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ARCHAEOLOGICAL FIELDWORK

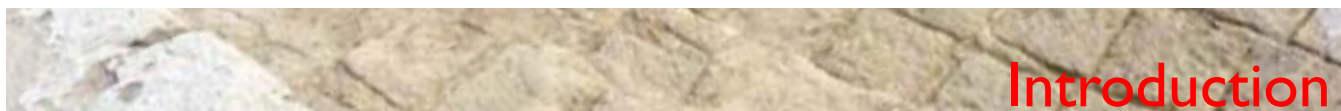
Our archaeological fieldwork on the site has followed two lines of activity as set out in our project plan: first, analysing the archaeological sequence at the site, specifically within the enclosure of Tchingiz Tepe; and second, carrying out the definition and in-depth analysis of the fortification that defends the hill of Tchingiz. The objectives of the fieldwork were and remain clear. They are to establish the phases of occupation of the fortified space over time and in terms of its use by studying its pottery, and to understand and safeguard the fortification structures in light of their visible deterioration.

The work has preceded in front of towers 7 and 9, in the interior part of the walled enclosure of Tchingiz Tepe. In the case of tower 7, uncovered changes in use reflect alterations to the fortification over time. We also uncovered an interior wall parallel to the fortification and defining a corridor or passageway; interior reinforcement of given points of the fortification at a later time; and the construction of an inhabited space against the wall structures, also at a later time, undoubtedly starting from the second or third centuries A.D. This hypothesis of an inhabited space is very preliminary and related to the possibility that the interior of the walled enclosure became a monastic area. In the case of tower 9, the primary objective was to define the fortification wall in this sector, given that it seems to disappear after tower 9. The fieldwork has been able to retrace the foundation of the wall and confirm the various modifications that it has undergone.

All the built structures detected during the season of excavations have been covered in order to ensure the preservation of the ruins, in the anticipation that restoration may take place in the near future. Because of the lack of large quantities of straw, we have followed the simplest possible protocol. Although straw is the best element for preserving adobe and mud structures, we have had to use locally produced cotton cloth, covered by the same sand that has preserved the ruins for centuries.

Introduction





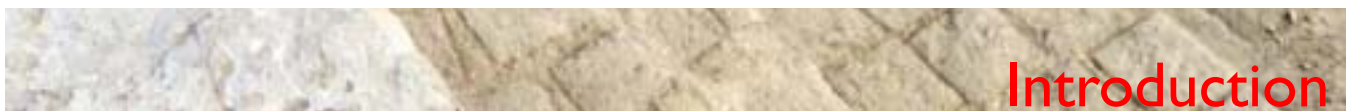
RESEARCH ARISING FROM THE ARCHAEOLOGICAL FIELDWORK

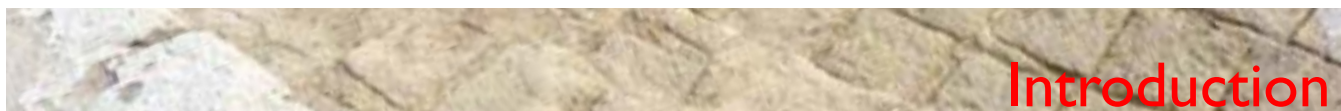
As a result of the documentation of archaeological materials carried out jointly at the Termez base by Uzbek and Spanish researchers, a selection of materials has been submitted to methods that are difficult to perform in situ. As in previous seasons, export permits have enabled the selected materials, basically pottery and organic remains, to be sent to the laboratories of the University of Barcelona, where analysis of the pottery provenance and technology is now under examination and palaeoenvironmental studies and carbon dating are being performed. The results of these analyses will be communicated and shared with the Uzbek researchers participating in the project as soon as they become available.

CONSERVATION AND RESTORATION WORK ON THE SITE

Currently, our project plan addresses a new line of activity: preserving the remains excavated in previous seasons. In this respect, we have cleaned and redefined the wall of the fortifications at Tchingiz Tepe between towers 4, 5 and 6. The aim is to prepare a surface correctly so that reconstruction of the fortification can be undertaken. The wall was built of adobe with a single, solid facing. The work entailed the individual cleaning of each and every adobe brick that provided a reference surface or base. The reconstruction seeks to meet two objectives: first, protecting the original conserved parts and, second, giving a greater size to the structure so that a visitor can form a better idea of the original appearance of the wall. The reconstruction efforts make use of original methods and the building materials have been prepared in conditions identical to the conditions at the time when the original materials were prepared. Reconstruction has begun in this space because it represents the best-understood space archaeologically as a result of the fieldwork and the analyses previously conducted by the Uzbek-Spanish mission. Our efforts have followed the established programme, and the activity planned for the first year of the multi-year programme has been completed, with the involvement of numerous local labourers. We have also relied on the services of a local business to prepare the building materials according to the traditional methods needed for the reconstruction work.







RESEARCH ARISING FROM THE CONSERVATION AND RESTORATION WORK ON THE SITE

Our project involves an additional new line of research: improving our understanding of the building and decorative materials used in Ancient Termez. In this respect, our fieldwork this year has also sought to determine the specific conservation problems associated with the materials used in construction, basically adobe, and the with decorative materials used in wall cladding and in architectural and sculptural decoration, basically the binders and pigments for painting. The final result of the season has involved collecting samples and, with the corresponding export permit, sending these samples to the University of Barcelona, where analysis is currently proceeding in order to propose protocols of action for the remains at Ancient Termez.

UPGRADING THE ARCHAEOLOGICAL TEAM'S BASE IN THE CITY OF TERMEZ

We have carried out significant work to improve the archaeological team's base in the current city of Termez, including conservation efforts and refurbishment. The effort has basically involved work on the building's architectural structure, the roof and waterproofing the walls. The spaces for personal hygiene have been renovated and the thermal insulation of the house has been improved. In general, the base was in a state of considerable neglect that made it uncomfortable for the long stay of a research team. We relied on the services of a local business who hired local workers to carry out the upgrades.

The excavation of sector RA-1 at Tchingiz Tepe

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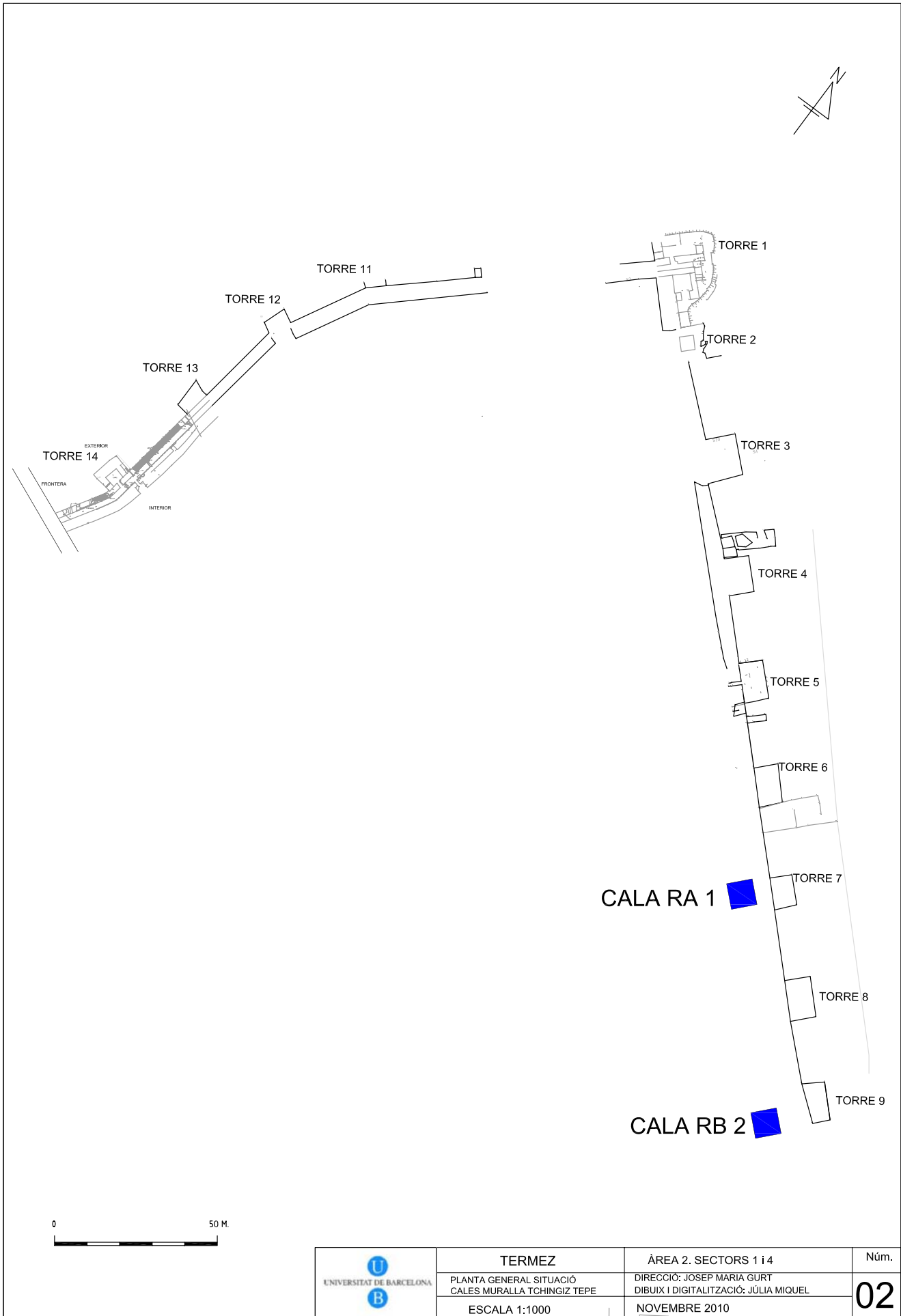
1. Introduction

One of the priority lines of work for the excavation conducted by the IPAEB team in Ancient Termez is to analyse the ancient town planning preserved in Tchingiz Tepe, a fortified city located on the banks of the river Amu Darya, the ancient Oxus. Data from recent excavation seasons (Achón *et al.*, 2008; Ariño, 2009, 2010; Martínez, 2009) and absolute dating obtained from radiocarbon dating of numerous archaeological contexts (Mestres, Rauret, 2009, 2010a, 2010b) have made an enormous contribution to our knowledge of the characteristics of this settlement in the various phases of the hill's occupation.

