

**TAYINAT ARCHAEOLOGICAL PROJECT
2006 SEASONAL REPORT**

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INTRODUCTION

The Tayinat Archaeological Project (TAP) represents part of an ongoing regional research effort investigating the historical development of urban institutions and the rise of early state societies in the ancient Near East. More specifically, TAP was conceived within the framework of the Amuq Valley Regional Project (AVRP), which has been systematically documenting the archaeology of the Amik Plain, in southeastern Turkey, since 1995. This explicitly regional project, still a relative rarity in the field of Near Eastern Archaeology, seeks to facilitate a multi-scalar approach to the investigation of the complex social, economic and political institutions developed by the first urban communities to emerge in this part of the ancient world. As first revealed by the investigations of the University of Chicago in the 1930s, Tell Ta'yinat preserves the extensive remains of the Neo-Hittite/Luwian capital Kunulua. Within the broader framework of the regional perspective articulated by the AVRP, therefore, the TAP investigations were initiated for the specific purpose of documenting the archaeological record preserved at this important settlement, located on the southern edge of the Amik Ovası.

The specific goals of the current phase of TAP are (1) to create a computerized base map (using GIS software technology) clearly defining the settlement parameters and topography of the site, (2) to document all visible architectural remains on the site, (3) to document the settlement history of the site through the assemblage of extensive, quantifiable collections of surface artifactual remains, (4) to document sub-surface remains utilizing remote sensing technology (both satellite imagery and ground-penetrating techniques), (5) to initiate an extensive coring program in the lower mound, (6) to conduct targeted excavations, (7) to assemble extensive, quantifiable collections of paleobotanical, faunal, ceramic and other artifactual remains from each of the principal phases of occupation at the site, and (8) to integrate the architectural and artifact records in a relational database that will permit the detailed regional comparative analyses necessary to address the broader research objectives of the project referred to above.

The first three project goals were the focus of field seasons conducted as part of the AVRP Survey. The surface artifact (#3) and architectural (#2) surveys were completed in 1999, and the topographic survey (#1) was completed in 2001. The 2002 and 2003 field seasons were devoted primarily to the remote sensing survey (project goal #4). The 2004 season was devoted to launching the coring program on the lower mound (project goal #5), and initiating excavations on the upper mound (project goal #6) (for more thorough descriptions of these field seasons, see the published reports in *Araştırma Sonuçları Toplantısı* and *Kazı Sonuçları Toplantısı*). In addition, during this period, work was initiated on the construction of a comprehensive relational database (project goal #8) for the site, linking the topographic and architectural record with artifact inventories from both past and present field work at Tell Ta'yinat, including artifact collections preserved in the Antakya Museum. The 2005 season saw expansion of the excavations initiated in 2004 (project goal #6), as well as the coring program and remote sensing investigations in the lower mound (project goal #5).

The 2006 season was conducted between June 14 and July 31, and continued the field investigations of the preceding two years. The expedition senior staff consisted of Dr. Timothy Harrison (Project Director), Dr. Jack Dessel (University of Tennessee), Dr. David Lipovitch

(Zooarchaeologist, University of Toronto), Dr. Hatice Pamir (Mustafa Kemal University), Dr. Laurence Pavlish (Geoarchaeologist, University of Toronto), Dr. Stephen Batiuk (Senior Field Archaeologist), Dr. Heather Snow (Senior Laboratory Supervisor), Susan Harrison (Photographer), Fiona Haughey (Artifact Illustrator), Julie Unruh (Conservator), Andrea Onodi (Paleoethnobotanist), Adam Aja (Supervisor for Square 56), Elif Denel (Supervisor for Square 66), Brian Janeway (Supervisor for Square 55), James Osborne (Supervisor for Squares 45 and 46), Elif Ünlü (Supervisor for Square 56) and Lynn Welton (Supervisor for Squares 34 and 77). The project was also assisted by seven archaeology students from Bilkent University, Boğaziçi University, Mustafa Kemal University, the University of Toronto, and the University of Venice. Mr. Ömer Celik, of the Antakya Archaeological Museum, served as government representative on behalf of the Directorate of Cultural Heritage and Museums.

THE 2006 EXCAVATIONS

The primary objectives of the 2006 field season were to (1) continue excavation of the Early Iron Age levels in Field I, (2) expand the probe in the Early Iron II levels in Field II begun in 2005, (3) open a new probe on the knoll in the southwest quadrant of the site, where Early Bronze Age remains were anticipated (Field III) (**figure 1**), and (4) continue the coring program and remote sensing investigations in the lower mound.

The Field I Investigations

The 2006 excavations in Field I (**figure 2**) continued the investigations begun in 2004, and expanded in 2005 to four 10x10 m squares (G4.55, G4.56, G4.65 and G4.66). In all, the 2004 through 2006 excavations in Field I have identified seven distinct stratigraphic Field Phases (FP), with the primary sequence (FPs 3-6) dating to the Early Iron Age.

Square G4.55

The excavation of Square G4.55 (**figure 3**) entered its third season in 2006 with the goal of uncovering the remainder of the Early Iron Age material. However, the earliest phase encountered in Square G4.55, FP 7, dates to the EB IV (Amuq Phase J), and was reached in a limited area in the western part of the square as a result of an inadvertent penetration of the floor of Pit G4.55:92. Earth Layers G4.55:106 and 108 may also belong to this phase. Two wall sections visible in the south faces of Pits G4.55:92 and 100 most likely also belong to FP 7.

There is unfortunately very little in the way of architecture that can be associated with FP 6. The 2004 excavations produced a small wall (G4.55:29) projecting from under the north pier wall of Bldg II, and the 2005 season generally did not reach FP 6 levels. There remains only about 20 cm of soil between the level of the 2006 square and the bottom of the 2004 trench, so the prospects of finding significant FP 6 architecture appear slim. Pit G4.55:100 was sealed by Wall G4.55:83 and Earth Layer G4.55:84, both assigned to FP 5, and hence may comprise the earliest Iron I locus excavated thus far. Probe G4.55:109 may also belong to FP 6, since it lies below Wall G4.55:99 of FP 5. The extant remains of FP 6, if such a phase can still be justified, are so ephemeral that even a hypothetical reconstruction of its remains is not possible.

FP 5 easily contains the best preserved architecture in Square G4.55. Wall G4.55:77 was cut by Wall G4.55:15, thereby establishing the key relationship between the two phases. Wall

G4.55:77 may have once been joined to Wall G4.55:83, but Pit G4.55:37 cut that segment of the structure, as it did between Wall Stubs G4.55:62-65. These in turn were sealed by a series of contemporary surfaces, including G4.55:85, Ash Layer G4.55:82, and Surfaces G4.55:75 and 79. These are located at the same elevation as Ash Layer G4.55:107, which blanketed the eastern half of the square. Unfortunately, they were cut by Pit G4.55:94, preventing a direct stratigraphic connection.

The 2006 excavations also revealed a small but significant number of FP 5 features in the eastern half of the Square. A large plastered surface (G4.55:97) covered an area directly below the foundation of Wall G4.55:15, whose function is not well understood. It is tempting to associate this surface with Bin G4.55:110. However, the level of the plastered surface is such that it may belong to a later sub-phase of the surface in that area.

The primary surface of FP 5 was Ash Surface G4.55:107, which can be traced in several sections of Square 55. It sealed against Wall G4.55:99 and Textile Bin G4.55:110, and is included in Nari Earth Layer G4.55:103. It can also be traced across the east balk and portions of the north as well. Surfaces G4.55:79, 75, 82, 85, and 87 are also associated with this layer, and it can be traced into the adjacent Squares 56 and 65. Though Surface G4.55:107 could not be discerned south of Wall G4.55:99, the hard packed, gray mudbrickly Surface G4.55:87 was contemporary to it, and contained evidence of localized burning or destruction that can be linked to similar evidence in neighboring squares (in particular G4.56:87 and 66:21). Another feature that may link to Square 56 is Wall G4.55:99, which aligns roughly with G4.56:67. Although G4.56:67 is ephemeral and only visible in the west balk, the elevation, size, and color of the brick is analogous to that of the bottom course of Wall G4.55:99.

One of the more interesting discoveries came in the form of a small 70 x 40 cm installation that may provide a key to understanding the nature of the FP 5 settlement in this area. Although not initially realized, it was later discovered that the installation was bonded into the north face of Wall G4.55:99, the latter of which could not be traced west of that point. Within a short radius of the installation, in an area encompassing Loci G4.55:75, 79 and 107, sixteen clay loom weights were recovered, in addition to the five found inside the nearby Textile Bin G4.55:110 (**figure 4**). Several spindle whorls were also among the finds. These remains provide evidence of textile production, and complement the similar finds recovered in Square 66.

Wall G4.55:15 represents the primary feature assigned to FP 4. After much deliberation, it was determined that the odd alignment of mudbricks discernable in plan were a result of the construction method employed by the builders, who cut into earlier remains such as Wall G4.55:77 and Earth layer G4.55:47. Wall G4.55:15 was itself cut by the foundation trench for the south wall of Bldg II (G4.55:61). The bottom course of bricks was found to be resting on a layer of white phytolithic material visible in section that appears to be a liner for the later foundation trench. The function of Wall G4.55:15 is unknown, since it is stratigraphically isolated by the earlier material into which it cut. Two potsherd covered surfaces (G4.55:73=78) were also assigned to FP 4, but their relationship to the Wall G4.55:15 remains uncertain. Several fill layers were also attributed to FP 4, but no other architecture can be confidently associated with it. It may be that the areas east and west of Wall G4.55:15 were part of an open courtyard of some kind.

