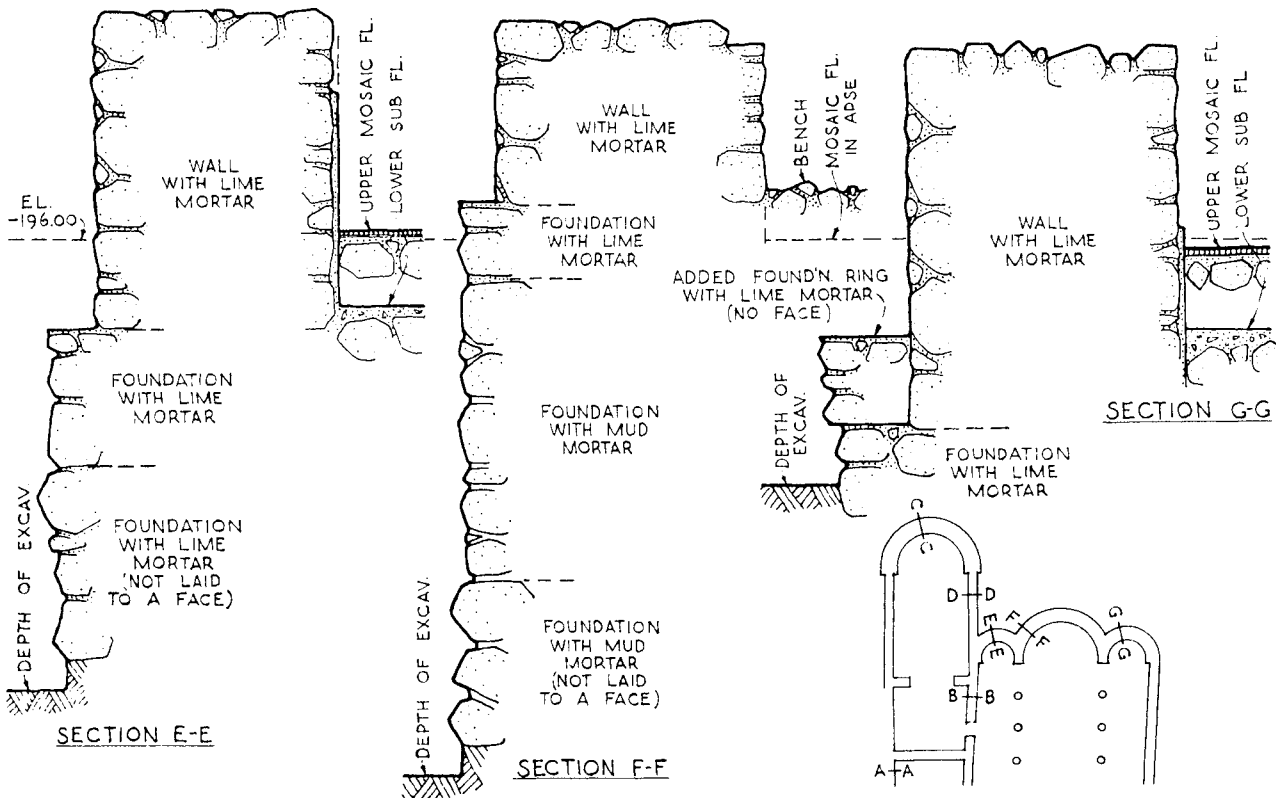
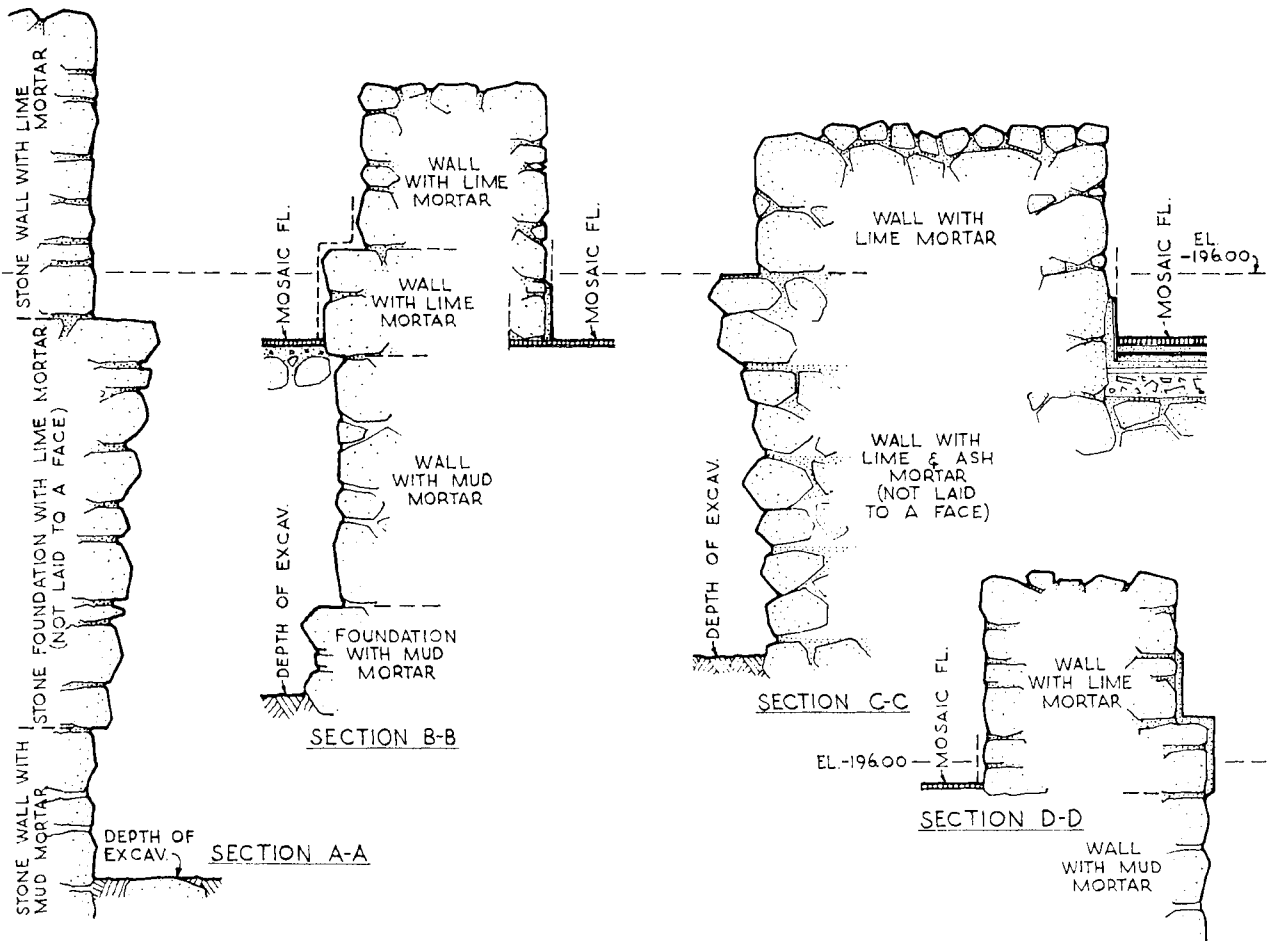




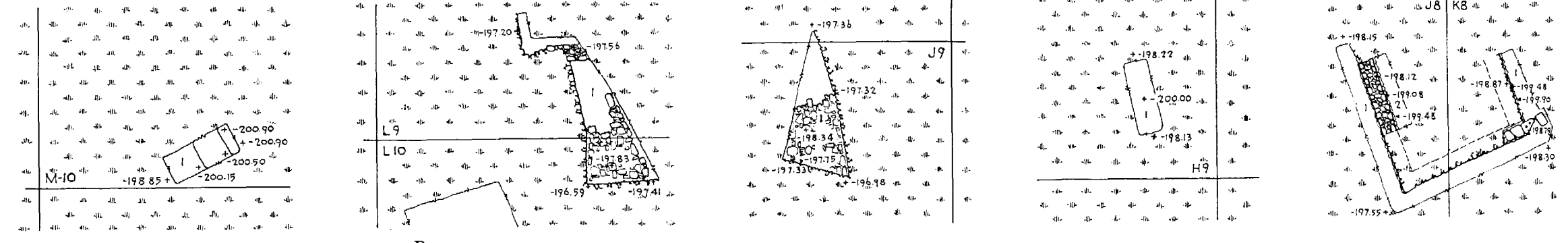
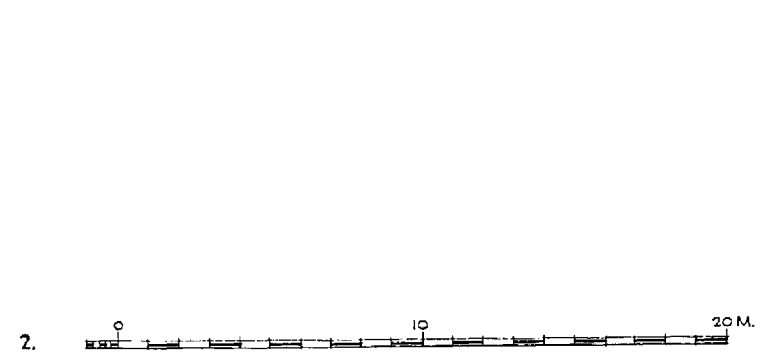
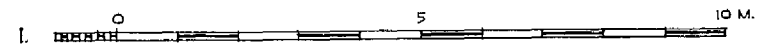
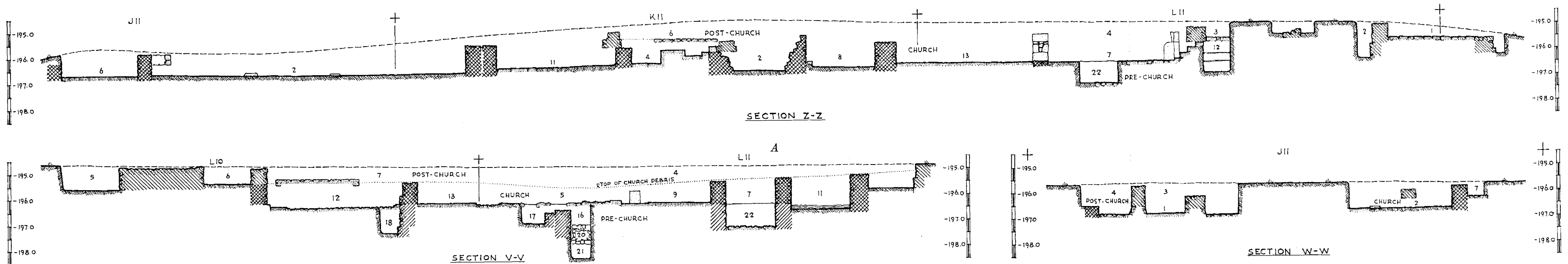
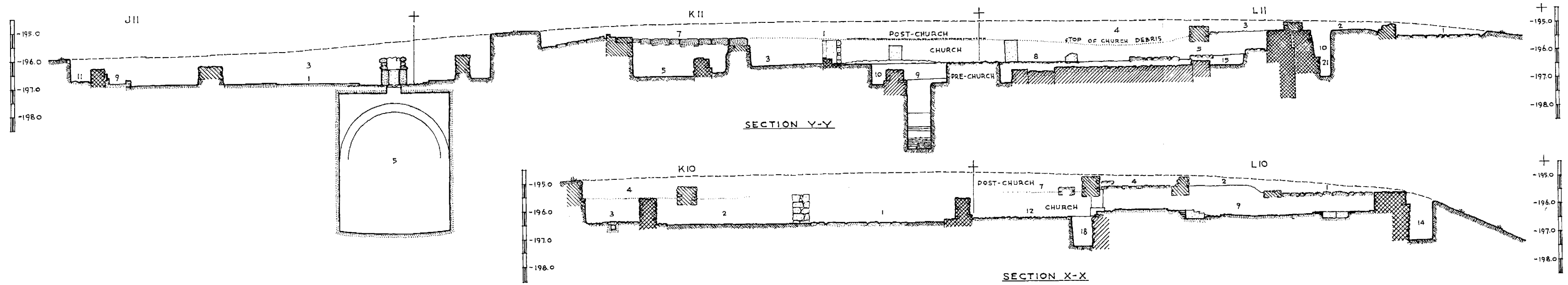
■ EXCAVATED WALLS OF CHURCH      ▨ RESTORED WALLS  
 ▩ LATER ALTERATIONS              ▧ UNEXCAVATED RESTORED WALLS



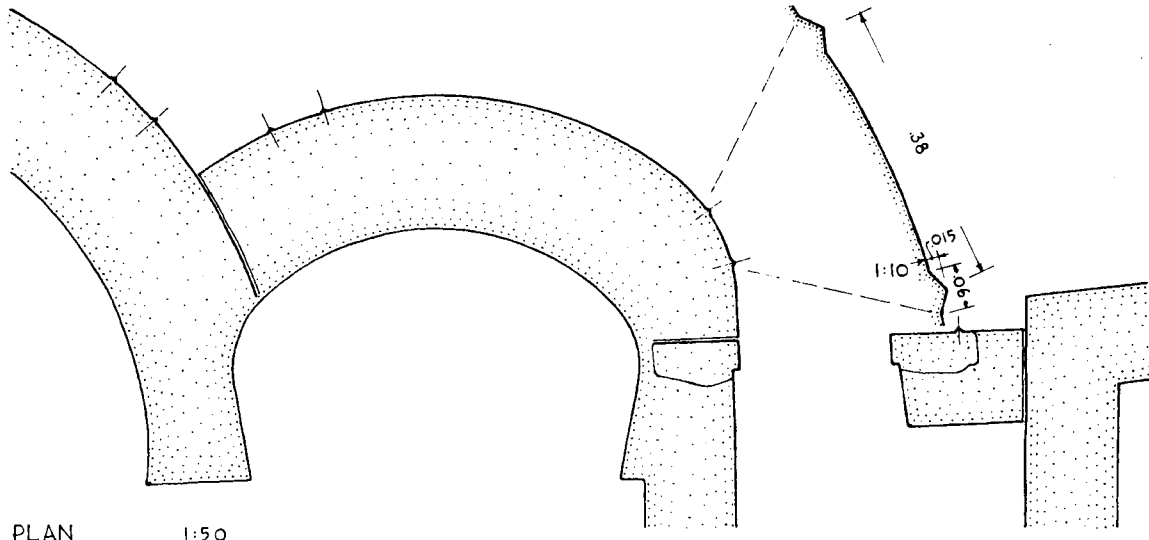
RECONSTRUCTED PLAN OF CHURCH AFTER LATEST ALTERATIONS. SCALE, 1:250



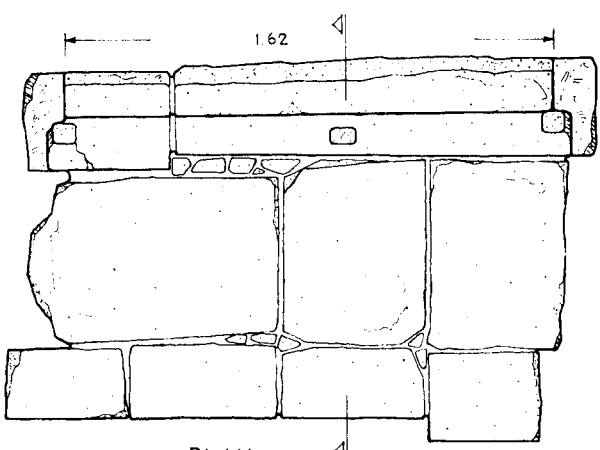
SECTIONS OF CHURCH WALLS. SCALE, 1:50



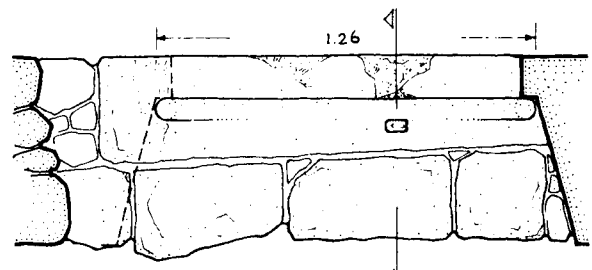
A. SECTIONS THROUGH MAIN EXCAVATION (CF. PLS. 11, 13, 14). SCALE, 1:125. B. PLANS OF SOUNDINGS NORTH AND EAST OF CHURCH. SCALE, 1:250



PLAN 1:50  
1



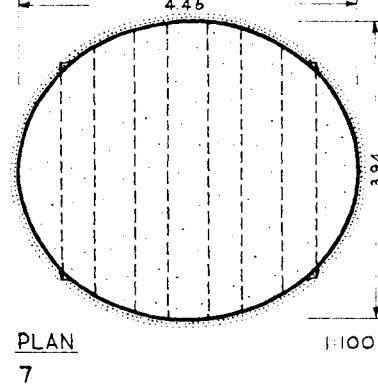
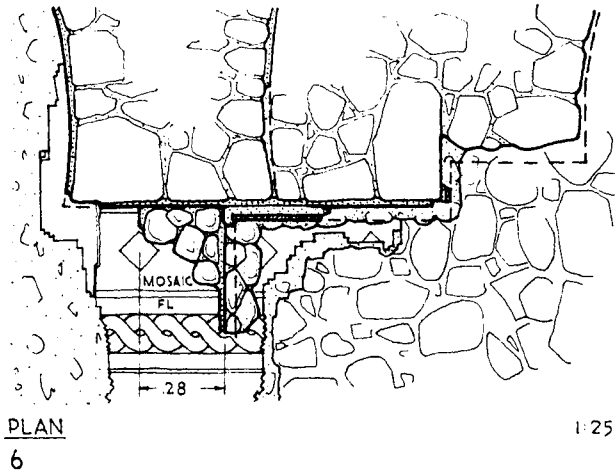
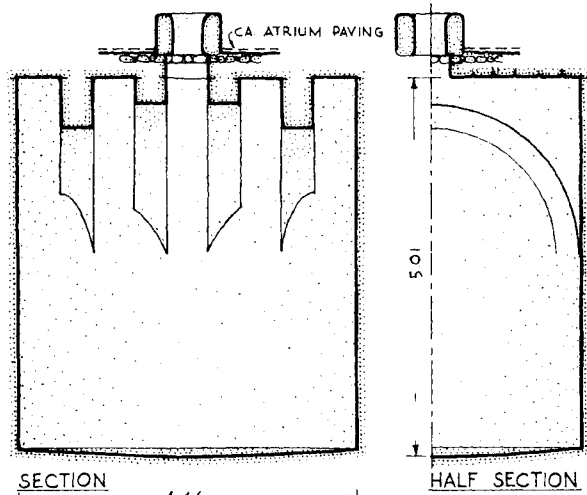
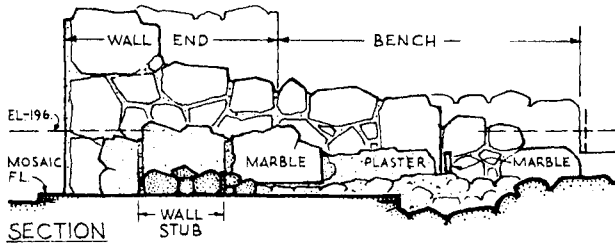
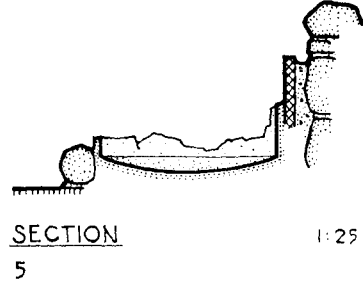
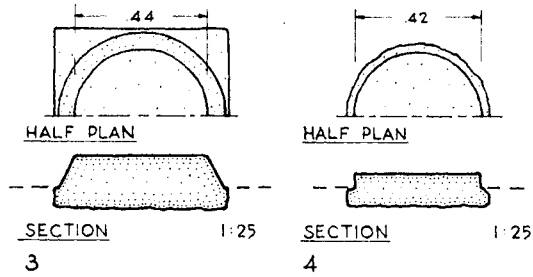
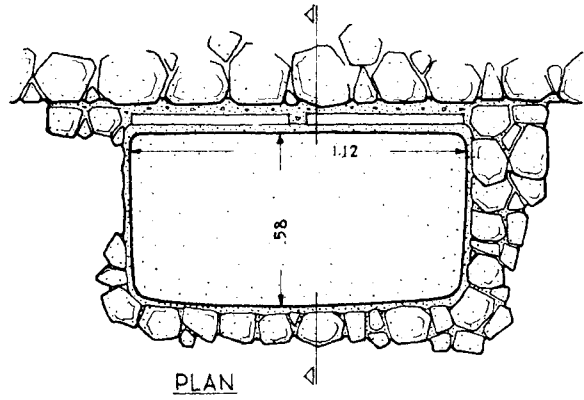
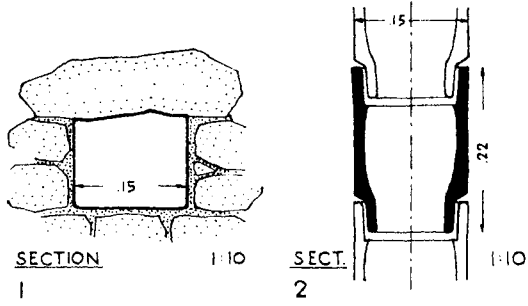
PLAN  
SECTION 1:25  
2



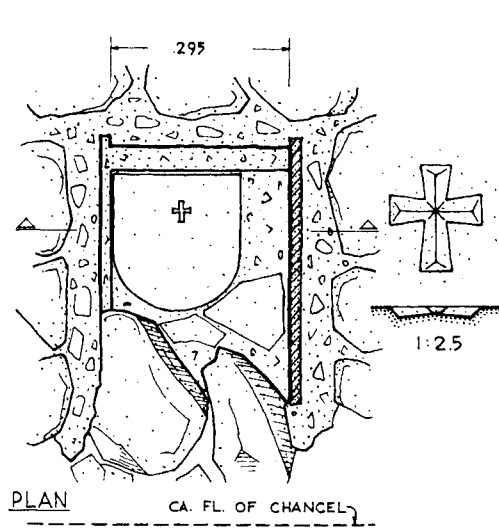
PLAN  
SECTION 1:25  
3

POSITIONS AND DETAIL OF VERTICAL PLASTER RIBS ON EXTERIOR OF CHURCH (1), DOORWAY IN WEST WALL OF ARAB BUILDING (2), NORTHERN DOORWAY IN WEST WALL OF *Domus* (3)

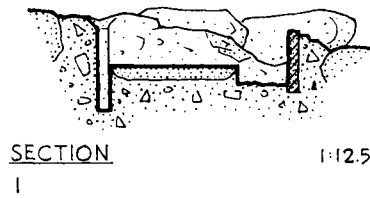
PLATE 20



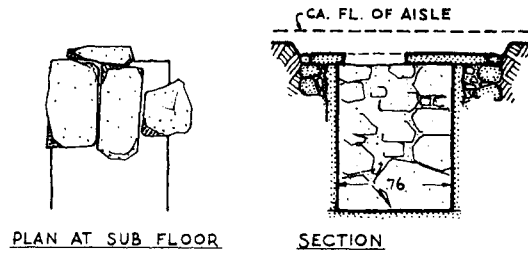
STONE (1) AND TILE (2) DRAINS UNDER ATRIUM FLOOR, WESTERN (3) AND EASTERN (4) COLUMN BASES IN OPENING BETWEEN LOGGIA AND ATRIUM, BASIN J 11:9 AT WEST END OF ATRIUM (5), STUB OF PARTITION WALL AND WALL END BETWEEN CENTRAL AND NORTHERN APSES OF *Domus* (6), CISTERN J 11:5 IN ATRIUM (7)