In 2010, new archaeological excavations were carried out at Tchingiz Tepe. As in earlier seasons, our primary objective focused on stratigraphic excavation, documentation of the preserved archaeological remains and analysis of the associated material culture. The aim was to broaden our knowledge of the evolution of the human occupation of Tchingiz Tepe, incorporating the data already available. The selected area is located on the eastern end of the settlement, touching the interior face of the wall of the fortification at tower 7 (Figure 1). This area coincides with sector RA, which was defined in the geophysical surveying carried out at Tchingiz Tepe in 2007 (Sala *et al.*, 2008). Inside sector RA, the team defined a trench measuring 8x8m (trench RA1) that included a portion of the interior facing of the wall visible on the surface. The key criteria for selecting this area concern the thick stratigraphy conserved at this point of Tchingiz Tepe, as identified by a survey previously carried out by the French-Uzbek Archaeological Mission (MAFOuz) two metres to the south of trench RA1.

The excavation of trench RA1 has led to the documentation of a great number of structures defining several spaces related to town planning that we can date to the Kushan and Kushan-Sassanian periods. Of all the documented areas, only two have been excavated in their entirety (areas RA-1 and RA-2). The first area is a corridor that runs between the walls forming the interior reinforcement of the fortification and a thick structure (SUs 40-14-70) that measures 1m in width and runs north-south for the entire length of the trench. This structure has been identified between towers 5 and 7 of Tchingiz Tepe, lying parallel to that section of the fortification. Area RA-2 is a space situated to the west of area of RA-1. Irregular in shape, it is bounded by the structure SUs 40-14-70 to the east and by other walls that simultaneously bound other spaces. Those areas have not been fully excavated because they extend beyond the edges of trench RA1. However, various levels of abandonment and/or destruction have been excavated that were documented in the archaeological stratigraphy of trench RA1 and covered these structures.

In addition to the remains from the Kushan and Kushan-Sassanian periods, the excavation of trench RA1 has led to the identification of archaeological levels that related to the first occupation of Tchingiz Tepe and lie directly over the natural substrate. The recovery of two coins of King Kanishka I dates this first occupation of the sector to the second quarter of the second century AD.



2. Archaeological stratigraphy of trench RA1

The treatment and management of the information relating to the stratigraphic units (SUs) identified in the excavation of the trench RA1 have been performed with the software program Proleg StratiGraf. The collection of documented remains has been described by category. The first section brings together the various structures that make up the walled enclosure. The second section captures the levels of abandonment and/or destruction. Finally, the third section details the levels of habitation and the conserved town planning.

Levels of abandonment, destruction and naturally contributed materials

At the start of excavation on trench RA1, the surface level to the east was composed of the highest part of the fortified enclosure (wall SU 38 and reinforcements SUs 16 and 67), while the rest of the trench was covered by a stratum of sand with scanty plant covering corresponding to current level of circulation (SU 1). This level contained pebbles, fragments of adobe and limestone and very rounded potsherds.

Beneath the surface level, two extensive stratigraphic units were recorded. One was a level of brown-grey sand (SU 3) extending from the central part of the trench toward the west and originating from windborne materials and slope erosion. The level followed a slope in the east-west direction and it had little thickness on the east side and greater thickness on the west side. This stratum contained a small amount of pottery, which was largely retrieved on the west side. At the western end of the trench, SU3 covered another thick level of sand, SU 28, which surely came about from windborne materials filling in a natural depression created by the trench's stratigraphy in the west-central end.

At its northeastern end, SU 3 covered SU 2, which was found to be partly covered by SU 1. SU 2 is a level composed of adobe fragments fallen into a sandy clay matrix. To a lesser extent, SU 2 contains mud brick fragments and a few fragments of sculptural relief in limestone, from architectural elements of ancient town planning. Abutting the reinforcements (SUs 16 and 17) of the interior curtain wall of the fortification (SU 38), SU 2 also sloped east-west. This level must be interpreted as the collapse of an adobe facing, possibly of the first fortification or of the interior reinforcements of the defensive wall. The level appears to be equivalent to SU 2 identified in sector RC, which was excavated in 2008 and 2009, although no whole adobe has yet been retrieved at this spot (Ariño, 2009, 2010).

Toward the south side of the trench, beneath strata SU 2 and SU 3, a modern military trench cut east-west across the stratigraphic record. The military trench measured 6m in length by 0.6-0.8m in width and it formed a curve in the area of contact with the wall SU 70, which it cut. The military trench also contained an interface (SU 5), a possible floor formed by a layer of hard, compact sand (SU 10) and a thick level of infill (SU 4), formed by sand and silt that was yellow in colour and contained pebbles, pottery, charcoal and modern elements of military use.

In the central and northern part of trench RA 1, a level of sand and the remains of disintegrating adobes (SU 7) spread under SU 3. Light-brown in colour, the stratum is partly cut by the military trench. The formation of SU 7 could be related to natural agents of erosion and sedimentation arising from wind or slope effects. At its northwestern end, SU 7 is interrupted by a negative stratum that is rectangular in shape (SU 8). SU 8 has been documented at 190 cm long by 60/80 cm wide, although it continues beyond the northern and western boundaries of the trench. This trench was found silted in by SU 3, the level of sand.

In the centre of the trench, a dark stratum (SU 6=SU 11) lay along the entire length of the trench. It is covered by SU 7 on the west and SU 2 on the east. This stratum was also intersected by the military trench, leaving SU 6 on the north of the military trench and SU 11 on the southern side. SU 6=SU 11 is formed by ash and isolated fragments of charcoal in a sandy matrix. It slopes east-west, showing greater thickness at the western end until it disappears prior to reaching the western edge of the trench. Given these characteristics and the large amount of charred organic material, this level could correspond to the burning of some plant element, possibly a roof, probably associated with the curtain wall of the fortification.

A new stratum, SU 9, lay at the eastern end of the trench. SU 9 was covered in part by SU 2 and only at its western end by SU 6=SU 11. In addition, SU 9 presented characteristics similar to SU 2. The level is composed of adobe fragments, possibly from the fortification, very loose and mixed with a sandy clay matrix. The finds include important architectural elements with relief, probably from a pilaster or stupa, as well as pottery fragments, bone and charcoal. The excavation of SU 9 revealed two structures (SU 35 and SU 70).

One of these two structures, SU 70, is a large longitudinal structure that bisects the archaeological stratigraphy of trench RA1. This wall lay across the entire trench in a north-south direction running parallel to the interior facing of the fortification (SU38) and to the reinforcement walls of this face (SUs 26, 16, 66, 67). The construction, which made use of adobe and pakhsa, a kind of local cob, was recorded along all 8m of the trench's length, totalling 0.70-0.84m in width and 0.80m in height. The east and west façades present a white lime cladding (SU 72), while the west façade also has red plaster (SU 93). The structure lies over an earlier wall (SU 14) and the various strata of abandonment and/or destruction lean on its eastern and western façades. Toward the east, a series of strata of destruction have been documented in relation to the reinforcements of the interior facing of the fortification. West of the wall SU 70, the documentation of levels of abandonment and/or destruction mixes remains from the fortification and the structures that delineate the various areas.

The second of the two revealed structures is a small wall of adobe bricks (SU 35). The wall, located in the southern end of area RA-1, appears to lean against the wall SU 70 on the southeast side and against the pakhsa or cob wall SU 26 on the eastern side. The wall measures 20-22 cm in width by 1m in length. It looks to be separate from structure SU 34 by only 14 cm. It has a lime cladding on its northern and eastern façades (SU 71). Because of its stratigraphic position, it must be one of the most modern structures in trench RA1. At present, its purpose can only be understood as a dividing wall enclosing area RA-1 on its southern end. The wall dates from a moment late in the occupation of the sector.

Architectural elements of the fortification and the area RA-1 next to the fortification

At the start of excavation, we observed several structures on the surface that corresponded to the fortified enclosure on the eastern end of trench RA1. The eastern facing of the fortification of Tchingiz Tepe (SU 38) was documented to the west of tower 7. This structure has not been excavated but it has been defined on the surface. The interior façade of the curtain wall had a white lime cladding (SU 92) in some areas. This made it possible to establish the interior layout of the defensive wall.

Leaning against the wall SU 38, a very small wall of adobe (SU 34) was built. Running north-south, this wall was only 0.44m wide and 0.80m long, although it continues beyond the southern boundary of the trench. The total height of this little structure is not known because the strata leaning against it have not been fully excavated. However, you can see on the surface that the structure SU 34 shares the cladding (SU 69) with the larger wall SU 38 on the northern façade. This would seem to indicate that the wall SU 34 must be contemporary with the use of the first fortification. However, the construction date of the defensive wall is not known at present because it has not been excavated.

At a later time, a series of structures were attached to the cladding (SU 92) of the interior curtain wall of the fortification wall and to the cladding of the north face of wall SU 34. The purpose of these structures appears to have been to reinforce the curtain wall of the fortification (SUs 26, 66, 67, 16). The two walls SU 16 and SU 67 are visible on the surface and, although they have not been excavated, their height has been identified thanks to the excavation of strata of abandonment and/or destruction attached to these structures. The wall SU 16 is a thick adobe structure attached to the lime cladding (SU 92) of the interior curtain wall of the fortification (SU 38). SU 16 presents 8 rows of adobe bricks fixed to a sandy base. In the space demarked by trench RA, this structure is 3.30m long and 1.40m wide on the surface, with a thickness of 1.20m. The south side of the structure supports a wall of pakhsa or cob (SU 66), which is also supported by the interior curtain wall of the fortification (SU 38). This structure is formed on levels of highly compact clay and sand. It measures 3.94m in length and has between 50 and 70 cm of thickness. Its width is not known because it appears to be covered by a structure of

adobe bricks (SU 67). SU 67 is formed by a row of adobes on its south side and by two rows of adobes on its north side. It is also attached to wall SU 66 and adjoins the cladding (SU 92) of the facing of the fortification (SU 38) and the cladding (SU 92) of wall SU 34. The structure is 3.94m long and has a thickness of 20-50 cm. In the space defined by trench RA-1, the width of this wall ranges from 90 cm in the south to 1.40m in the north. Its function, as with the structures SU 16 and SU 66, must be related to the attempt for reinforce the interior facing of the fortification of Tchingiz Tepe in front of tower 7.