Field Phase 3, which mainly comprised a series of large pits, produced a number of additional pits during the 2006 season, including G4.55:88, 90, 112, 114 and 116. The remains of FP 2, the final Iron Age field phase (associated with the Building II complex), were largely uncovered during the 2005 field season. To facilitate further excavation in Square G4.55, the remains associated with this phase were completely removed from the southern half of the square at the beginning of the season, but retained along the northern half, where they are better preserved.

Square G4.56

Square G4.56 (**figure 5**) underwent its third excavation season in 2006. During the 2004 season, excavations probed deeply into the northern third of the square to provide 1) a southern subsidiary section, 2) the northern extent of the so-called “Room 1” (dated to the Iron Age I), which guided excavations in the southern extent of the square during the 2005 season, and 3) a Stone Platform (G4.56:20), which was further traced to the south during the 2006 season.

Only a few features were identified as clearly pre-dating the more coherent construction of the later sub-phases first uncovered in 2004 and 2005, including Earth Layer G4.56:88, Wall G4.56:152, which emerged in the closing days of the season, and an unlabelled wall exposed in the later Pit G4.56:117. These remains were tentatively assigned to FP 6.

The FP 5 remains encountered in G4.56 were divided into two sub-phases during the 2006 season. FP 5b, the earliest of the two sub-phases, was one of the most coherent and well-preserved architectural phases in the square. The so-called Room 1 (as designated in 2005) was located in the northwest portion of the square (and comprised of Walls G4.56:23, 66-68, with internal features G4.56:76-77, and 31 [not excavated in 2006]). The west face of the building remains obscured by the west balk of the square, and does not extend into the neighboring Square G4.55. One cross-wall (G4.55:99) roughly aligned with G4.56:67 may provide a tentative link to the architecture of Square G4.55 to the west. A small portion of this wall may be visible in the western balk, although it is not currently visible in plan along the top of the balk. Surface G4.55:107, which seals against G4.55:99, may also be concealed in the balk potentially sealing against the west face of Wall G4.56:66. Also of note is the exceptional thickness of Room 1's west wall (G4.56:66), which suggests the possibility of either two adjacent/parallel walls, or a later rebuilding. Either the walls were constructed of interwoven courses of half- and full-sized bricks (employing a type of ‘header and stretcher’ technique), or the narrow width (especially visible in Wall G4.56:68) represents a course of brick which was cut into by a later construction or rebuild along the same basic wall line.

Unfortunately, no clear surface was identified to the south of Room 1. Soil layer G4.56:151 may represent the top of a surface characterized by the presence of significant ash, charcoal and burned mudbrick fragments. The equivalent locus was first identified in Square G4.66 to the south as G4.66:66 (=G4.65:17-18, 32?), and may serve to unify the relevant loci from this phase in these adjacent squares. A large mound of burned debris was visible in the southwest corner of G4.56, and in isolated patches across G4.56:151. A large pit (as yet unexcavated) in the southwest corner of the square may also cut through this layer, while a thin layer of overlying fill material (G4.56:127-128) may still obscure what remains of a potential surface.

The southwest quarter of the Square G4.56 is defined by the southern wall of Room 1 (G4.56:67) to the north and Wall G4.56:91 to the east. The space to the east appears to have been an exterior space, possibly a courtyard, characterized by ashy, laminated layers of debris, including flat lying sherds and bone that are unlikely to have remained on an interior room floor. The use of this area as an exterior space remained constant throughout FPs 5 and 4. It appears that Wall G4.56:91 was constructed on the slope of Soil Layer G4.56:148, which extended to the east of the wall. A Posthole (G4.56:155, with Fill G4.56:156) was dug at sometime to the north of Wall G4.56:91 (possibly before its construction). A sloping Surface (G4.56:95=G4.56:113) began to build up on top of Fill G4.56:148, forming an accumulating series of ashy, laminated layers that extended from the southeast corner of the square (=G4.56:140, which sealed Fill G4.56:147) across the southern part of the square and through an opening between the north end of Wall G4.56:91 and the southern end of Wall G4.56:146. Wall G4.56:146 bonded at a right angle with Wall G4.56:145, which abutted the eastern wall (G4.56:68) of Room 1. Walls G4.56:145 and 146 appeared to form a small, narrow room, approximately 1 m wide. It was difficult to define individual bricks for either wall, although the bricky material they were composed of could be clearly differentiated from the surrounding fills. The function of the room remains unclear, and as of yet no floors have been reached within it.

A cooking installation, or Hearth (G4.56:129), was excavated above the highest lamination of G4.56:95. A section cut through this installation revealed another, earlier hearth in the same general area of G4.56:129, and it is likely that these fires produced ash that contributed to the lamination of the surface. At least one of the surface laminations covered Pit G4.56:149 (Fill G4.56:150) located in the northern part of the area. Pit G4.56:160 (Fill G4.56:161) cut Surface G4.56:95 to the east of Wall G4.56:91. A complete copper-alloyed arrowhead (TT06.G4.56.143) was discovered among the lower laminations of G4.56:95. The pottery from FP 5b consistently produced Early Iron I calls, and consisted predominantly of painted wares.

The architecture of FP 5b remained largely intact in FP 5a. The eastern half of the square was modified by the accumulation of fills and a surface, with the appearance of several new pits (**figure 6**). Fill G4.56:119 (=G4.56:94) accumulated above Surface G4.56:95. The northeast of the square was covered by Fill G4.56:141, upon which Surface G4.56:133 appeared. It was unclear if Surface G4.56:133 ever extended to Room 1, or the abutting narrow Chamber G4.56:145-146, because connections were severed by modern disturbances and the excavation of G4.56:82 in 2005. No surface was discovered above Fill G4.56:119, likely because any surface would have been cut away by the foundation trenches of the south wall of Building II (FP 2). A Posthole (G4.56:136, with Fill G4.56:137) cut the top lamination of Surface G4.56:133, but two other Pits (G4.56:142 [Fill G4.56:132] and G4.56:134 [Fill G4.56:135]) were covered by the upper laminations of the surface. Pit G4.56:142 had a bell-shaped profile and a plastered bottom. A white coat of plaster lined the bottom of straight-sided Pit G4.56:134, and was discovered lipping slightly inward at the sides. The material at the bottom of the pit was charred. Flotation of this material revealed a high concentration of barley grains. Thus, it is apparent that G4.56:134 functioned as a grain silo.

An unusual feature also assigned to this FP was partially excavated in the southeast part of the square. It appears to have been a large oval Pit (G4.56:144 [Fill G4.56:138]), with a rough E-W orientation, that was cut in order to construct a subterranean mudbrick chamber (G4.56:159). Thus far, only the northwest quarter of the pit and the chamber/installation have

been excavated. The eastern half extends under the east balk. Installation G4.56:159 was a rectangular structure built of thin mudbrick walls. The northern wall abutted the long northern side of Pit G4.56:144, but appears to have cornered before reaching the western edge of the pit. Several courses of brick from this N-S oriented western wall were visible in the subsidiary south section. The floor of the installation was not reached this season, although a significant amount of ash, charcoal, and debris was visible at the lowest exposed elevations of the installation. The fill of the pit, which consisted heavily of ash and slightly burned mudbrick fragments, may have included part of the collapsed installation. The lowest exposed mudbrick in the northern wall of the installation was charred on its inner face. The function of this installation remains unclear, although it is tempting to suggest that it functioned as a pottery kiln; however no ceramic slag or wasters were recovered from the pit fill.

Again, no clear surface was revealed south of Room 1. Fills G4.56:127 and 128 appear on top of FP 5b Soil Layer G4.56:151. Collapsed Stone Installation G4.56:83 spread out irregularly over G4.56:127, with high concentrations of broken pottery scattered among the stones. The original function of this installation could not be ascertained. Several stone objects in secondary reuse, including broken basalt grinders and socket stones (TT06.G4.56.84-89), were embedded in the installation. Fill G4.56:87 (=G4.56:122) sealed Fills G4.56:127 and 128, and part of G4.56:83. The lowest stones appear to have penetrated slightly into the top of Soil Layer G4.56:151. Pit G4.56:153 (Fill G4.56:154) appeared immediately south of Wall G4.56:68, and even grazed the south face of Wall G4.56:67. The installation may be lined with brick material, approximately 20 cm thick. Any later surfaces in this area were robbed out either by the foundation trenches of the Building II complex, or by modern pitting.

A moderately crumbly Fill (G4.56:126) was dumped into the space between Walls G4.56:68 and 146 in a relatively short span of time. This fill produced a significant number of large sherds and bone. The sherds and bone were not heavily abraded or broken as would be expected from an exterior or well-trod surface. The contents were more consistent with pit fill, although there was little ash. One possibility is that the narrow chamber operated as a stair or ramp to give access to Room 1. However, no doorway was found penetrating the wall of the structure.

The bulk of the remaining loci excavated in 2006 were located in the east half of the square. However, the foundation trenches of the Building II complex, as well as modern disturbances and the excavation of G4.56:82 in 2005, severed most connections between Room 1 and the eastern half of the square. Nevertheless, a number of loci could be attributed to FP 4, which was also further divided into two sub-phases.

