

**TAYINAT ARCHAEOLOGICAL PROJECT
2015 SEASONAL REPORT**

[Not for Publication]

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INTRODUCTION

The Tayinat Archaeological Project (TAP) conducted its eleventh season of field research at Tell Tayinat between **June 1 and July 31, 2015**. The field excavations were followed by two months of laboratory analysis and research, conducted between September 14 and November 20, 2015, in preparation of reports and conference presentations on the results of the 2015 season.

The 2015 TAP senior staff consisted of Dr. Timothy Harrison (Project Director), Dr. Elif Denel (Assistant Director and Field 7 Operations), Dr. Stephen Batiuk (Senior Field Archaeologist), Dr. Lynn Welton (Field 1 Operations), Dr. James Osborne (Lower Town Survey), Dr. Mark Weeden (Epigrapher), Doğa Karakaya (Paleoethnobotanical Specialist), and Dr. Fiona Haughey (Artifact Illustrator and Registrar). The project was assisted by nine advanced archaeology students from Boğazici University, Bryn Mawr, Brown University, Koç University, Mustafa Kemal University, the University of California at Los Angeles (UCLA), and the University of Toronto. Ms. Nesrin Demirhan served as government representative on behalf of the Directorate of Cultural Heritage and Museums.

The primary objectives of the 2015 TAP field season were as follows: (1) conduct excavations in Fields 1 and 7 to resolve important stratigraphic questions, as part of the ongoing Phase Two (2011-2015) investigations, and in preparation for large scale excavations anticipated in Phase Three (2016-2020) of TAP; (2) complete an intensive systematic surface survey of the lower town settlement; (3) continue the ‘soft capping’ conservation program for the monumental mudbrick architecture on the Neo-Hittite citadel, in particular Temple II in Field 1, as part of the planned archaeological park; (4) and continue ongoing analyses of the artifact assemblages recovered from previous field seasons in Fields 1, 5, and 7.

FIELD 1 EXCAVATIONS (L. WELTON)

Squares G4.55 and G4.56 (Ö. Demirci and L. Welton)

The primary focus of the investigations in Squares G4.55 and G4.56 involved the cleaning of balk collapse along the north balk of the two squares that had occurred underneath the protective geotextile covering installed during the off-season between 2012 and 2015. A substantial amount of balk collapse had occurred, predominantly along the north balk of Square G4.55. This included slump of some of the softer, ashier material at the base of the balk, from the Early Bronze levels (Field Phases [FP] 7-8), as well as larger sections of the balk that collapsed almost intact from the superimposed Iron I levels, probably due to being undermined by the slumping of the lower material. Considerable effort was devoted to trimming and cleaning the balk, which helped to clarify important stratigraphic details of the Early Bronze and Iron I levels, while also stabilizing the entire section across both squares.

A number of wall sections in Square G4.55 dating to the Early Bronze Age (specifically FP 8b) were also trimmed in order to better document their construction sequence, and clarify important stratigraphic questions that had remained concerning the large architectural structure previously excavated in this area. In the course of trimming and cleaning this area, traces of several stratigraphically earlier walls became visible, and were tentatively assigned to Field Phase 9, the earliest architectural phase excavated in Field 1 to date, and likely dating to late EB IVA (Amuq I), or early EB IVB (Amuq J).

Square G4.66 (T. Spurrier and Z. Mutlu)

Excavations in Square G4.66 had reached Early Bronze Age levels in the western third of the square by the end of the 2012 season, but significant Iron I deposits remained in the eastern part of square. The investigations in Square G4.56 to the north had displayed a similar pattern, with the walls associated with a large Early Bronze Age structure preserved at a higher level in the western part of the square, and conversely, the Iron I deposits in the eastern two-thirds of the square preserved to a greater depth. In G4.56, these deeper Iron I deposits represented the earliest

Iron I levels in the square, FP6c. Somewhat surprisingly, however, the 2015 excavations in the eastern part of Square G4.66 moved more quickly than expected into intact EBA levels. For the most part, the majority of the Iron I pottery excavated during the 2015 season in G4.66 is consistent with the FP6b assemblage, and there were comparatively few clean deposits where the ceramics were comparable to the FP6c pottery found in G4.56. By the end of the season, EBA levels had been reached across the entire square, and the outlines of several walls had become visible.

FIELD 7 EXCAVATIONS (Ö. DEMIRCI AND E. DENEL)

Square G4.58 (D. Joblonkay and E. Künefeci)

The primary objective of the 2015 season for Field 7, and in particular Square G4.58, was to establish a clean stratigraphic sequence for the Iron II in order to better understand the archaeological context for the statuary discovered in this area during previous seasons. The investigations were focused primarily in the northern part of the square, in the immediate vicinity of the discovery spots of the lion sculpture, the Suppiluliuma statue, and winged bull and sphinx column base. A series of sherd and pebble-lined surfaces were excavated, clarifying the stratigraphic sequence in this area. A substantial mudbrick wall was uncovered in the northernmost part of the square, largely hidden by the north balk. The wall was oriented NW to SE, extending across both Squares G4.58 and G4.59, and appeared to enclose the area to the south associated with the monumental sculptures.