PLAN CA. FL. OF CHANCEL

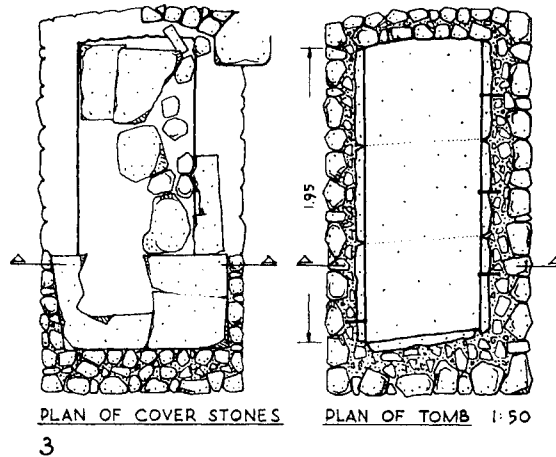


SECTION 1:25



PLAN AT SUB FLOOR

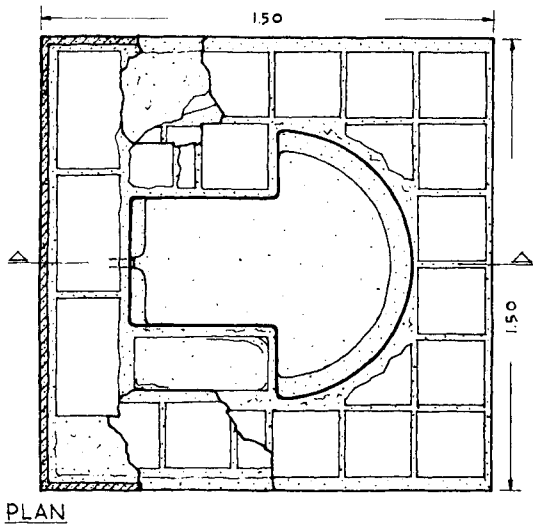
SECTION



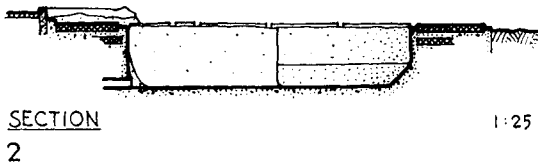
PLAN OF COVER STONES

PLAN OF TOMB 1:50

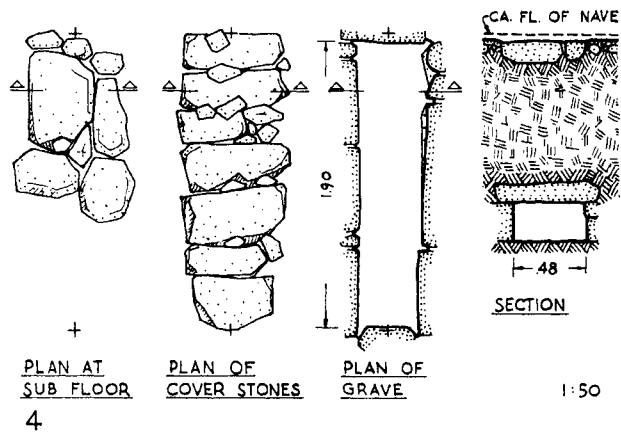
3



PLAN



SECTION 1:25



PLAN AT SUB FLOOR

PLAN OF COVER STONES

PLAN OF GRAVE

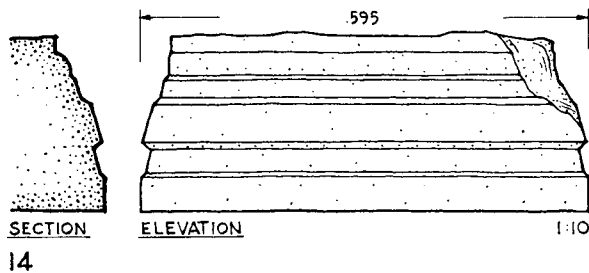
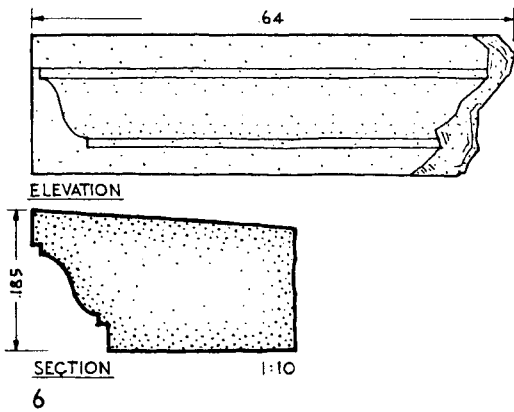
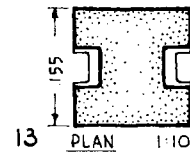
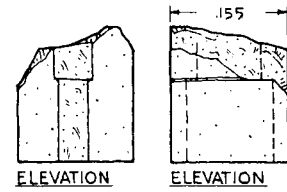
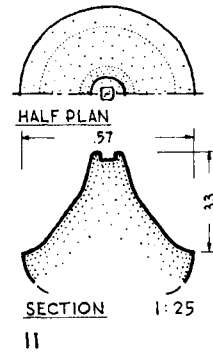
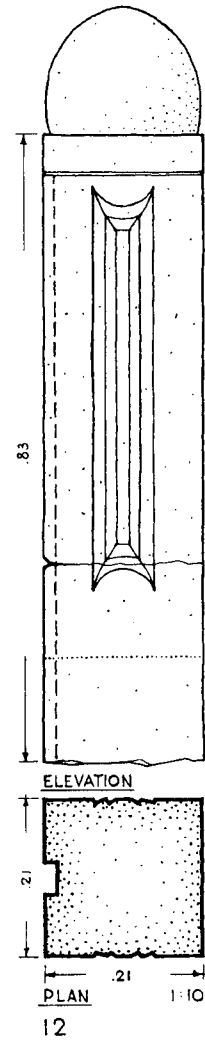
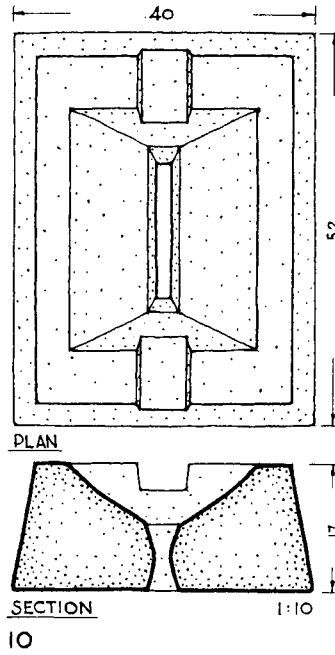
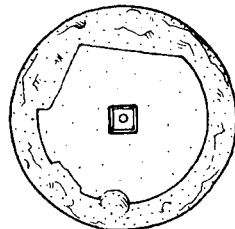
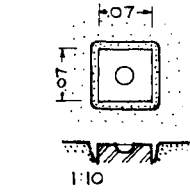
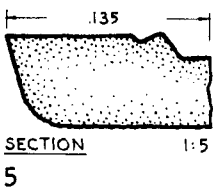
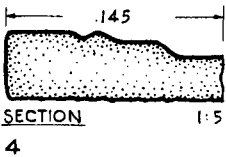
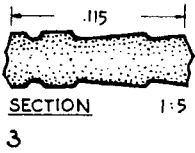
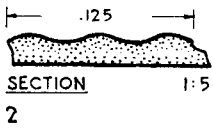
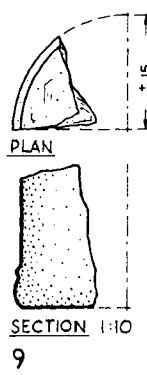
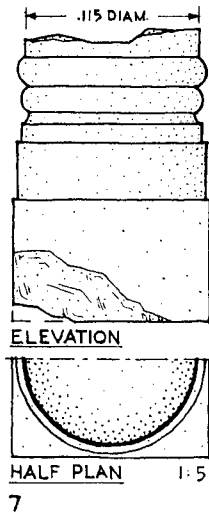
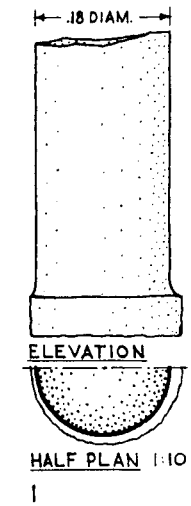
SECTION

1:50

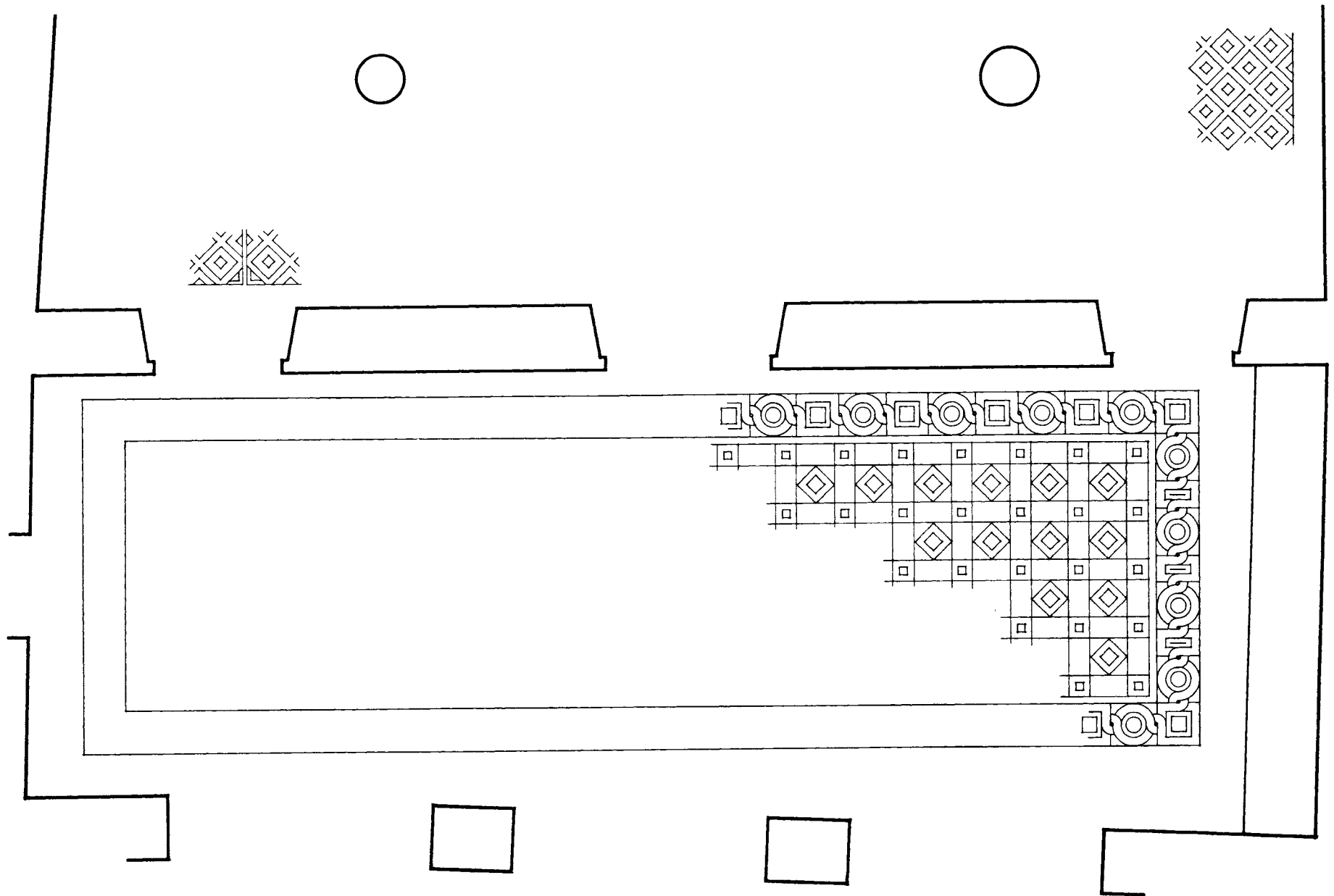
4

REMAINS OF RELIQUARY(?) IN CHANCEL FLOOR (1), SUNKEN BASIN OR FONT IN APSE OF DIACONICON (2), TOMBS K 11:15 (3) AND L 11:23 (4) IN *Domus*

PLATE 22

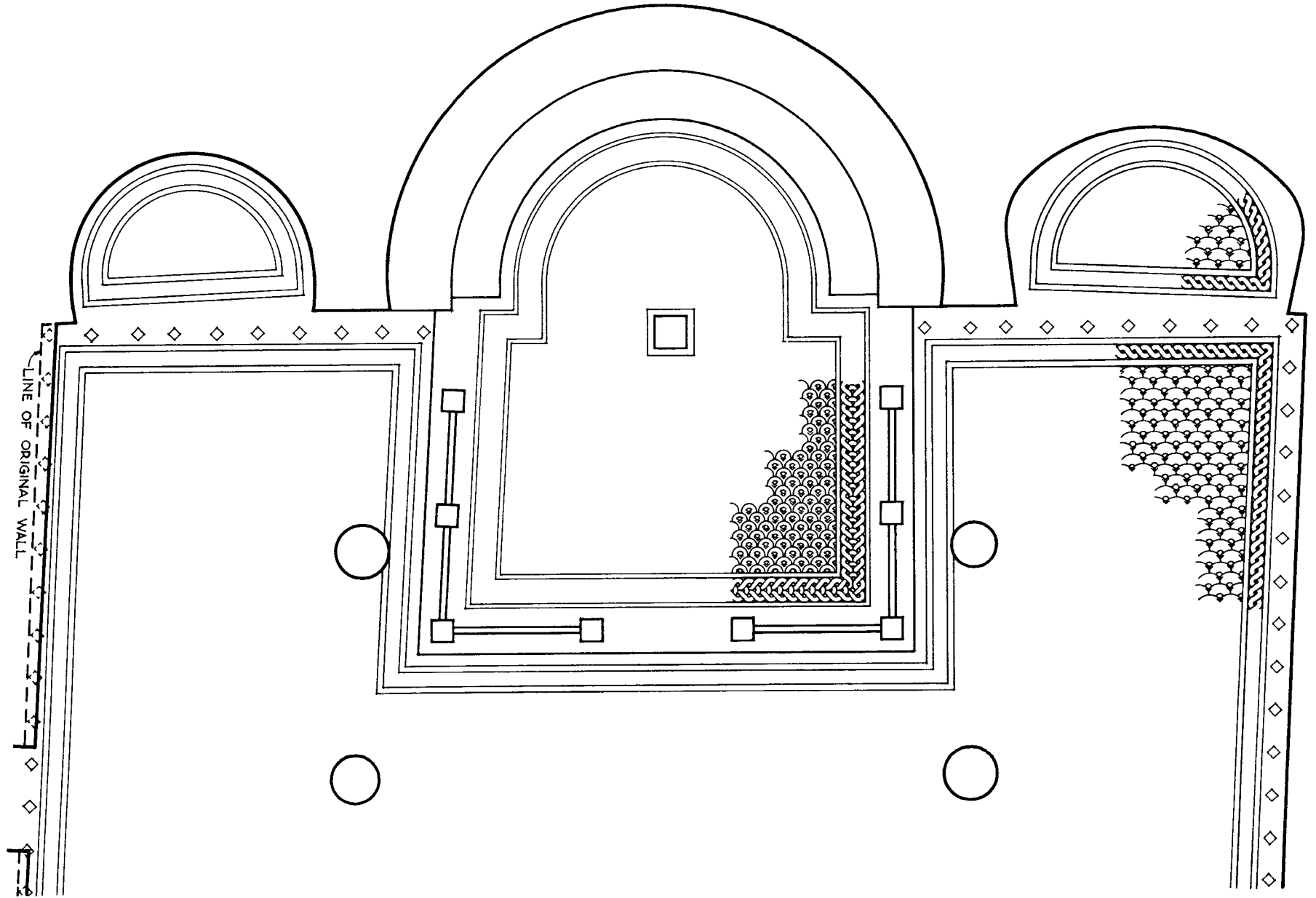


MISCELLANEOUS WORKED STONES FROM MAIN EXCAVATION

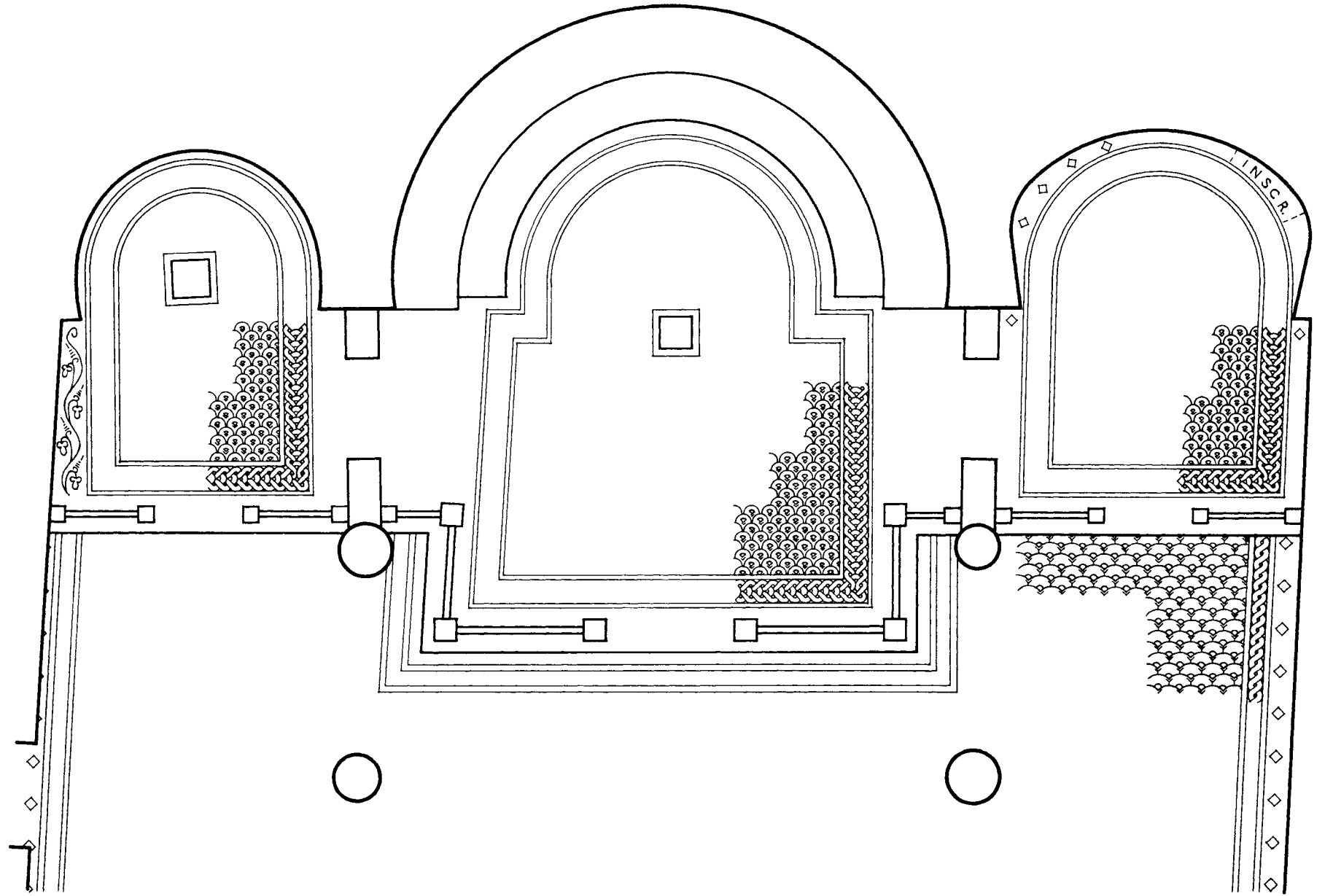


RECONSTRUCTED PLAN OF NARTHEX AND WEST END OF *Domus*, WITH MOSAIC FLOOR PATTERNS. SCALE, 1:50

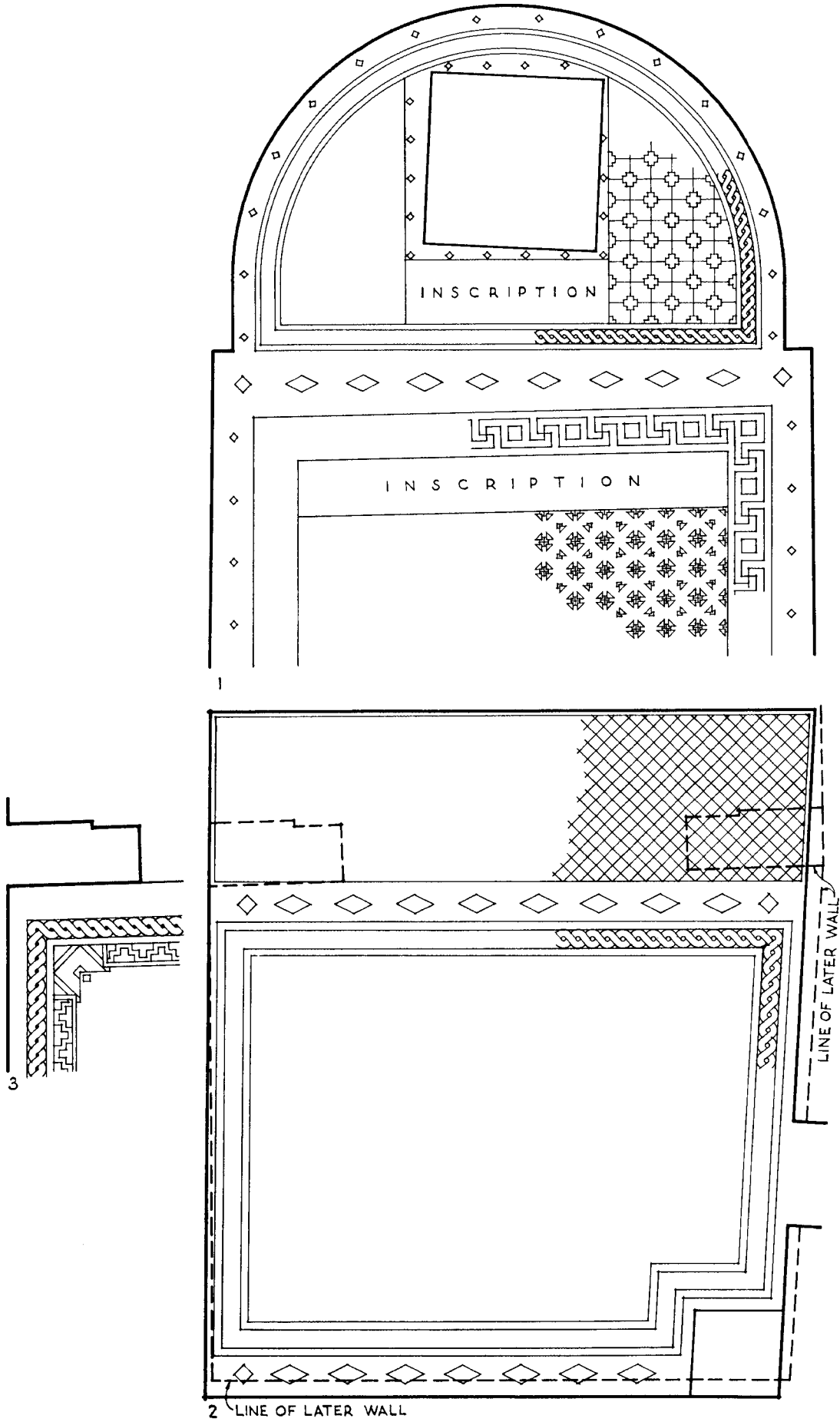




RECONSTRUCTED PLAN OF EAST END OF *Domus*, WITH MOSAIC FLOOR PATTERNS. SCALE, 1:50



RECONSTRUCTED PLAN OF EXTENDED CHANCEL, WITH MOSAIC FLOOR PATTERNS. SCALE, 1:50



RECONSTRUCTED PLANS SHOWING MOSAIC FLOOR PATTERNS IN EAST END OF DIACONICON (1), ROOM L 10:12 (2), AND NORTHEAST CORNER OF LATTER WITH SUPPOSEDLY LATER MOSAICS (3). SCALE, 1:50

*A**B**C**D**E**F*

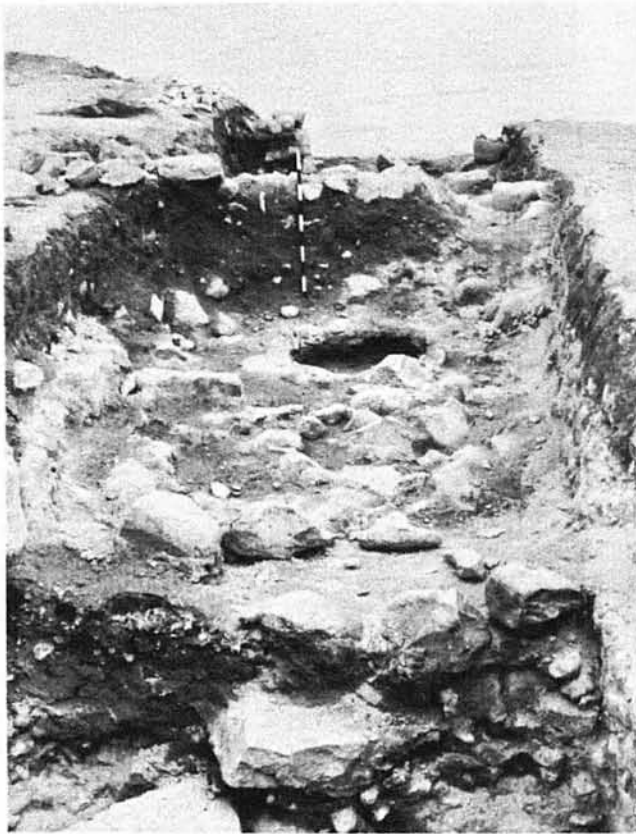
EXCAVATION VIEWS OF BYZANTINE TOMBS IN RIDGE WEST OF MOUND (CF. PL. 3 A). A. SCRAPING WEST SIDE OF RIDGE TO LOCATE TOMBS. B-C. CLEARING COVER STONES OF TOMB 7. D. EXCAVATING TOMB 7. E. STEPS LEADING INTO TOMB 3. F. COLLECTING GLASS FRAGMENTS IN TOMB 4, VIEW FROM EAST SHOWING RECTANGULAR PROJECTION AT WEST AND TWO STONES PROJECTING FROM MASONRY OF NORTH WALL



A



C



B

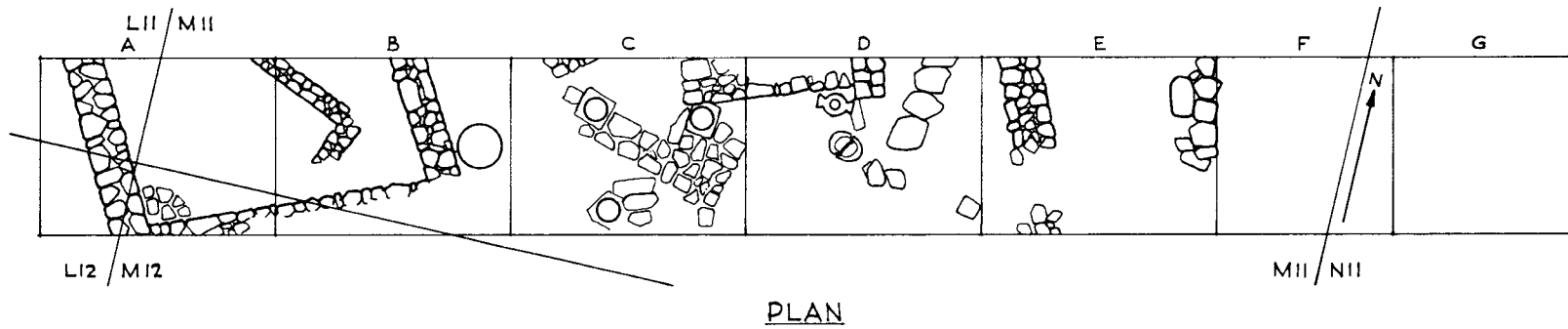
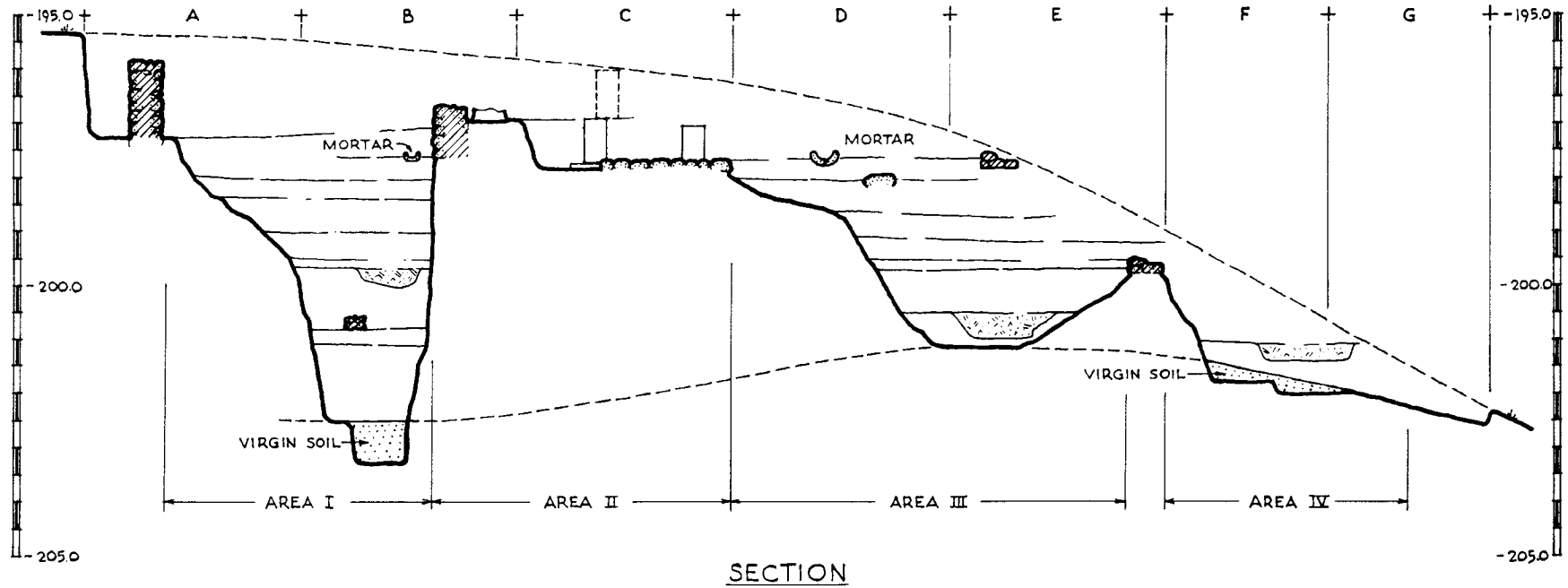