Surface G4.56:121, characterized by numerous flat lying sherds and bone fragments, covered the south east corner of the square and ran northward. A N-S oriented mudbrick wall (G4.56:120) was constructed by laying bricks directly on this surface. It does not appear that the wall extended to the south balk. Surface G4.56:121 was traced around the southern end to the east balk. A possible doorway existed at this location to provide access to a room that would have extended to the east. Although a direct stratigraphic could not be demonstrated, the slope of Surface G4.66:61 appeared to meet and equate with Surface G4.56:121. The north end of Wall G4.56:120 joined an E-W cross wall (G4.56:132), which was located approximately at the northern edge of Pit G4.56:144. The eastern and western extents of Wall G4.56:132 could not be

determined. The eastern extent was excavated either as part of the 2005 Probe G4.56:46, or by modern trenching. The western extent was cut by the later Pit G4.56:117 and the excavation of Probe G4.56:82 in 2005. A cooking installation (G4.56:109) was partially preserved abutting the west face of Wall G4.56:120. Ash and debris surrounded the installation. Wall G4.56:120 and Installation G4.56:109 were positioned directly over a pit filled with loose debris, and as a result had slumped into the depression caused by the settling and compression of this pit (G4.56:138). Surface G4.56:121 was also visible in the east balk sloping into the depression of G4.56:144.

To the north of Wall G4.56:132, above Fills G4.56:125 and 130, was a well-preserved phytolith-covered Surface (G4.56:139). This white surface sloped up from the north toward Wall G4.56:132, although unfortunately not all the way to the north face of the wall. It was difficult to connect any features south of the depression caused by the settling of Pit G4.56:144 to either FPs 5a or 4b. It is possible that Surface G4.56:139 was more closely related to the following FP 4a, although several later surface laminations are equally good candidates (see surface G4.56:99 discussion below).

The most dramatic feature of FP 4b was the massive storage Silo G4.56:111 (Fill G4.56:112) (**figures 6-7**). This large pit presented a bell-shaped profile with a maximum diameter of nearly 3 m at the bottom and a height of approximately 2 m. A six course mudbrick dividing wall (G4.56:131) was preserved within the silo. Plaster lined the floor of the silo and lipped up the sides of both the silo and Wall G4.56:131. A second, lower floor was discovered approximately 10 cm below, although it was more poorly preserved. It appears that the lower surface provided the founding level for Wall G4.56:131. The top lip of the silo (as preserved around the cut in Fill G4.56:126) appears to have possessed a brown mudbrick border. Unfortunately, no clear evidence for the silo's original contents was recovered, with the exception of a reasonably large amount of organic debris identified only as "chaff."

The slumping of Wall G4.56:120 created the necessity of rebuilding it, which occurred in the form of a series of features associated with Wall G4.56:96 that were assigned to FP 4a. Wall G4.56:96 was oriented along the same line as G4.56:120, and was originally considered an upper course of this earlier phase wall. However, excavation revealed that the upper Wall G4.56:96 was actually offset from G4.56:120 by 14 cm, and longer in length. Installation G4.56:109 appears either to have been rebuilt or to have continued in use with Wall G4.56:96. Laminated Surface G4.56:115 sealed against G4.56:96 on the south side of Installation G4.56:109, while ashy, laminated Surface G4.56:99 sealed against G4.56:96 on the north side of Installation G4.56:109. Interestingly, these surfaces sloped *down* toward the wall, apparently part of a gully that had formed on the west face of the wall. Cobblestones and large fragments of pottery were placed along the foundation of the wall, possibly to protect the lower brick courses from rain water erosion.

Surface G4.56:99 met Surface G4.56:100 at an apparent opening or threshold located at the northern extent of Wall G4.56:96. A small, poorly preserved stub of a wall (G4.56:114) to the north was roughly aligned with Wall G4.56:120. This fragment possibly represented the northern E-W cornering wall for a room that extended to the east. Surface G4.56:100 demonstrated a character more similar to periodically cleaned-out interior spaces than the thick ashy, laminations of Surface G4.56:99.

North of Wall G4.56:114, small and medium-sized fieldstone boulders were levelled with fill (G4.56:124) to create Stone Platform G4.56:20. This feature was originally exposed in 2004 and only a few additional stones were uncovered during the 2006 season. The specific function of this platform remains uncertain. Surface G4.56:99 sealed against the platform, indicating that they were in contemporary use. Silo G4.56:111 was filled at this time with an alternating mixture of loose and hard, compact, bricky soil. Large unbroken animal bones and pottery sherds suggest the silo was used as a convenient garbage dump. The top of the fill was designated G4.56:123, and a wall (G4.56:110) was constructed across the mouth of the silo. Although Wall G4.56:110 was poorly preserved, having been cut into on all sides, it was tentatively possible to connect the wall with Wall G4.56:68 of Room 1, as well as the stones of Platform G4.56:20. A small mudbrick fragment adhering to the west side of G4.56:20 may represent the eastern extent of Wall G4.56:110. An additional stone feature, possibly a wall (G4.56:81), was excavated along the west face of Wall G4.56:68, which it abutted. Surface G4.56:80 (excavated in 2005), characterized by flat lying sherds and bone, was described as sealing against Walls G4.56:68 and 81, and may represent the western extent of Surface G4.56:99.

Two Iron I pits, (G4.56:117 [Fill G4.56:118] and G4.56:101 [Fill G4.56:102]) may also belong to FP 4a, although their top elevations could not be confirmed. The bulk of Pit G4.56:101 was excavated in 2005, and the top of G4.56:117 was cut off by the foundation trenches of the Building II complex.

Room 1 appears to have gone out of use in FP3, with new structures built in the eastern half of the square. Fills G4.56:93 and 108 provided some leveling for the poorly preserved Wall G4.56:92, which was founded on Wall G4.56:96. The relationship of Wall G4.56:92 to Wall G4.56:44 (=G4.56:75) is uncertain, although it appears that G4.56:44 provided the E-W cross wall for the N-S oriented Wall G4.56:92. A large pit (G4.56:89 [Fill G4.56:90]), located near the center of the square, was only preserved on its western and northern extents. A second large, plaster-lined Silo (G4.56:97 [Fill G4.56:98]) was embedded farther to the north. The upper layers of this feature, as well as the entire western half of the structure, were missed during the 2004 excavations. The contents of Silo G4.56:97 excavated in 2006 contained an alternating sequence of ash and phytolithic striations, with a high percentage of bone inclusions. Based on the 2004 field records, we may tentatively associate the following loci with the contents of Silo G4.56:97: G4.56:22, 29, 32, 34 and 37.

A single pit (G4.56:106 [Fill G4.56:107]), which stratigraphically predates the Building II complex (previously FP 2), was tentatively assigned to a new sub-phase, specifically FP 2b. The pit contained Iron Age II pottery, as well as a crushed gold amulet (TT06.G4.56.57).

The complete excavation of what remained of Building II (FP 2) in Square G4.56 represented one of the primary goals of the 2006 season. The massive foundations of the complex largely followed the line of the excavation grid, with Wall G4.56:63 (Foundation Trench G4.56:103 [=G4.56:64] and Fill G4.56:65) stretching the length of the west balk, and Wall G4.56:69 (Foundation Trench G4.56:116 and Fill G4.56:105) following along the south balk. Wall G4.56:74 (Foundation Trench G4.56:104) formed the eastern wall line of the complex. Most of the western extent of the Wall G4.56:74 was excavated along with other loci in 2005. Similarly, much of the E-W part of Wall G4.56:69 that extended into the square was

excavated in 2005, leaving only the lower courses of brick and the underlying Foundation Trench Fill (G4.56:105) for investigation in 2006.

Square G4.65

The earliest remains in Square G4.65 (**figure 8**) were uncovered in the southeast corner of the square. This area was characterized by a series of ashy soil layers that sloped sharply to the southeast (G4.65:59, 64, 65, 74, 79, 80, 81 and 89). It was unclear whether these ashy slopes were cut artificially, or whether they formed part of the original contours of the mound. The associated pottery dated to the Iron II period.

Slightly to the north of these ashy layers, and largely cut by them, a limited probe revealed the well-preserved remains of several isolated features and smashed pottery (G4.65:69) dating to the EB IVB period (or Amuq Phase J). One feature appeared to be a wall, but could also have formed the edge of a bench-like structure. Unfortunately, much of this area was badly damaged by bioturbation (G4.65:72 and 73), making it very difficult to identify the function of what remained. Sealing these remains to the north, excavations uncovered part of a pebbled Surface (G4.65:88), with a circular pit-like feature embedded into it. The date of these later features was unclear, though they appeared to date to the Iron II period. Further attention will be devoted to this area in upcoming field seasons.

Along the north balk of Square G4.65, the south wall of Building II and its foundation trench (G4.65:5), part of FP 2, sealed the burnt remains (Soil Layers G4.65:16 and 17) of the Early Iron I levels preserved in the square, and which only extended into the northeastern corner of the square. A faded Ashy Layer (G4.65:32) was all that remained of this field phase, very probably FP 5, in 2006. This Early Iron I burnt layer was clearly situated over a terraced feature (G4.65:49), which cut into earlier EBA levels. Farther to the west, the south wall of Building II sat directly over this terrace, as well as over part of a platform-like structure made of two courses of mudbricks. Although unexcavated, this platform clearly lies on top of the Iron II fill (G4.65:53-55) used for the foundations of the south wall of Building II.

Portions of the Iron II Fill (G4.65:53-55), as well as the Terrace (G4.65:49 and 86), had slumped, or eroded over a Surface (G4.65:61 and 91) packed with small pebble-sized stones, bones fragments and small pottery sherds dated to the Iron II. This surface, in turn, sealed the badly disturbed remains of a possible oven or kiln (G4.65:84 and 90), which was only partially excavated. The installation was lined with clay, or mud brick, measured approximately 1.25 m in diameter, and contained a number of EBA pottery sherds.

Square G4.66

The main objective of the 2006 excavations in Square G4.66 (**figure 9**) was to investigate the remains of the same well-preserved Early Iron I destruction layer identified in the northeast corner of Square G4.65, and link these remains stratigraphically to the other Early Iron Age phases uncovered in Field I.