Square G4.59 (M. Moore and G. Türköz)

Excavations were initiated in G4.59, located to the east of G4.58, to better understand the stratigraphy of the area south of Temple XVI, particularly in light of the uncertainty surrounding the monumental sculptures excavated in G4.58. The two easternmost meters of the square were excavated, rather than excavating a full 9 x 9 m square, along with the balk between G4.58 and

G4.59, resulting in a 9 m (north-south) x 3 m (east-west) trench. The excavations revealed a long narrow stone pavement, approximately 10-12 cm in diameter, which extended from the north to the south balk. At its southern end, the pavement appeared to intersect with a second pavement to the west made of larger, rounder stone, although it is possible this pavement is stratigraphically later in date, and thus effectively sealed the north-south oriented pavement. The function of these pavements was not clear. Excavations to the east of the north-south pavement revealed a hard-packed earthen surface that contained concentrations of nari material and flat-lying pottery; this surface extended to the east out of the excavated area.

Square G4.68 (Ö. Demirci)

The excavations in Square G4.68 continued the effort of previous seasons, but focused primarily on balk removal. In addition, excavations in the probe along the north balk opened in 2012 were extended to the west with the aim of tracing the stone pavement uncovered in this area. The pavement was found to connect with the contemporary pavement segment uncovered in Squares G4.58 and G4.59 to the north. However, the pavement did not extend to the west, and indeed the western edge of the pavement appeared to form a north-south line; the functional significance of this apparent border or edge remained unclear through the end of the season. Unfortunately, the western extent of the probe revealed significant later disturbance, possibly dating to the classical or medieval periods, apparently the result of efforts to mine the stone from the Iron Age structures that once stood in this area.

LOWER TOWN SURFACE SURVEY (J. OSBORNE)

The intensive systematic survey of the lower settlement at Tayinat initiated in 2014 was continued and completed in 2015. The aim of this survey was to document the extent of the lower settlement at Tayinat, and to determine the settlement history and primary functional activities conducted in this area of the site, presumed to have been the main residential and

industrial sectors of Tayinat during the Iron Age (early first millennium BCE). To document this activity, a systematic survey of the surface remains was necessary. There are several specific categories of information that can be gained from the systematic examination of surface artifacts. These include (1) the precise **areal extent** of the lower settlement, determined by the presence of surface artifacts; (2) the **density of settlement** in the area, determined by the frequency of surface artifacts as measured in pottery counts and weights; and (3) differences in the **use of space** across the lower town, or neighborhoods, determined by the types of ceramics and other objects found in different areas of the city.

To better understand the distribution of artifacts on the lower town's surface, this sector of the site was divided into 10 x 10 m units distributed 20 m apart from one another, or 25 units per hectare. At roughly 16 ha in size, as estimated from satellite imagery, this means the Tayinat lower settlement was divided into approximately 400 units. 238 of these units were visited and sampled during the 2015 season, all located east of the citadel mound. The surface survey was conducted over fourteen days of fieldwork. 17,973 pottery sherds were recorded in these units. This material will be used to determine the size and density of Tayinat's residential neighborhoods. Of the total number of sherds identified, 5148 were diagnostic pieces that can be dated more precisely based on the Iron Age typology for Tayinat; this information will also be used to identify the different functional activities that occurred in the lower town. 212 objects were also identified during the survey, including numerous fragments of basalt grinding stones and quern stones, and ceramic loom weights, confirming the domestic character of the lower settlement. Two fragments of monumental statuary were also found, one of which displays the hair curls of characteristic of Neo-Hittite statuary, such as depicted on the Suppiluliuma statue found in Field 7 on the citadel mound, suggesting the presence of statues in Tayinat's lower settlement as well.

MUDBRICK ARCHITECTURAL CONSERVATION PROGRAM (S. BATIUK)

As noted in previous Tayinat seasonal reports, an assessment of the monumental mudbrick architecture in the Temple Precinct on the Tayinat citadel conducted in 2012 provided a treatment strategy that has served as a guide for the conservation program we have implemented over the past two years. Following preliminary cleaning and preparations in 2012 and 2013, conservation treatment and consolidation of the Tayinat Temples (Buildings II and XVI) commenced in 2014 and continued through 2015. A method called “soft capping” has been employed, based on the results of analyses conducted as part of the 2012 assessment. This method does not involve reconstruction of a building’s architecture, but rather the creation of a reversible mudbrick “shell” around the excavated remains, which are then in-filled with earth. The soft capping approach preserves the shape of the original structure for visitors to see, while also protecting the existing architectural remains by essentially backfilling them, with a layer of geotextile separating—and thus preserving—the archaeological remains from the encompassing earth and mudbrick shell. The 2014 season saw completion of this procedure for Temple XVI, and in 2015 our efforts shifted to the larger and more complex Building (Temple) II.