E



D

SUCCESSIVE STAGES IN EXCAVATION OF TRENCH, LOOKING EAST (CF. PL. 29). A-B. JUST BELOW SURFACE IN PLOTS A-C, WITH TOP OF OVEN EXPOSED IN B. C. PLOTS C-D, WITH TOPS OF TWO COLUMNS SHOWING IN C. D. PLOT C WITH THREE COLUMNS EXPOSED. E. DEEP PIT IN PLOTS A-B



PLAN AND SECTION OF TRENCH. SCALE, 1:125

No.	Field No.	Provenience	Level	Description	Scale
1	BY 406	K 11:5	Church	Thin-walled bowl frag., vertically grooved, black glaze, Attic ware	1:1
2	BY 42	Sounding J 9:1		Bowl rim, gray fabric, black glaze on both surfaces (=No. 18)	1:1
3	BY 202	L 10:6	Arab bldg.	Neck frag., traces of handle, tan fabric, black glaze	1:1
4	BY 159	Main area	Surf.	Thin-walled bowl frag., light buff fabric, brown at bottom, black lines	1:1
5	BY 437	L 11:16/17	Pre-church	Bowl rim, brownish fabric, glossy black slip on both surfaces (=No. 24)	4:5
6	BY 119	Main area	Below surf.	Inverted rim, buff fabric, red slip on both surfaces (=No. 17)	4:5
7	BY 483	K 10:5	Pre-church	Bowl rim, reddish-buff fabric, red slip inside, black (near rim) and red (at bottom) outside (=No. 19)	4:5
8	BY 498	J 11:2	Church	Ring base of bowl, rim broken, brownish fabric, glossy black slip (=No. 26)	4:5
9	BY 148	Main area	Below surf.	Flat rim, buff fabric, red slip on both surfaces, black band on edge (=No. 22)	4:5
10	BY 430	J 11:11	Church	Ring base of "fish plate," light red fabric, red slip inside and on underside, brown outside, depression in center inside (=No. 28)	4:5
11	BY 403	K 11:5	Church	Ring base, reddish-buff fabric, brown-red slip inside, pink-buff on underside and outside with red splotches (=No. 27)	4:5
12	BY 338	L 11:7	Church	Lamp base, buff fabric, brown slip outside (=No. 29)	1:1
13	BY 158	Main area	Surf.	Overhanging rim and part of neck, pink-buff fabric, brownish slip (=No. 21)	4:5
14		Plot E	Surf.	Upright bowl rim, brownish fabric, glossy black slip outside, reddish brown and black inside	2:5
15		Plot D	-197.45 m.	Shallow bowl frag., gray fabric, irregular brownish slip outside and inside rim, reddish slip inside	2:5
16		Plot F	Surf. to -200.45 m.	Bowl frag., reddish fabric, irregularly polished brown slip outside, smooth reddish slip inside	2:5
17	BY 119	Main area	Below surf.	See No. 6	2:5
18	BY 42	Sounding J 9:1		See No. 2	2:5
19	BY 483	K 10:5	Church	See No. 7	2:5
20		Plot E	Below surf.	Bowl rim, buff fabric, glossy gray-black slip on both surfaces	2:5
21	BY 158	Main area	Surf.	See No. 13	2:5
22	BY 148	Main area	Below surf.	See No. 9	2:5
23		Plot D	-197.00 m.	Bowl rim, pink fabric, glossy brown-black slip outside, reddish brown inside	2:5
24	BY 437	L 11:16/17	Pre-church	See No. 5	2:5
25		Plot E	-199.00 m.	Tan fabric, black slip	2:5
26	BY 498	J 11:2	Church	See No. 8	2:5
27	BY 403	K 11:5	Church	See No. 11	2:5
28	BY 430	J 11:11	Church	See No. 10	2:5
29	BY 338	L 11:7	Church	See No. 12	2:5
30		Plot C	-196.50 m.	Reconstructed thick-walled bowl, red fabric, glossy reddish-brown slip inside, over rim, and on underside of base, glossy black slip outside	2:5
31		South of Oholo	Surf.	Stamp on Rhodian jar handle (see p. 31)	2:1
32		South of Oholo	Surf.	Stamp on Rhodian jar handle (see p. 31)	2:1
33	BY 446	L 10:18	Pre-church	Rhodian jar handle with round stamp (see p. 31), buff fabric	2:3(a) 2:1(b)
34		Plot C	-196.90 m.	Stamp on Rhodian jar handle (see p. 31)	2:1



1

2

3

4



5

6

7

8

9

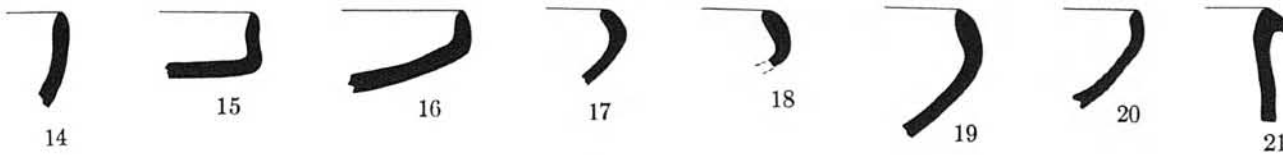


10

11

12

13



14

15

16

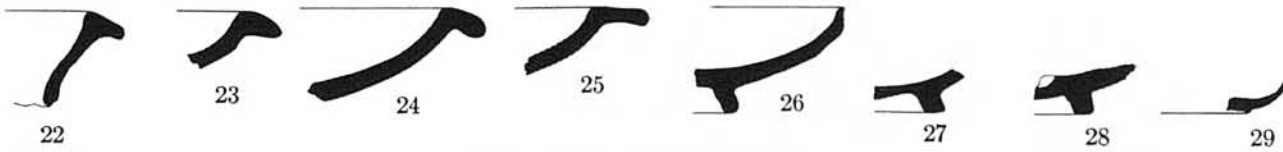
17

18

19

20

21



22

23

24

25

26

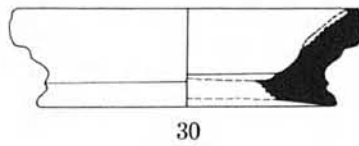
27

28

29



31



30



32



a



b

33



34

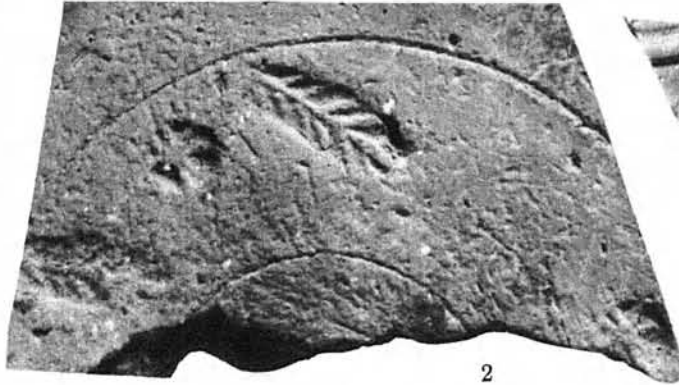
HELLENISTIC SHERDS



No.	Field No. Museum No.	Provenience	Level	Description
1	BY 133	L 11:2	Arab bldg.	Red fabric
2	BY 350 A 30363	L 11:11	Church	Soft tan fabric, red slip (=Pl. 53:42)
3	BY 514b A 30408B	Plot B	-197.00 m.	Hard brown fabric, wheel marks on underside
4	BY 112	Sounding J 8:1		Hard orange-red fabric
5	BY 513 A 30407	Plot A	Surf.	Slightly convex, thin, fine orange-red fabric
6	BY 515 A 30409	Plot C	-196.00 m.	Slightly convex, medium thick, hard brown fabric, white inclusions
7	BY 351 A 30364	L 11:11	Church	Soft drab fabric, red slip (=Pls. 53:41, 61:1)
8		Plot B	-197.35 m.	Slightly convex, medium thick, reddish-brown fabric, white inclusions, red slip, spiral wheel marks on underside (=Pl. 61:2)
9	BY 514a A 30408A	Plot B	-197.00 m.	Ring base, curved outside, rather thick, brick-red fabric, white inclusions (=Pl. 61:4)
10		Plot B	-197.40 m.	Stamped cross on plate shown on Pls. 33:2 and 54:7
11	BY 432 A 30379	L 10:14/15	Pre-church	Slightly convex, fairly thin, brownish fabric, smooth red-brown slip (=Pl. 61:3)
12	BY 516 A 30410	Plot D	-198.00 to -197.30 m.	Slightly convex in center, thin, fine bright red fabric, smooth red slip (=Pl. 61:5)



1



2



3



4



5



7



8



6



10



9



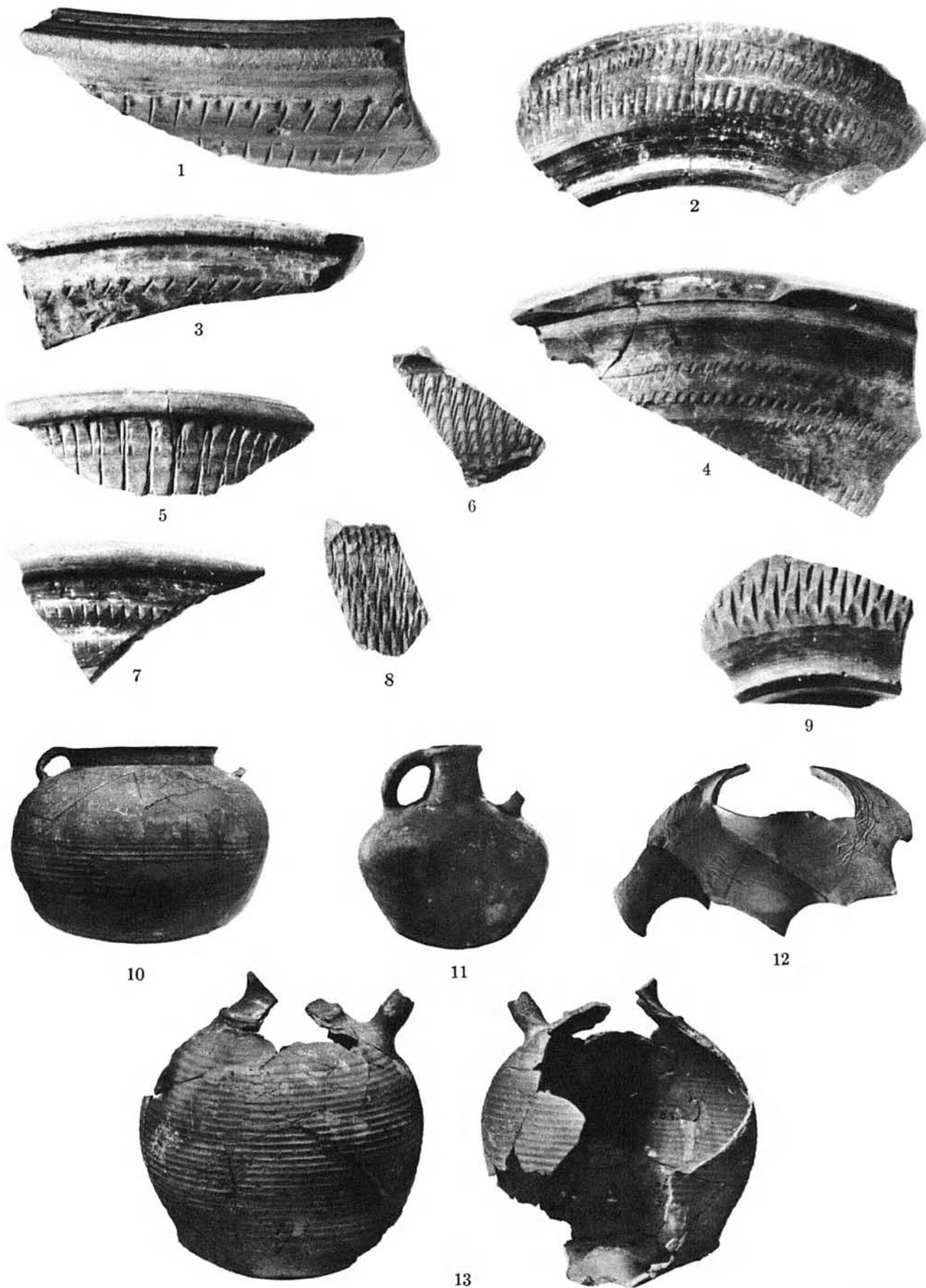
11



12

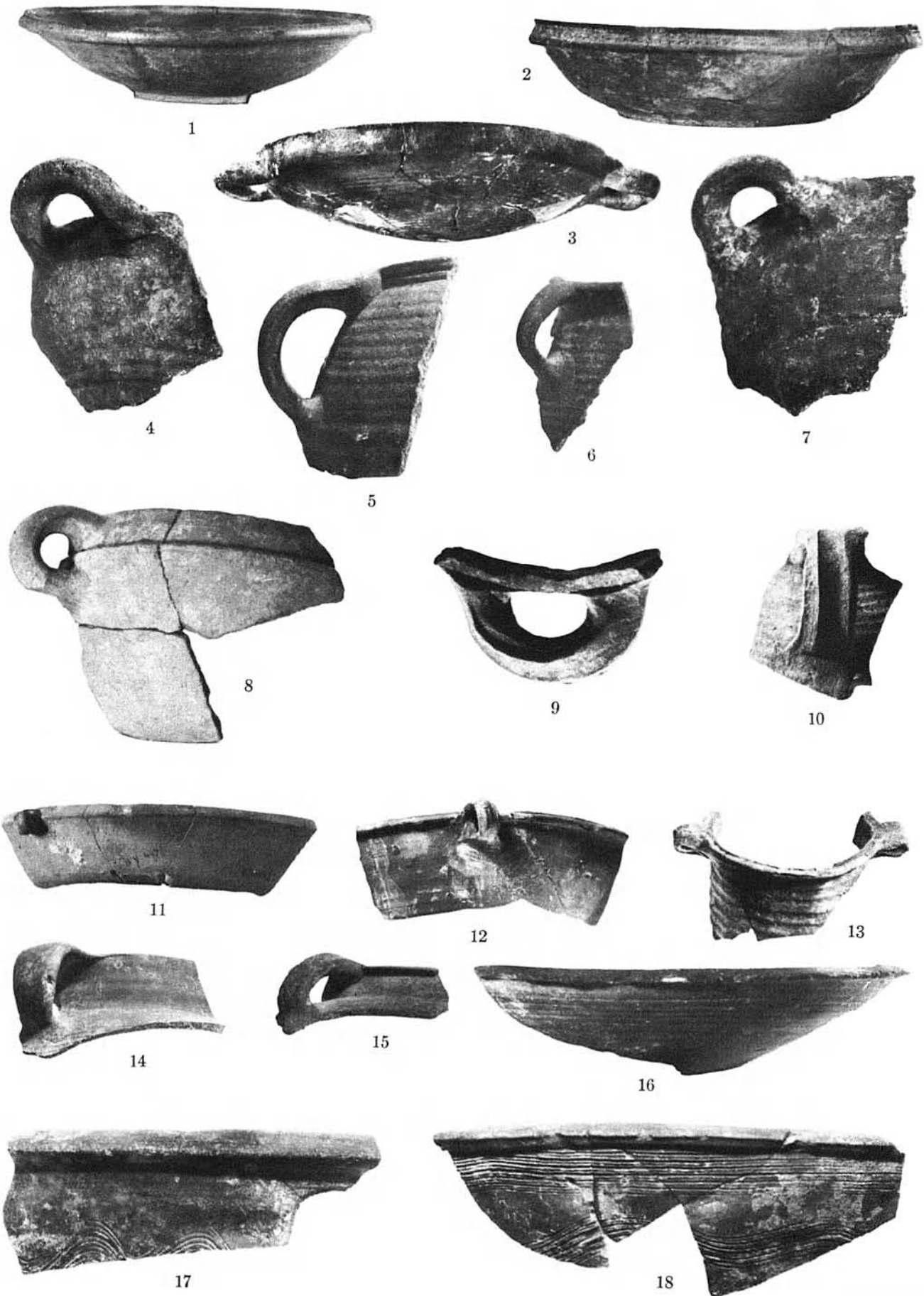
"LATE ROMAN" BASE SHERDS WITH STAMPED DESIGNS INSIDE. ACTUAL SIZE

No.	Field No. Museum No.	Provenience	Level	Description	Scale
1	BY 267	K 11:1	Arab bldg.	Plate rim, brown fabric, rouletted (=Pl. 52:39). Ring base (BY 302) of same plate found in debris in L 10:7	3:5
2		Plots C/D	-197.50 m.	Hard brick-red fabric, smooth red slip, rouletted	1:2
3	BY 242	K 11:2	Church	Rim sherd, hard light reddish-brown fabric, red slip inside, rouletted (=Pl. 52:36)	1:2
4		Plot B	-196.30 m.	Hard brick-red fabric, rouletted	1:2
5		Plot B	-197.00 m.	Fine tan fabric, red slip on rim and outside, rouletted	1:2
6		Plot D	-197.50 m.	Hard reddish fabric, smooth red slip, rouletted	1:2
7		Plot G	Surf.	Grooved rim sherd, hard reddish fabric, bright red slip outside, rouletted, partly worn	1:2
8		Plot D	-197.70 m.	Hard reddish fabric, darker red slip with brown patches, rouletted	1:2
9		Plot B	-197.00 m.	Fine buff fabric, buff slip inside, red slip outside, rouletted	1:2
10	BY 342 A 30429	L 11:22	Pre-church	Thin-walled jar, two handles, brown-red fabric (=Pl. 57:1); cf. <u>Beth-Shan</u> , Pls. XXX 32 and XXXIII 17	1:5
11	BY 520 A 30412	Plot A	-197.10 m.	Spouted jug, reddish-brown fabric, blackened by fire outside (=Pl. 57:2)	1:5
12	{ BY 246 BY 247 A 30341	{ L 11:3 K 11:2	{ Below Arab floor Church }	Lantern(?) assembled from sherds of light buff, pinkish, brown, and gray fabric, cut-out round holes (=Pl. 57:9)	1:5
13		Plot B	-197.25 m.	Restored thin-walled spouted jar, dark red fabric (=Pl. 57:3)	2:5



*"LATE ROMAN" ROULETTED SHERDS (1-9), DARK RED WARE (10, 11, 13), LANTERN? (12)*

No.	Field No. Museum No.	Provenience	Level	Description
1	BY 477 A 30390	K 11:11	Church	Plate, hard brown fabric, glossy brown slip, incised horizontal lines around inside
2		Plot B	-197.40 m.	Restored thin-walled plate, hard orange-red fabric, rouletted rim, stamped cross inside (Pl. 31:10), mended with lead wire (=Pl. 54:7)
3	BY 510 A 30405	L 11:11	Church	Cooking plate, brown granular fabric, ribbed (=Pl. 54:11)
4	BY 359	L 11:13	Church	Cooking bowl frag., flat-cut rim, dark brown granular fabric, gray-black outside, ribbing at bottom
5		Trench	Unknown	Cooking pot frag., ledge rim, dark brown granular fabric, ribbed
6	BY 434	L 11:16/17	Pre-church	Thin-walled cooking pot, dark red fabric, ribbed (=Pl. 53:36)
7	BY 15	Sounding J 9:1		Cooking bowl frag., flat rim, ridged handle, red fabric, ribbed, smoke-blackened (=Pl. 53:24)
8	BY 361 A 30365	L 11:13	Church	Cooking bowl, vertical handles, brown fabric, ridge below rim (=Pl. 54:12)
9		Plot D	Below surf.	Horizontal ridged loop handle, light tan fabric; seen from above and showing straight-cut rim (cf. e.g. Pls. 53:25-26, 54:10-11) with handle ends projecting above it
10		Plots C/D	-197.70 m.	Thin-walled frag. with vertical ridged handle, buff outside, light red inside, ribbed
11	BY 447	L 10:18	Pre-church	Upper part of bowl, two rudimentary "pinched" handles, fairly fine brick-red fabric (=Pl. 53:30)
12	BY 491	J 11:1	Church	Upper part of bowl, grooved rim, two rudimentary "pinched" handles, fairly fine brick-red fabric (=Pl. 53:26)
13	{BY 190 BY 360	L 11:2 L 11:13	Below Arab floor Church	Thin-walled neck or cup frag., grooved flat rim, two rudimentary "pinched" handles, red inside, brown-gray outside, ribbed (=Pl. 54:15)
14	BY 97 A 30325	L 11:4	Arab bldg.	Dark red fabric, thin, ribbed below handle (=Pl. 53:34)
15	BY 331	L 11:7	Church	Dark red fabric, thin (=Pl. 53:32)
16	BY 319	K 11:3	Church	Lid, flat rim, small hole near top, brown granular fabric (=Pl. 54:17)
17	BY 419	K 11:5	Church	Large bowl frag., gray ware, comb-incised wavy band
18	{BY 51 BY 81 A 30324	Sounding J 9:1		Large bowl frag., gray ware, comb-incised bands, mending holes on either side of crack at left with wire in one hole



"LATE ROMAN" PLATES (1-2), COOKING UTENSILS (3-10, 16), DARK RED WARE (11-15),  
 GRAY WARE (17-18). SCALES, ca. 1:4 (1-3) AND 2:5

No.	Field No. Museum No.	Provenience	Level	Description	Scale
1	BY 502 A 30398	Tomb K 11:15	Church	Complete juglet, string-cut base, light tan fabric, incised decoration (=Pl. 56:8); cf. <u>Beth-Shan</u> , Pl. XXXI 6	1:1
2	BY 307	L 10:10	Church	Broken juglet, tan fabric (=Pl. 56:9)	3:5
3	A 30438	Tomb 4 (No. 7)		Complete juglet, neck pinched to form pouring lip, reddish fabric, incised decoration (=Pl. 56:11)	4:5
4	BY 329	L 11:7	Church	Stump base of juglet, light brown fabric	3:5
5	BY 349 A 30362	L 11:11	Church	Broken juglet, traces of handle, light brown fabric (=Pl. 56:10)	3:5
6	BY 457	L 10:19	Pre-church	Lower part of juglet, light red fabric (=Pl. 56:12)	3:5
7	BY 443 A 30382	K 11:11	Church	Lid, gray fabric (=Pl. 56:7)	1:2
8		Plot A	-196.70 m.	Lid, tan-gray fabric	2:5
9		Plot C	-196.10 m.	Lid, buff fabric, traces of burning	2:5
10	BY 519 A 30411	J 11:6	Church	Two-handled jug, brownish-red fabric, white painted decoration (=Pl. 56:1)	3:5
11	BY 348 <sub>a</sub> A 30360	L 11:11	Church	Knobbed lid, gray fabric (=Pl. 56:3)	1:2
12	BY 348 <sub>b</sub> A 30361	L 11:11	Church	Knobbed lid, brown fabric (=Pl. 56:4)	1:2
13	BY 218 A 30331	Sounding J 8:2		"Greek fire bomb," thick-walled, brown fabric (=Pl. 56:2); cf. <u>Beth-Shan</u> , Pl. XXXIII 10	4:5



1



2



3



4



5



6



7



8



9



10



11



12



13

JUGLETS (1-6), LIDS (7-9, 11-12), LIGHT-ON-DARK PAINTED WARE (10), "GREEK FIRE BOMB" (13)



No.	Field No. Museum No.	Provenience	Level	Description
1		Plot A	-197.10 m.	Brown-red fabric, red inside, dark gray outside, white painted decoration (=Pl. 55:1)
2		K 11:11	Church	Brick-red fabric, light red inside, half red and half gray outside, white painted decoration (=Pl. 55:2)
3		K 11:2	Church	Red core, gray surface, white painted decoration
4		Plot B	-197.00 m.	Gray and brown granular fabric, dark gray surface, white painted decoration
5	BY 417 A 30376	K 11:10	Pre-church	Light brick-red fabric, tan and gray just below surface, white painted decoration, dark red inscription
6		Sounding J 8:1		Brownish fabric, lightly corrugated (=Pl. 55:7)
7	A 30437	Tomb 4 (No. 6)		Soft light buff fabric, deformed shape
8		Tomb 4 (No. 50)		Relatively thin-walled, hard gray fabric, reddish-buff inside, light buff outside (=Pl. 55:6). Base of similar but larger jar, of pinkish fabric, found in K 11:4



1



2



3



4



5



6



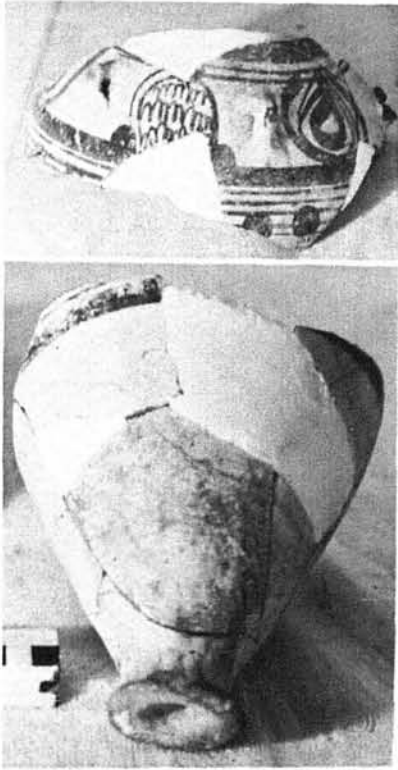
7



8

BAG JARS (1-6, 8), BUFF WARE WITH PLASTIC DECORATION (7). SCALES. 1:4 (7) AND 1:5

No.	Field No. Museum No.	Provenience	Level	Description	Scale
1	BY 347 Jer. 53-113	L 11:11	Church	Tan fabric, cream slip, black and purplish-red paint (=Pl. 57:7)	ca. 2:5
2	BY 441 A 30381	K 11:11	Church	Restored crater, horizontal loop handles, brown fabric, dark red slip, brown bands with white blobs (=Pl. 54:1)	1:4
3		Plot A	-197.10 m.	Hard red-tan fabric, red-brown slip, brown band with white blobs below rim and on rim	4:5
4		Plot C	-196.70 m.	Light red fabric, dark red slip, brown band with white blobs	4:5
5		Plot B	-197.00 m.	Buff fabric, buff slip, white and brown bands, white blobs on one brown band	1:2
6		Plot A	-197.10 m.	Gray-buff core, red surface, red slip, brown band with white blobs, white band	1:2
7		Plot D	-197.40 m.	Soft buff fabric, red slip, brown band with white blobs, white bands	1:2
8		Plots C/D	-197.70 m.	Hard brick-red fabric, white decoration	1:2
9		Plot B	-196.30 m.	Light tan fabric, light red slip, white decoration	1:2
10	BY 30	Sounding H 9:1		Hard brown-red fabric, white decoration	1:2
11	BY 18	Sounding J 9:1		Hard gray fabric, red inside, reddish-tan outside, white decoration	1:2
12		Plots C/D	-197.70 m.	Shoulder(?) sherd, hard brick-red fabric, white decoration	1:2
13		Plot A	-196.30 m.	Bag jar(?) sherd, hard brick-red fabric, white decoration	1:2