The south wall of Building II, along with its foundation trench, ran across the length of the north balk of Square G4.66. In the west, the foundations of the wall (G4.66:7 [=G4.66:22, 41 and 55], with Fill G4.66:13 [=G4.66:45, 46, 56 and 54, as well as G4.66:19 and perhaps 43?]) appeared to

rest directly on top of the Early Iron Age destruction debris (G4.66:33), while in the east it cut into several intermediate occupational phases. The 2006 excavations expanded the trench opened in 2005, with a 3 m wide probe along the north balk. The probe revealed a number of isolated features, including a horseshoe-shaped installation (G4.66:29, with Fill G4.66:38), sandwiched between the foundations of Building II and the Early Iron Age destruction debris, but without sufficient preservation to determine their date or stratigraphic position within the broader phasing scheme for Field I.

The excavations in the western extent of the probe revealed at least one and possibly two phases of occupation between the FP 2 remains of Building II (mainly G4.66:13) and the Early Iron Age destruction debris layer. The earlier of the two phases was represented by an Oven (G4.66:30), which was oriented toward the east. It was sealed by a fill (G4.66:36), which contained a large concentration of pottery topped by a surface (G4.66:32). The surface appeared to ascend towards the north-northwest, and was cut by the remains of the Building II south wall foundation fill. Surface G4.66:32 may in fact be contemporary with Surface G4.66:65, part of the destruction debris layer. If so, then Oven G4.66:30 predates the destruction debris.

The destruction debris (G4.66:33) (**figure 10**) above Surface G4.66:65 was excavated in several segments, and it became clear that this occupational phase corresponded with the similar evidence of destruction in the adjacent squares, and assigned to FP 5. The destruction debris contained substantial amounts of carbonized material, probably from burnt wood, twigs and other organic material such as reed mats and/or textiles. Loose ashy segments alternated with bricky substances that had been hardened in the fire. In addition, a large number of shells were collected from this deposit. The carbonized wood fragments preserved a number of distinctive patterns, suggesting the remains of wooden structures, although their original form was unclear.

In the course of excavating this debris, several (clearly at least two, and perhaps one or two more) bricks, measuring approximately 20 x 42 x 13 cm, were found, which formed some sort of structure or installation. Initially identified as an oven, due to the evidence of intense burning activity and its curvilinear form, the installation (G4.66:35) appears to have served simply as a bin, and closely resembles a similar structure found in Square G4.55 (G4.55:110), which contained numerous unbaked loom weights. Although no loom weights were found in Bin G4.66:35, excavations revealed a line of unbaked loom weights and a cluster of well-worn cobble-sized stones just to the east, as well as a series of bone tools (associated with weaving) and spindle whorls. An anomalous feature (G4.66:34), which ran in a north-south orientation adjacent to Bin G4.66:35, appears also to have formed part of the installation.

Immediately to the east of the destroyed remains of FP 5, several fill layers (including G4.66:19, 23-27 and 31?) were excavated that post-date FP 5, although their precise stratigraphic position was not clear. Oven G4.66:30 (with Fill G4.66:53) was located above these, while a pebbly surface (G4.66:47) extended eastward from Oven G4.66:30.

The eastern-most extent of the 2006 probe revealed a series of uneven surfaces and fills (including G4.66:51, 57-59) which extended below Oven G4.66:30, before reaching an ashy surface (G4.66:61 [=G4.66:27?]). Below this surface was a substantial fill (G4.66:62) and a surface densely packed with sherds (G4.66:63), which in turn sealed a sequence of soil layers, including G4.66:60, 66 and 67, and a possible wall (G4.66:68) and yet another oven (G4.66:69).

The Field II Investigations

The 2006 investigations in Field II (**figure 1**) had two primary objectives: 1) to establish a direct stratigraphic link between Squares G4.35 and G4.55, thereby connecting Fields I and II, and 2) to continue exposing the monumental architecture uncovered in Square G4.35 during the 2005 season. To accomplish these objectives, two new squares, G4.45 and G4.46, were opened. A total of four distinct field phases (FP) were identified, with Topsoil (G4.45:1 [=G4.46:1]) and a small modern pit (G4.45:4 and 5) forming FP 1. The earliest field phase (FP 4) consisted of a series of apparent domestic structures and installations tentatively dated to the Iron I. The remains of Building XIV, tentatively dated to the Late Iron I/Early Iron II, were assigned to FP 3, and a series of pits, possibly associated with Building I, were assigned to FP 2.

Square G4.45

The remains of FP 4 were preserved in the central part of the square, between the FP 3 walls of Building XIV. In addition to a substantial, largely homogenous soil layer (G4.45:2, later divided into G4.45:17 and 18, and to the east, G4.45:21) characterized by its heavy concentration of mud brick detritus, the FP 4 remains included an ashy Surface (G4.45:22) replete with flat sherds and a small pot bust (TT06.G4.45.73.2), which sealed against a Wall (G4.45:16) and a rectangular mudbrick Bin (G4.45:26), equipped with its own surface (G4.45:24). A third Surface (G4.45:27) sealed against the southern face of Bin G4.45:26. A cobblestone Surface (G4.45:34), uncovered in the deepest part of a probe in the northwest corner of the square, very probably also belongs to this field phase.

FP 3 was marked by the construction of the monumental walls of Building XIV, first discovered during the Syro-Hittite excavations in the 1930s, and includes the walls uncovered in Square G4.35 during the 2005 season (**figures 11-13**). Four walls were assigned to the FP 3 complex, working clockwise, G4.45:6 (=G4.35:4), 7, 8 and 3 (=G4.35:9). The walls all bonded together, and clearly belong to the same structure. An interesting feature of the FP 3 complex consisted of a triangular segment of mudbrick Installation (G4.45:12) sandwiched into the corner formed by Walls G4.45:7 and 8. Although functionally unclear, it appears to have provided structural support for these walls. Installation G4.45:12 cut cleanly through Surfaces G4.45:22 and 27 and Bin G4.45:26 of FP 4.

No surfaces were associated with any of the FP 3 walls, further strengthening the conclusion reached in 2005 that they form the sub-structural foundation support for the actual walls of Building XIV, which no longer exist. In addition, a probe into the northern Wall G4.45:6, at its western junction with Wall G4.45:3, revealed the clear line of a Foundation Trench (G4.45:29) running all the way down the excavated edge of the wall, packed tightly with mudbricks (that is, there was no fill in G4.45:29 other than Foundation Wall G4.45:6 itself). Furthermore, G4.45:29 clearly cut through Cobblestone Surface G4.45:34. Foundation Wall G4.45:6 was excavated to a depth of 1.6 m, and presumably all four of the walls extend to at least this depth, and very possibly even deeper to the 3 m depth reached in the southeast corner of Square G4.35 in 2005. The pottery recovered from the cores of these walls consisted predominantly of Iron II Red Slipped Burnished Ware.

FP 2 consisted of a number of isolated pits (G4.45:15 [Fill G4.45:19], G4.45:10 [Fill G4.45:11] and G4.45:13 [Fill G4.45:14]), which had been dug into the interior space between the Building XIV walls. They contained Iron II Red Slipped Burnished Ware pottery, and very probably were associated with the Building I horizon excavated by the Syro-Hittite Expedition. A bronze shield boss (TT06.G4.45.2.15) found in G4.45:2, but almost certainly belonging to Pit G4.45:10, is identical to 11 similar bosses found by the Syro-Hittite Expedition in the south rooms of Building I, in other words above the area excavated in Square G4.45.

At the end of the season, a probe was opened in the southwest corner of Square G4.45 to establish a direct stratigraphic connection with Square G4.55 to the south. As expected, the probe came down on burnt brick material belonging to the north wall of Building II (G4.45:28 [=G4.45:9 and G4.55:9?]). However, these excavations were only successful in uncovering the filled remains of the excavation trench (G4.45:28) created by the Syro-Hittite Expedition between the north wall of Building II (G4.45:28) and the south face of Building XIV (Wall G4.45:8). Further excavations will be necessary in this area in 2007.

Square G4.46

The stratigraphic sequence in Square G4.46 closely mirrors the sequence in G4.45, with Topsoil (G4.46:1) representing FP 1. The earliest feature uncovered in the square, found in the northwest quadrant of the square, consisted of a surface (G4.46:15), and has been tentatively assigned to FP 4. The two interior spaces excavated in Square G4.46, although difficult to phase, nevertheless produced a substantial amount of Iron I pottery, mainly Soil Layers G4.46:9, 11, 14-15, and therefore probably also belong to this field phase.

As in Square G4.45, FP 3 consisted of a series of four large Walls (G4.46:5, 6 [=G4.45:8?], 10 and 12) that appear to belong to Building XIV (**figures 11-13**). Wall G4.46:6 has an east-west orientation, and occupied almost the entire southern half of the square. Wall G4.46:6, which runs along the west balk, very probably equals G4.45:8. Three additional walls, all of which ran in a north-south direction, bonded with Wall G4.46:6. From west to east, they are Walls G4.46:2, 5 and 10. Wall G4.46:12 is very probably the same wall as Wall G4.45:7. Wall G4.46:5 was only two courses wide, or only 1.22 m in width, by far the thinnest wall in the Building XIV complex. Wall G4.46:10, the eastern-most wall, ran along the east balk. In the corner between Walls G4.46:6 and 10, excavations revealed a second triangular Installation (G4.46:13), similar to Installation G4.45:12, to the west. As in Square G4.45, no surfaces were found in association with the FP 3 walls.