Originally excavated by the University of Chicago’s Oriental Institute in the 1930s, the Tayinat Archaeological Project (TAP) re-excavated the northern wall of Building II during its 2004 and 2005 field seasons as part of its Field 1 investigations. The 2015 effort provided some unique challenges, most notably the extensive exposure of the north section of the field, which now drops vertically more than five meters below the surface of mound, and undergirds the south face of Building II’s north wall. Although covered by geotextile during the offseason, this north section has been adversely affected by the annual winter rains, and as a result its preservation became a priority for the 2015 season (see discussion above in the section on Field 1).

The same soft-capping procedure developed for Building XVI was employed for Building II, although with some modification necessitated by the peculiar circumstances of the preserved structure. In particular, the extended exposure of the temple's north wall—made of highly friable sun-dried mudbrick—over the intervening years since the Chicago excavations had resulted in considerable erosion, and the transformation of the outer courses of mudbrick into an undifferentiated soil matrix. Combined with the constraints imposed by the vertical face of the north section of Field 1, it was therefore necessary to remove, or trim, much of this external “skin” away from the better preserved core of the temple wall before the soft capping procedure could commence. Approximately 30 cm of this amorphous soil matrix was removed along the south face of the wall, and similarly around the north pier that separated the temple portico from its inner chamber, or cella. These excavations also revealed the remains of the northern-most extension of the stone steps that fronted the monumental entrance to the temple on its east.

Another change to the soft capping procedure involved the installation of wire meshing for structural support. Fine wire meshing was laid over the geotextile covered archaeological remains of the wall, and then sandwiched between the first and second courses of the reconstructed brick; a second layer was applied between the third and fourth and final courses. This was done to provide more stability for the soft-capped exterior of the structure, especially in light of the potential for erosion and undercutting due to the wall's proximity above the deep north section of Field 1.

A third adjustment involved the installation of a temporary roofed shelter designed to protect the north temple wall and the exposed north section of Field 1 below until a planned permanent shelter can be erected. Given the north temple wall's proximity to the edge of the Field 1 excavations, their depth, and the erosion damage that had occurred over a succession of off-seasons, a temporary shelter was critical if the conservation effort was not to be lost. As an

interim solution, the shelter also had to be designed and installed in a manner that would not damage the archaeological remains, and would be completely reversible (or removable), as stipulated by Turkish Ministry of Culture and Tourism regulations. To accomplish this, the supports for the roof of the shelter were inserted into concrete “buckets” that served as anchors, which in turn were placed above the preserved archaeological remains, but inside the core of the mudbrick capping for further support. The combined weight of the cement, the sturdiness of the surrounding earth packing, wire meshing, and mudbrick capping were designed to provide sufficient stability to extend the roof south enough to shield both the north wall of Building II and the north section of Field 1 from the elements. The height of the roof was limited to 30 cm to provide further protection from the strong seasonal winds and rains.

The conservation and restoration of the western extent of Building II, which includes its inner sanctum, or ‘holy of holies’, is planned for the 2016 Tayinat field season. Conceptually, this will result in a more coherent view not only of the temple, but also of the larger sacred precinct and its place within the Neo-Hittite citadel complex. It will also enable the impressive remains of Building II, including life-size replicas of its sculptural stone monuments (see further below), to frame the ongoing investigations in the Field 1 deep sounding, and provide a visually striking stratigraphic profile of Tayinat’s lengthy archaeological history, as part of the planned Archaeological Park.

LUWIAN MONUMENTS AND SCULPTURE CONSERVATION AND RESTORATION

The 2015 season saw a continuation of the project to restore the Hieroglyphic Luwian stelae and sculptures that flanked the monumental citadel gate complex and stood in the Temple Precinct at Tayinat. The primary effort during the 2015 season involved the continued documentation and analysis of the thousands of basalt fragments recovered to date (inventorying, registration and digital imaging) in preparation for a comprehensive restoration program. Almost

3000 basalt fragments have now been documented. In conjunction with this restoration project, we plan to produce life-size replicas of these monuments with the aim of installing them *in situ* on site as part of the planned Archaeological Park. Permission to create these replicas was secured from the Ministry of Culture and Tourism in 2014.