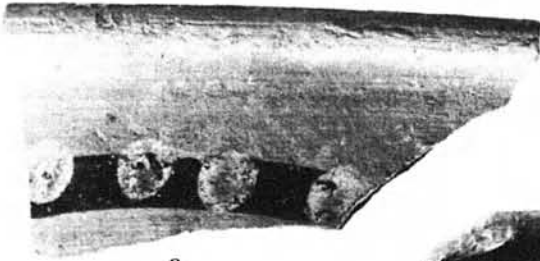
1a



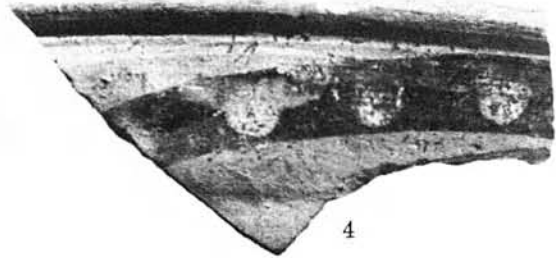
1b



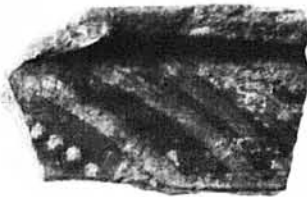
2



3



4



7



5



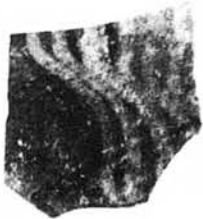
6



8



9



10



11



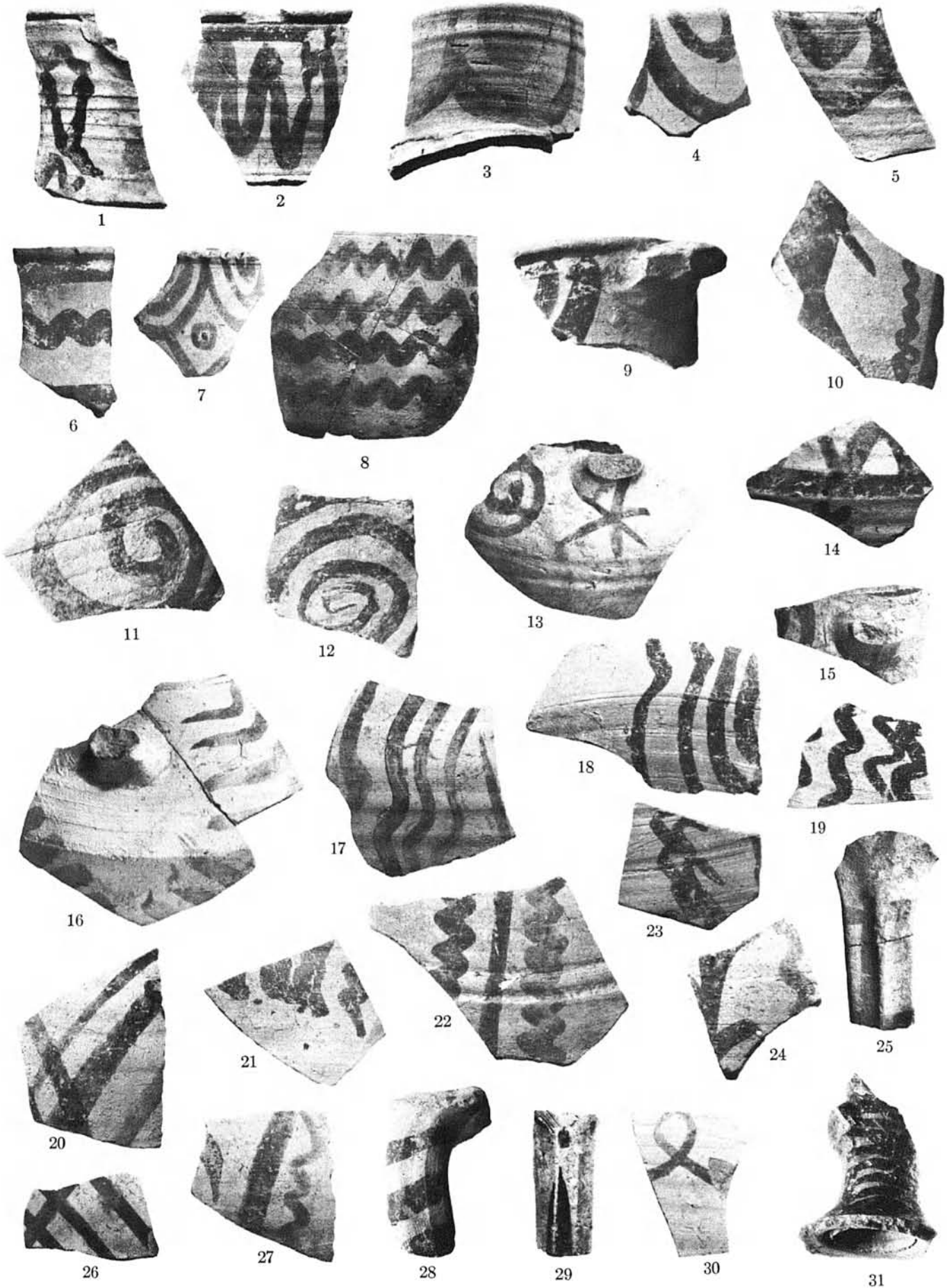
12



13

PAINTED WARES. DARK-ON-LIGHT (1), LIGHT-ON-DARK (8-13), CRATERS WITH DARK AND LIGHT BANDS AND WHITE BLOBS (2-7)

No.	Field No.	Provenience	Level	Description
1		L 10:7	Arab bldg.	Neck with flat grooved rim and traces of handle, warm buff slip, purplish-red paint
2	BY 259	K 11:1	Arab bldg.	Neck with grooved rim, buff fabric, light buff slip, brown paint
3	BY 243	K 11:1	Arab bldg.	Neck, greenish-drab fabric, faint brownish paint (=Pl. 58:4)
4		K 11:5	Church	Neck, light tan fabric, greenish-cream slip, red paint
5		K 11:5	Church	Neck, reddish fabric, mellow cream slip, brownish paint
6	BY 429	J 11:11	Church	Flat grooved rim, brownish-gray fabric, brownish-buff slip, dark red paint
7	BY 487	J 11:1	Church	Flat rim with nicks, buff fabric, greenish-buff slip, red paint
8	BY 239	K 11:1	Arab bldg.	Large neck or cup frag., tan fabric, greenish slip, brown paint
9		K 11:5	Church	Slightly grooved flat rim and ridged handle, buff fabric, green-buff slip, brownish paint
10		L 11:11	Church	Tan fabric, buff slip, brownish-red paint
11	BY 275	K 11:1	Church	Buff fabric, cream-buff slip, light orange-red paint
12		Main area	Surf.	Light buff fabric, buff slip, purplish-brown paint
13	BY 278	K 11:3	Church	Tan fabric, light buff slip, brown-red paint
14		L 11:9	Church	Light brick-red fabric, pinkish-cream slip, bright red paint
15	BY 274a	K 11:1	Arab bldg.	Sherd with traces of handle, light tan fabric, cream-buff slip, brownish-red paint
16	BY 105	Sounding J 8:1		Shoulder with traces of handle, orange-buff fabric, buff slip, red paint
17		L 10:12	Church	Buff fabric, greenish-buff slip, thin reddish paint, slightly deformed shape
18		K 11:1	Arab bldg.	Bowl(?) frag., brownish fabric, warm buff slip, bright brown-red paint
19		J 11:1	Church	Greenish-buff fabric, greenish-cream slip, brownish-red paint
20	BY 198	L 10:1	Arab bldg.	Buff fabric, greenish-buff slip, brownish-gray paint
21	BY 330	L 11:7	Church	Tan fabric, greenish-buff slip, brownish-red paint
22		L 11:12	Church	Buff fabric and slip, thin brownish paint
23	BY 313	L 10:12	Church	Buff fabric and slip, brownish-red paint
24		K 11:5	Church	Reddish-buff fabric, warm buff slip, thin red-brown paint
25	BY 362	L 11:13	Church	Ridged handle of thin-walled (4 mm.) vessel, light red fabric, light buff slip, brown-red paint
26	BY 142b	L 11:2	Arab bldg.	Buff fabric, brown paint
27		J 11:1	Church	Grayish-buff fabric, buff slip, brownish-red paint
28		K 11:1	Arab bldg.	Handle, light buff fabric, cream slip, purplish-red paint
29		K 11:1	Arab bldg.	Handle, buff fabric, cream slip, purplish-red paint
30		Main area	Unknown	Light tan fabric, cream slip, orange-red paint
31		Main area	Surf.	Neck with traces of loop handle, reddish fabric, orange slip, brown-red paint



DARK-ON-LIGHT PAINTED WARES. SCALE, 2:5

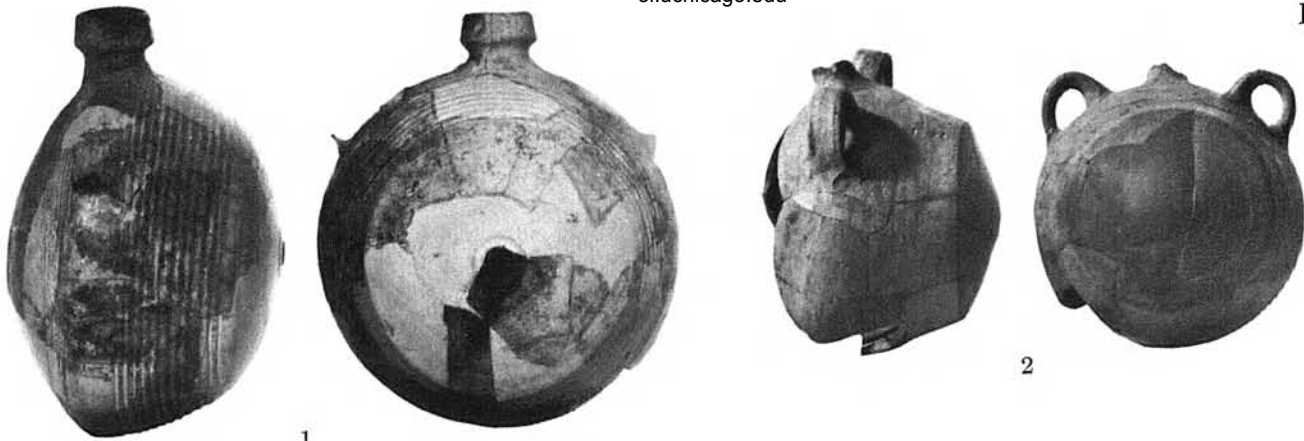
No.	Field No. Museum No.	Provenience	Level	Description
1	BY 34	Sounding H 9:1		Rim (24 mm. thick) sherd of large basin, traces of handle (14 mm. thick), hard reddish-brown fabric, gray core
2	BY 428a	L 11:16	Pre-church	Rim sherd of hole-mouth vessel, rough brownish fabric
3	BY 428b	L 11:16	Pre-church	Rim and shoulder sherd (19-24 mm. thick), rough reddish-tan fabric, straw and mineral temper
4		Plot E	Surf.	Body frag. of large vessel (18-20 mm. thick), warm tan fabric
5		Plots A/B	-196.30 m.	Rim sherd (16-18 mm. thick) of large jar, pinkish-tan fabric
6		Plot G	Below surf.	Hard brownish-buff fabric
7	BY 248	L 11:6	Church	Stump base, tan fabric
8	BY 207	L 10:10	Church	Stump base, reddish-brown fabric
9	BY 444	K 11:11	Church	Stump base, brown-red fabric
10	BY 272	K 11:1	Arab bldg.	Thin-walled vessel frag. with hollow base, dark red fabric (=Pl. 54:18)
11	BY 41	Sounding J 9:1		Stump base, buff fabric
12	BY 16 A 30318	Sounding J 9:1		Restored hole-mouth jar (20 mm. thick), rough light brown fabric, straw or chaff temper, incised decoration (=Pl. 58:8)
13	BY 188	Sounding K 8:1		Stump base, gray fabric
14	BY 181	Sounding J 8:1		Stump base, gray fabric



FRAGMENTS OF LARGE VESSELS WITH PLASTIC DECORATION (Nos. 1-6, 12), STUMP BASES (7-9, 11, 13-14), THIN-WALLED FRAGMENT WITH HOLLOW BASE (10). SCALES, 1:2 (1-6), 4:5 (7-11, 13-14), 1:5 (12)

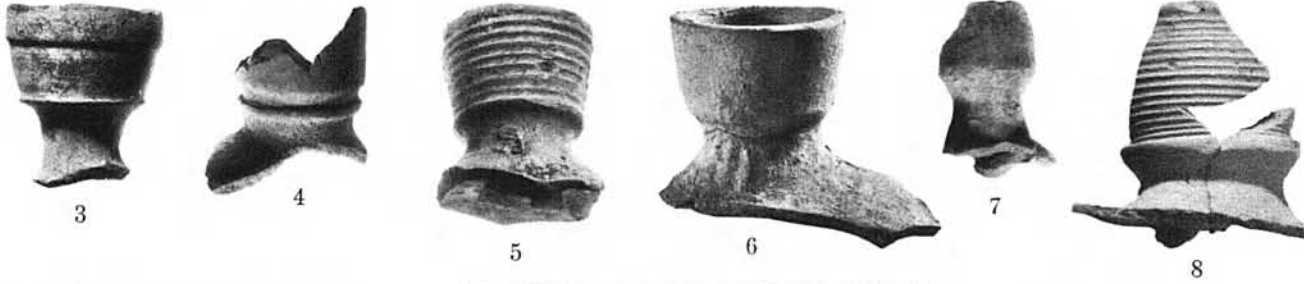


No.	Field No. Museum No.	Provenience	Level	Description
1	BY 480 A 30393	K 11:11	Church	Restored pilgrim flask, buff fabric, ribbed (=Pl. 57:5)
2	BY 376 A 30367	L 11:7	Church	Restored pilgrim flask, soft buff fabric, ribbed (=Pl. 57:6)
3	BY 191	L 11:24	Arab bldg.	Neck, probably of pilgrim flask, hard brown fabric, cream slip (=Pl. 57:11)
4	BY 258	K 11:1	Arab bldg.	Neck, soft yellowish-buff fabric, cream slip (=Pl. 57:13)
5	BY 19	Sounding J 9:1		Neck of pilgrim flask, soft greenish-buff fabric, cream slip, ribbed (=Pl. 57:12)
6		Plot C	Below surf.	Neck and shoulder frag. of pilgrim flask, hard reddish fabric, buff slip (=Pl. 57:10)
7	BY 154	Main area	Surf.	Neck, soft light buff fabric
8	BY 155 A 30326	Main area	Surf.	Neck of pilgrim flask, soft yellow-buff fabric, slightly lighter slip, ribbed
9	BY 5-6+82 A 30431	Sounding J 9:1		Pitcher, light-buff fabric, shallow ribbing on body (=Pl. 58:3)
10	BY 235 Jer. 56-116	K 11:3	Church	Cream-buff fabric (=Pl. 58:7)
11	BY 1 A 30311	L 10:1	Arab bldg.	Thin-walled vessel, one handle preserved, cream-buff fabric (=Pl. 58:2); cf. <u>Beth-Shan</u> , Pls. XXXII 2, 6 and XXXIII 4
12	BY 236	K 11:3	Church	Light buff fabric, traces of handle above restored part of ridge (=Pl. 58:1)
13	BY 475 A 30388	K 11:11	Church	Pinkish-buff fabric, cut-out decoration on red painted bands, traces of burning inside; cf. <u>Beth-Shan</u> , Pl. XXVII 1, <u>QDAP X</u> , Pl. XXI 7 and 9



1

2



3

4

5

6

7

8



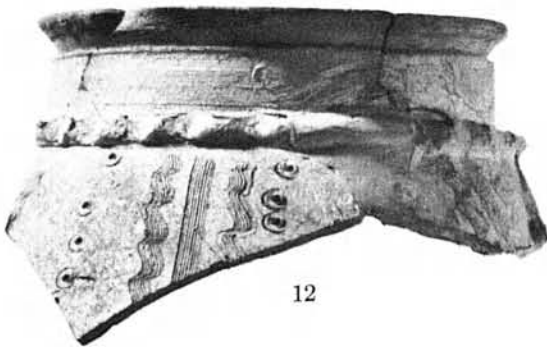
9



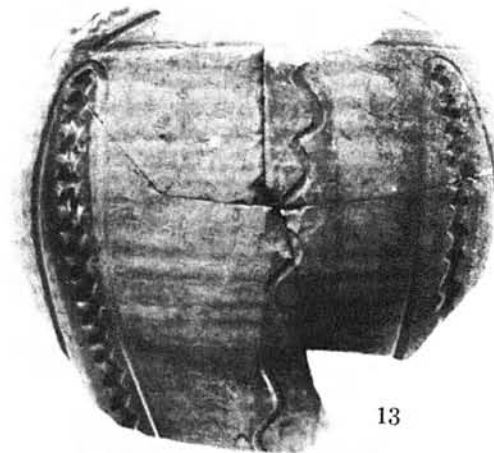
10



11



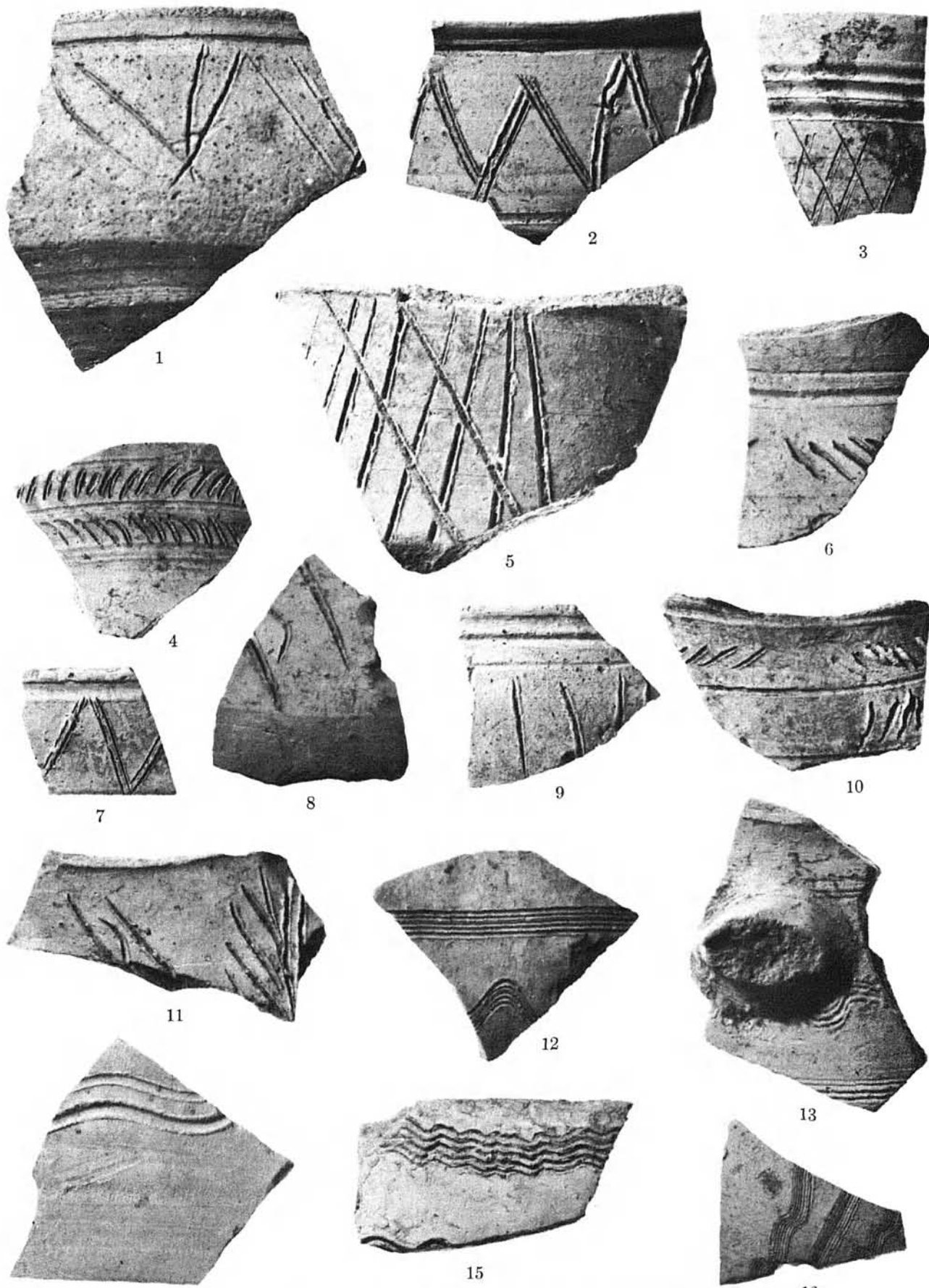
12



13

PILGRIM FLASKS (1-3, 5-6, 8), SOFT BUFF WARES (4, 7, 9-12), VESSEL WITH CUT-OUT DECORATION ON PAINTED BANDS (13). SCALES, 1:5 (1-2), 2:5 (3-9, 11, 13), 3:5 (12)

No.	Field No.	Provenience	Level
1	BY 304	L 10:10	Church
2	BY 145	Main area	Below surf.
3	BY 153 <u>b</u>	Main area	Surf.
4	BY 146	Main area	Below surf.
5	BY 401	K 11:5	Church
6	BY 66	L 10:8	Church
7	BY 153 <u>a</u>	Main area	Surf.
8	BY 101	L 10:7	Arab bldg.
9	BY 160	Main area	Surf.
10	BY 8	Sounding J 9:1	
11	BY 138 <u>b</u>	L 11:2	Arab bldg.
12		Unknown	
13	BY 104	Sounding J 8:1	
14	BY 130	L 11:2	Arab bldg.
15	BY 85	Sounding J 9:1	
16		Unknown	

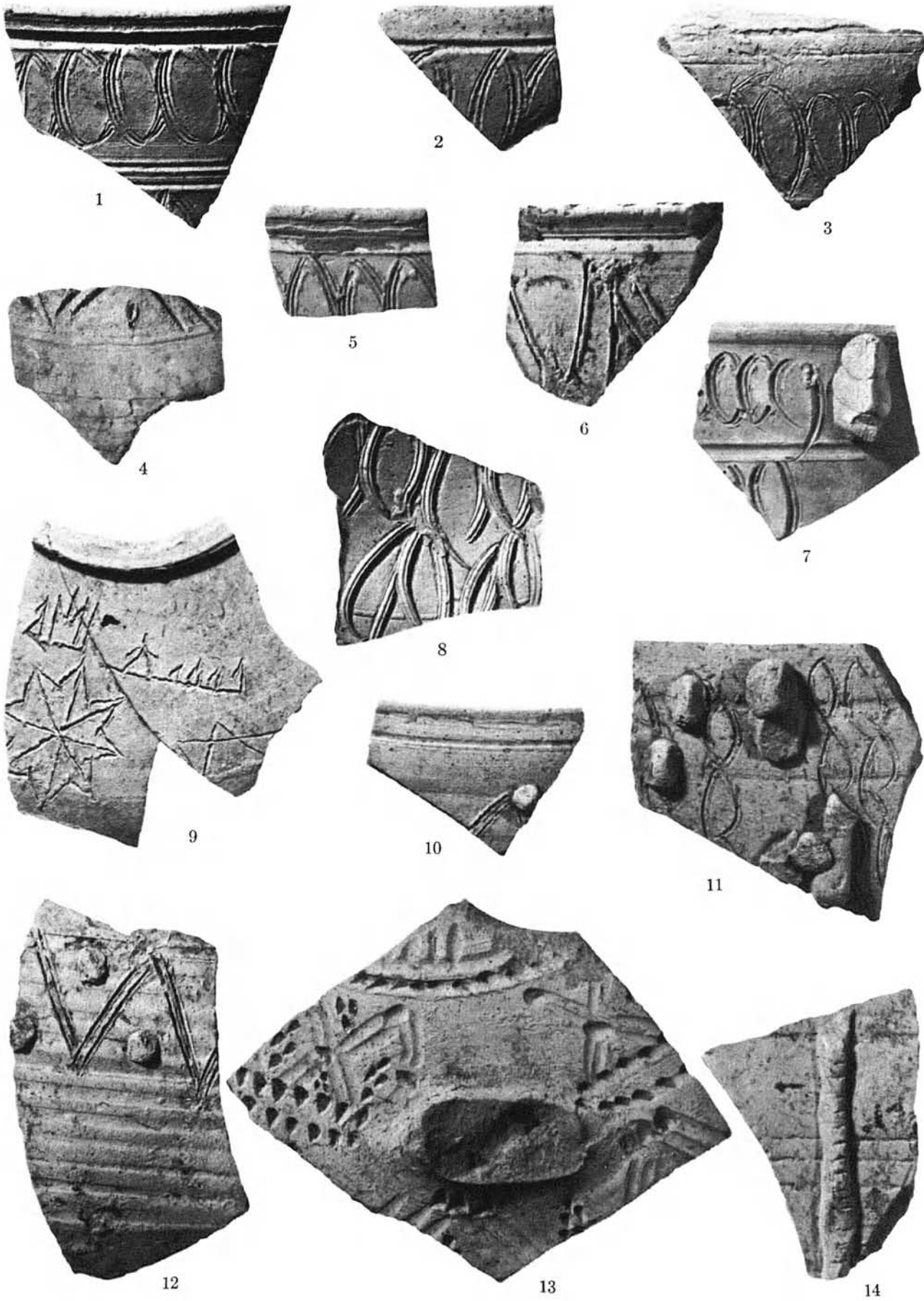


14

LIGHT BUFF SHERDS WITH PLASTIC DECORATION. ACTUAL SIZE

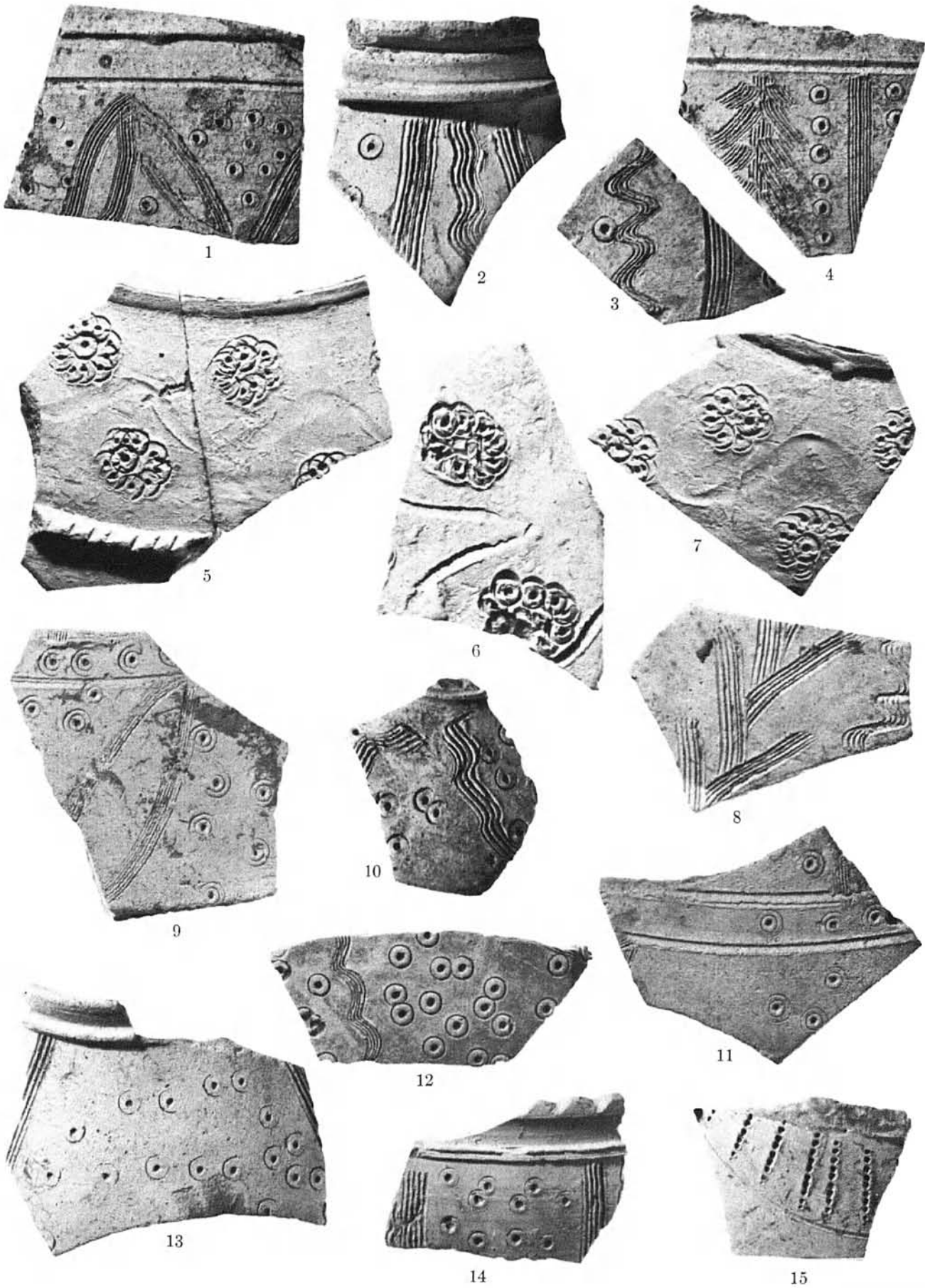
16

No.	Field No.	Provenience	Level	Description
1	BY 206	L 10:9	Church	Light buff fabric
2	BY 214	L 10:13	Church	Light buff fabric
3	BY 189	L 11:2	Below Arab floor	Light buff fabric
4	BY 128	L 11:2	Arab bldg.	Light buff fabric
5	BY 175b	L 11:2	Arab bldg.	Light buff fabric
6	BY 144	Main area	Below surf.	Light buff fabric
7	BY 370	K 10:2	Church	Light buff fabric
8	BY 367	L 10:12	Church	Greenish-buff fabric
9	BY 438	K 10:3	Church	Inscribed(?) rim sherd, light buff fabric
10	BY 139	L 11:2	Arab bldg.	Light buff fabric
11	BY 152	Main area	Surf.	Light buff fabric
12	BY 7	L 10:1?	Arab bldg.?	Light buff fabric
13	BY 115	Main area	Below surf.	Light buff fabric, traces of large handle
14	BY 201	L 10:6	Arab bldg.	Light buff fabric