Two isolated pits were tentatively assigned to FP 2. Pit G4.46:3 (Fill G4.46:4) may have been a trench from the 1930s excavations, based on its similarity in appearance to the modern trenches found in Square G4.56 to the south during the 2005 season. Likewise, the function and date of Pit G4.46:8 (Fill G4.46:7) is unclear, but may also in fact be a result of the Syro-Hittite Expedition excavations. Is so, both pits would belong to the terminal FP 1, rather than FP 2.

The Field III Investigations

Square H3.77

The primary goal of the excavations in Square H3.77 (**figures 1, 14-15**) was to determine the potential for achieving horizontal exposures of the Early Bronze Age (EBA) levels at the site. The location of H3.77 was chosen based on a number of factors. Trenches excavated by Braidwood on the southwest corner of the mound (specifically T-13) had produced remains dating to the EBA, indicating that during this period the settlement extended across this area of the mound. Since Braidwood's trench is currently within the farmstead on the southwest corner of the mound, Square H3.77 was chosen just north of the fence line in the hopes of connecting with the Early Bronze Age remains by the Chicago expedition. Furthermore, it was hoped that the slightly elevated position of this area on a rise on the tell would help to reduce the problem of the depth of Early Bronze Age deposits elsewhere on the mound, where heavy deposition due to erosion has negatively affected the accessibility of EB remains (i.e. excavations in G4.92 and G4.72 in the 2005 season). A test core was completed on this rise during the 2005 season, which produced a variety of non-diagnostic pottery at depths quite close to the surface, as well as substantial evidence for architectural remains (mudbrick, etc). A piece of pottery identified as Simple Ware (Phase I/J) was found at a depth of approximately 3 m. It is also worth noting that another Braidwood trench (T-6) was excavated just to the north of H3.77. This trench had an exposure of only 9 X 5 m, and was abandoned because it produced no identifiable architectural remains. It is unclear, however, how deep these excavations reached before they were discontinued.

Two broad cultural phases were identified in H3.77. The earlier phase was reached in a deep probe in the northeast corner of the square. The pottery excavated from a series of Fill Layers (H3.77:24 and 27) in this corner were predominantly Iron I, while the remainder of the deposits below this (H3.77:29, and the material excavated from Well H3.77:34) was exclusively Iron I. Originally, this material was thought to have been fill brought in from a different location on the mound, and used during the construction of the Iron II architecture in this area. However, the discovery of intact architecture that appears to date to the Iron I period (Walls H3.77:30 and 32, and the associated well-like installation [H3.77:34]), would suggest that the presence of Iron I material in this area cannot be entirely explained as the result of a filling operation.

The second, later phase of occupation identified in H3.77 consisted of the foundations of a large Wall (H3.77:7), 2 m in width and with an east-west orientation, and which was sealed against by a Surface (H3.77:9) paved with cobble-sized stones. A series of earlier surfaces (H3.77:15 and 22) in the northwest corner of the square also sealed against Wall H3.77:7, and indicate that this wall was likely in use over a lengthy period of time. Soil Layer H3.77:23, which continued under Wall H3.77:7, and in turn sealed the earlier Iron I remains, produced pottery dating to the Iron II period. The precise stratigraphic relationship between Wall H3.77:7 and two fragmentary walls (H3.77:14 and 19) uncovered in the southern part of the square was unclear, although both of these walls appeared also to date to this phase. A functionally ambiguous installation (H3.77:31) and a possible sub-floor mudbrick foundation (H3.77:20) beneath Surface H3.77:9 were also assigned to this phase. The pottery associated with this phase was dated to the Late Iron II or even Iron III (i.e. late 8th-7th/6th Cent BCE).

Square G3.34

As in Square H3.77, the primary objective of the excavations in G3.34 (**figures 1, 16-17**) was to locate the EBA levels in this area of the upper mound, and to determine whether these

levels would be accessible for broader horizontal excavations. The choice of Square G3.34 was based on the results of the Braidwood excavations in Trench T-5. T-5 was a long step trench excavated on the west side of the mound, measuring approximately 5 X 60 m, and revealed a series of massed mudbrick constructions which covered virtually the entire length of the trench. These were interpreted to be a series of buttressing walls that formed part of the western line of the fortifications encircling the upper mound. At the eastern end of the trench, inside the innermost mudbrick wall, the excavations uncovered a sequence of three floors that were dated by Braidwood to the Second Mixed Range, and which produced the only Early Bronze Age burial found at Tayinat. As a result, the goal of the 2006 investigations was to link up with these remains, and determine the depth of the EBA levels. In all, the 2006 excavations delineated at least five Field Phases (FP) in Square G3.34.

FP 5, the earliest phase, consisted only of Wall G3.34:28, and possibly Surface G3.34:24, which ran beneath the walls of FP 4, may be part of this phase. The date of FP 5 was unclear.

FP 4 consisted of three Walls (G3.34:21, 22 and 23), which appeared to form part of a single structure. It is possible that an early phase of the Platform (G3.34:15) associated with the metal workshop (see below) was constructed during this phase. The platform was constructed against Wall G3.34:21, and seems to have been in use during this period, as the ash and burned material from this installation (G3.34:12) had spilled over the top of Wall G3.34:21. It is also possible that the initial phase of the fortification wall was constructed during this architectural phase, although no direct stratigraphic links with the structural remains of FP 4 were evident. The pottery recovered from FP 4 was tentatively dated to the Late LB II/Early Iron I.

The first constructions of this phase, FP 3, appear to have been Walls G3.34:5 and 7, which were constructed abutting the inner face of the fortification wall. At a later point, Wall G3.34:11 was built between these two walls, joining them. Wall G3.34:17 was then erected as an addition to the fortification wall, between Walls G3.34:5 and 7, covering the earlier remains from FP 4 (G3.34:20 and 21). The metal workshop also continued in use during this phase (**figures 18-20**), as the burned material of G3.34:12 also sealed against Wall G3.34:17. Some of the brickwork in Wall G3.34:17 also exhibited burning that was likely a result of the activities associated with this installation. Wall G3.34:18 was later constructed as an addition to Wall G3.34:7, between Walls G3.34:17 and 11. Finally, Wall G3.34:8 was built abutting Wall G3.34:18, separating the area into two smaller rooms. The associated pottery was dated to the Early Iron I.

A Pit (G3.34:?) found on the eastern side of the square produced the only evidence of Iron II pottery below the level of the topsoil, and therefore was assigned to its own field phase, FP 2. Topsoil (G3.34:1), which represented the soil accumulation since the end of the 1930s excavations, was assigned to FP 1.

THE CORING PROGRAM

The coring program initiated during the 2004 season continued in 2006. The primary goal of these investigations is to determine the full extent of the lower mound, which has been buried by alluviation from the annual floods of the nearby Orontes River, and to develop a sedimentary profile of this submerged part of the site. The coring program will also help to

determine the impact of the changing course of the river in ancient and modern times. To date, a total of 59 cores, ranging in depth from 2 to 8 m, have been drilled across the lower mound and around the base of the upper mound, producing a valuable sedimentary profile of the submerged lower mound.

The new cores taken during the 2006 season show that the lower mound extends to the south of the main upper mound, as suggested by the shadow visible in the Corona satellite image. EBA material (specifically RBBW pottery) was found in this area extending approximately 75 m south of the main mound. Coring to the west of the upper mound continued to show sand deposits consistent with the body of water identified in 2005. Coring (and crop lines) also suggested the existence of two new city gates, one in the south part of the lower mound, and a second one possibly at the very northern point of the lower mound. Finally, microtopographic analysis documented a section of the northern fortification wall in the lower settlement (**figure 21**), and a section on the west side of the upper mound (**figures 22-23**), southwest of Square G3.34.

CONCLUDING OBSERVATIONS

In summary, the 2006 excavations continued to uncover the remarkably well-preserved remains of the Early Iron Age settlement at Tell Ta'yinat, both the Early Iron I (12th Cent. BCE) settlement in Field I, with its strong Aegean cultural connections, and the monumental structure (Building XIV) in Field II, that dates to the Late Iron I/Early Iron II (10th-9th Cent. BCE). Though still tentative, we believe this latter complex, which we estimate measured at least 50 X 100 m in size, may have been the palatial residence of the Luwian kings of Padasatini. The numerous Luwian hieroglyphic inscriptions that have been found at Tell Ta'yinat, now totaling almost 100 in number, when both the Syro-Hittite Expedition and our own excavations are combined, almost certainly should also be assigned to this cultural horizon. The discovery of a metal workshop in Field III dating to the Late Bronze II/Early Iron I transition further confirms the importance of the site during this period, and indicates that the Early Iron Age settlement at Tayinat was considerably larger than first thought, possibly encompassing the entire 20 ha upper mound. As a result, the Tayinat Archaeological Project will continue to prioritize its efforts and resources investigating the Bronze and Iron Age levels in Fields I, II and III at the site.

The conservation program initiated during the 2005 season also continued in 2006. These measures are intended to provide immediate protection, in advance of the implementation of a more comprehensive conservation and restoration program that will prepare the site for presentation to the public as part of a planned archaeological park. To further ensure the safety and protection of these important remains, and in keeping with the regulations of the Directorate, a bekçi was employed by the Tayinat Archaeological Project to guard and protect the site throughout the year.