The presence of the wall SU 70 at 1.5m from these reinforcements gives rise to a corridor that must have had a width that varied according to the time of occupation. This narrow space parallel to the fortification and flanked by these structures and the wall SU 70-14 corresponds to the area RA-1. In this space, beneath SU 9, we documented a heterogeneous level (SU 20) formed by fine layers, some sandier and others more clay, with some 30-36 cm of thickness. This level extended from the reinforcements of the fortification (SU 16 and SU 66), against which it leaned, to the structure SU 70. On the south, it leans against the cladding (SU 71) of wall SU 35. Based on its characteristics and composition, it must be a level of abandonment caused by the gradual destruction and sedimentation of remains largely coming from the reinforcements of the fortification wall and the wall itself (SU 38).

SU 20 covered a level that was very compact with broken and highly decomposed adobe bricks (SU 25), mixed in a clay matrix. It leans against the wall SU 14 to the west, the cladding (SU 71) of wall SU 35 to the south and the wall of pakhsa or cob (SU 26) to the east, on which the interior reinforcements of the fortification wall lie (SU 16 and SU 66). Remains of fauna and fragments were collected. In addition, the stratum also yielded a bronze coin that, despite its poor state of conservation, could be related to an imitation of coins from one of the first Sassanian kings between Shapur III (383-388 AD) and Bahram IV (388-399 AD).

The stratum of destruction and/or abandonment covers or is attached to a structure of heterogeneous form, SU 26. This wall could be observed mostly in elevation, because structures SU 16 and SU 66 are situated over it and it has not been excavated. As a result, we do not know for certain whether it abuts the interior face of the first fortification or not. The structure has variable thickness. It has been identified in the southern part of RA-1 as a thick wall of pakhsa or cob, measuring 80 cm in height and formed of layers of compact clay and finer layers of sand. However, toward the north, the structure loses thickness and becomes a stratum of 20-6 cm, which adjoins the wall SU 14 in the west. SU 26 also covers an earlier floor of circulation (SU 36) that extends through the corridor in area RA-1, and it served as the base for the construction of several walls that serve to buttress the first fortification (SU 16 and SU 66), leading us to speculate that the function of wall SU 26 is to act as a foundation for various units that serve to reinforce the first fortification. Toward the north, the structure in pakhsa or cob (SU 68) that was built on SU 26 serves as the foundation for wall SU 35, which encloses the space RA1 on the south. The construction of the structure SU 26 marks a new phase in the occupation of area RA-1 in trench RA1, because it seals the levels of destruction and/or abandonment of the first fortification and the level of use (SU 36) associated with wall SU 14, which defines the area on the west side. In addition, the construction of SU 26 involves a considerable reduction in the width of the space and also seals the level of use (SU 36) associated with wall SU 14.

As indicated earlier, the structure of pakhsa or cob (SU 26) that extends over space RA1 covers a level of circulation (SU 36) that occupies the entire area RA-1, and it slopes north-south. This level is composed of a sandy clay matrix with abundant remains of charcoal and ash. The preliminary results of the anthracological analysis (R. Piqué, in this volume) performed on this charcoal points to the principal presence of *Salicaceae* (willow trees), *Platanus orientalis* (plane trees) and *Tamarix sp.* (tamarisk), while other species present in the charcoal to a lesser degree include *Juniperus sp.* (junipers), *Eleagnus angustifolia* (oleasters), monocotyledons, *Rosaceae/Maloideae* (fruit-bearing trees) and *Ulmus sp.* (elm trees).

The stratigraphic relationships of these units indicate that the wall SU 14 already existed at the time of the formation of the floor SU 36. They also indicate that this level of circulation could have functioned with the first fortification, because it passes under the first buttress (SU 26) of the fortification. Although confirmation of this date would require the reinforcement structures to be taken apart, it appears obvious to think that the construction of the wall SU 70 and the first buttress of the fortification (SU 26),

both subsequent to the formation of floor SU 36, were produced at the same time or as part of the same programme of town planning. This programme would appear to involve the construction of thick walls abutting the interior facing of the fortification to defend and reinforce it. Certainly, it would imply a third elevation of the structure running parallel to the fortification wall (SU 70) to overcome topographical changes arising from the occupation of the space. There are also other grounds for supporting this hypothesis prior to total excavation of the defensive structures in trench RA.

The floor SU 36 covers a level of orange-brown adobe fragments in a sandy clay matrix (SU 48). Apart from the potsherds retrieved, we also found many balls of raw clay that could have been used as projectiles (for attack or defence by the inhabitants of Tchingiz Tepe). These elements have been located in similar, nearby contexts excavated previously. Based on the characteristics of this stratum, it could be considered a level of destruction of the adjacent structures.

The level of destruction SU 48 covers a very compact level, SU 50, formed of light-brown clay and sand. The level abuts the wall SU 40 on the west and its continuity in the east is impossible to determine because it passes under the structures buttressing the fortification wall and strata that have not yet been excavated. From its composition, it could be a level of destruction and/or abandonment of the previous attached structures (SU 40 and SU 14 in the west and the facing of the first fortification, SU 38, in the east). Also, a coin was found among the pottery fragments.

In the area RA-1, SU 50 directly covered a stratum composed of broken, medium-brown clay (siltstone) (SU 65), which extends over the natural substrate of siltstone and sandstone (SU 94). SU 65 continues beyond the northern, southern and eastern boundaries of the trench and below the wall SU 40. It is identified in the contiguous area with its equivalent, SU 63. On the north and south side, it extends over the natural substrate, while in the central part of area RA-1 it extends over a level formed of broken sandstone (SU 62), which fills in a big cut in the natural substrate. The presence of sparse pottery as well as the composition and characteristics of this stratum indicate a formation that is largely natural in origin. However, the recovery of two coins dedicated to Kanishka I (120-150 AD) in the equivalent level SU 63 would indicate the use of the space at a time prior to the construction of most of structure SU 40 and, certainly, the fortification wall (SU 38).

As indicated, the natural substrate in the central strip of area RA-1, which is partly beneath unexcavated levels, presents a highly marked depression in the north-south direction. The cutting (SU 95) was filled in by SU 62, formed by broken, not very compact, grey sandstone, with some potsherds. In the contiguous area RA-2, we identified an equivalent level of broken sandstone (SU 64). It is the same level that in terms of the stratigraphy has been partly excavated under the wall SU 40.

3. Areas RA-2, RA-3 and RA-4

Levels of abandonment-destruction

In the rest of the trench, we found SU12=15 beneath the stratum of collapse SU 9 in the west and beneath the level of charcoal and ash SU 6 in the east. This level is a level of sand with some remains of adobe bricks and sparse pottery. From its characteristics, it must be a stratum of windborne and slope materials, caused by the erosion of adjacent adobe structures. It is intersected by the military trench (SU 5) and divided into SU 12 on the northern side of the military trench and SU 15 on the southern side. The excavation of SU 12 led to the identification of a few structures (SU 22, SU 73 and SU 76) on the northern side of trench RA1. These structures, oriented in the east-west direction, were attached to one another.

A new stratum rich in charred organic materials in a matrix of sand, SU 13, lay below SU 12=SU 15 in the central area of the trench RA1. SU 13 was located west of wall SU 70, abutting its cladding and

pictorial plaster (SU 72 and SU 93), following a sharp slope in an east-west direction. It also adjoined the pictorial plaster of the southern façade of walls SU 22, SU 73 and SU 76. Given its characteristics, SU 13 could be considered a level of destruction caused by fire to a structure composed of organic materials, such as a roof.

SU 17 is a stratum of great expanse in trench RA1. It lays under SU 13 in the central and northern part and below SU 15 in the southern part. The stratum is composed of sand and silt, highly compact and hardened, which is intersected by the modern military trench SU 5. Attached to the pictorial plaster of walls SU 70, SU 22, SU 73 and SU 76 toward the southeastern end, it covers a series of structures (SU 29, SU 30 and SU 31) located at the southern end of trench RA1 and oriented in an east-west direction, like the quadrangular structure SU 27. The recovered material features potsherds, a small bronze coin and a small, light-blue cast-glass bead. SU 17 covers several strata of different categories. On one side, it covers levels SU 21 and SU 23 at the northern end, SU 19 in the central part and SU 18 in the southern part of the trench.

SU 19 corresponds to a third level of charcoal, ash and remains of charred or burnt material. Dark grey-brown in colour, it lay over the central part of the trench. The level adjoins the lime cladding (SU 72) and wall painting (SU 93) of structure SU 70, covering part of the sediment that silts in the northern opening of the walls SU 22 and SU 73. This stratum may correspond to the remains of the destruction by fire of a structure made of organic material (possibly a roof). Some potsherds were collected.

From the north end of the trench to the contiguous walls SU 22 and SU 76 lay a reddish-brown level (SU 21). Covered by SU 17 on its north side and by SU 19 on its south side, SU 21 is a stratum composed of smashed adobe fragments in a sandy clay matrix, which suggest that the formation of the stratum stems from processes of erosion and destruction of the attached adobe structures. SU 21 partly covers other levels of destruction and/or abandonment, such as SU 18 and SU 23.