BUFF WARE WITH PLASTIC DECORATION. ACTUAL SIZE

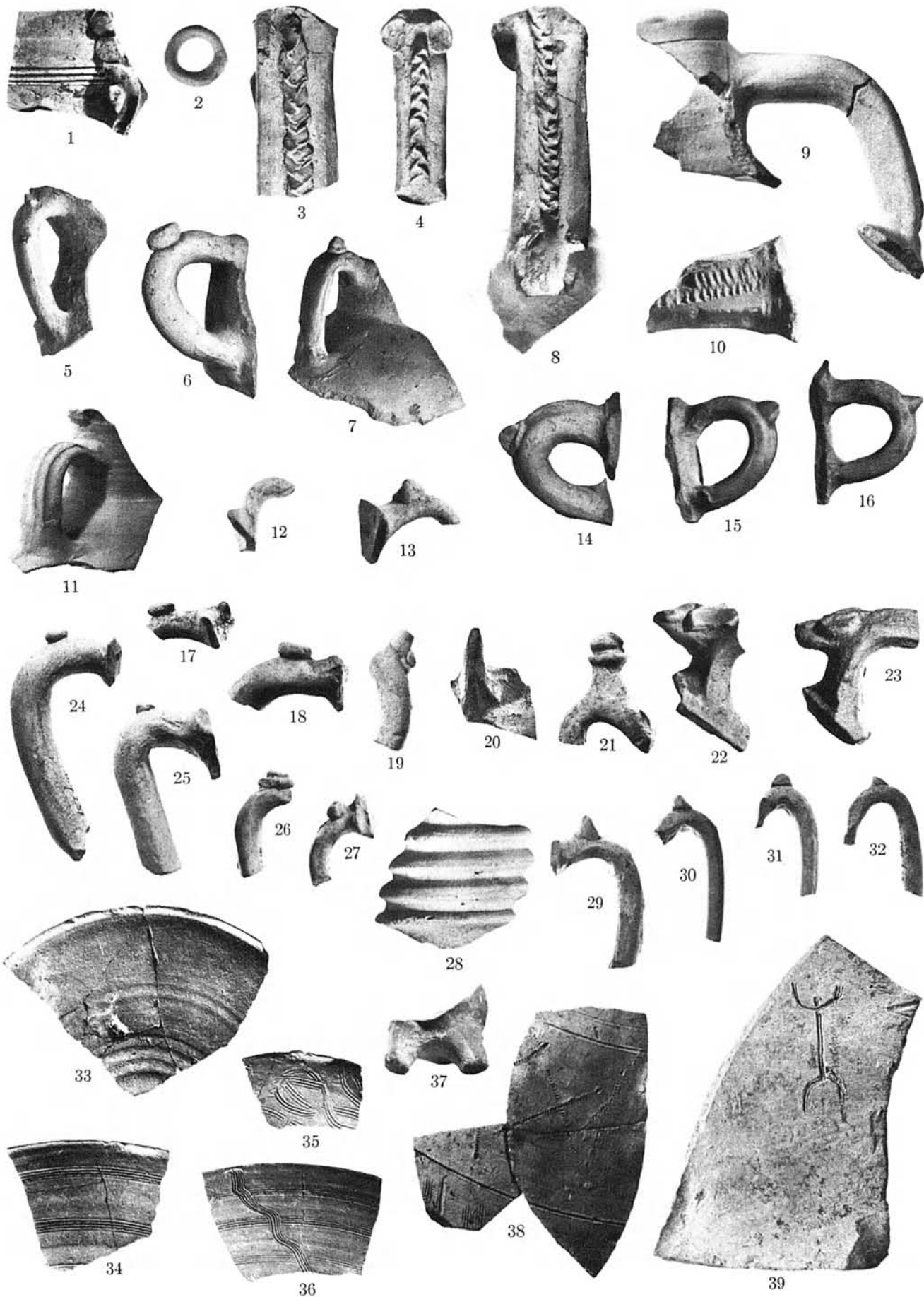
No.	Field No.	Provenience	Level
1	BY 135 <u>c</u>	L 10:7	Arab bldg.
2	BY 253 <u>a</u>	L 11:8	Church
3	BY 233	L 10:13	Church
4	BY 135 <u>a</u>	L 10:7	Arab bldg.
5	BY 209	L 10:11	Church
6	BY 200	L 10:6	Arab bldg.
7	BY 212	L 10:13	Church
8		L 11	Surf.
9	BY 175 <u>a</u>	L 11:2	Arab bldg.
10	BY 135 <u>b</u>	L 10:7	Arab bldg.
11	BY 251	L 11:9	Church
12		Main area	Surf.
13		Main area	Unknown
14	BY 138 <u>a</u>	L 11:2	Arab bldg.
15	BY 205	L 10:9	Church



LIGHT BUFF SHERDS WITH PLASTIC DECORATION. ACTUAL SIZE



No.	Field No. Museum No.	Provenience	Level	Description	Scale
1	BY 369	K 10:2	Church	Neck with loop handle, greenish-buff fabric	1:2
2	BY 4	Sounding J 9:1		Ring from loop handle, light buff fabric	1:2
3	BY 150	Main area	Surf.	Band handle, light buff fabric	1:2
4	BY 252b	L 11:9	Church	Band handle, light buff fabric	1:2
5	BY 39	Sounding J 9:1		Knobbed handle, light buff fabric	1:2
6	BY 257	K 11:1	Arab bldg.	Knobbed handle, light buff fabric	1:2
7	BY 27	Sounding H 9:1		Knobbed handle, light buff fabric	1:2
8	BY 173	L 11:2	Arab bldg.	Band handle, light buff fabric	1:2
9	BY 387a	K 11:9/10	Pre-church	Brown fabric, buff slip	3:10
10	BY 151	Main area	Surf.	Flat handle, red fabric; cf. <u>QDAP X 103</u> , Fig. 16:7	1:2
11	BY 357	L 11:12	Church	Light brown fabric, incised decoration on rim, neck, and shoulder	1:5
12	BY 83	Sounding J 9:1		Light buff fabric	1:2
13	BY 174	L 11:2	Arab bldg.	Light buff fabric	1:2
14	BY 149a	Main area	Surf.	Knobbed handle, light buff fabric	1:2
15	BY 126b	L 11:2	Arab bldg.	Knobbed handle, light buff fabric	1:2
16	BY 252a	L 11:9	Church	Knobbed handle, light buff fabric	1:2
17	BY 255a	K 11:1	Arab bldg.	Light buff fabric	1:2
18	BY 282	K 11:3	Church	Light buff fabric	1:2
19	BY 165	L 10:8	Church	Light buff fabric	1:2
20	BY 127	L 11:2	Arab bldg.	Lug, light buff fabric; cf. <u>QDAP X 81</u> , Fig. 5:15-16, and Pl. XIX 3-4	1:2
21	BY 197	L 10:1	Arab bldg.	Stirrup-shaped handle, light buff fabric; cf. <u>QDAP X 103</u> , Fig. 16:1-3	1:2
22	BY 26	Sounding H 9:1		Handle, light buff fabric	1:2
23	BY 164	L 10:8	Church	Handle, light buff fabric	1:2
24	BY 237b	Unknown		Knobbed handle, light buff fabric	1:2
25	BY 187a	Sounding K 8:1		Knobbed handle, light buff fabric	1:2
26	BY 204	L 10:9	Church	Knobbed handle, light buff fabric	1:2
27	BY 94	L 11:4	Arab bldg.	Knobbed handle, light buff fabric	1:2
28	BY 499	J 11:3	Post-church	Neck frag., light buff fabric	1:2
29	BY 149b	Main area	Surf.	Knobbed handle, light buff fabric	1:2
30	BY 126a	L 11:2	Arab bldg.	Knobbed handle, light buff fabric	1:2
31	BY 126c	L 11:2	Arab bldg.	Knobbed handle, light buff fabric	1:2
32	BY 100b	L 10:7	Arab bldg.	Knobbed handle, light buff fabric	1:2
33		Plot A	-197.10 m.	Lid frag., flat lip cut at angle, hard reddish-brown fabric, gray-brown outside	2:5
34		Plots C/D	-197.50 m.	Lid frag., flat lip cut at angle, slight projection from lip, hard tan fabric	2:5
35		Plots A/B	-197.20 m.	Lid frag., slight projection from lip, hard brown fabric, large grits	2:5
36	BY 410	K 11:9	Pre-church	Lid frag., hard brown fabric, gray-brown outside	2:5
37	BY 32	Sounding H 9:1		Small theriomorphic vessel frag., tan fabric; cf. <u>QDAP X 103</u> , Fig. 16:20	1:2
38	BY 99	Sounding J 8:1		Light buff fabric	1:2
39	BY 494b A 30395B	J 11:4	Post-church	Hard reddish-brown fabric, thick	1:2



BUFF WARE WITH PLASTIC DECORATION (1-8, 12-32, 38), LIDS (33-36), MISCELLANEOUS FRAGMENTS (9-11, 37, 39)

No.	Field No. Museum No.	Provenience	Level	Description
1	BY 390 Jer. 53-117	L 11:12	Church	Light brown fabric, traces of red slip, loop handle broken
2	BY 389 A 30371	L 11:14	Church	Light tan fabric, traces of brownish-red slip, blackened by fire at wick holes, loop handle broken
3	BY 396b A 30373B	L 11:14	Church	Buff fabric, red slip, six wick holes, loop handle broken (=Pl. 60:27)
4	BY 396c A 30373C	L 11:14	Church	Pinkish-tan fabric, traces of red slip, lug handle
5	BY 433 A 30380	L 10:15	Pre-church	Fine light tan fabric, perhaps red slip
6	BY 305 A 31347	L 10:10	Church	Large multiple-wick frag., grayish-buff fabric, red slip outside and inside, plant design
7	BY 388 A 31349	L 11:12	Church	Multiple-wick(?) frag., buff fabric, red slip, loop handle broken
8	BY 474a A 31342	K 11:11	Church	Light gray fabric, dark gray core, knob handle
9	BY 535 A 30426	Plot D	-197.50 m.	Buff fabric, red slip on upper part (perhaps hand-decorated), horizontally projecting lug handle (cf. <u>Beth-Shan</u> , Pl. XXXVI 15-16). Found in crack of broken mortar
10	{BY 337e BY 345 A 31346	L 11:7 } L 11:11 }	Church	Well baked brick-red fabric, blackened at nozzle, cross (cf. <u>Nebo</u> , Pl. 58:10) in wick channel (=Pl. 60:28)
11	BY 295 A 30350	L 10:12	Church	Buff fabric (=Pl. 60:30); cf. <u>Gezer</u> , Pl. XCIX 6, <u>QDAP X</u> , Pl. 17:7
12	BY 211 A 30328	L 10:12	Church	Tan fabric, reddish surface (=Pl. 60:31)
13	BY 346 A 30359	L 11:11	Church	Hard reddish fabric, black core, nozzle blackened, upturned lug handle (=Pl. 60:32); cf. <u>Gezer</u> , Pl. CVIII 5, <u>Samaria</u> , Fig. 89:8, <u>Samaria I</u> , Fig. 201:813
14	BY 512 A 30406	Plot D	-197.50 m.	Tan fabric, red slip, lug handle
15	BY 216 A 30329	L 10:5	Arab bldg.	Reddish-buff fabric (rather compact and heavy), thick walls and base, knob handle; cf. <u>Gezer</u> , Pl. CXVIII 13
16	BY 217 A 30330	L 10:12	Church	Poorly baked tan fabric, traces of red slip, thick-walled, knob handle
17	BY 14 A 30317	Sounding J 9:1		Soft brittle tan fabric, traces of red slip
18	BY 505a A 31350	L 11:17	Pre-church	Buff fabric, red slip, thin-walled, lug handle of rectangular section
19	BY 61 A 30322	L 11:2 floor	Arab bldg.	Well fired reddish fabric, cream-buff slip, thin-walled; cf. <u>QDAP X</u> , Pl. XVIII 5, for decoration in channel
20	BY 156b A 31348	Main area	Surf.	Reddish-buff fabric; cf. <u>Samaria</u> , Fig. 89:7
21	BY 407 A 31351	K 11:4 or 2	Church	Greenish-buff fabric
22	BY 203 A 30327	L 10:6	Arab bldg.	Buff fabric, greenish-buff slip (=Pl. 60:29); cf. <u>QDAP X</u> , Pl. XVIII 3, for decoration



1



2



3



4



5



6



7



8



9



10



11



12



13



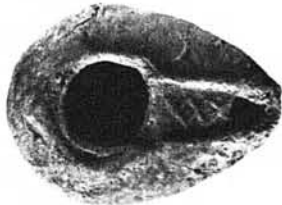
14



15



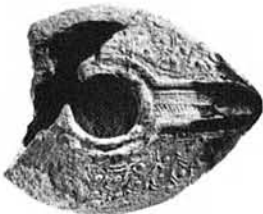
16



17



18



19



20



21



22

LAMPS. SCALES, 1:2 (20-21) AND 2:5

No.	Tomb No.	Object No.	Description	Scale
1	3	5	Chipped gnostic gem, black onyx(?); obv.: human figure with lion(?) head and snake(?) legs; rev.: ΙΑΩ MIXAHA	2:1 (obv.)
2	3	52	Carnelian signet with bird	1:1
3	4	11	Carnelian bezel of silver ring	1:1, 3:2
4	4	39	Bronze signet ring with lion	3:2
5	4	28	Bronze ring, conical bezel with cross	1:1, 3:2
6	4	12	Carnelian signet, animal (pig or wild boar) engraved on convex surface	2:1
7	4	10	Part of gold ring or earring	1:1
8	4	14	Silver ring, filigree bezel	1:1, 3:2
9	3	19	Bead pendant, silver(?) with paste core and bronze loop	4:5
10	7	1	Paste ring	1:1
11	4 or 7		Glass ring with glass inset	1:1
12	3	7	Bronze band ring with bezel	1:1
13	3	65	Bronze ring with bezel	1:1
14	3	38	Iron key	4:5
15	3	2	Bronze ring	1:1
16	3	28	Bronze ring	1:1
17	3	27	Flat bronze ring	1:1
18	3	9	Bronze ring	1:1
19	3	47	Bronze pendant	3:4
20	3	22	Bronze pendant	3:4
21	3	20	Bronze pendant	3:4
22	3	21	Bronze pendant	3:4
23	3	64	Iron pendant	3:4
24	3	44	Open bronze bell	1:1
25	4	8a	Closed bronze bell	1:1
26	4	8b	Closed bronze bell	1:1
27	4	8c	Closed bronze bell	1:1
28	3	29	Closed bronze bell	1:1
29	3	43	Closed bronze bell with clapper	1:1
30	3	42	Closed bronze bell	1:1
31	3	39	Closed bronze bell	1:1
32	3	26	Closed bronze bell	1:1



2



3



4



5



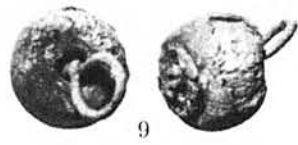
6



7



8



9



10



11



12



13



14



15



16



17



18



19



20



21



22



23



24



25



26



27



28



29



30



31



32

SMALL OBJECTS FROM TOMBS

No.	Tomb No.	Object No.	Description
1	4	17	Etched carnelian bead with traces of silver wire
2	4	19	Translucent bead with traces of silver wire
3	3	56	Bronze chain frag. with twisted-wire and bead pendants
4	4	23	About 60 paste and glass beads
5	7	5a	Fluted bead
6	4	20	Black agate bead pendant
7	4	21	Fifteen beads, one of opal(?), most others of carnelian
8	4	26	Onyx(?) bead
9	3	53	Fifty-one beads (not all illustrated)
10	7	4	Baked-clay plaque frag. with circle in relief, pierced (possibly a glass-disk shrine; cf. Harold R. Willoughby, "The religious import of the Tushingham plaque," <i>Vigiliae Christianae</i> XI [1957] 57-92 and Pl. I)
11	4	37	Glass bracelet
12	3	11	Bronze coin reused as pendant, design effaced
13	3	4	Bronze coin reused as pendant (p. 51, No. 8)
14	3	10	Bronze coin reused as pendant (p. 51, No. 5)
15	3	3	Bronze coin reused as pendant (p. 51, No. 4)
16	4	16	Bronze coin reused as pendant (p. 51, No. 9)
17	4	15	Bronze coin reused as pendant (p. 51, No. 12)



SMALL OBJECTS FROM TOMBS. ACTUAL SIZE



No.	Field No. Museum No.	Provenience	Level	Description
1	BY 507 A 30402	J 11:8	Church	Silver coin (p. 51, No. 1)
2	BY 534b A 30424	J 11:6	Church	Bronze coin (p. 51, No. 7)
3	BY 392 A 30372B	J 11:2	Church	Bronze coin (p. 51, No. 10)
4	BY 418 A 30377	K 11:11 floor	Church	Bronze coin (p. 51, No. 11)
5	BY 297 A 30352	L 11:13	Church	Bronze coin (p. 51, No. 17)
6	BY 223 A 30336	West of church	Surf.	Bronze coin (p. 51, No. 18)
7	BY 503 A 30399	J 11:1	Arab bldg.	Bronze coin (p. 51, No. 20)
8	BY 504 A 30400	J 11:8	Church	Bronze coin (p. 52, No. 26)
9	BY 320 A 30354	K 10:1 floor	Church	Bronze coin (p. 52, No. 28)
10	BY 9 A 30314	Sounding J 9:1		One of hoard of 36 bronze coins (p. 52, No. 30)
11	BY 20 A 30319	Sounding H 9:1		Bronze coin (p. 52, No. 33)
12	BY 21 A 30320	Sounding H 9:1		Bronze coin (p. 52, No. 34)
13	BY 220 A 30333	Unknown	Surf.	Silver (plated?) coin (p. 52, No. 31)
14	BY 10 A 30315	Sounding J 9:1		Broken silver coin (p. 51, No. 24)
15	BY 219 A 30332	Dump	Unknown	Silver coin (p. 52, No. 35)
16	BY 321 A 30355	Dump	Unknown	Bone disk; cf. <u>Beth-Shan</u> , Pl. XL 32, <u>Nebo</u> , Pl. 134:1
17	BY 527 A 30417	Plot C	-197.70 m.	Bone pin; cf. <u>Beth-Shan</u> , Pl. XL 27 and 31, <u>Samaria</u> , Fig. 114:25



COINS AND BONE OBJECTS. ACTUAL SIZE

No.	Field No. Museum No.	Provenience	Level	Description
1	A 30434	Tomb 4 (No. 2)		Iron hammer-adz
2	BY 2 A 30312	Sounding J 9:1		Iron pickax
3	BY 485 A 31339	K 11:11	Church	Iron chisel
4	A 30433	Tomb 4 (No. 1)		Iron blade with one cutting edge, back folded over for strengthening
5	BY 294 A 31336	L 11:4	Arab bldg.	Bent iron spike
6	BY 280 A 31338	K 11:1	Arab bldg.	Iron nail
7	Jer. 53-176	Tomb 3 (No. 50)		Iron sickle blade
8	A 30467	Tomb 4 (No. 38)		Iron sickle blade
9	BY 11 A 30316	Sounding J 9:1		Iron knife blade
10	A 30436	Tomb 4 (No. 5)		Part of iron bracelet; cf. Gezer, Pls. CXVIII 10 and CXIX 12
11	BY 486b A 30394	K 11:11	Church	Broken iron ring. Found with complete iron ring (BY 486a)
12	A 30497	K 11:1	Arab bldg.	Iron spade bit (=Pl. 61:7)
13	BY 284 A 30342	K 11:3 floor	Church	Iron horseshoe
14	BY 228 A 30337	L 11:9	Church	Bronze cross, probably part of church lamp
15	BY 528 A 30418	K 11:5	Church	Bronze kohl spoon or ear scoop
16	BY 311 A 30353	L 11:9	20 cm. below column base	Bronze receptacle, possibly part of candelabrum
17	BY 468 A 31341	Tomb K 11:15	Church	Three bronze cramps used to hold soft stone slabs in place (see p. 16)



IRON AND BRONZE OBJECTS. SCALES, 1:5 (11) AND 2:5

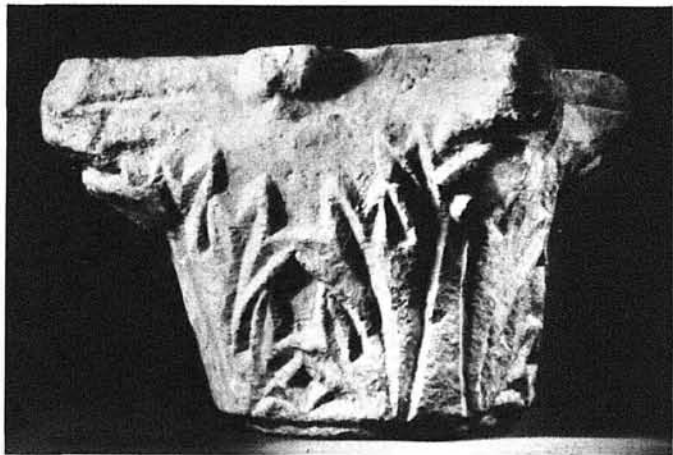
No.	Field No. Museum No.	Provenience	Level	Description	Scale
1	BY 231 Jer. 53-114	L 10:5 masonry	Arab bldg.	Marble head	1:5
2	A 30496	Arab bldg. masonry	Arab bldg.	Marble torso	1:5
3	BY 296 A 30351	K 11:3	Church	Limestone Corinthian capital (see p. 26, No. 11, and cf. <u>Beth-Shan</u> , Pl. XXI, upper left)	1:5
4		L 11:11 floor	Church	Chancel post (see p. 26, No. 5, and cf. <u>Nebo</u> , Pl. 132:4). Now in Museum of Tiberias	
5		L 11:2	Arab bldg.	Slotted basalt slab (see p. 26, No. 4)	
6		L 10:15	Pre-church	Basalt millstone (see p. 26, No. 19)	
7	BY 414 A 30375	L 11:11	Church	Basalt mortar	1:3
8	BY 501 A 30397	L 11:8	Church	Limestone floor slab from reliquary(?), engraved with cross (see pp. 14 f. and Pl. 8 <u>B</u> )	1:4
9	BY 44 A 30321	Sounding J 9:1		Basalt bowl frag.	2:7
10	A 30498	Plot F	-201.40 m.	Shallow limestone container, oval in plan	2:5
11	BY 172 A 31343	L 10:8	Church	Basalt pestle	2:5
12	BY 132 A 31342	L 11:2	Arab bldg.	Concave basalt bowl frag.	1:3
13	BY 372 A 31345	K 10:2	Church	Soft gray-green bowl frag. with horizontal lug	3:10



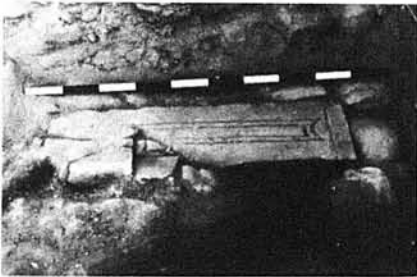
1



2



3



4



5



6



7



8



9



10



11



12



13

STONE OBJECTS

No.	Tomb No.	Object No.	Description
1	3	1	Complete amber-colored flask, iridescent
2	7	12	Complete bluish globular vase, iridescent; cf. <u>Glass from the Ancient World: The Ray Winfield Smith Collection</u> (Corning, New York, 1957) No. 212
3	7	11	Complete greenish globular vase, iridescent
4	7	10	Complete light green bottle, iridescent
5	7	8	Restored bottle; cf. <u>Gerasa</u> , Fig. 27:91, <u>Samaria</u> , Fig. 95:1
6	4	36	Restored light green bottle
7	4	31	Bottle
8	4	32	Amber-colored bottle, iridescent spots
9	4	29	Complete greenish bottle with pinched plastic decoration around shoulder, transparent; cf. <u>Gerasa</u> , Fig. 18:244
10	7	6	Neck of bottle, silvery iridescence inside
11	3	78	Double-barreled unguentarium with bronze applicator in position
12	4	33	Bluish double-barreled unguentarium, transparent
13	7	13	Complete square pitcher, iridescent
14	4	30	Green bottle with twisted neck, rim missing
15	4	34	Light blue bottle
16			"Wine-glass" lamp
17	3	54	Lower part of blue unguentarium
18	3	55	Green unguentarium with bronze applicator
19	7	9	Miniature bottle, opaque