ACKNOWLEDGMENTS

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Tell Tayinat 2006 Excavation Season

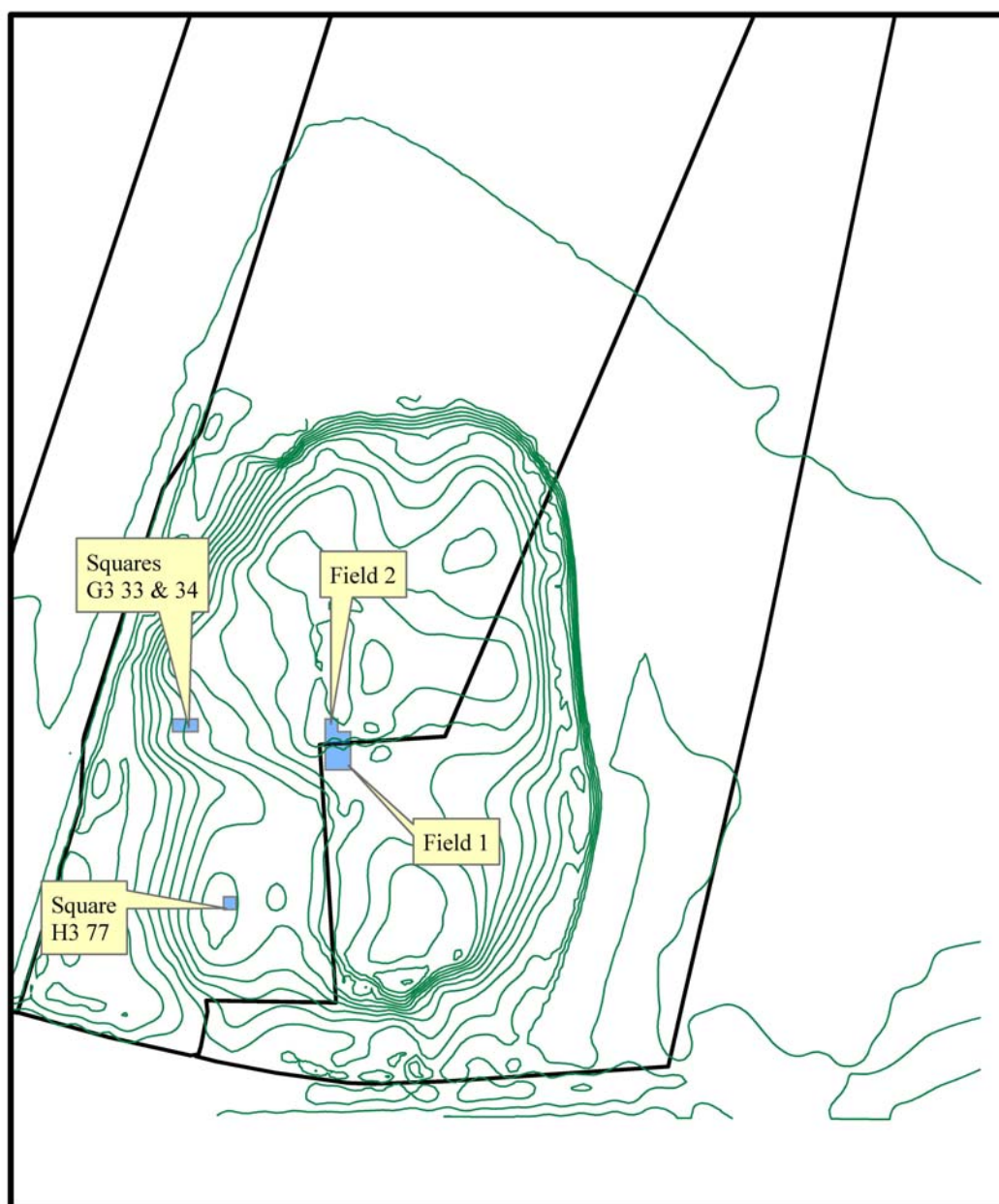


Figure 1

Tell Tay‘inat 2006: Area G4 Squares 55, 56, 65 & 66



Figure 2

Tell Tay‘inat 2006: Area G4 Square 55

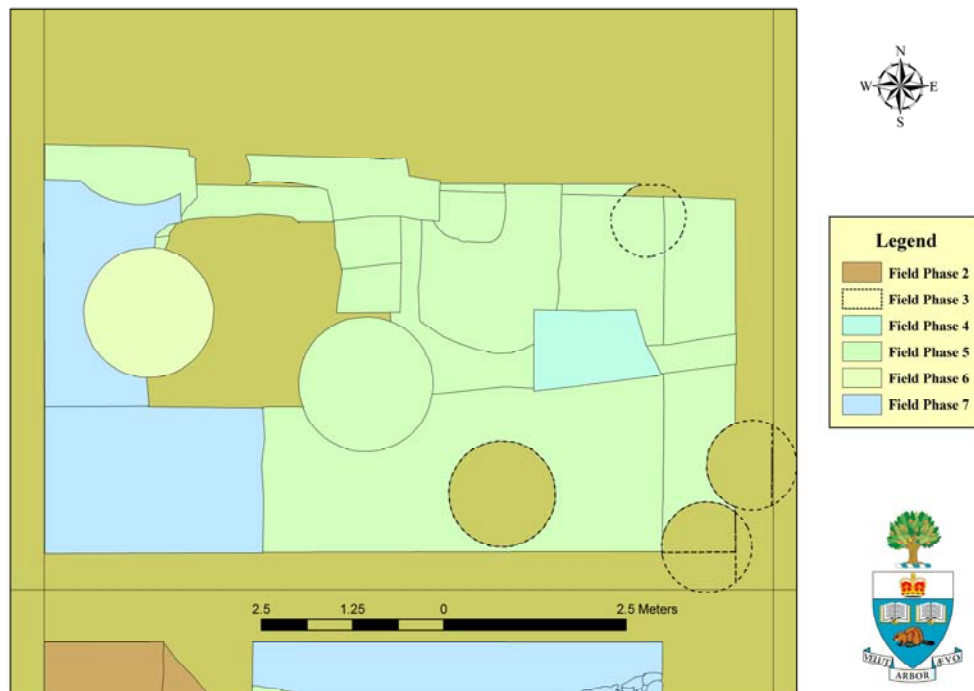


Figure 3

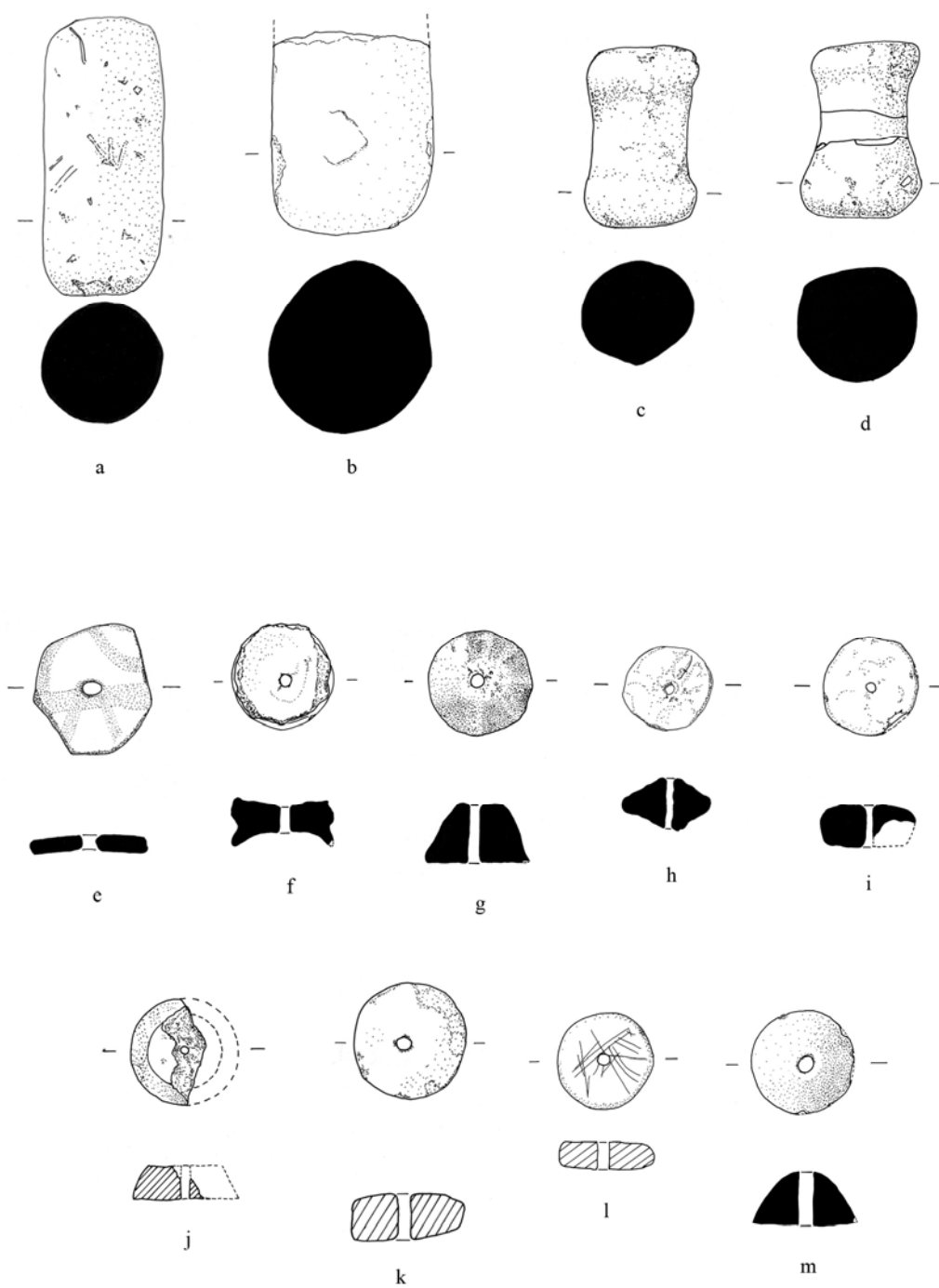


Figure 2: Loom Weights and Spindle Whorls

Illustrations by F. M. Haughey

Figure 4

Tell Tay'inat 2006: Area G4 Square 56

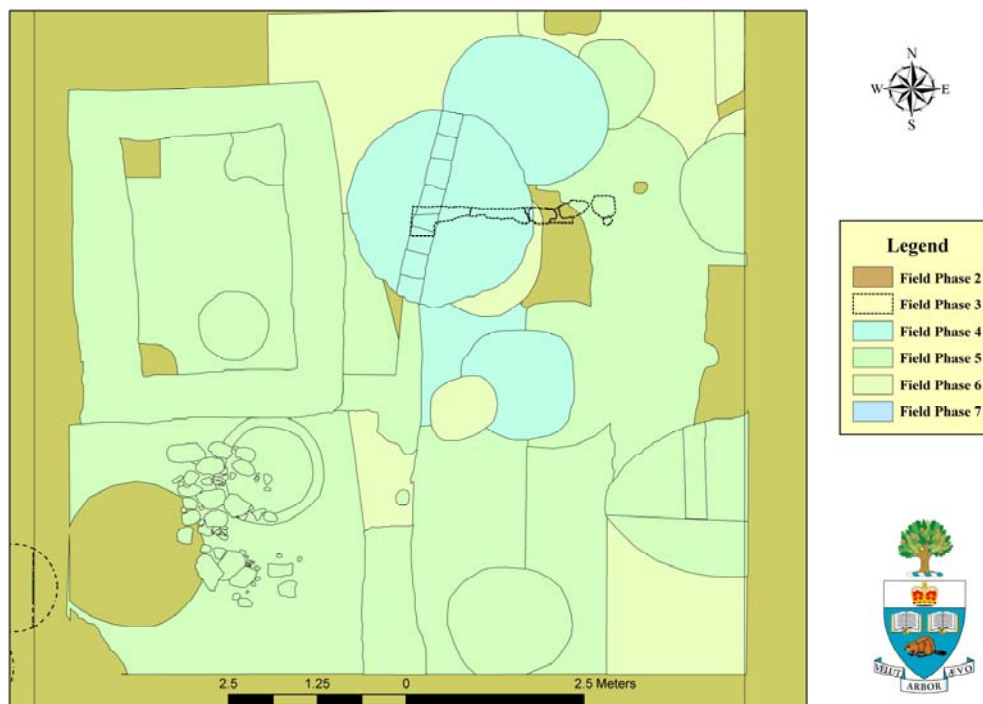


Figure 5



Figure 6



Figure 7

Tell Tay'inat 2006: Area G4 Square 65



Tell Tay'inat 2006: Area G4 Square 66



Figure 8

Figure 9



Figure 10



Figure 11



Figure 12

Tell Tayinat 2006: Field II (Squares 35, 45, and 46) Late Iron I/ Early Iron II (Building XIV)