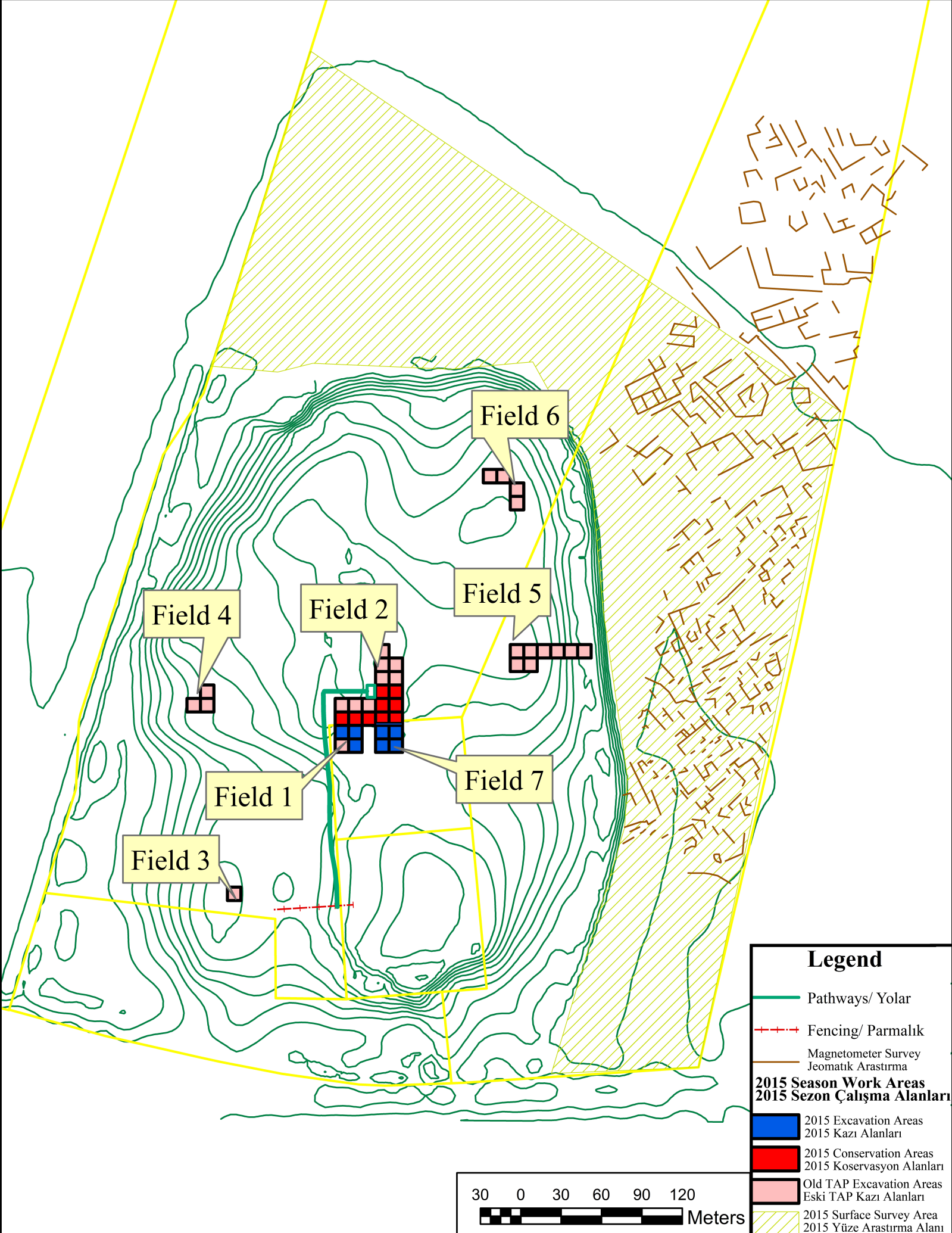
CONCLUDING OBSERVATIONS

The Tayinat Archaeological Project's 2015 investigations continued to document the rich archaeological remains of the succession of Early Bronze and Iron Age settlements that occupied the site, in particular as preserved in Fields 1 and 7. The 2015 season also saw completion of the intensive surface survey initiated in 2014 in the lower settlement at Tayinat. The results of this investigation promises to provide critically important knowledge about the residential and industrial activity areas of the ancient settlement.

The 2015 season also saw a continuation of the conservation program to preserve the monumental mudbrick architecture that formed the royal palaces and temples of Tayinat's Neo-Hittite citadel. Together with the pathway, viewing platform, and signage installed in 2014, this effort represents part of the first phase in the development of the planned Tayinat Archaeological Park, with further expansion anticipated in future field seasons. The restoration of the Hieroglyphic Luwian stela and sculptures that flanked the monumental citadel gate complex and stood in the temple precinct will be an important component of this ongoing effort, with replicas planned for installation onsite once restoration is complete.