SU 18, partly covered by SU 19 and partly by SU 21, corresponds to a level of yellow sand and silt with white limestone patches, more abundant in the lower depths of the level, as well as some isolated concentrations of ash. The stratum appears in the central and southern parts of the trench and slopes somewhat in an east-west direction. It is supported against the lime cladding (SU 72) and wall painting (SU 93) of the western façade of the structure SU 40, 14, 70 and the lime cladding (SU 90) of structure SU 31. It contains pottery and bone and could be related to SU 18 identified in trench RC in contact with the facing of the fortification excavated farther to the north of Tchingiz Tepe (Ariño, 2009, 2010).

SU 23 is a stratum of sand with abundant charcoal and potsherds at the northwest end of the trench, adjoining the cladding of the northern façade (SU 74) of wall SU 22 and cut by SU 8. The preliminary results of the anthracological analysis (R. Piqué, in this volume) reveal the presence of abundant charcoal remains with *Salicaceae* (willow trees), monocotyledons, *Eleagnus angustifolia* (oleaster), and to a lesser extent *Vitis vinifera* (common grape vine), *Tamarix sp.* (tamarisk), *Platanus orientalis* (plane trees), *Prunus sp.* (fruit-bearing trees) and *Juniperus sp.* (junipers). It is possible that this was a level of sporadic use where pottery and charcoal from a fire were tossed and later covered and mixed with a thick level of sand probably formed by natural agents that were aeolic in origin.

A stratum of composition similar to SU 23 is SU 47. SU 47 is a level of sand with abundant charcoal remains and some remains of fauna and pottery. The level is located in the west side of the trench below the level of sand SU 28. It is supported against the lime cladding (SU 78) of the southern façade of wall SU 76 and it extends beyond the western boundary of the trench. They are certainly remains of combustion mixed with sand contributed by the wind. The presence of these sandy strata, in common with the two strata of sand SU 3 and SU 28 in the western end of the trench, could indicate an absence of structures in this area. This would explain how the levels of sedimentation and destruction formed along an east-west slope and how the lowest point of this archaeological topography attracted large deposits of sand contributed naturally.

These levels covered a thick level of destruction (SU 24) that stretched largely from the superimposed walls SU 14 and SU 70 to the northern, southern and western boundaries of the trench and

beyond. As with all the documented levels of abandonment and/or destruction, SU 24 presented a sharp east-west slope that was much sharper from the central part of the trench going west. We documented remains of fragmented or crumbling adobe bricks in a sandy clay matrix, reddish-brown in colour. To the east, this thick level adjoined the lime cladding (SU 72) and wall painting (SU 93) of walls SU 70 and SU 14, covering the levels of silted infill (SU 87 and SU 45) at the northern and southern openings of the structure. SU 24 also leaned on the cladding SU 90 of wall SU 31, SU 89 of wall SU 30, and SU 84 of SU 29, which enclosed the room on the south side. Similarly, the level SU 24 covered the structure SU 56 and adjoined the cladding (SU 82) of wall SU 27, the cladding (SU 81) of wall SU 33, and the wall SU 56, which enclosed the area RA-2 on the west side. On the side of walls SU 46, SU 33, SU 27 and SU 56, in the space that marks the room contiguous to area RA-2, SU 24 lay beneath SU 47, covering wall SU 55. Lastly, toward the north, SU 24 covered the structure SU 44, adjoining the cladding of its northern façade (SU 88) and southern façade (SU 75); the structure SU 22, adjoining the cladding of its northern façade (SU 74) and its southern façade (SU 75); the cladding (SU 75) of wall SU 73, and the northern cladding (SU 74) and southern cladding (SU 78) of wall SU 76. SU 24 may be considered the first level of collapse of the attached structures constructed out of adobe bricks, because levels of use have been identified below this stratum for each and every one of the rooms located to the west of wall SU 14 – SU 70.

Area RA-2: Levels of use in the Kushan-Sassanian period

Beneath SU 24, we identified the most modern levels of use related to the three areas defined by the identified structures. Area RA-3 is located in the western end of the trench, in the space bounded by the walls SU 76-SU 73 to the north, the walls SU 46-SU 33 to the east and the wall SU 55 to the south. The total extent of the RA-3 is not known because it reaches beyond the western boundary of the trench. Beneath SU 24, we identified the floor SU 49, which has not been excavated. In area RA-4, defined by the wall SU 14 - SU 70 to the east and the walls SU 76-SU 22-SU 44 to the south, we located the floor SU 39, which has also not been excavated.

Area RA-2 lies in the centre of the trench, bounded by the walls SU 40-14-70 to the east, SU 31, SU 30 and SU 85 to the south, SU 56, SU 27, SU 33 and SU 46 to the west, and SU 73, SU 22 and SU 44 to the north. This area has been fully excavated. Beneath SU 24, we documented the floor SU 32, which corresponds to the most modern use of the space. SU 32 is a level composed of compact clay and sand and it lies beneath SU 24 between the structures SU 14 on the east side, SU 22 on the north side, SU 33 on the west side and SU 30 and SU 31 on the south side, adjoining the cladding on all of these walls. On SU 32, we found abundant potsherds and remains of ash and charcoal in the southeast end of the area, providing evidence of a fire or a possible hearth. This floor covered a fine layer of prior alterations/destruction (SU 37) that was certainly levelled to build the floor SU 32 on top of it. SU 37 is formed of a matrix of decomposing adobe bricks mixed with the remains of wall plaster, leading to the supposition that the level's formation must correspond to a small alteration to the space, which also affected the structures that bound the area (SU 14, SU 31, SU 30, SU 56, SU 27, SU 33, SU 46, SU 73, SU 22 and SU 44).

SU 37 covered a level of use (SU 41) formed of sand in a clay matrix, which is light-brown in colour and is attached to the structures listed above. In addition to potsherds, we recovered a bronze coin. Although the coin was in a poor state of conservation, we have identified a similar obverse in gold coins belonging to the reign of King Huvishka (154-192 AD), which depict the king emerging from clouds. As a result, we can interpret that the bronze coin is an imitation of these gold coins. No hearth structure has been identified and the number of potsherds is lower than in the case of the floor SU 32. The floor SU 41 was built over a level of preparation (SU 42), which contains rubbish from the alteration of the attached structures, given that the matrix of SU 42 is formed of the remains of highly decomposed adobe bricks and the cladding of the walls involved. Beneath SU 42, we identified two consecutive levels of use (SU 43 and SU 51). Both show clear evidence of use.

SU 43 covered the entire surface of area RA-2 and was made up of a compact, grey clay matrix. On SU 43, we also documented two circular areas (SU 52 and SU 53) that must have served as hearths because the ground presented remains of charcoal and ash and the sediment had undergone severe fire-reddening. SU 52 and SU 53 are both oval in shape and have a thickness of approximately 5 cm, although the fire identified as SU 52 is larger (100x70 cm) than SU 53 (24x58 cm). In addition to potsherds, we also retrieved a bronze coin from SU 43.

The floor SU 51 lay directly beneath SU 43 and also stretched across the entirety of area RA-2. However, the boundaries of the two levels are very unclear on the north side of RA-2, indicating that one came after the other in a short period of time. SU 51 is a level of use formed of yellow-brown trodden sand and it adjoins the cladding of the structures SU 14, SU 44, SU 22, SU 73, SU 33, SU 27, SU 56, SU 30 and SU 31, as well as the wall SU 46. The lime cladding and painting covering these structures presented partial continuity over this floor on the sides of the room. This would indicate that the plaster conserved on the western façade of the walls SU 14-SU 70, on the northern façade of the walls SU 31 and SU 30, on the eastern façade of the walls SU 56 and SU 33, and on the southern façade of the walls SU 73, SU 22 and SU 44 corresponds to the moment of use of the floor SU 51. In the central part of the floor and excavated over SU 51, we documented a quadrangular hearth (SU 61) measuring 90x65 cm. The hearth had a reddish burnt outline and contained fire-reddened earth, charcoal, ash and some potsherds (SU 54).

The floor SU 51 covered a level of largely natural formation (SU 63) that is equivalent to level SU 65 in area RA-1. Its composition, which can largely be described as decomposing clay, supports the notion that its formation must primarily be attributed to natural mechanisms, such as the siltstone of the natural substrate and other sediments dragged down the slope. On the north and south sides, the stratum lies directly over the natural substrate (SU 94), formed by a pocket of siltstone at this point. However, the presence of some potsherds and two bronze coins appear to indicate a human use of this space. The coins, which are in a poor state of conservation, appear to depict King Kanishka I (120-150 AD). Given its characteristics and stratigraphic position, it is highly likely that SU 63 corresponds to a stratum of earth-levelling for the construction of at least the structures SU 14, SU 31, SU 30, SU 27, SU 33, SU 73 and SU 22, all identified in area RA-2.

In area RA-2, SU 63=SU 65 rests directly on the level of natural siltstone (SU 94), but in the southern end of the space, the topography of the natural substrate is considerably uneven, as can also be seen in area RA-1. This depression is filled in by SU 62 and its equivalent in area RA-1 is SU 64. It is a level composed of loose, grey, fragmentary sandstone containing some potsherds. Its formation is largely due to natural agents (slope contributions) at a time when Tchingiz Tepe first experienced occupation directly on the geological substrate. As a result, we think that this level reflects evidence of the first occupation at this point of Tchingiz Tepe.

In the southwestern end of the area RA-2, the natural level of siltstone (SU 94) presents a circular perforation of approximately 15 cm in diameter (SU 86) that could be a post hole for a wooden building.

4. Conclusions

Based on the stratigraphic sequence described above, we can depict the evolution of the occupation of this sector of Tchingiz Tepe in the broad terms set out below:

The first archaeological level (SU 62=64), located directly on the natural substrate of sandstone, is formed of the decomposing sandstone itself. However, the presence of a post hole (SU 86) in SU 94 and other potsherds in this level indicates that it relates to the earliest human occupation at this point of Tchingiz Tepe.