1



2



3



4



5



6



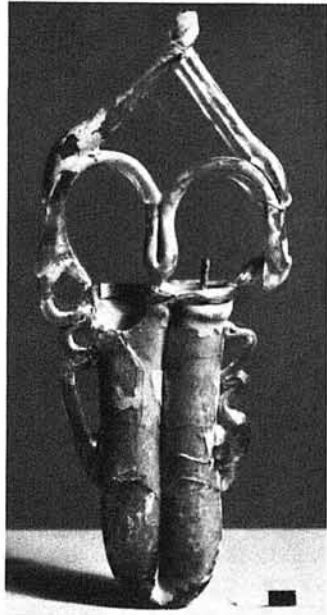
7



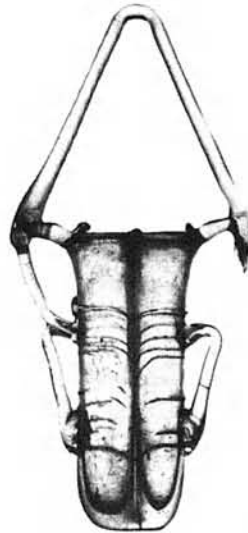
8



9



11



12



13



10



14



15



16



17



18



19

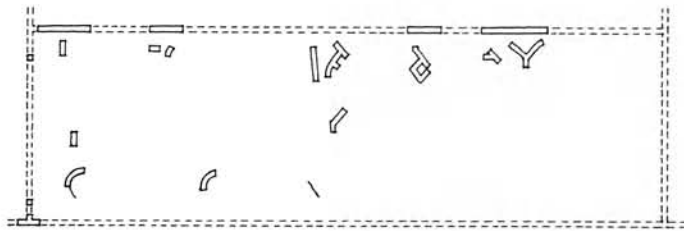
GLASS VESSELS. SCALES, 1:1 (19) AND 2:5



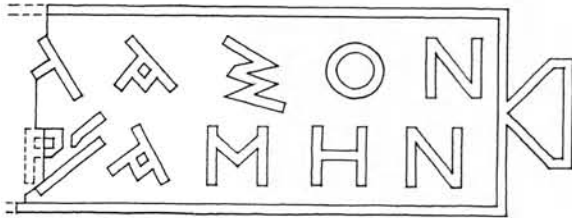




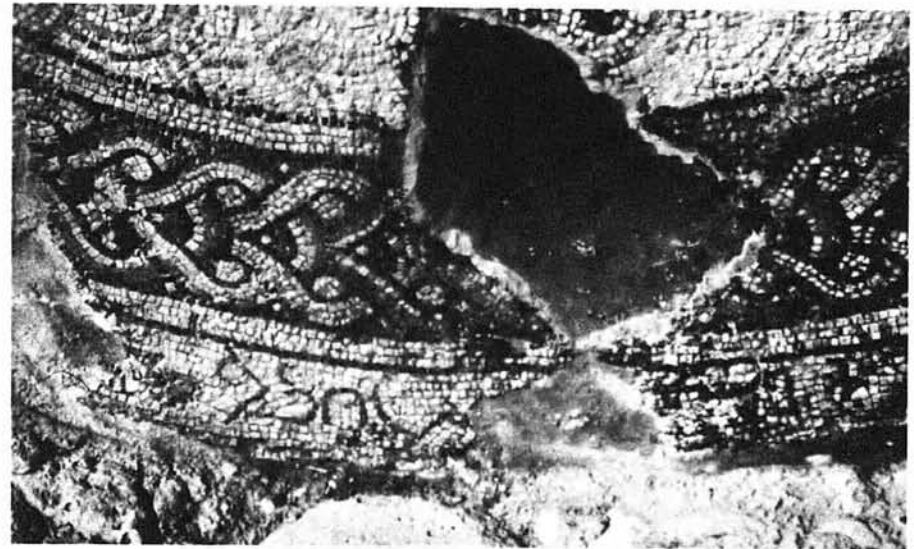
A



B



D



C

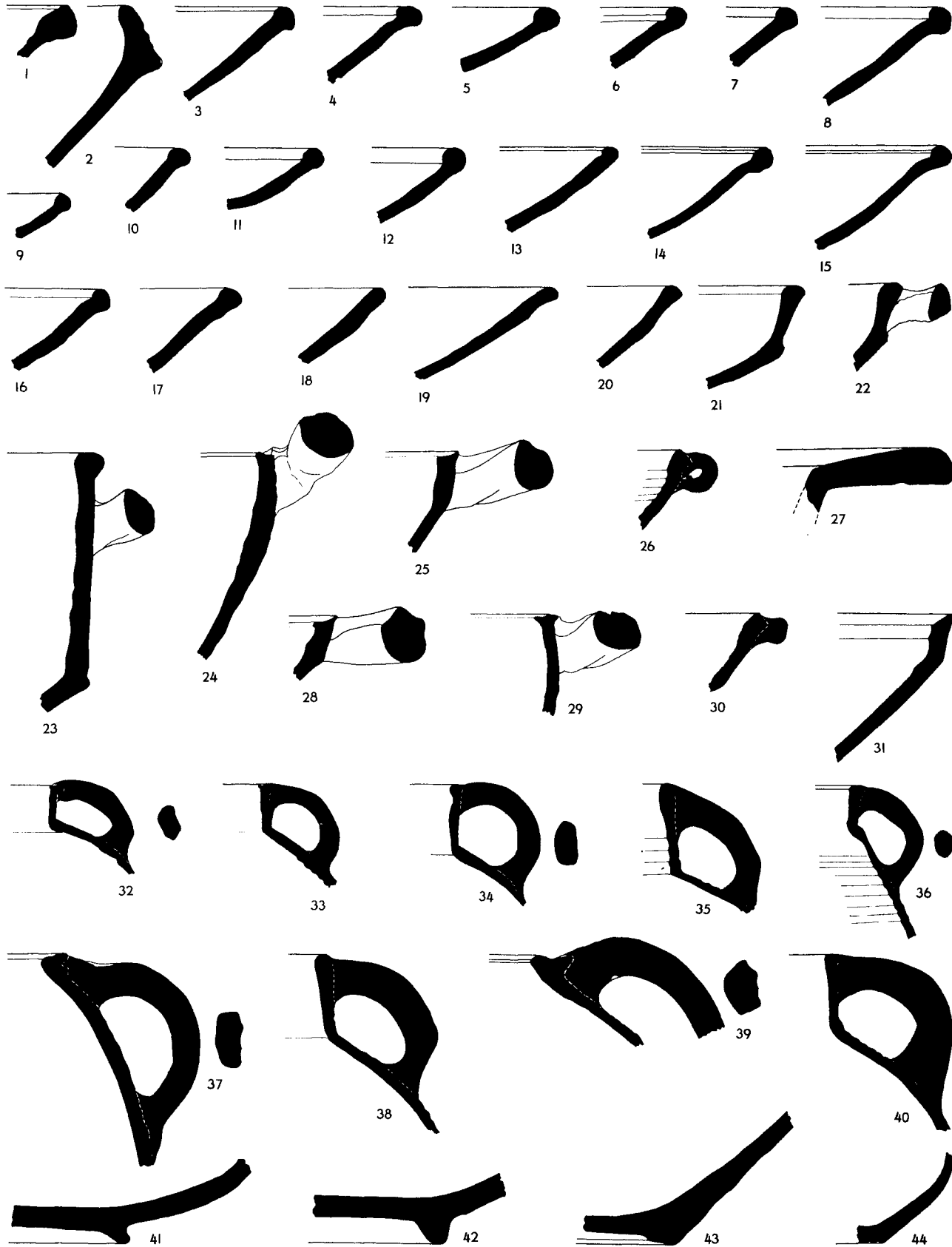
MOSAIC INSCRIPTIONS FROM CHURCH. A. FROM DIACONICON (1), AS RESTORED IN THE ORIENTAL INSTITUTE MUSEUM. B. FROM APSE OF DIACONICON (2). SCALE, 1:20. C. FROM SOUTHERN APSE OF *Domus* (3). SCALE, 1:8. D. FROM ATRIUM (4). SCALE, 1:20

No.	Field No.	Provenience	Level	Description
1	{BY 384} {BY 373}	K 10:2	Church	Hard brown fabric, polished inside and on rim
2	BY 335	L 11:7	Church	Light brown fabric
3		Plot C	-196.00 m.	Plate frag., dark gray (burnt?) hard gritty fabric, red near base outside; cf. <u>Samaria</u> , Fig. 84:24
4	BY 333	L 11:7	Church	Brown fabric, dark red slip on both surfaces, incised lines below rim
5		Plots A/B	-196.82 m.	Hard red fabric, very fine inclusions, partly polished at lip
6		Plots C/D	-197.70 m.	Hard reddish-tan fabric, orange slip originally well smoothed, partly gray-brown from secondary burning
7		Plot D	-197.40 m.	Brown or red fabric, red slip, smoothed inside, rouletted
8	BY 283	K 11:3	Church	Buff fabric, brown-reddish slip, incised decoration below rim
9	BY 334	L 11:7	Church	Light brown fabric, red slip inside, brown on rim
10		Plot D	-197.50 m.	Hard red fabric, orange-red slip, rouletted rim
11		Plots D/E	Surf.	Hard light brown fabric, orange-red slip
12		Plot D	-197.25 m.	Hard red fabric, slip a shade darker, roughly smoothed
13		Plot A	Surf.	Hard orange-red fabric, smooth bright orange-red slip inside, brownish slip on rim; cf. <u>Samaria</u> , Fig. 84:16
14	BY 422b	L 10:14	Pre-church	Light brown fabric; cf. <u>ibid.</u> , Fig. 84:11
15	BY 421	L 10:14	Pre-church	Brown fabric
16		Plot D	-197.00 m.	Hard brick-red fabric, brownish-red slip, rim rouletted in three rows
17		Plots A/C	Surf.	Fine hard brown granular fabric, dark brown slip
18	BY 269b	K 11:1	Arab bldg.	Reddish-brown fabric
19		Plots D/E	Surf.	Red fabric, red slip, smoothed but not polished; cf. <u>Samaria</u> , Fig. 84:15
20		Plot A	Surf.	Hard terra-cotta-colored fabric, darker slip, very thin wall
21		Plot D	-197.25 m.	Hard red fabric, burnt black slip, rouletted rim
22	BY 179	Sounding J 8:1		Dark red fabric
23		Plot A	-196.70 m.	Hard pale red fabric, red slip, rouletted
24		Plots A/B	-195.42 m.	Hard red fabric, thin
25	BY 484	K 10:5	Pre-church	Pinkish-buff fabric, red slip, rouletted on rim and outside; cf. <u>Samaria</u> , Fig. 84:10
26		Plots A/B	-196.82 m.	Deep bowl, hard brownish-red fabric, mat brown slip, finger marks
27		Plots D/E	Surf.	Grooved rim, hard pale brick-red fabric, darker slip, shallow rouletting
28	BY 269a	K 11:1	Arab bldg.	Reddish-brown fabric
29		Plot B	-195.75 m.	Hard red(?) fabric
30		Plot G	-201.45 m.	Find hard light red fabric, smooth red slip, tan on rim, rouletted
31	BY 262	K 11:1	Arab bldg.	Red fabric
32		Plot A	-196.70 m.	Hard red fabric, rouletted
33		Plot D	-197.25 m.	Hard terra-cotta-colored fabric, bright red slip, redder inside, rouletted vertical lines
34		Plot B	-196.20 m.	Fine hard red fabric, slip of same color, rouletted
35		Plots C/D	-196.30 m.	Hard fabric, rouletted
36	BY 242	K 11:2	Church	See Pl. 32:3
37		Plot C	-196.50 m.	Fine hard reddish fabric, red slip inside, tan slip outside, rouletted near rim
38		Plot A	-197.10 m.	Fine hard buff-tan fabric, brick-red slip
39	BY 267	K 11:1	Arab bldg.	See Pl. 32:1
40		Plot D	-198.00 m.	Hard red(?) fabric
41		Plot B	Surf.	Hard brick-red fabric, smoothed but not polished inside; cf. <u>Samaria</u> , Fig. 84:17
42		Plots C/D	-197.70 m.	Hard red fabric
43		Plot B	-196.75 m.	Fine red fabric
44		Plots A/B	-196.82 m.	Hard red fabric, slip of same color
45		Plot C	-196.00 m.	Hard red fabric, red slip, darker brownish slip on top of lip
46		Plots A/B	-196.82 m.	Hard brick-red fabric, mat slip of same color
47		Plot C	-196.45 m.	Hard reddish-brown fabric, small white grits, traces of black on rim
48		Plot A	-196.10 m.	Hard light brick-red fabric, lighter slip, not polished
49		Plot B	-197.40 m.	Hard red fabric, red slip, not polished
50		Plot A	-196.70 m.	Hard brick-red fabric, mat red slip
51		Plot F	Surf.	Hard red fabric, smoothed but not polished
52		Plot B	-196.75 m.	Find hard "metallic" granular red-brown fabric, slip a shade redder, worn off at lip
53		Plot B	-197.40 m.	Hard red fabric, fine white inclusions; cf. <u>Samaria</u> , Fig. 84:23
54		Plots A/B	-197.20 m.	Hard light brown-red fabric, slip of same color, brown on outside rim
55		Plot D	-198.40 m.	Hard red fabric, not polished
56		Plots A/B	-196.82 m.	Brick-red fabric, red slip, smoothed inside
57		Plot B	Surf.	Hard red fabric, red slip, "reserved" effect outside
58		Plot B	-197.40 m.	Hard light brown fabric, smooth thick red slip, partly polished inside
59		Plot A	-196.30 m.	Fine hard granular brownish-red fabric, not polished
60		Plot A	-195.80 m.	Hard gray-black (burnt?) fabric, black slip, polished outside
61		Plots A/B	-196.82 m.	Hard red fabric, partly polished inside
62		Plots D/E	Surf. to -197.50 m.	Originally(?) brown-red fabric, burnt black inside, polished inside, horizontal lines around outside
63	BY 411	K 11:9	Pre-church	Brown fabric, incised lines outside; cf. <u>Samaria</u> , Fig. 84:6
64		Plot A	-196.70 m.	Tan fabric, red slip, polished inside
65		Plot D	-197.25 m.	Brick-red(?) fabric
66	BY 270	K 11:1	Arab bldg.	Reddish-brown fabric
67	BY 364	L 11:13	Church	Ring base, overfired brown fabric, polished red slip inside
68		Plot B	-196.40 m.	Ring base, hard brownish-red fabric, slip of same color
69		Plot B	-196.30 m.	Ring base, hard light tan fabric, brick-red slip, rouletted



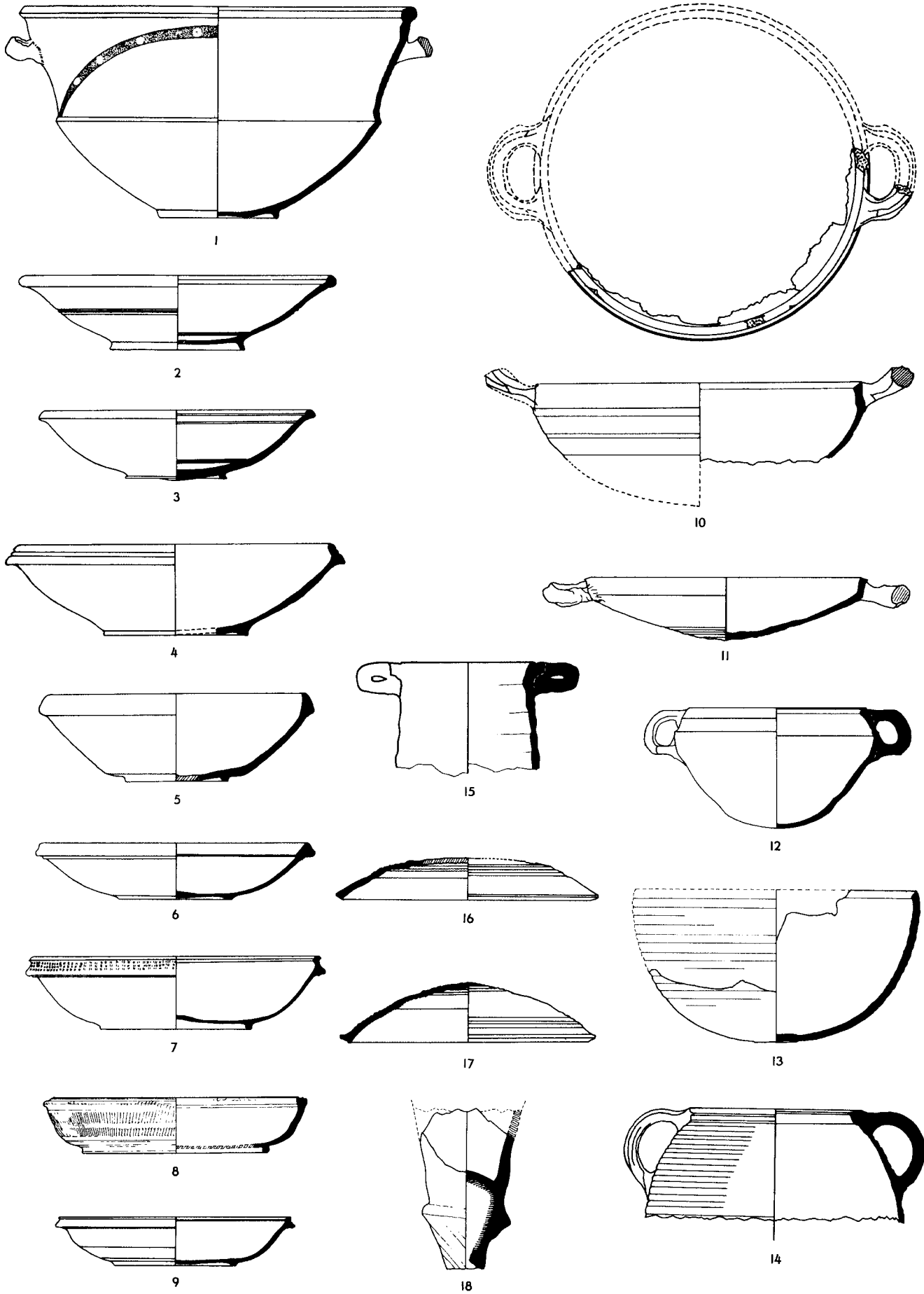
“LATE ROMAN” HARD RED WARE. SCALE, 2:5

No.	Field No.	Provenience	Level	Description
1		Plot A	-196.70 m.	Very fine hard light brown fabric, red slip, not polished
2		Plot B	-197.40 m.	Fine soft light tan granular fabric, light brick-red slip, wheel polished inside and over rim
3		Plot C	-196.45 m.	Porous brownish fabric, white inclusions, red slip, polished inside and over rim
4		Plots A/B	-196.92 m.	Soft tan fabric, polished red slip inside, lighter mat slip outside (polishing of slip darkens color?)
5		Plot B	-197.40 m.	Brown fabric, not compact, well smoothed (on wheel?) red slip
6		Plots C/D	-196.75 m.	Plate frag., hard dark gray (burnt?) gritty fabric
7		Plot B	-197.40 m.	Soft light brown fabric, smooth red slip
8		Plot D	-197.25 m.	Light brown fabric, dark red slip, thicker inside
9		Plot B	-197.40 m.	Tan slightly granular fabric, red slip, thicker and smoother inside
10		Plot A	-196.30 m.	Light tan fabric, red slip, thicker inside
11		Plot B	-197.40 m.	Soft light brown fabric, red slip, darker and partly polished inside
12		Plot B	-197.40 m.	Relatively soft tan fabric, thick red slip, polished inside
13		Plot C	-196.45 m.	Soft light tan fabric, small white inclusions, traces of light red slip
14		Plots D/E	-196.25 m.	Dark gray-brown fabric, not smoothed, gray-tan slip, polished inside
15		Plot A	-196.70 m.	Brown-gray granular fabric, gray core, black inside from secondary burning, perhaps red slip originally
16		Plot B	-198.20 m.	Soft brownish fabric, red slip, wheel polished outside and over rim
17		Plot B	-197.40 m.	Soft buff fabric, small inclusions, bright red slip, polished inside
18		Plot C	-196.45 m.	Soft medium fine (no grits) buff-tan fabric, wheel-made
19		Plot B	-196.30 m.	Hard light brown fabric, not very compact, red slip outside, bright pink slip inside, well smoothed
20		Plot C	-196.45 m.	Soft tan fabric, red slip, darker and polished inside and over rim
21		Plot B	-197.40 m.	Medium fine tan fabric, slightly polished brick-red slip (not "late Roman")
22		Plot B	-197.40 m.	Soft light tan fabric, red slip
23		Plot A	-196.70 m.	Crater frag., light tan fabric, red slip, dark paint with white blobs, dark band on rim, hand polished (cf. Pl. 36:2)
24	BY 15	Sounding J 9:1		See Pl. 33:7
25		Plot D	-197.25 m.	Cooking bowl frag., reddish-brown granular fabric
26	BY 491	J 11:1	Church	See Pl. 33:12
27	BY 356	L 11:12	Church	Light brown fabric, red slip, polished on upper surface
28		Plot D	-196.50 m.	Cooking bowl frag., pale tan fabric
29	BY 23	Sounding H 9:1		Cooking bowl frag., brown fabric, gray core
30	BY 447	L 10:18	Pre-church	See Pl. 33:11
31		Plot C	-197.75 m.	Cooking bowl frag., probably with handle, reddish-brown fabric, tan-gray outside
32	BY 331	L 11:7	Church	See Pl. 33:15
33		L 11:7?	Church	Cooking pot, ridged rim, reddish-brown compact fabric
34	BY 97	L 11:4	Arab bldg.	See Pl. 33:14
35		Plots A/B	-196.92 m.	Cooking pot, reddish-brown granular fabric, ribbed, burnt outside
36	BY 434	L 11:16/17	Pre-church	See Pl. 33:6
37		Unknown		Cooking pot, reddish granular fabric, dark brown outside
38		Plots A/B	-195.42 m.	Cooking pot, reddish-brown granular fabric, ribbed
39	BY 426	L 11:16	Pre-church	Cooking pot, hard granular fabric, red inside, gray outside
40		Plot B	-197.40 m.	Cooking pot, ridged handles, reddish light brown fabric, ribbed
41	BY 351	L 11:11	Church	See Pl. 31:7
42	BY 350	L 11:11	Church	See Pl. 31:2
43	BY 423	L 10:14	Pre-church	Hard red fabric, rouletted
44	BY 264	K 11:1	Arab bldg.	Light and dark brown fabric



"LATE ROMAN" SOFT TAN (1-22, 27, 41-42) AND HARD RED (43) WARES, CRATER WITH DARK BANDS AND WHITE BLOBS (23), COOKING UTENSILS (24-25, 28-29, 31, 33, 35-40), DARK RED WARE (26, 30, 32, 34), UNIQUE SHERD (44). SCALE, 2:5

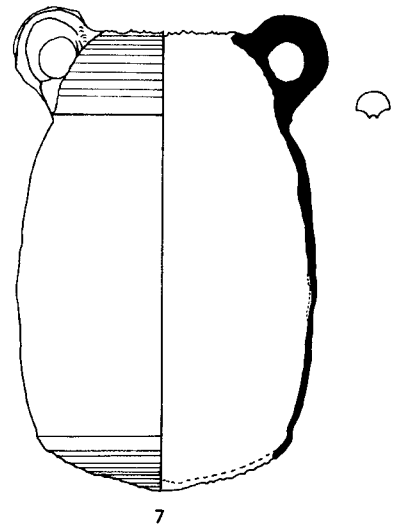
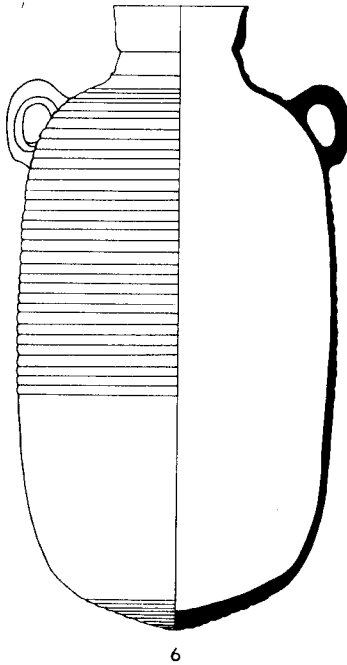
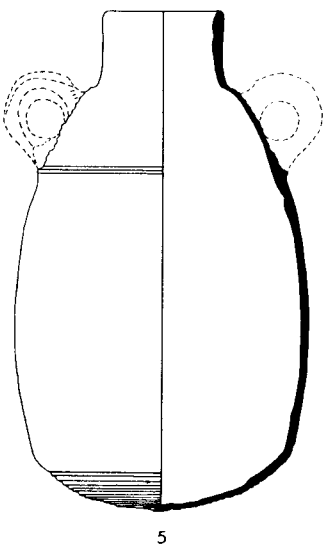
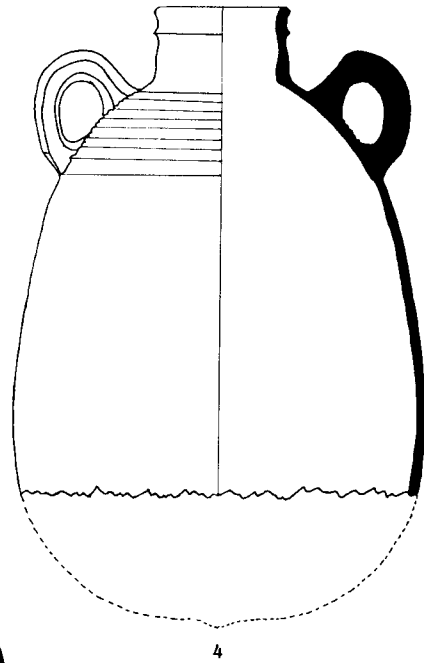
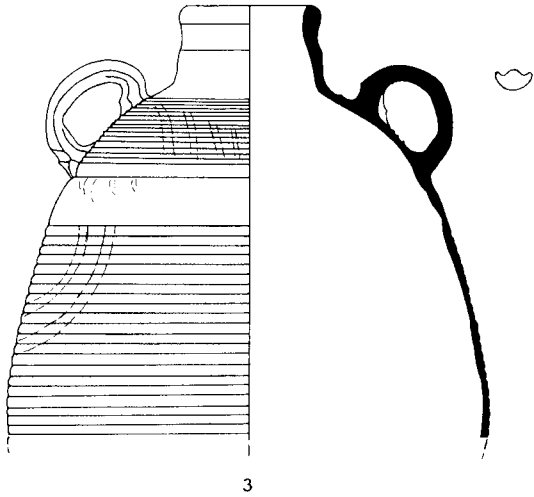
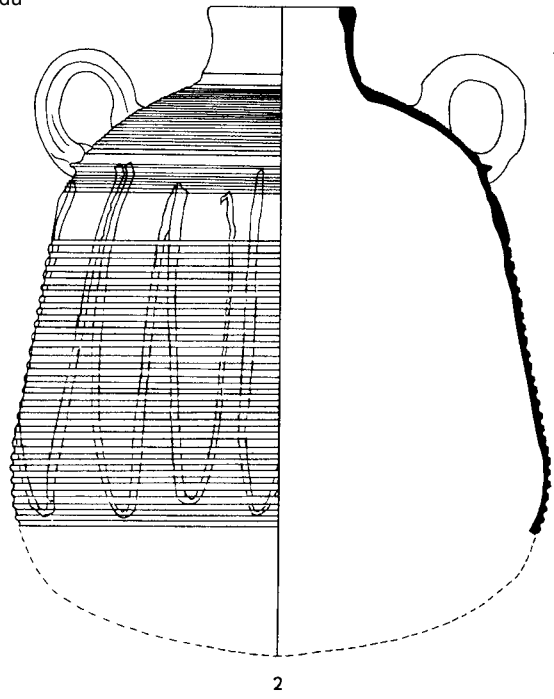
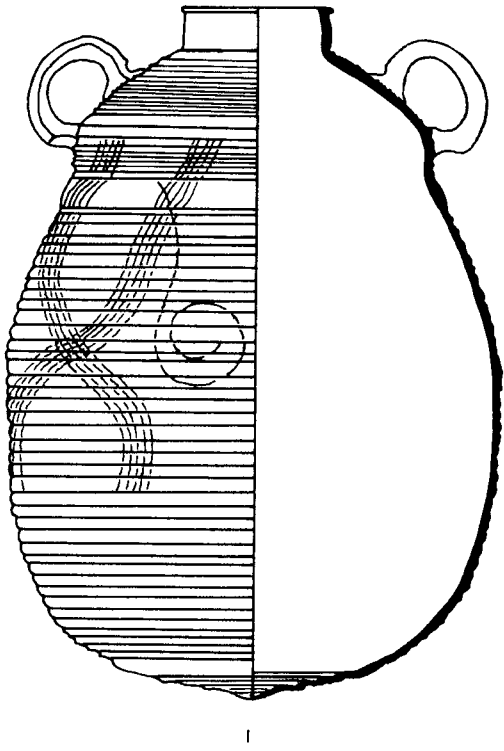
No.	Field No. Museum No.	Provenience	Level	Description
1	BY 441 A 30381	K 11:11	Church	See Pl. 36:2
2	BY 479 A 30392	K 11:11	Church	Reconstructed plate, hard brown fabric, polished inside and lightly outside, incised lines near base
3	BY 476 A 30389	K 11:11	Church	Reconstructed plate, hard brown fabric, polished inside, leaf design stamped on bottom inside, three incised lines near base outside
4		Plot B	-197.40 m.	Reconstructed plate, hard tan fabric, thick bright red slip, glossy inside and on rim
5	BY 427 A 30378A-B	L 11:16	Pre-church	Reconstructed bowl, slight carination near base, brown fabric, two repair holes filled with lead
6	BY 382 A 30370	K 11:11 floor	Church	Reconstructed bowl, brown-reddish fabric, mat surface
7		Plot B	-197.40 m.	See Pl. 33:2
8		Plots C/D	-197.60 m.	Reconstructed plate, hard red fabric, rouletted
9	BY 67 A 30323	L 10:8	Church	Reconstructed plate, carination below flat rim, brown fabric
10		Plot B	-196.00 m.	Cooking bowl, horizontal ridged handles, brown fabric, blackened by fire
11	BY 510 A 30405	L 11:11	Church	See Pl. 33:3
12	BY 361 A 30365	L 11:13	Church	See Pl. 33:8
13		K 11:10	Pre-church	Cooking bowl, brownish-red fabric, ribbed, blackened by fire
14		Plot B	-196.30 m.	Cooking pot, brown fabric, ribbed, blackened by fire
15	{BY 190 BY 360	L 11:2 L 11:13	Below Arab floor Church	See Pl. 33:13
16	BY 478 A 30391	K 11:11	Church	Lid, perhaps with knob (cf. <u>Beth-Shan</u> , Pls. XXX 13 and XXXI 12), brown granular fabric, ribbed
17	BY 319	K 11:3	Church	See Pl. 33:16
18	BY 272	K 11:1	Arab bldg.	See Pl. 38:10