ACKNOWLEDGMENTS

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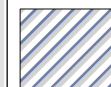


G4.55

G4.56

Tayinat 2015: Field 1 Excavations Early Bronze IV

Legend



Unexcavated



Field Phase 8
Pyrotechnic
Installations



Field Phase 8
Architecture



Hypothesized



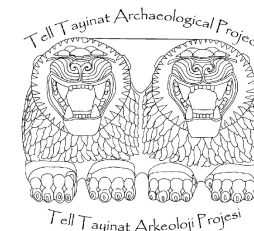
Field Phase 7 Pits



Field Phase 9
Walls



Hypothesized



0 0.5 1 2 3 4 5 Meters

G4.65

G4.66

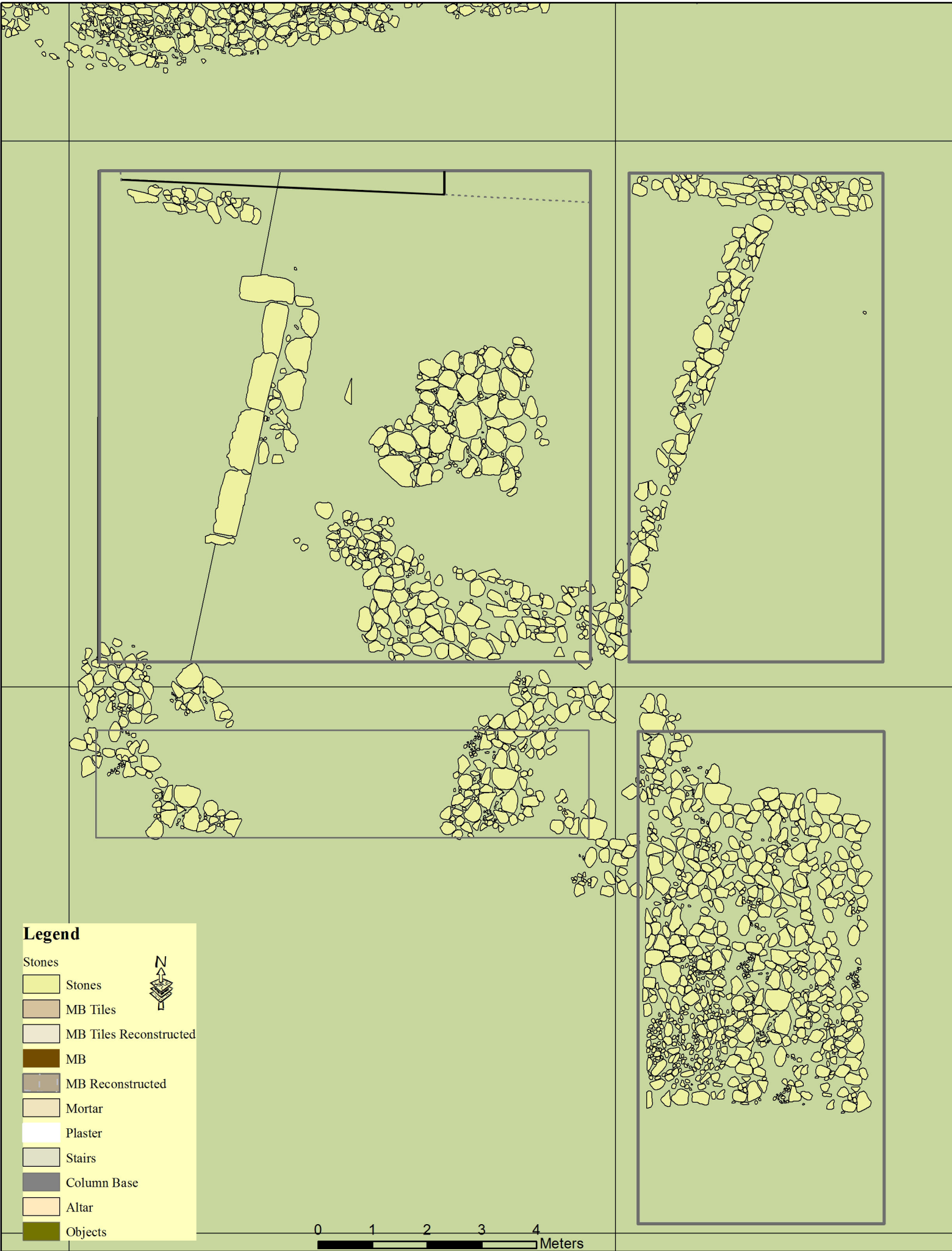
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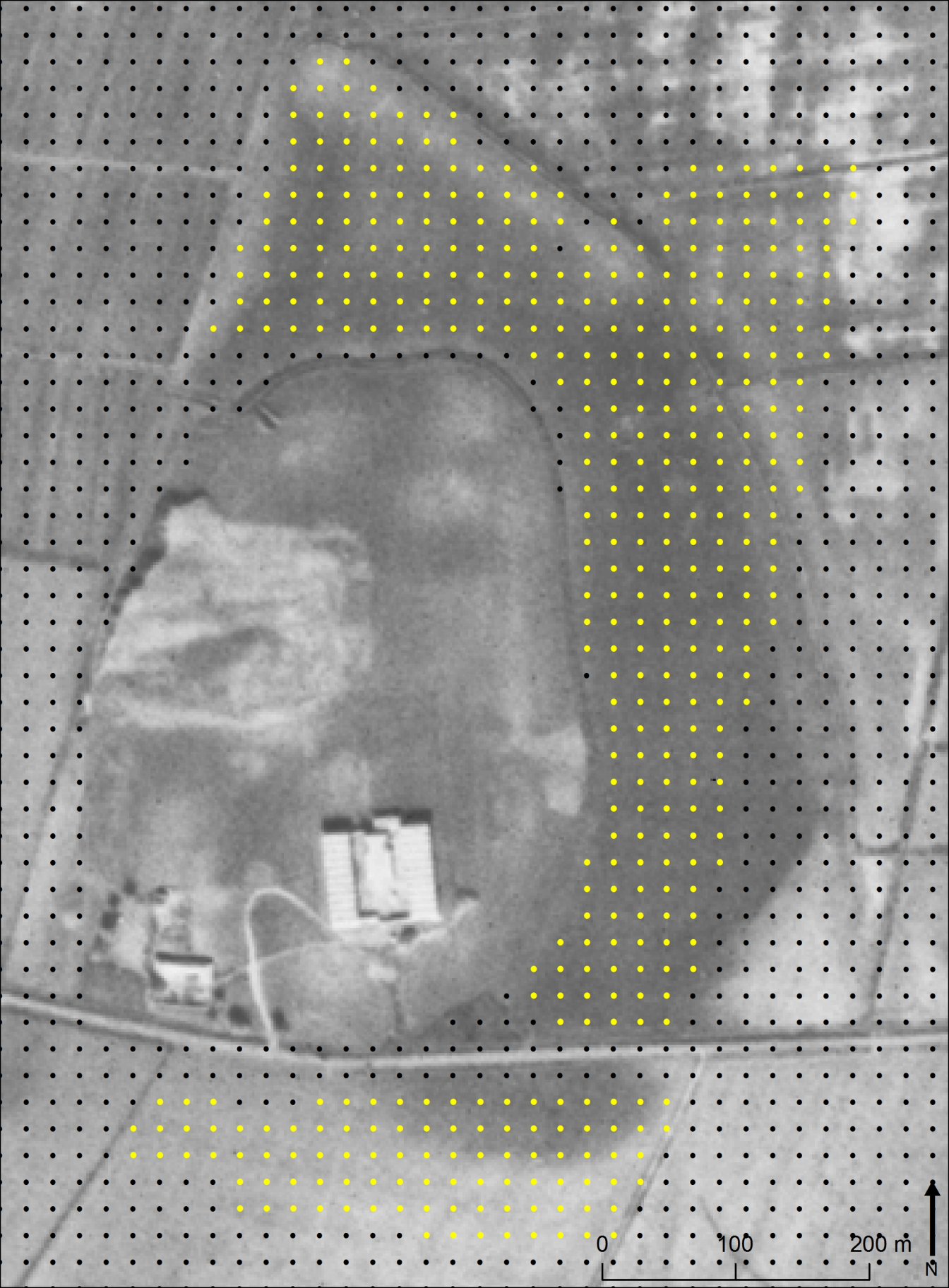
Stones