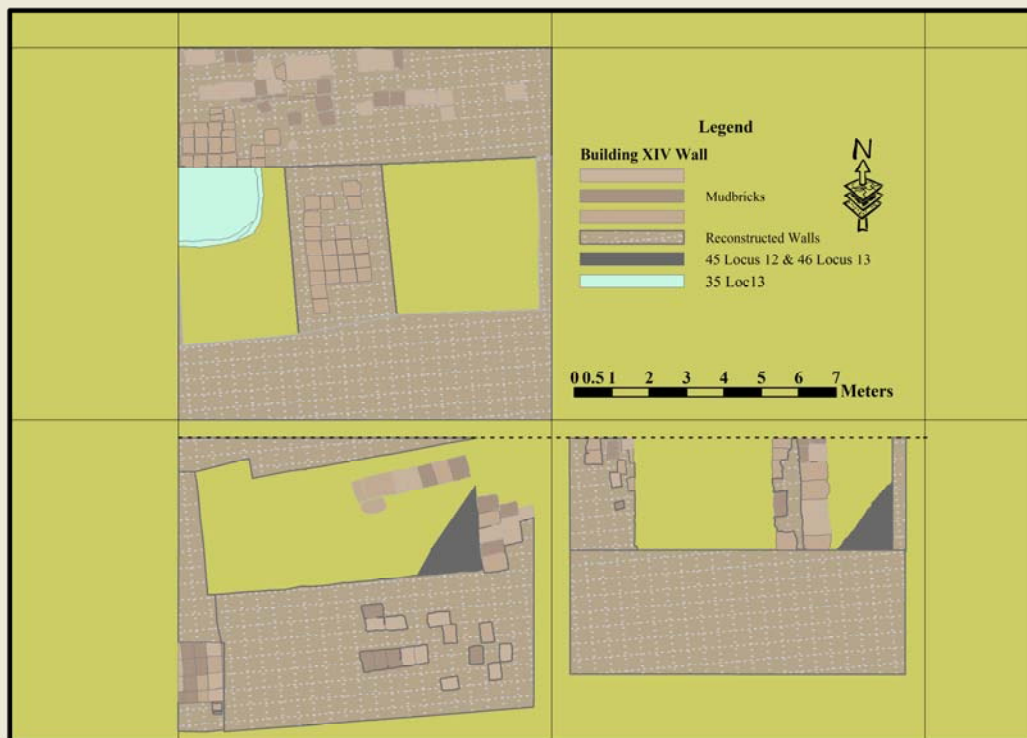


Figure 13



Figure 14

Tell Tay'inat 2006: Area H3 Square 77



Figure 15



Figure 16

Tell Tay'inat 2006: Area G3 Square 34

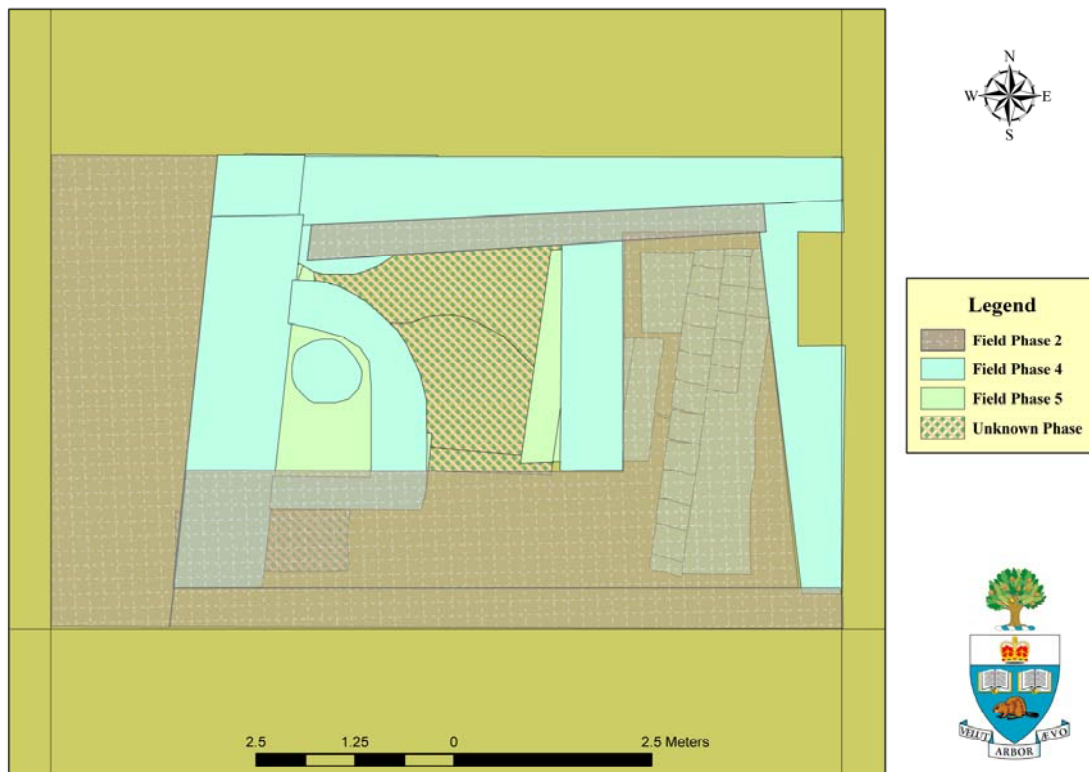


Figure 17



Figure 18



Figure 19