RESTORED CRATER WITH PAINTED LOOPS AND WHITE BLOBS (1), RECONSTRUCTED "LATE ROMAN" FORMS (2-9),  
COOKING UTENSILS (10-14, 16-17), DARK RED WARE (15), THIN-WALLED FRAGMENT WITH HOLLOW BASE (18)  
SCALES, 2:5 (15, 18) AND 1:5

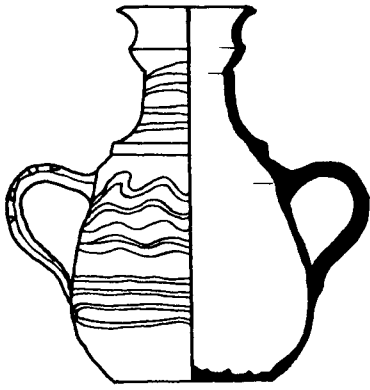


No.	Field No. Museum No.	Provenience	Level	Description
1		Plot A	-197.10 m.	See Pl. 35:1
2		K 11:11	Church	See Pl. 35:2
3	BY 3 A 30313	Sounding J 9:1		Brick-red fabric, brownish and light gray inside, dark gray outside, white painted decoration. Fragments of several jars and at least one basin found together
4		Tomb 4 (No. 51)		Soft brownish fabric
5		Sounding J 8:1		Fairly hard reddish-tan fabric, light ribbing on body, more pronounced ribbing on base
6		Tomb 4 (No. 50)		See Pl. 35:8
7		Sounding J 8:1		See Pl. 35:6



BAG JARS. SCALE, 1:5

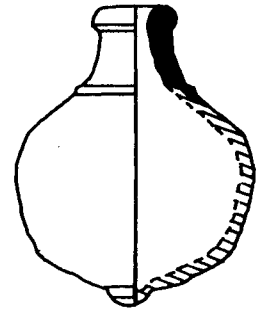
No.	Field No. Museum No.	Provenience	Level	Description
1	BY 519 A 30411	J 11:6	Church	See Pl. 34:10
2	BY 218 A 30331	Sounding J 8:2		See Pl. 34:13
3	BY 348a A 30360	L 11:11	Church	See Pl. 34:11
4	BY 348b A 30361	L 11:11	Church	See Pl. 34:12
5		Plot C	-196.10 m.	Lid, pink-tan fabric, traces of burning; cf. <u>Beth-Shan</u> , Pls. XXX 4 and 9, XXXI 11
6		Plot A	-196.70 m.	Lid, gray fabric, burned; cf. <u>ibid.</u>
7	BY 443 A 30382	K 11:11	Church	See Pl. 34:7
8	BY 502 A 30398	Tomb K 11:15	Church	See Pl. 34:1
9	BY 307	L 10:10	Church	See Pl. 34:2
10	BY 349 A 30362	L 11:11	Church	See Pl. 34:5
11	A 30438	Tomb 4 (No. 7)		See Pl. 34:3
12	BY 457	L 10:19	Pre-church	See Pl. 34:6
13	BY 408 A 30374	K 11:4 or 2	Church	Small bowl, hard brown fabric
14		Plot C	-196.10 m.	Small bowl or lid, pink-buff fabric
15	BY 399	K 11:5	Church	Upper part of large bowl, buff fabric



1



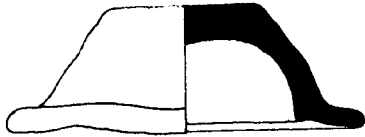
3



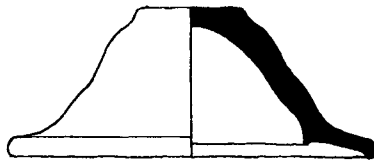
2



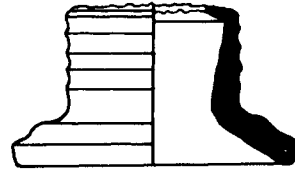
4



5



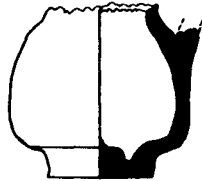
6



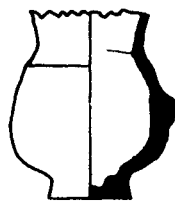
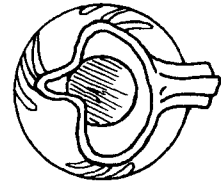
7



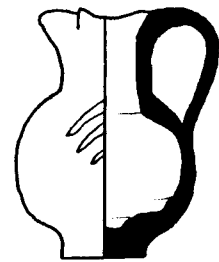
8



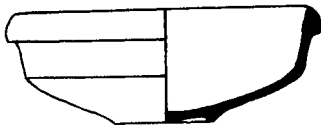
9



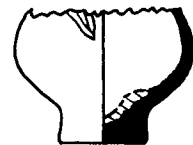
10



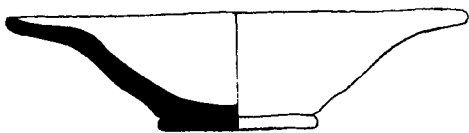
11



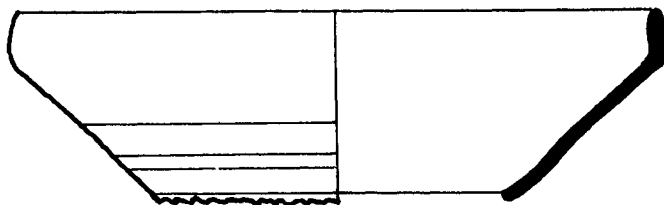
13



12



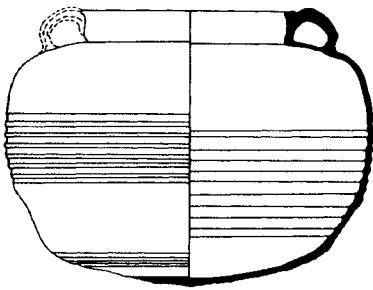
14



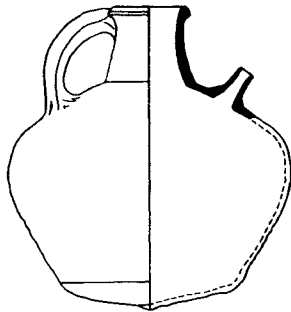
15

LIGHT-ON-DARK PAINTED WARE (1), "GREEK FIRE BOMB" (2), LIDS (3-7, 14), JUGLETS AND A SMALL BOWL (8-13), PLAIN BUFF WARE (15). SCALE, 2:5

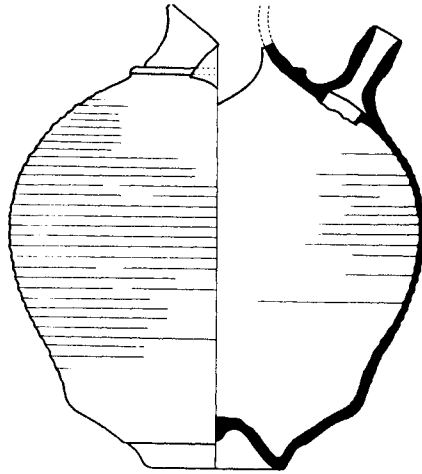
No.	Field No. Museum No.	Provenience	Level	Description
1	BY 342 A 30429	L 11:22	Pre-church	See Pl. 32:10
2	BY 520 A 30412	Plot A	-197.10 m.	See Pl. 32:11
3		Plot B	-197.25 m.	See Pl. 32:13
4	BY 266	K 11:1	Arab bldg.	Spouted jar, hard red fabric, gray outside
5	BY 480 A 30393	K 11:11	Church	See Pl. 39:1
6	BY 376 A 30367	L 11:7	Church	See Pl. 39:2
7	BY 347 Jer. 53-113	L 11:11	Church	See Pl. 36:1
8	BY 237a A 30340	K 11:3	Church	Jug neck with traces of handle, light buff fabric
9	{ BY 246 BY 247 A 30341	{ L 11:3 K 11:2	{ Below Arab floor Church }	See Pl. 32:12
10		Plot C	Below surf.	See Pl. 39:6
11	BY 191	L 11:24	Arab bldg.	See Pl. 39:3
12	BY 19	Sounding J 9:1		See Pl. 39:5
13	BY 258	K 11:1	Arab bldg.	See Pl. 39:4



1



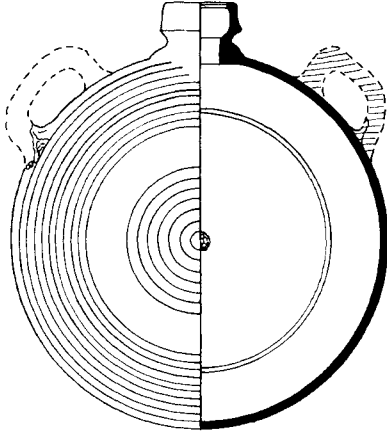
2



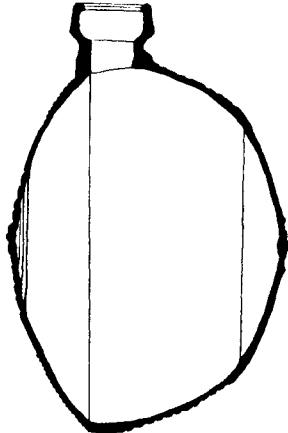
3



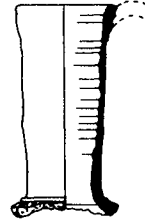
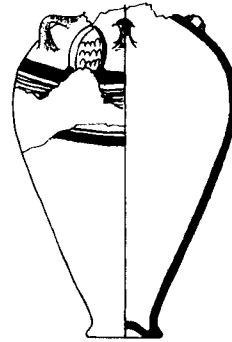
4



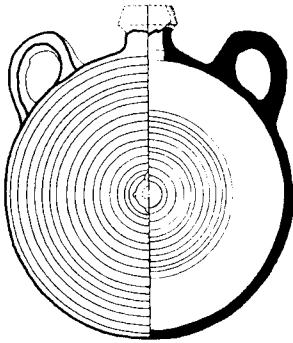
5



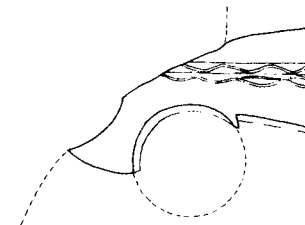
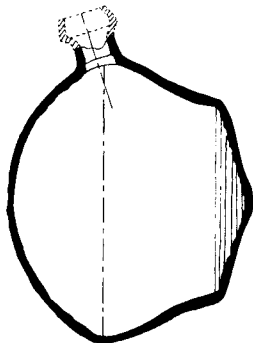
7



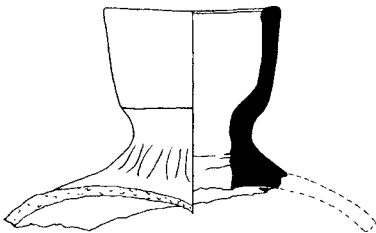
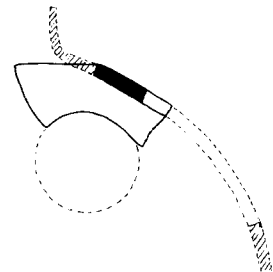
8



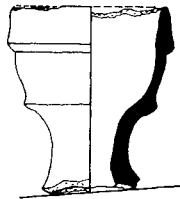
6



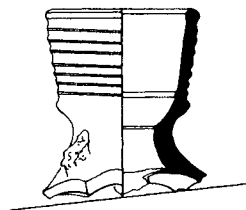
9



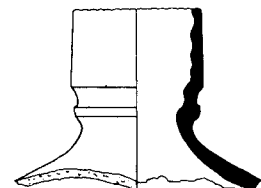
10



11



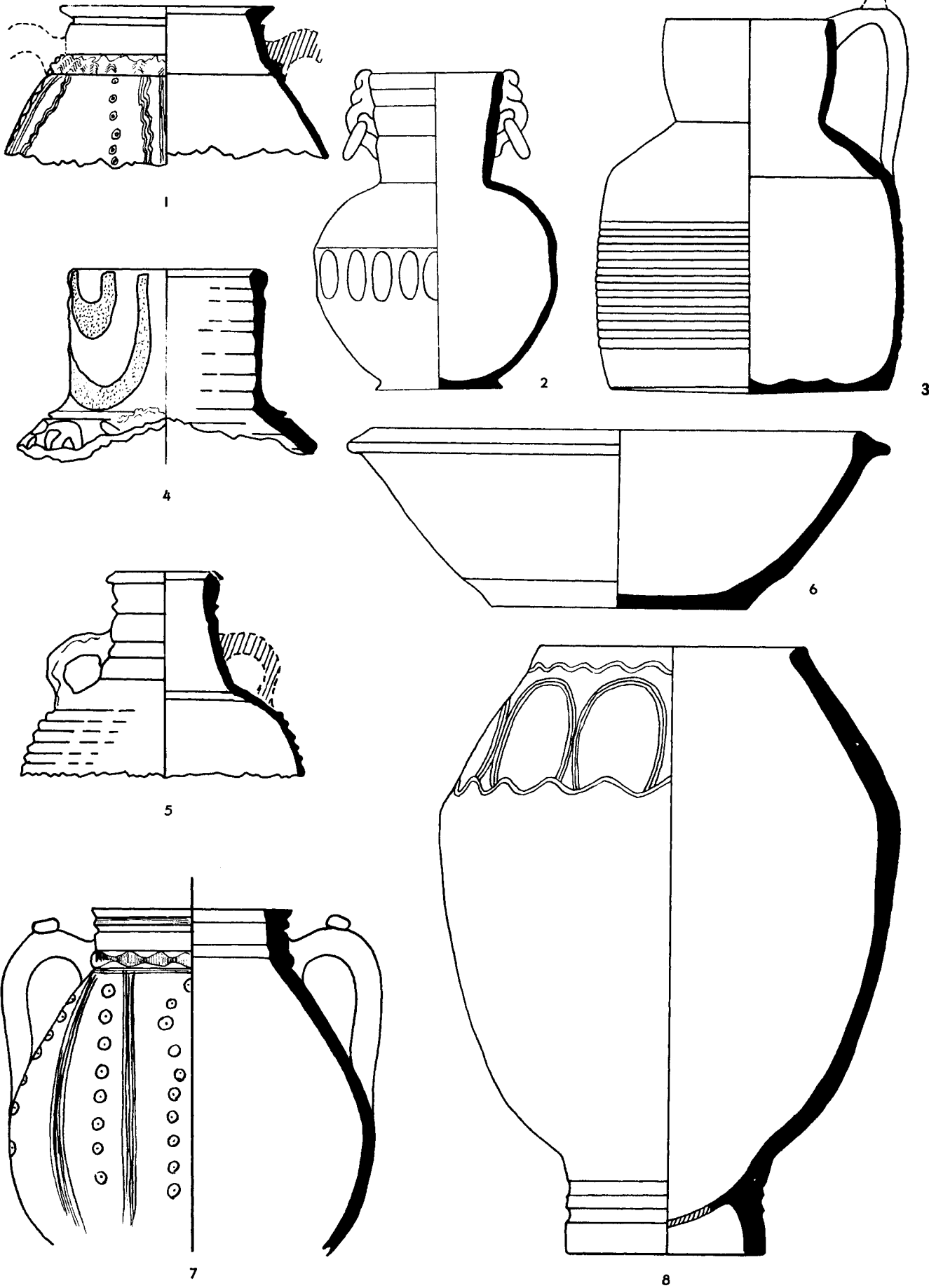
12



13

DARK RED WARE (1-3), RED AND GRAY SPOUTED JAR (4), PILGRIM FLASKS (5-6, 10-12), DARK-ON-LIGHT PAINTED VESSEL (7), PLAIN BUFF WARE (8, 13), LANTERN? (9). SCALES, 1:5 (1-2, 5-9) AND 2:5 (3-4, 10-13)

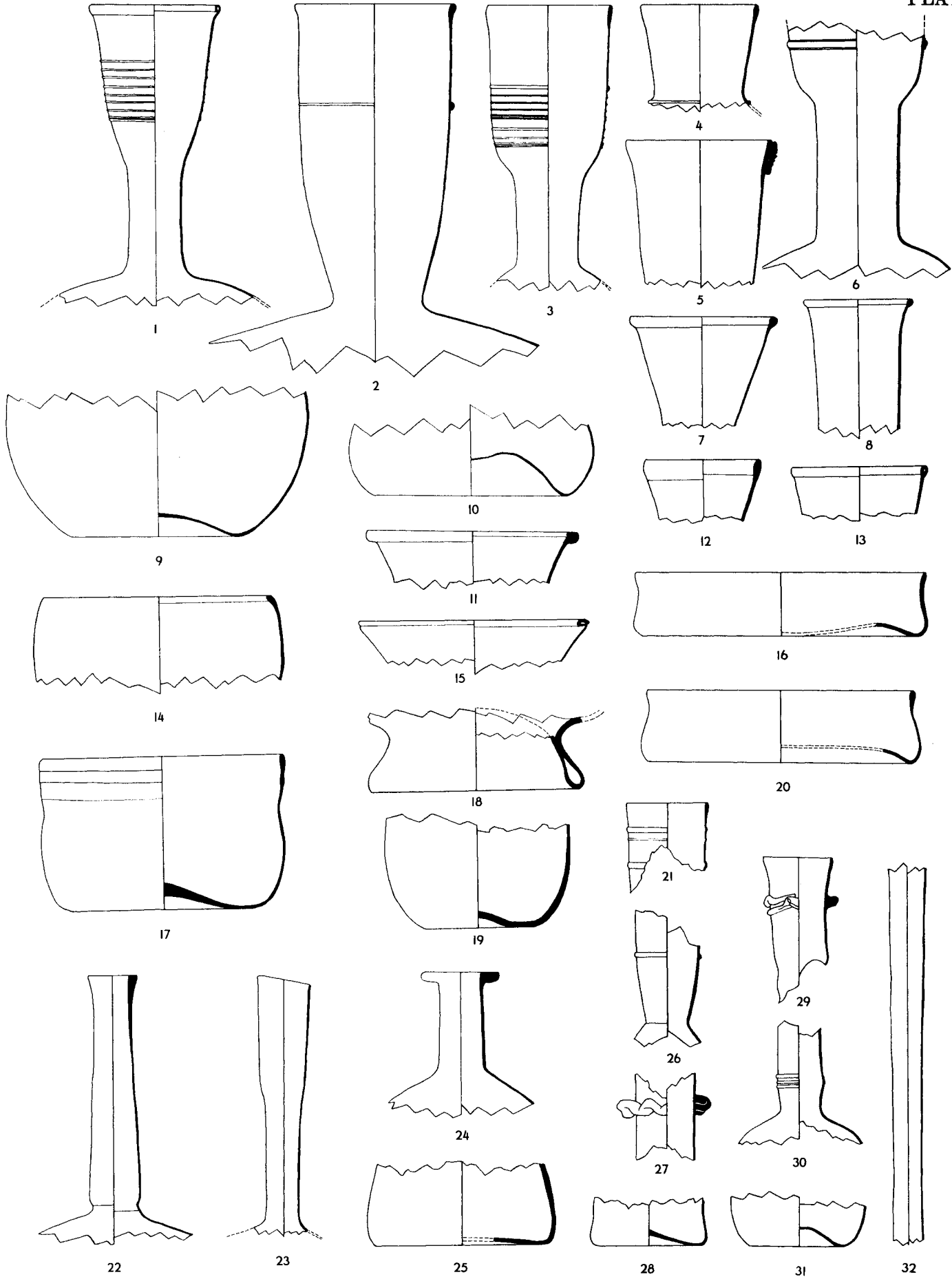
No.	Field No. Museum No.	Provenience	Level	Description
1	BY 236	K 11:3	Church	See Pl. 39:12
2	BY 1 A 30311	L 10:1	Arab bldg.	See Pl. 39:11
3	BY 5-6+82 A 30431	Sounding J 9:1		See Pl. 39:9
4	BY 243	K 11:1	Arab bldg.	See Pl. 37:3
5	BY 496 A 30396	J 11:4	Post-church	Light brown fabric
6	BY 253 <sub>b</sub>	L 11:8	Church	Light buff fabric; cf. <u>QDAP</u> X 95, Fig. 12:13
7	BY 235 Jer. 56-116	K 11:3	Church	See Pl. 39:10
8	BY 16 A 30318	Sounding J 9:1		See Pl. 38:12



SOFT BUFF WARES (1-3, 6-7), DARK-ON-LIGHT PAINTED NECK (4), JUG FRAGMENT (5), LARGE INCISED JAR (8). SCALES, 1:5 (8) AND 2:5