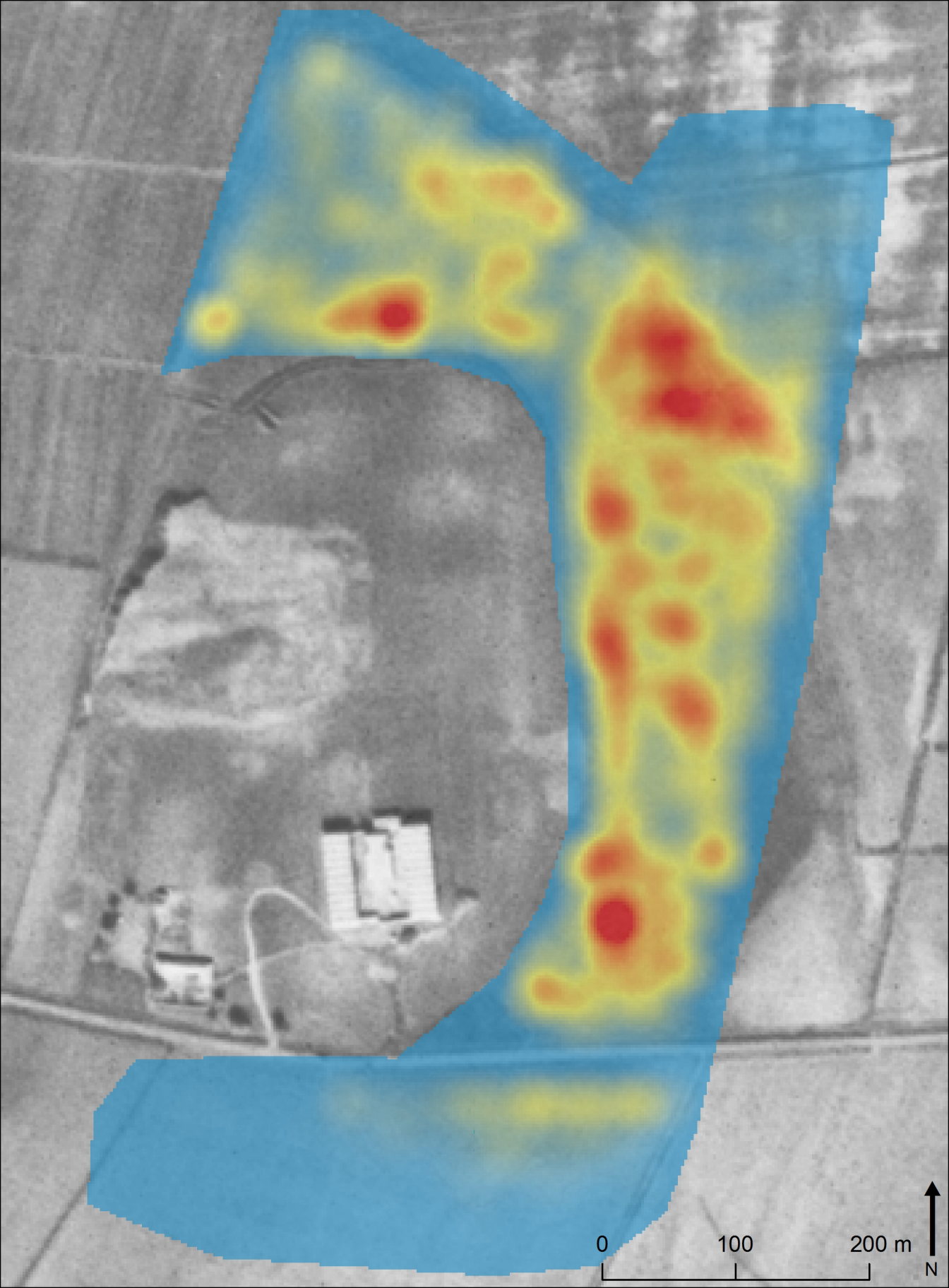
- Stones
- MB Tiles
- MB Tiles Reconstructed
- MB
- MB Reconstructed
- Mortar
- Plaster
- Stairs
- Column Base
- Altar
- Objects