A second phase of occupation relates to the level of clay (siltstone), SU 63=65, that could date to the reign of Kanishka I or a slightly later time, based on the discovery of two bronze coins of this Kushan king. This new stratum sealed the previous post hole and served as the base on which most of the adobe or pakhsa (cob) structures identified in trench RA1 were built: walls SUs 40, 29, 85, 31, 27, 33, 73 and 22. In terms of the first fortification of Tchingiz Tepe, we cannot yet state whether it was raised at this time or existed prior to the stratum SU 63=SU 65. The construction of the structures above gave rise to town planning, with the organisation of various structured areas around a principal axis, the wall SU 40, running N-S and parallel to the curtain wall of the fortification. However, the stratigraphic sequence of use of most of these spaces is not known, because they have not been fully excavated, except in areas RA-1 and RA-2.

In the corridor formed by area RA-1, the first level of use has not been identified clearly, although it would be an interface between SU 63=65 and SU 50, and it would have covered the space between wall SU 40 on the west and the curtain wall of the fortification SU 38 on the east.

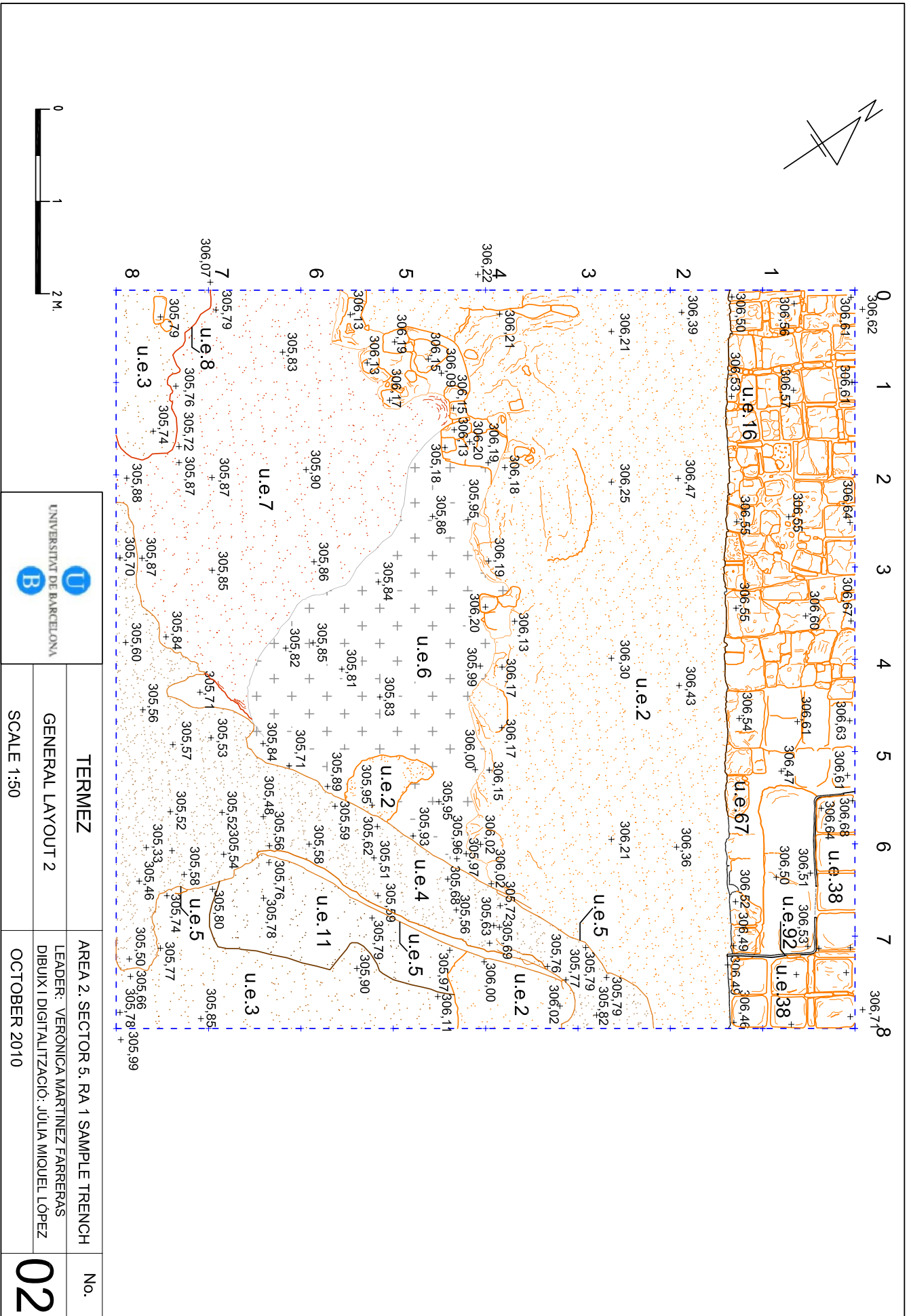
In area RA-2, the first level of use is SU 51, which is associated with the hearth SU 54 - SU 61. As none of the structures bounding this space have been dismantled, we cannot determine precisely when the various alterations documented in the structures took place. However, it appears that before the second paving of this space (SU 43), the wall SU 40 was erected again (SU 14 and SU 70) although these new elevations have a width that is less than the width of the initial wall. On the western façade of wall SU 70, a vaulted niche was built, measuring 90 cm long and 80 cm wide. The niche was built in the most elevated part of wall SU 14. The back of the niche was enclosed with a fine wall raised on a fine mortar of sand and clay and the surface was plastered with white limestone (SU 60). The elements conserved in this niche or possible altar for the statue of Buddha are a flat mud brick (SU 57) and, in an upper level, a square adobe brick inserted into a cavity created directly in wall SU 70. The niche and the façade of walls SU 40-14-70 were plastered with a layer of white lime (SU 72) and a layer of red paint (SU 93).

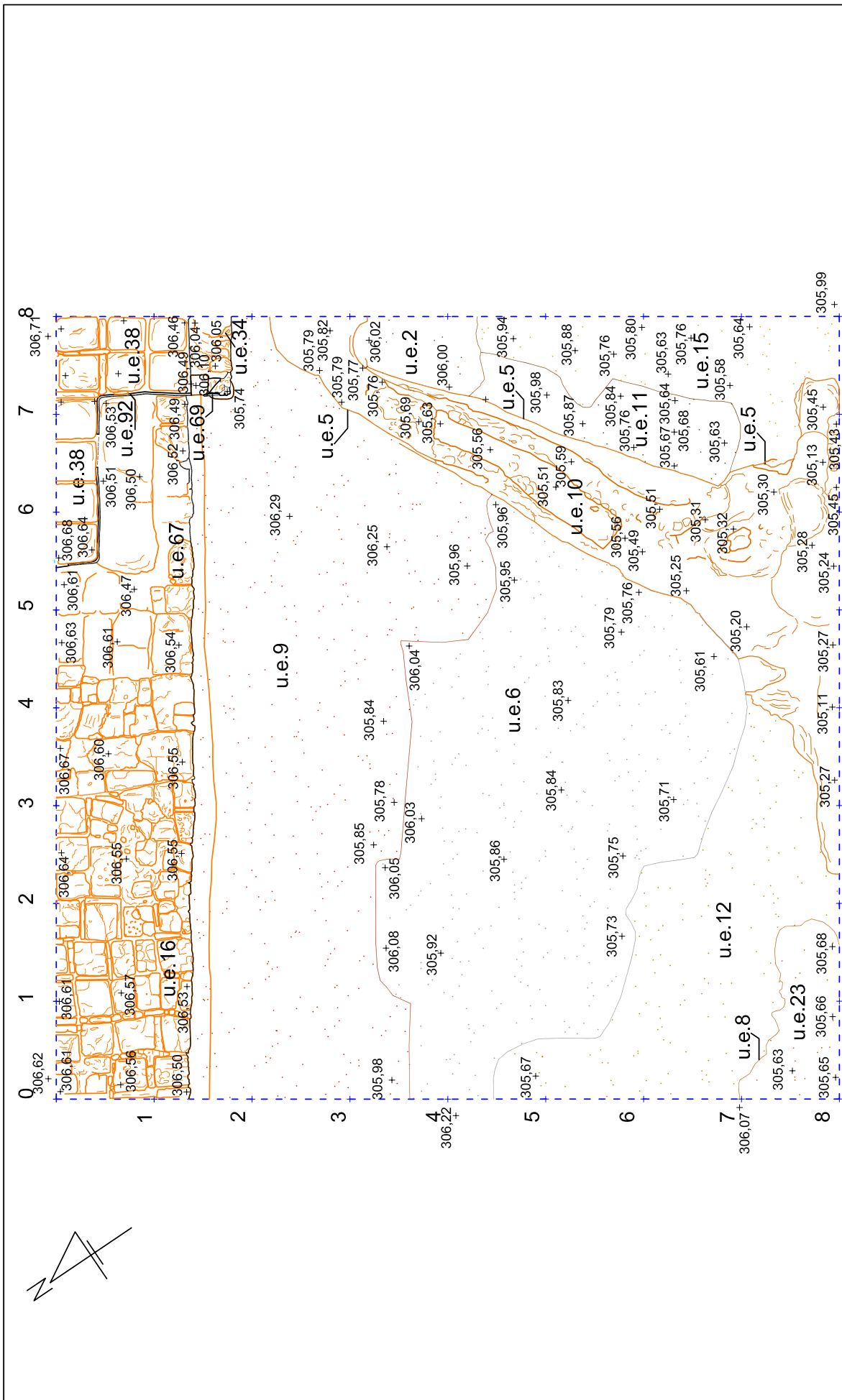
The upper part of the adobe wall SU 56 must have functioned as a window sill. Only the base of the sill has been conserved, not its elevation. It is also possible that the highest area of wall SU 44, situated on the northern façade of area RA-2, corresponds to a window sill. However, at this earlier time, access would certainly have been in the northwestern end of the area, in the space subsequently enclosed by the abode wall SU 46.