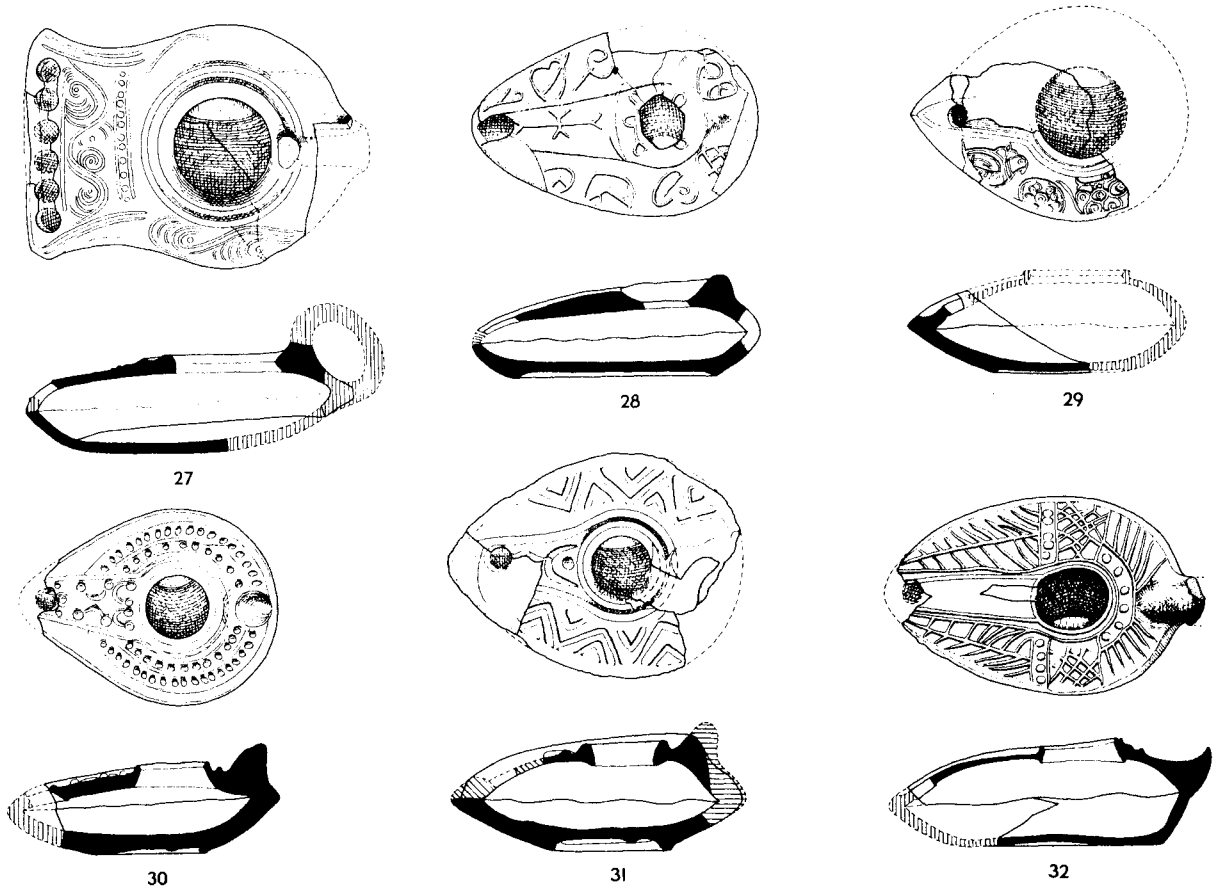
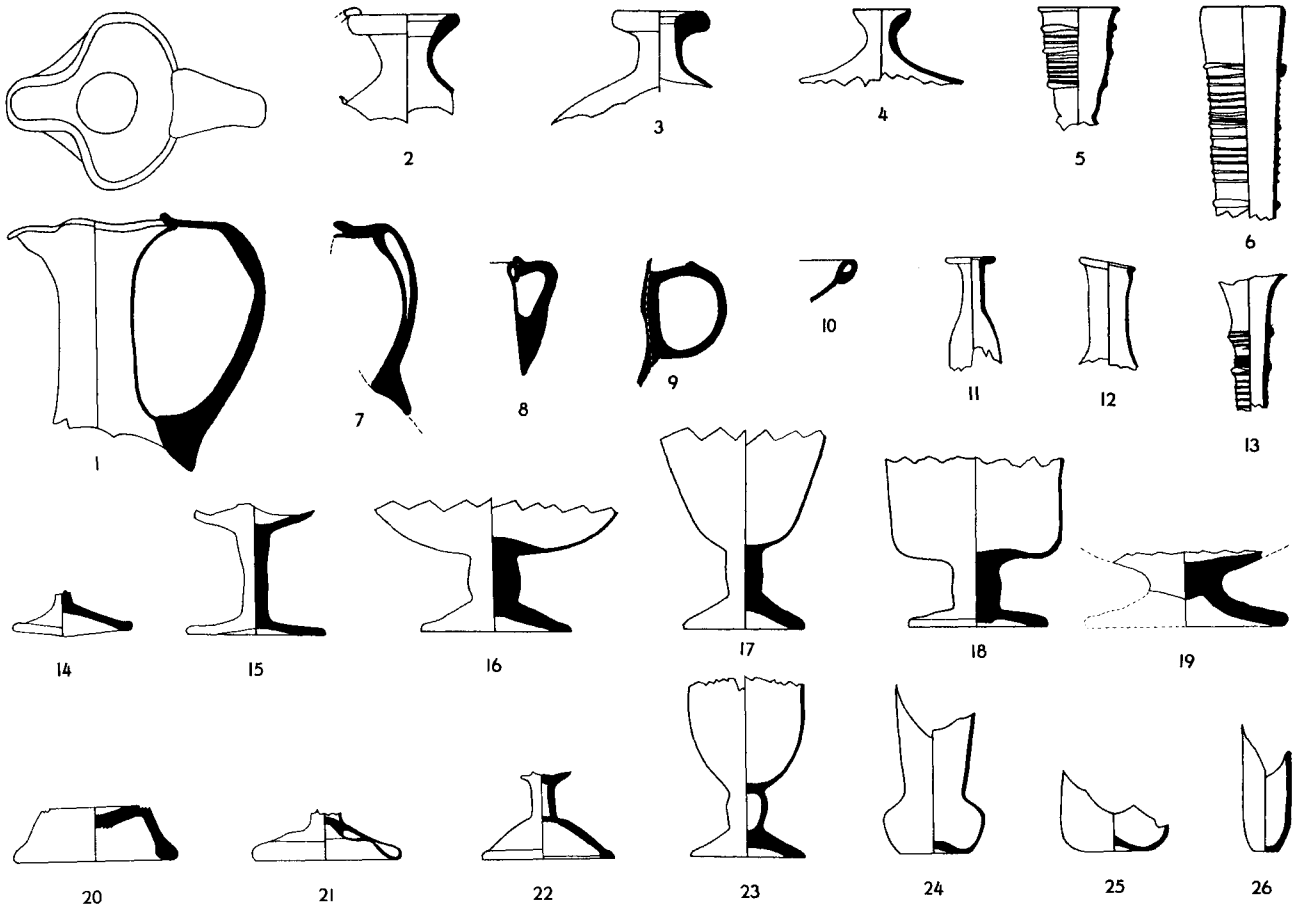


No.	Provenience	Level	Description
1	Tomb 4 (No. 40)		Pale blue neck wound spirally with glass thread, hollow rolled rim; for general shape cf. <u>Samaria</u> , Fig. 95:9
2	Tomb 4 (No. 41)		Neck of pale blue-green bottle, single-coil binding
3	L 11:12	Church	Neck of blue bottle wound with band and spiraled thread, thickened rim; cf. <u>Beth-Shan</u> , Pl. XXXIX 25
4	L 11:12	Church	Neck of pale blue-green vase, single-coil binding, thickened rim
5	L 11:12	Church	Blue neck frag. with stub of handle
6	K 11:4 floor	Church	Pale blue-green neck frag. wound with band between two threads
7	L 10:17	Pre-church	Pale blue neck, thickened rim; cf. <u>Beth-Shan</u> , Pl. XXXIX 13
8	L 11	Church	Pale blue neck frag., rolled rim
9	Tomb 4 (No. 42)		Lower part of pale blue-green flask; cf. <u>Beth-Shan</u> , Pl. XXXIX 25
10	Tomb 4 (No. 43)		Pale green bottle(?) base
11	L 11:9	Church	Pale blue, rolled rim
12	L 10:21	Pre-church	Pale blue-green cup or bottle frag.
13	L 10:14	Pre-church	Pale blue-green hollow rolled rim
14	L 11	Church	Blue slightly rolled thickened rim
15	L 11	Church	Pale blue-green hollow rolled rim
16	L 11:11	Church	Pale blue-green bowl frag.
17	L 11	Church	Green bowl, slightly ribbed; cf. <u>Gerasa</u> , Fig. 23:381A
18	L 11	Church	Hollow base of pale blue-green bowl; cf. <u>ibid.</u> Fig. 24:386
19	L 11	Church	Lower part of tall amber-colored bottle
20	L 11	Church	Pale blue-green bowl frag.
21	L 11:7 floor	Church	Neck frag. wound with bands and thread
22	Tomb 4 (No. 44)		Neck of pale blue-green bottle
23	Tomb 4 (No. 45)		Neck of pale blue bottle
24	Tomb 4 (No. 46)		Neck, clear, heavily incrustated, rolled rim
25	L 10:13	Church	Lower part of clear bowl, decorated
26	L 11:9	Church	Neck frag. of pale blue-green bottle
27	L 11:6?	Church	Pale blue-green neck frag. with undulating band
28	Sounding J 9:1		Lower part of yellowish cup
29	L 11	Church	Pale blue-green neck frag. with undulating band of green and red
30	L 10:1	Arab bldg.	Pale blue neck and shoulder frag. with coil binding
31	L 11	Church	Lower part of blue bottle
32	Tomb 4 (No. 47)		Neck frag. of pale blue bottle



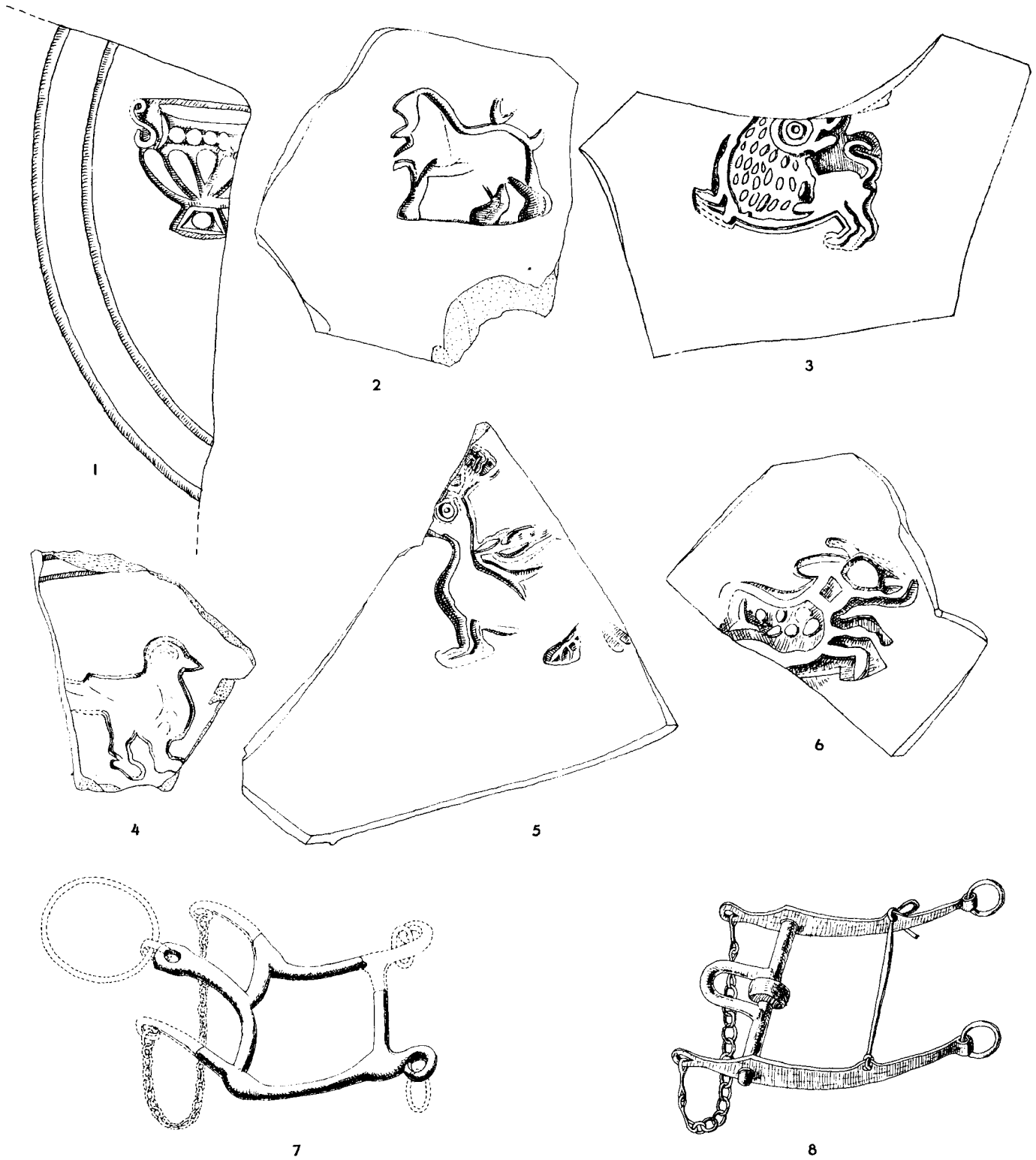
GLASS VESSELS. SCALE, 2:5

No.	Provenience	Level	Description
1	L 11	Church	Greenish pitcher frag.
2	L 11:7 floor	Church	Neck of bottle with handle stubs, body rectangular rather than circular
3	L 11:11	Church	Neck of pale blue-green bottle; cf. <u>Gerasa</u> , Fig. 25:240
4	K 11:1	Arab bldg.	Neck of white bottle
5	Unknown	Church	Pale blue neck wound with bands and spiraled threads
6	Tomb 4 (No. 48)		Pale blue-green neck wound with three bands and spiraled threads; cf. <u>Gerasa</u> , Fig. 31:59
7	L 11	Church	Pitcher frag.
8	L 11:11	Church	Bowl frag., slightly ribbed handle, hollow rolled rim; cf. <u>Gerasa</u> , Fig. 22:380, and <u>Beth-Shan</u> , Pl. XXXIX 4
9	Unknown	Church	Loop handle of pale blue-green bowl
10	Sounding J 9:1		Pale blue-green bowl frag., hollow rim
11	K 11:1	Arab bldg.	Pale blue-green bottle frag.
12	K 11:5	Church	Neck of pale blue bottle, rim uneven with imperfection lump just below thinner portion
13	J 11:1	Church	Pale blue-green frag. wound with spiraled thread
14	L 11:7 floor	Church	Base and stem frag. of pale blue-green "wine-glass" lamp
15	L 11:7 floor	Church	Pale blue-green "wine-glass" lamp frag.
16	Unknown	Church	Pale blue-green "wine-glass" lamp frag.; cf. <u>Gerasa</u> , Fig. 20:378
17	Unknown	Church	Deep blue "wine-glass" lamp frag.; cf. <u>ibid.</u> No. 235
18	Unknown	Church	Pale blue-green "wine-glass" lamp frag.
19	Plot B	-196.75 m.	Brownish-green "wine-glass" lamp frag.
20	L 11:7 floor	Church	Base of pale blue bowl
21	Sounding J 9:1		Base of pale blue-green "wine-glass" lamp, hollow stem, flat rolled rim; cf. <u>Gerasa</u> , Fig. 21:22, and <u>Samaria</u> , Fig. 96:7
22	L 11:7 floor	Church	Green "wine-glass" lamp frag., rayed on underside
23	Tomb 4 (No. 49)		Pale green "wine-glass" lamp frag.
24	L 11:7 floor	Church	Green vase frag.
25	Sounding J 9:1		Base of pale blue-green bottle
26	L 11:7 floor	Church	Pale blue-green cosmetic bottle frag.
27	L 11:14	Church	See Pl. 44:3
28	{ L 11:7 } { L 11:11 }	Church	See Pl. 44:10
29	L 10:6	Arab bldg.	See Pl. 44:22
30	L 10:12	Church	See Pl. 44:11
31	L 10:12	Church	See Pl. 44:12
32	L 11:11	Church	See Pl. 44:13



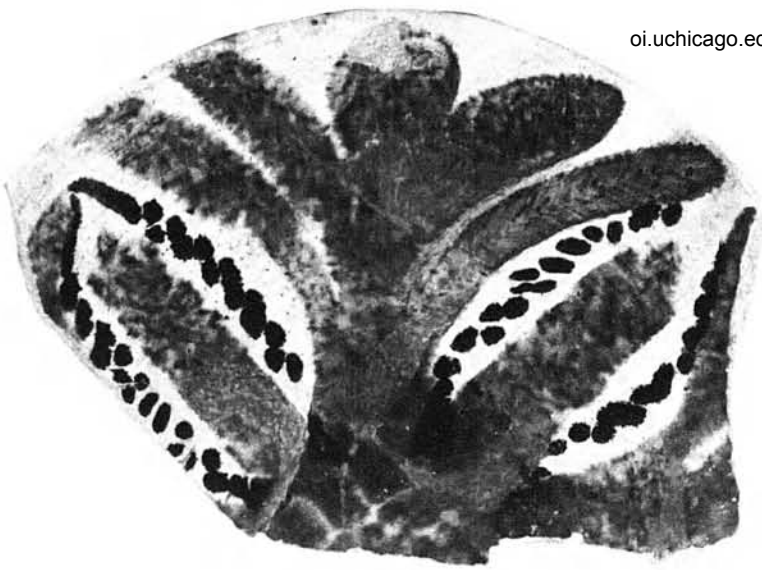
GLASS VESSELS (1-26) AND POTTERY LAMPS (27-32). SCALE, 2:5

No.	Field No. Museum No.	Provenience	Level	Description
1	BY 351 A 30364	L 11:11	Church	See Pl. 31:7
2		Plot B	-197.35 m.	See Pl. 31:8
3	BY 432 A 30379	L 10:14/15	Pre-church	See Pl. 31:11
4	BY 514a A 30408A	Plot B	-197.00 m.	See Pl. 31:9
5	BY 516 A 30410	Plot D	-198.00 to -197.30 m.	See Pl. 31:12
6		Plot B	-196.30 m.	Hard brown fabric, stamped with running hare
7	A 30497	K 11:1	Arab bldg.	Reconstructed iron spade bit (=Pl. 48:12)
8				Modern Argentinian spade bit; drawn from Tito Saubidet, <u>Vocabulario y refranero criollo</u> , p. 169



"LATE ROMAN" STAMPED DESIGNS (1-6) AND RECONSTRUCTED IRON SPADE BIT (7)  
WITH MODERN PARALLEL (8). SCALES, 1:1 (1-6) AND 1:4 (7)

No.	Field No.	Provenience	Level	Description
1	BY 298	L 10:7	Arab bldg.	Angled bowl frag. (cf. <u>Beth-Shan</u> , Pl. XXXIII 32, for shape), wall thickness 3-5 mm., rim diameter 22-24.4 cm., base diameter 14 cm., height 5 cm., white slip inside and outside, straw-colored background glaze, green- and brown-glazed pattern (partially restored) inside, spots of green and brown glaze outside (see pp. 41-42, No. 1)
2	{ BY 96 BY 140 }	{ L 11:4 L 11:2 }	Arab bldg.	Bowl frag., rim diameter 24 cm., base diameter ca. 14 cm., monochrome green glaze inside and over rim, brownish wash outside (pp. 42 f., No. 2)
3	BY 121	Main area	Below surf.	Molded condiment dish ( <u>mudhunah</u> ) frag., 4-7 mm. thick from edge to center, 2 mm. thick at bottoms of round depressions or cups, green glaze inside, mat ocher-amber glaze outside (see pp. 43-44, No. 3)
4		Main area	Surf.	Ring-base and body sherd of bowl, wall thickness 5 mm., diameter more than 20 cm., base diameter ca. but not less than 10 cm. (cf. <u>Sarre</u> , <u>Die Keramik von Samarra</u> , Fig. 145, for possible shape), white slip and yellow, amber, and green running glaze on all surfaces (see p. 44, No. 4)
5		Main area	Surf.	Body sherd (5-7 mm. thick) of ribbed jar, diameter ca. 8 cm. (cf. <u>ibid.</u> Figs. 71-73 for probable shape), deep blue-green glaze outside, paler blue-green glaze inside (see pp. 44 f., No. 5)
6	BY 102	L 10:7	Arab bldg.	Base sherd (5-7 mm. thick) of bowl, base diameter ca. 8-10 cm., yellow glazed and green-glazed leaf pattern inside (see p. 46, No. 10)



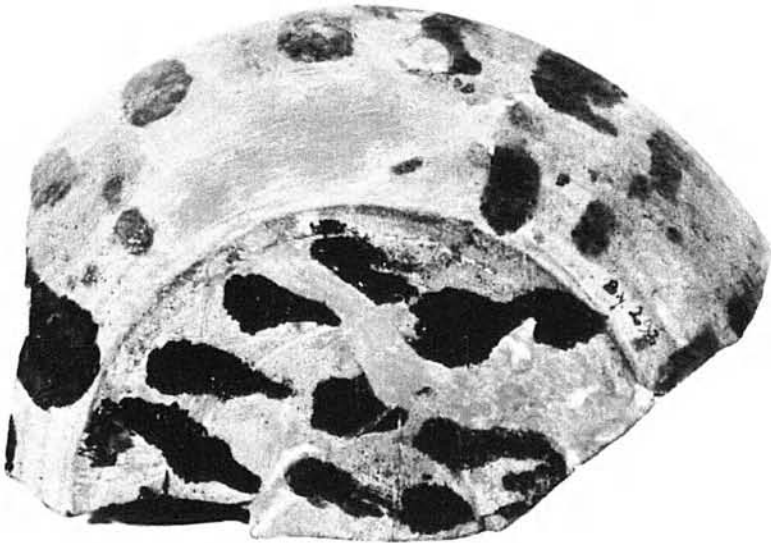
1



5



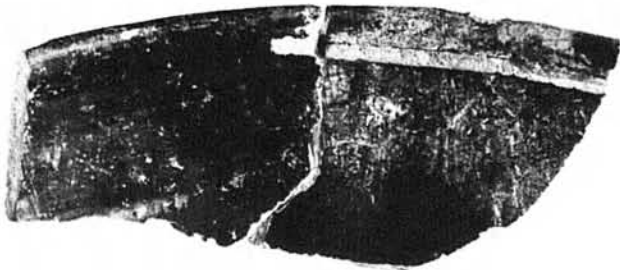
6



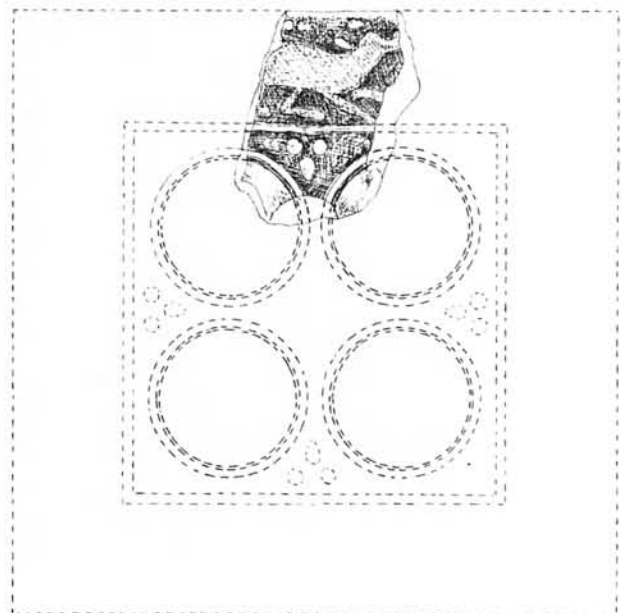
2



3



4



ISLAMIC GLAZED POTTERY OF THE Umayyad (1-3) and 'Abbasid (4-6) Periods Scales, 2:3 (1-2 and drawing) and 1:1



TABLE I  
DISTRIBUTION OF POTSDHERDS IN MAIN AREA OF EXCAVATION

Provenience	Hellenistic Sherds	"Late Roman" Wares		Handles			Cooking Utensils			Bag Jars	Ribbed Sherds (Probably mostly dark red ware)	Painted Wares	"Khirbat Mafjar Ware"	Flasks and Bottles	Lamps	Gray Ware		Cut-Out Ware	Glazed Wares	Early Bronze Wares
		Rims	Rouletted and Stamped Sherds	Horizontal Loop	Vertical Loop	Knobbed ("Khirbat Mafjar Ware")	Bowls and Plates	Pots	Lids							Miscellaneous Sherds	Combed Sherds			
PRE-CHURCH	K10:5	1	6	1				2	3											47
	K11:9	1	2	6		7	1	4	14		82									167
	L10:14		1					4	1		1				26					20
	15														1					
	16		10	8		6	2	6	7	2	44	6	1	15	1				1	13
	17							2	1		5									
	18	1	5	1				2	7	3	5									3
	19			4				2	7		8									7
	21			3		2		1			8	1	1	2						3
	L11:16-17	2	27	15	22	7		4	26	2	30	153	1		3		3			46
20																			71	
21																			37	
22			7		5	10		4		7	23								3	
Total	5	51	45	22	27	13	19	59	8	116	266	5	17	1	32	1	7		1	417
CHURCH†	J11:1		10	2	6	1	2	1	15		11	57	3			3	2		4	19
	2	2		1	5		1	1	7		2	11	1						1	2
	8								3				3							1
	11	1										1	3							8
	K10:1		1	2					3		20	15	6				1	4		2
	2		3	8				3	9		21	3	6							1
	K11:2		4	5		6		4	7		46	8	5	1	1	2*	3	1	4	12
	3		3	7	1	10	1	5	1	2	33	39	16	2	3	2*	1	1	2	7
	4		3	4		6		2	6		8		2							4
	5	4	9	7		3		1	6		37	61	17	1	1	5*	6		9	6
	8			3				1	1		4	2	2				1		1	
	11		8	3		8		6	2	1	11	2	11	3				1	1	8
	L10:8			4				2	2		8		2							8
	9		2	2		1	1	1	2		19	5	2				1	1		4
	10		1	7				8	3		18	2	4							8
	11	1	1	1		9		3	1	1	4	3	10	4	1	1	1	1	2	3
12		2	8		1	1	1	1	1	25	5	12	3	2	2	5		2	5	
13	1	1	3		1	1	1	4	1	26	6	38	7	1	3	7		14		
L11:5		1	4				3	3		5	1	1							6	
6		2	5				11	10		8	2	5	1			3			9	
7	1	2	8			3	3	3		17	6	4	1						5	
8	1	1	10		29		1	5		26	13	21	1	1	1	3			5	
9	2	12	5		6	1		12		34	2	8	1		8				129	
10		2	3					5		19		1							75	
11		50	13		4		36	100	8	528	46	12	41	3	8	5	1	3	2	
12		5	6						2	7		3							7	
13	1	5	10		8		2	10		42	2	2		3	1	1			2	
Total	14	128	131	1	102	8	86	196	16	980	165	314	159	22	28	38	39	3	60	333
POST-CHURCH	J11:3		4	2	2	1	2	1	1			23	4	2		2			5	10
	4		5	2			3	1	4			8	6						3	6
	K10:4		2	2			1						1						1	1
	K11:1	2	7	11		27	1	7	11	39	38	110	10	3		2*	6		18	13
	6					1				1		8							1	2
	7		2			1						5							4	2
	13			7				9	3		6			2						3
	L10:1		8	8			1	2	4	1		11	8							5
	3					2			4				1							
	4					2			2				1	1						2
6	1	9			3		2				4	3							2	
7	2	15	4				6	1	2	21	18	11	4	1		8*	1	6	6	
L11:2		1	1		1	8	2	1	2	21	12	1	11	3	5		6	6	3	
3	1	2					1		2	2	2		4		2	1*	2			
Total	6	53	37		39	11	35	28	4	96	75	182	53	12	11	15	18	6	43	44
Surface and just below	8	43	22		22	6	2	13	1	37	23	32	31	4	6	7	3		31	6
SOUNDINGS	H9:1		2	2	15	3	6	9	16		29	4	2	4	2	3		1	4	
	J8:1	1	1	47	12		9	30	23			27	9	1	3	2			23	5
	J8:2	1		15			7	9	8			2	3						1	
	J9:1	5	7	3	1	1	3	1	77		9	7	28	5	2	6	9		1	1
	K8:1		5	7			1	5	2											
Total	7	15	74	1	28	5	25	54	3	126	38	40	42	10	7	11	13	1	29	6

† But not contemporary with the church as such (see p. 59, n.6).

NOTES TO TABLES I AND II

It may be noted that, on the whole, the headings in these two distribution tables are uniform, but there are some differences. For instance, in recording the pottery from the trench, where our interest was concentrated on prehistoric material, we used certain general classifications such as "Byzantine Wares," whereas a more detailed sorting of the late pottery from the main area resulted in such subdivisions as "Horizontal Loop Handles" and "Vertical Loop Handles" while all the early pottery was recorded under the general heading "Early Bronze Wares." The differences are due not only to the procedure called for by the specific purpose of the trench but also to the fact that records of the various areas were kept by different members of the staff and the fact that some of the material was not available in Chicago during the preparation of this report. Definitions of the types or groups represented by the headings used in the tables are to be found in the discussion of the pottery (pp. 30-48).

The quantities of potsherds found are indicated, with the exception that when several sherds could be recognized as belonging to a single vessel they were always counted as one sherd. Obviously the relative frequency of sherds does not necessarily provide a precise picture of the numerical relationships of the various types of whole vessels. Our numerical record may give an approximate picture, however, and of course the mere presence of certain types at certain levels is often significant. We feel that the keeping and publishing of such numerical records is not superfluous, for, while it may be argued that such a record from one campaign on one site is of limited value by itself, the accumulation of records of this sort from various excavations over a period of time is bound to provide significant evidence that could not otherwise be obtained.