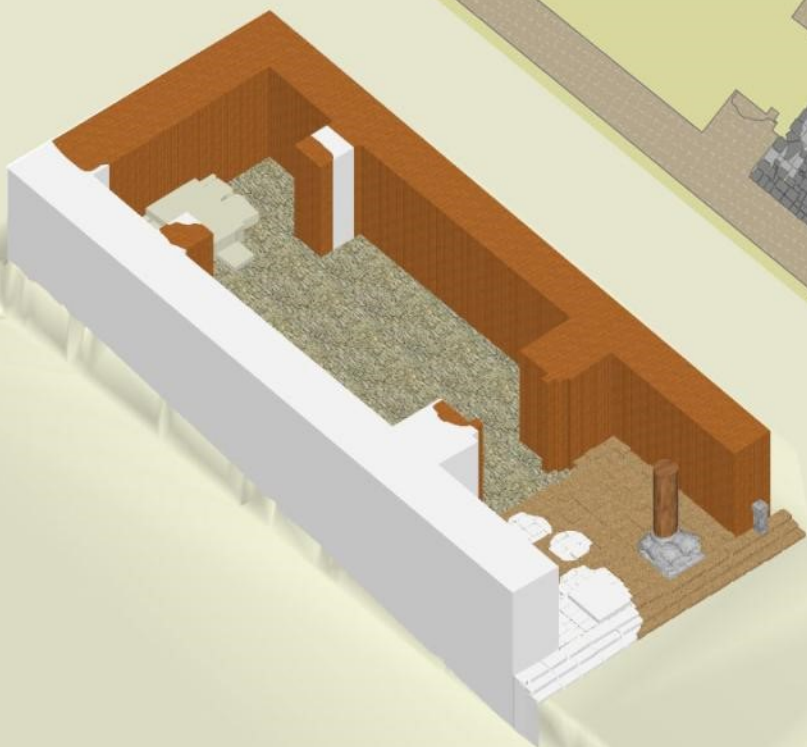
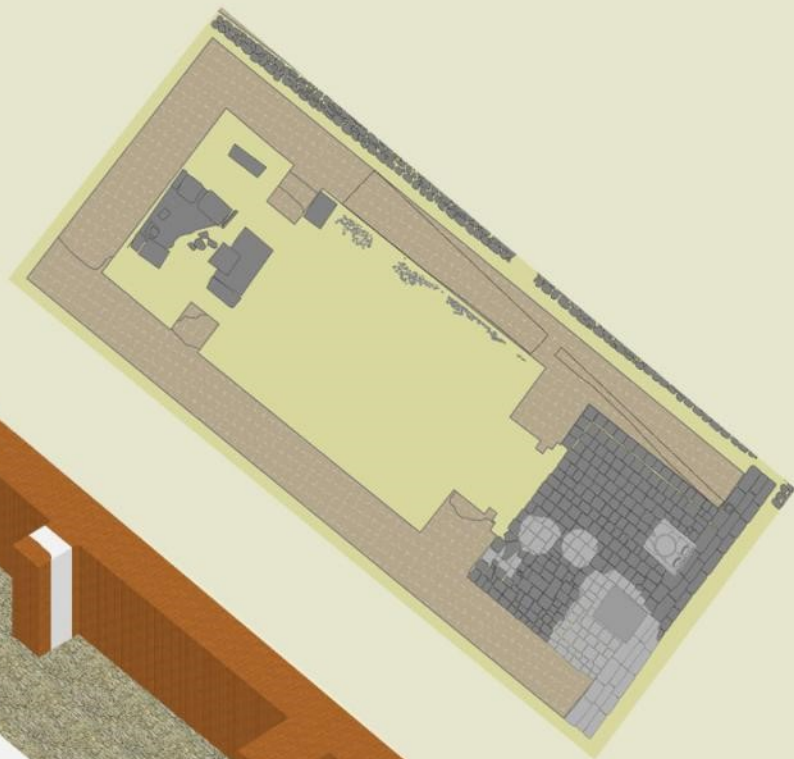