In area RA-2, a new pavement (SU 43) was later laid. It is identified with two hearths (SU 52 and SU 53). From these strata, we have documented the superposition of levels of preparation of floors (SUs 42 and 37) and pavement (SUs 41 and 32). In area RA-1, on the first possible level of circulation, we documented two thick strata of destruction (SUs 50 and 48). The interfaces of these two strata may have functioned as surfaces of circulation. The causes of their destruction may lie in a possible skirmish at the gates of the fortified city between the inhabitants of Tchingiz Tepe and an enemy. As a result of these clashes, we found a large number of balls of raw clay retrieved in SU 48, which must have been used as projectiles. Subsequent to these clashes, a new level of use (SU 36) is documented in the corridor defined by the fortification wall and the areas RA-2 and RA-3. This last level of use of the corridor RA-1 could have functioned with the most modern pavement in areas RA-2 (SU 32) and RA-3 (SU 39). However, the largest alterations of this time are documented in area RA-1. At the time when the floor SU 36 was in use, the fortification reinforcements were constructed (SU 26, 16, 66 and 67), drastically reducing the width of this area. In addition, the wall SU 35 was built to enclose area RA-1 on the south. It is doubtless at this time when construction took place on the reinforcement (SU 31) of wall SU 85 and when access to this area was sealed off through the construction of wall SU 46. Raising wall SU 46 eliminated the access door to this area. This supports the conclusion that access had to rely on a stairway connecting to a higher level of which no vestige remains in situ. However, most of the levels of abandonment-destructions documented above SUs 32, 39, 49 and 36 could, to a large extent, reflect the destruction of architectural elements of the defensive structures (ancient fortification and reinforcements) and structures of habitation adjacent to the defensive wall.

Adding the data obtained from excavations in 2011 to the data obtained previously in sector RC, we can deduce that most of the conserved structures appear to correspond to an important monastic set-

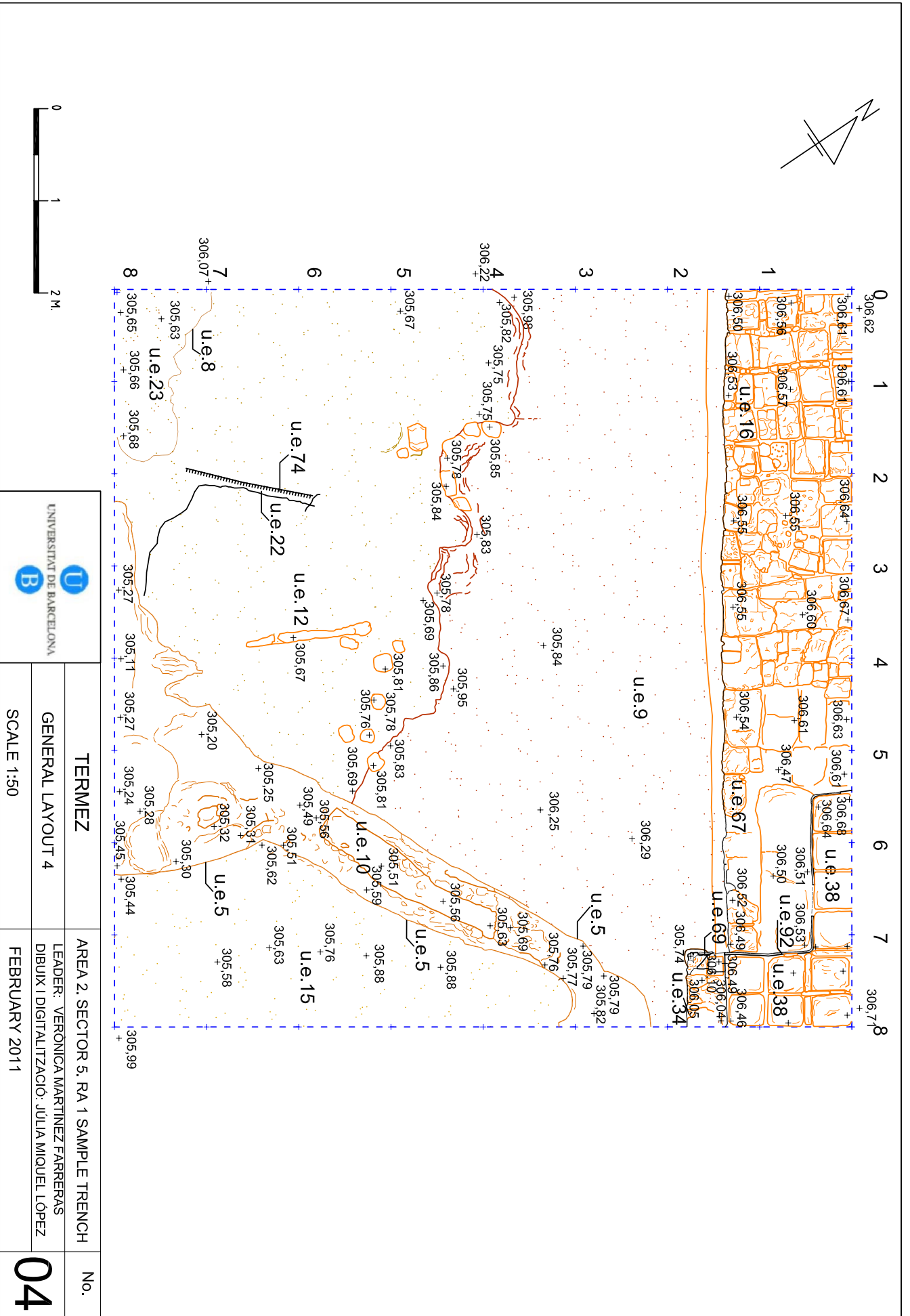
tlement inhabited by a Buddhist community, as can also be observed in the nearby Buddhist settlements of Kara Tepe and Fayaz Tepe. In this respect, the vaulted niche in wall SU 70 of area RA-2 and other architectural and sculptural elements located in sectors RC and RA support this hypothesis. Based on the data provided by the excavation of trench RA1, we can date the construction of this monastic enclosure within the walled perimeter of Tchingiz Tepe to the reign of Kanishka I (120-150 AD). Based on the data obtained at other points of Tchingiz Tepe, we can date the last destruction and abandonment of these structures to the end of the fourth century AD (Mestres and Rauret, 2010a). However, the future application of radiocarbon analysis to charcoal and fauna samples from the various levels of use and abandonment-destruction in trench RA1 will enable us to establish more precise chronologies for the evolving organisation of the settlement on the hill of Tchingiz Tepe.

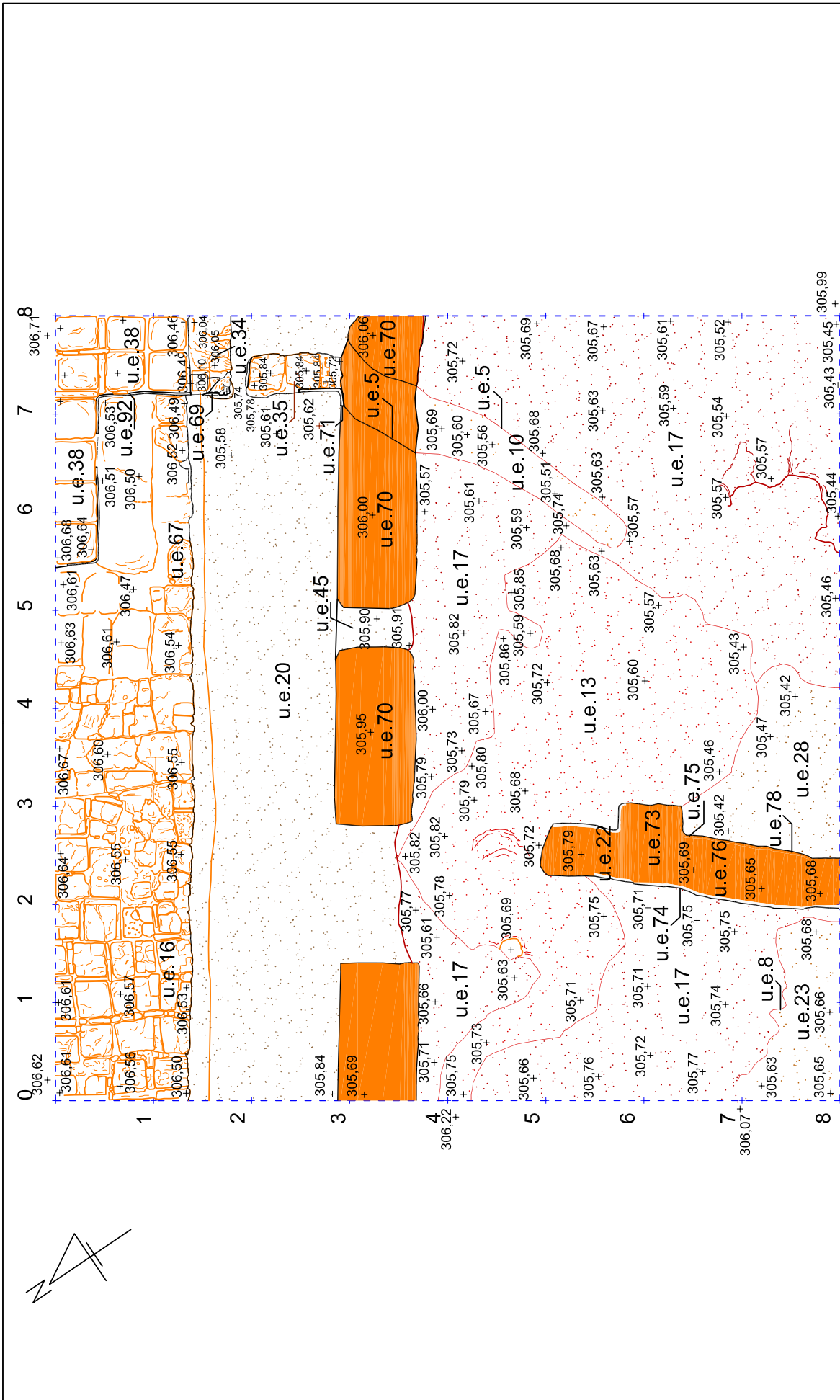





 UNIVERSITAT DE BARCELONA	TERMEZ	AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH	No.
	GENERAL LAYOUT 3	LEADER: VERONICA MARTINEZ FARRERAS DIBUIX I DIGITALITZACIO: JÚLIA MIQUEL LÓPEZ	
	SCALE 1:50	FEBRUARY 2011	