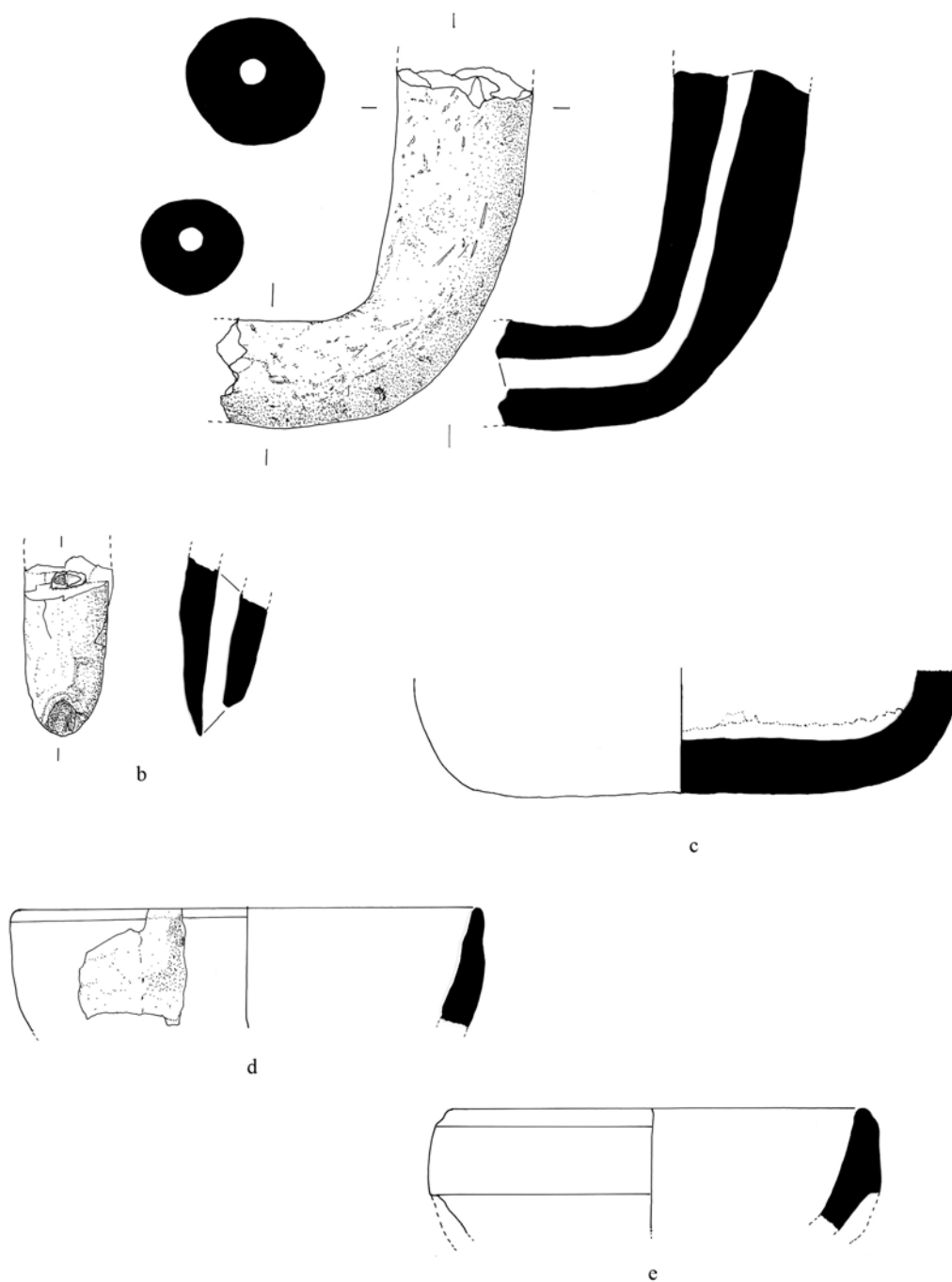


Figure 4: Tuyères and Crucibles

Illustrations by F.M. Haughey

Figure 20

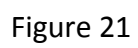


Figure 21

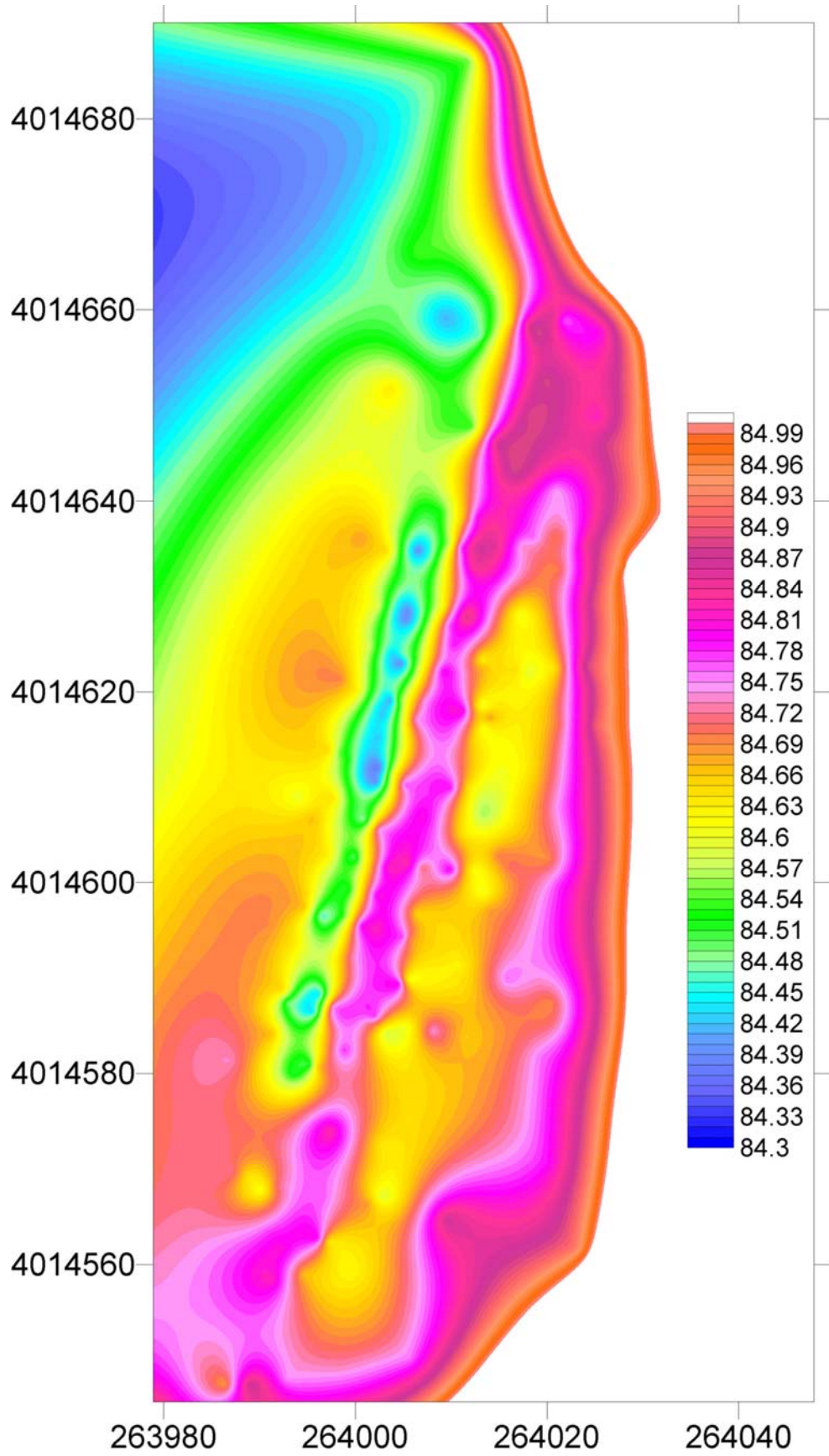


Figure 22

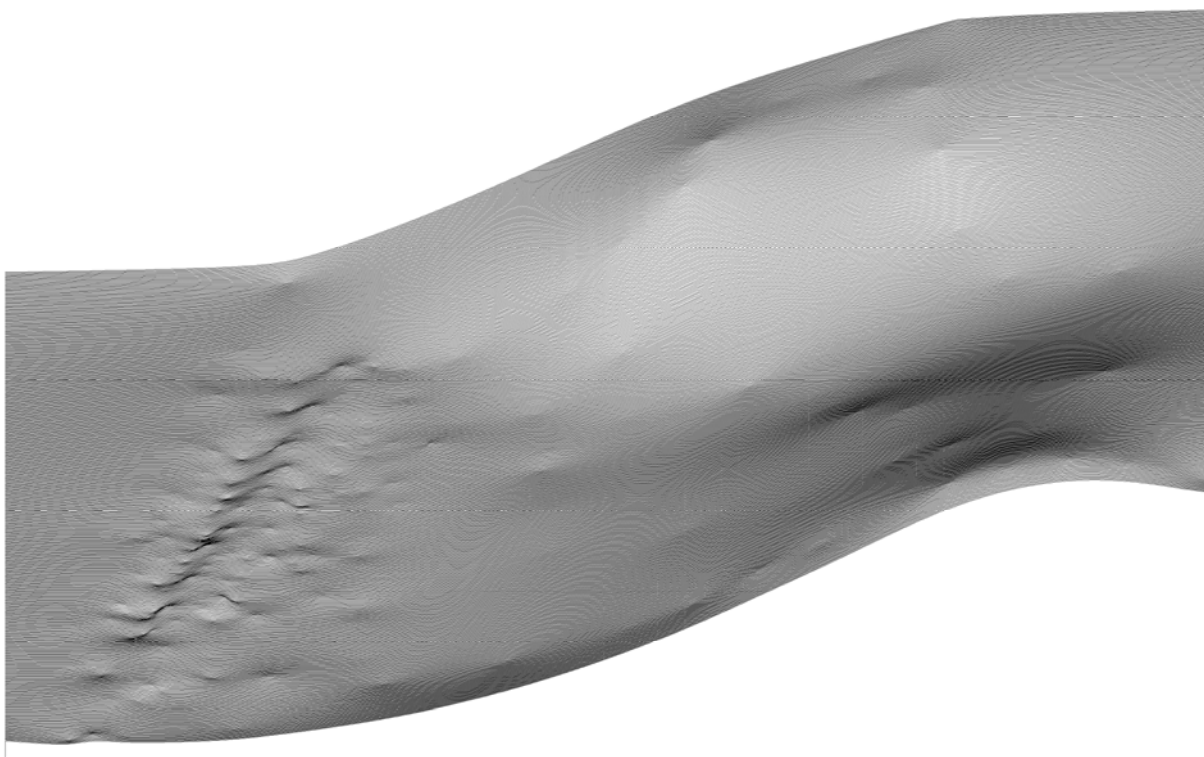


Figure 23