0 1 2 3 4 Meters













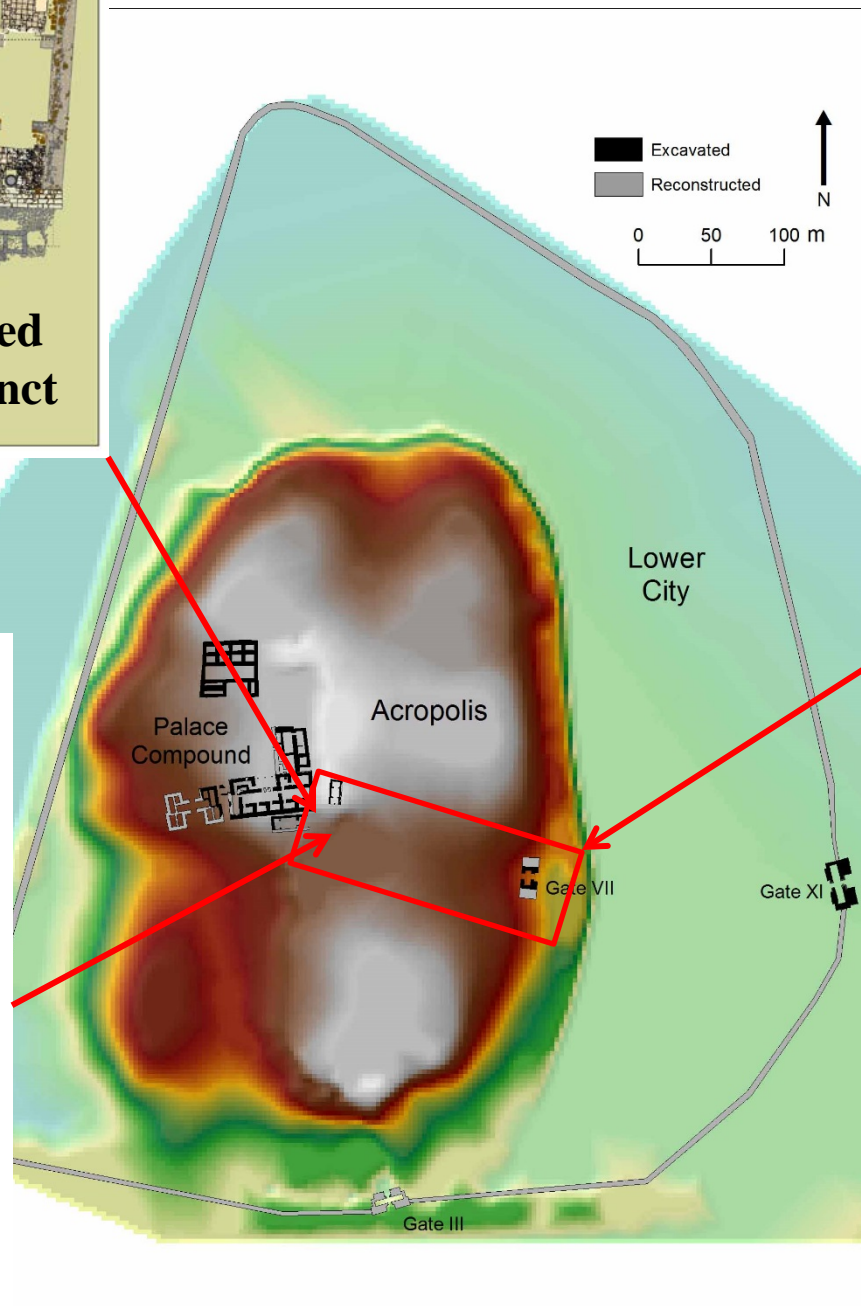












**Ceremonial
Procession
Way?**