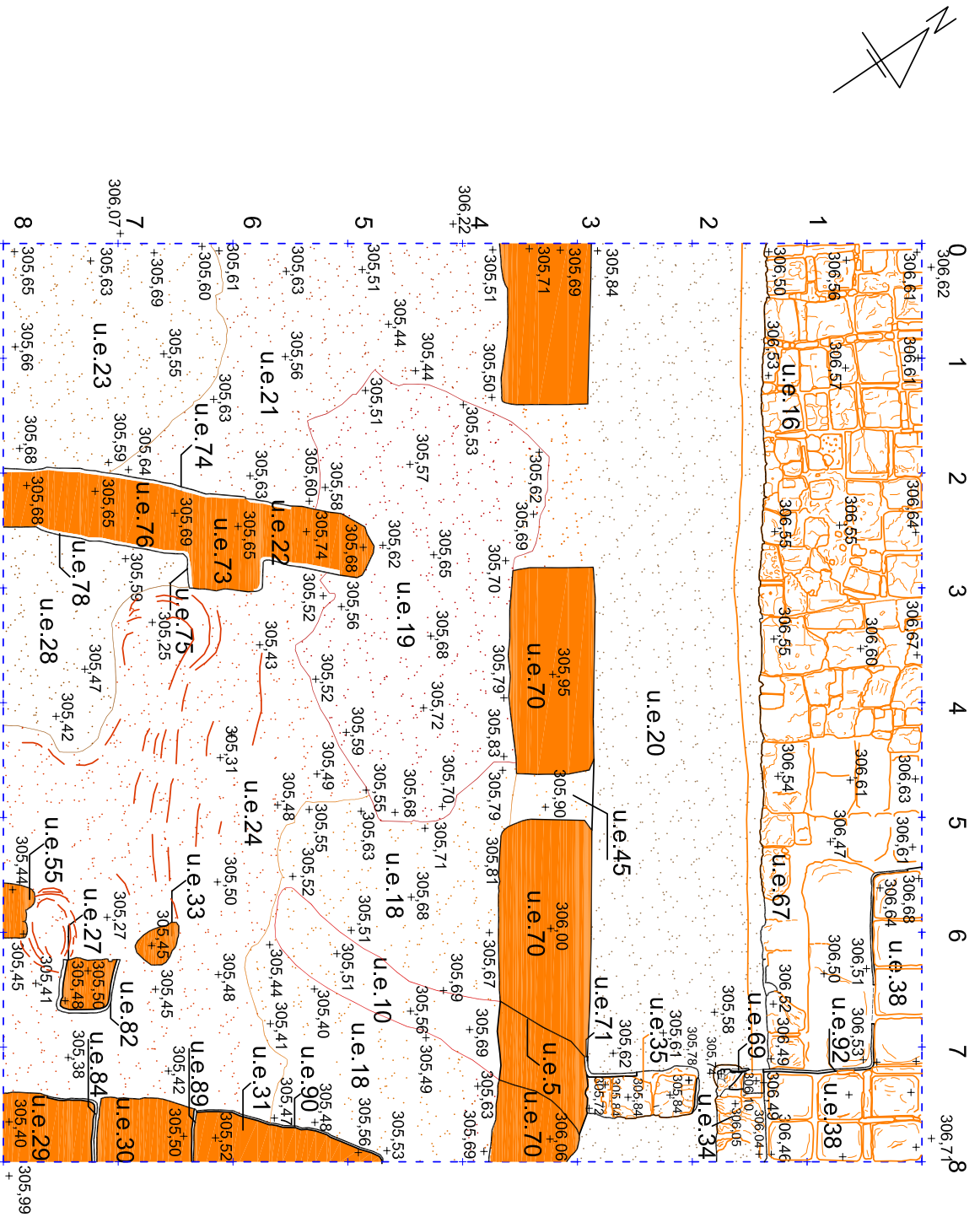
03



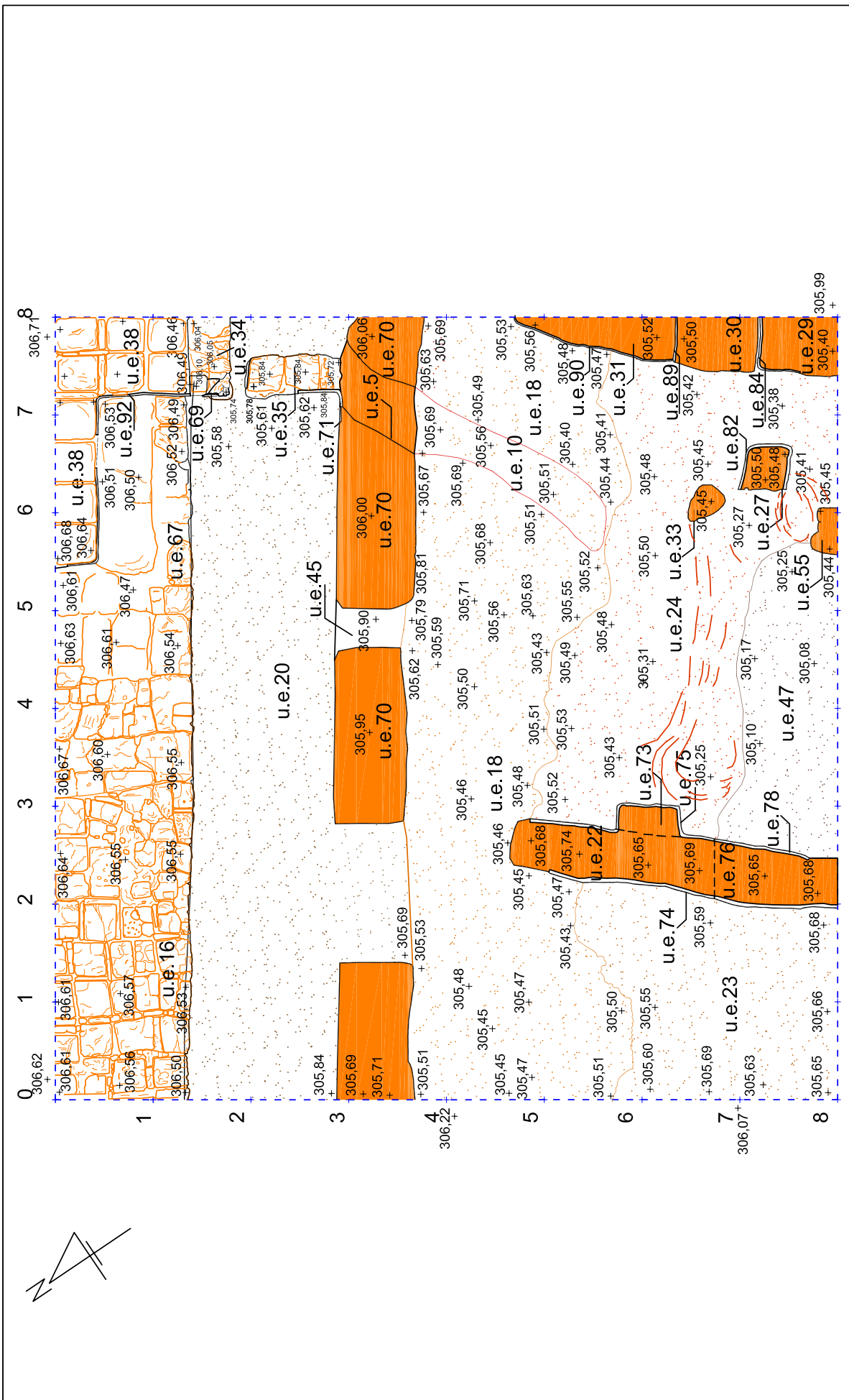



 UNIVERSITAT DE BARCELONA	TERMEZ	AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH	No.
	GENERAL LAYOUT 5	LEADER: VERÓNICA MARTÍNEZ FARRERAS DIBUIX I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ	
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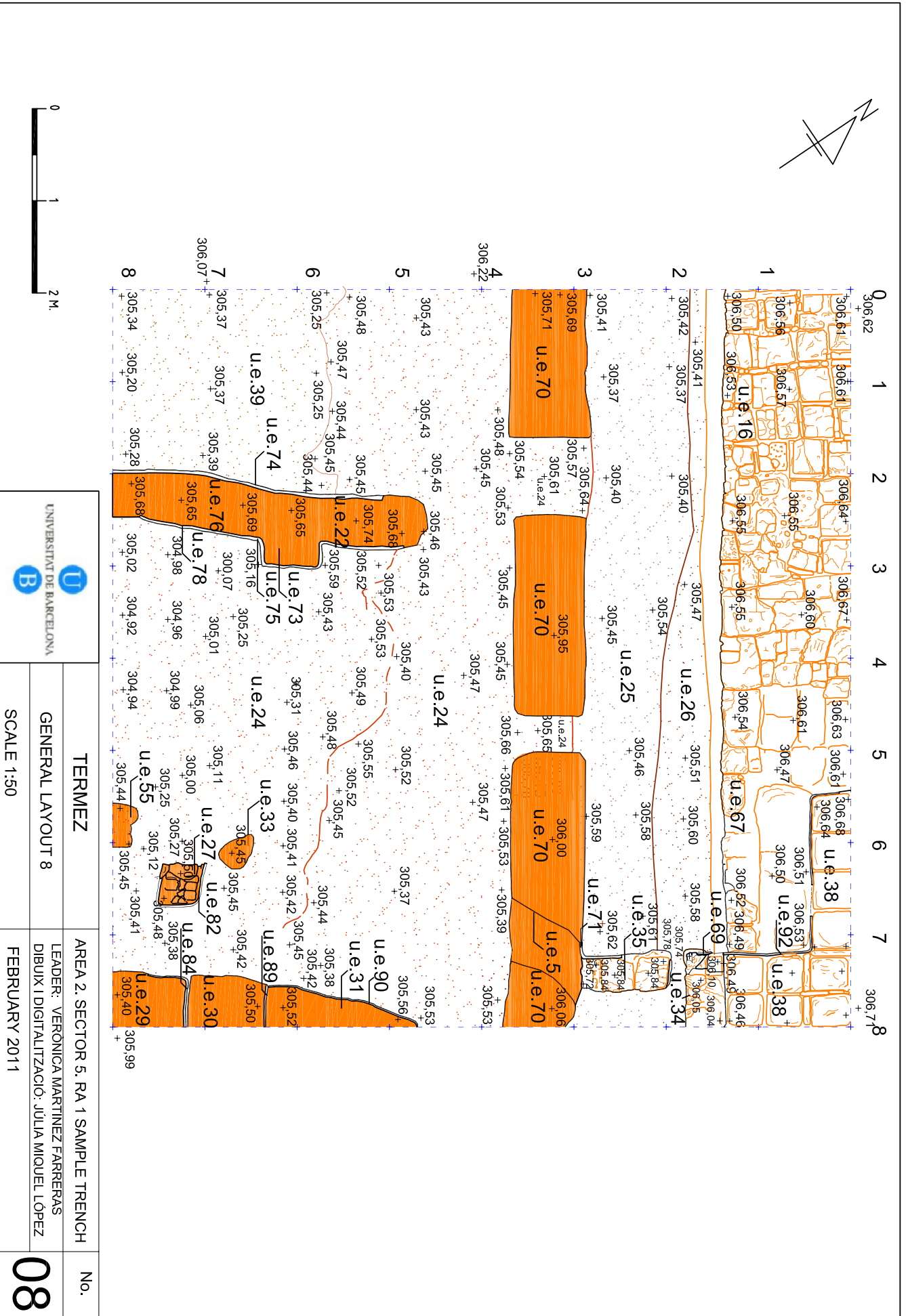
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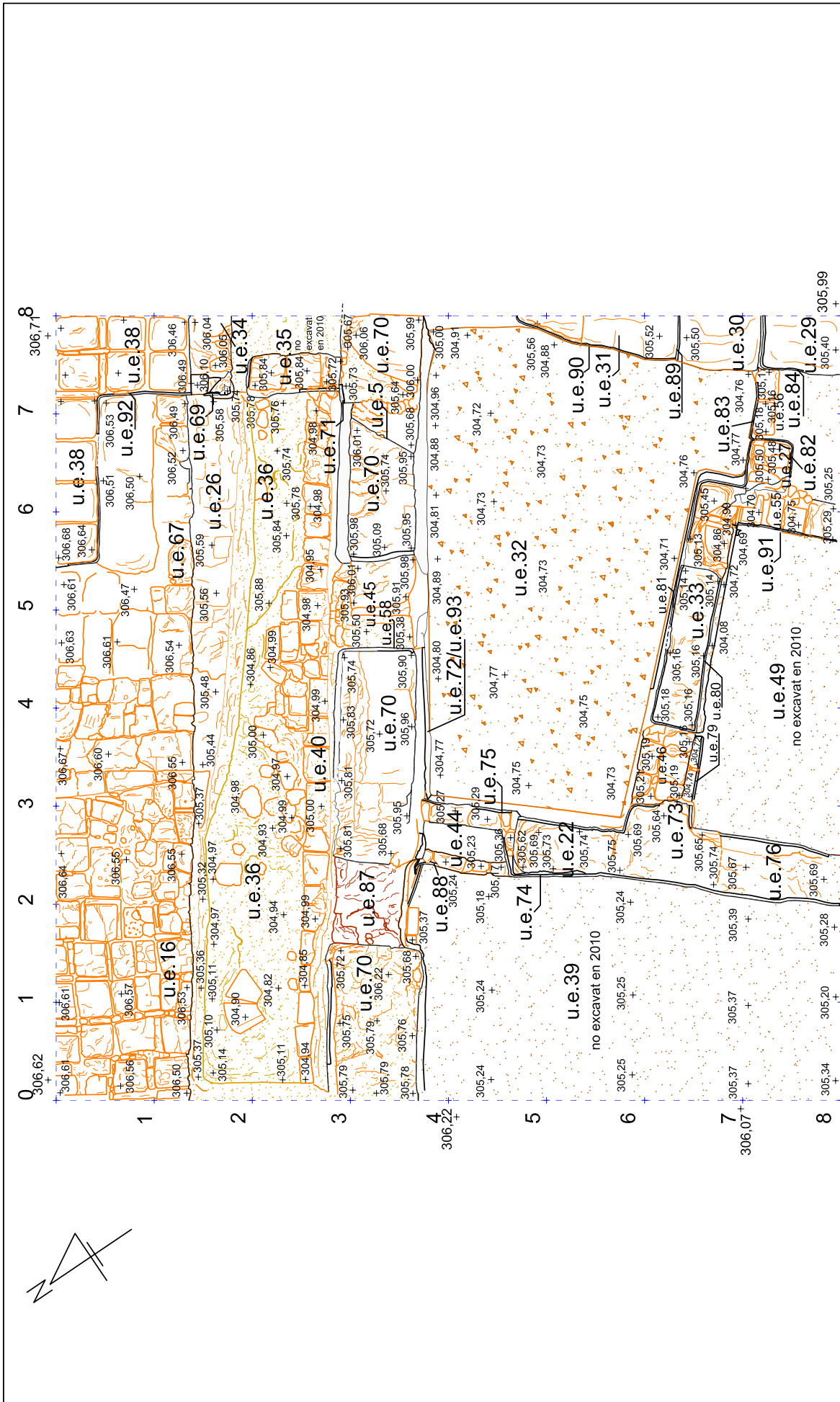



TERMEZ	AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH	No.
SCALE 1:50	FEBRUARY 2011	



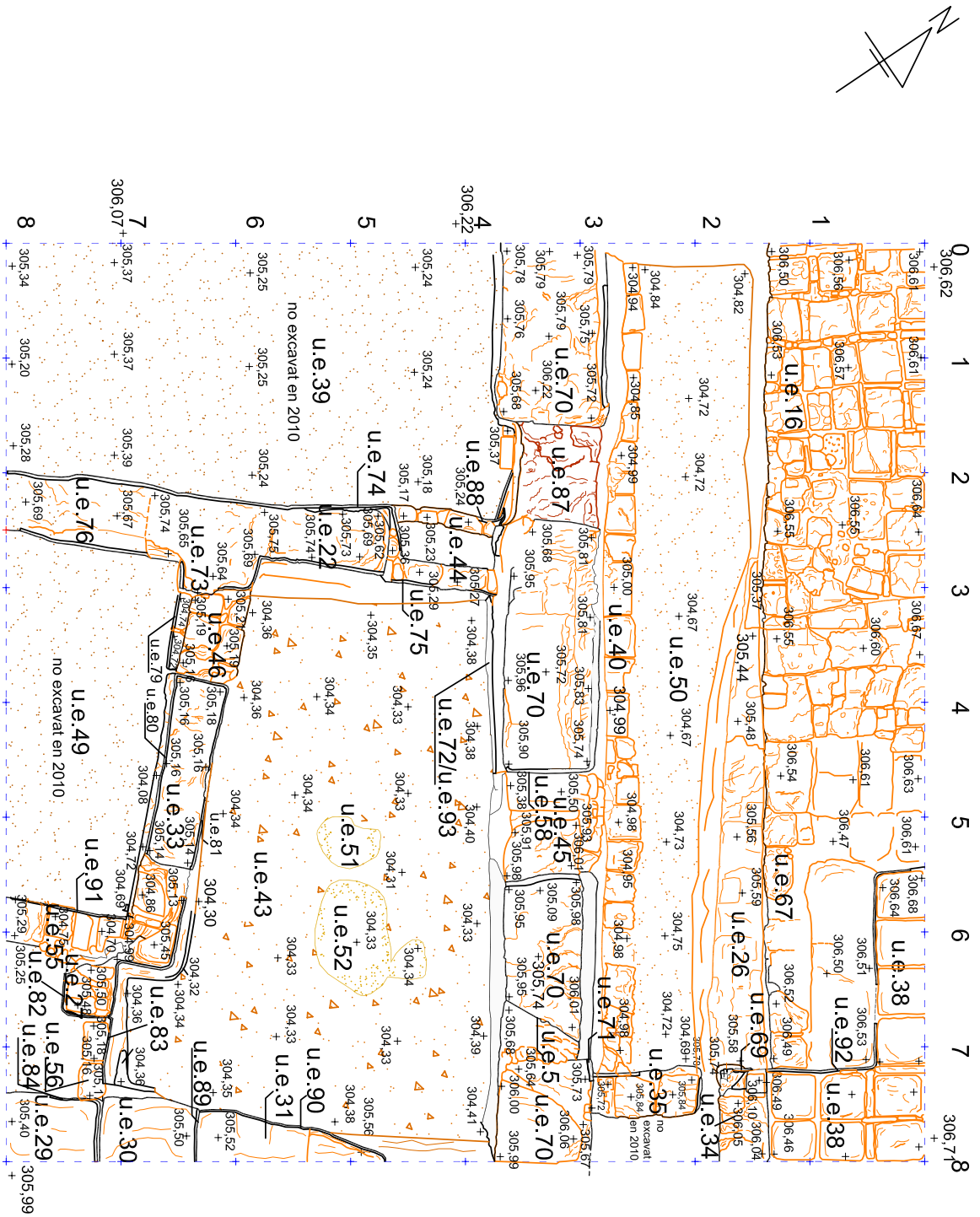
 UNIVERSITAT DE BARCELONA	TERMEZ	AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH	No.
	GENERAL LAYOUT 7	LEADER: VERÓNICA MARTÍNEZ FARRERAS DIBUIX I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ	07
	SCALE 1:50	FEBRUARY 2011	



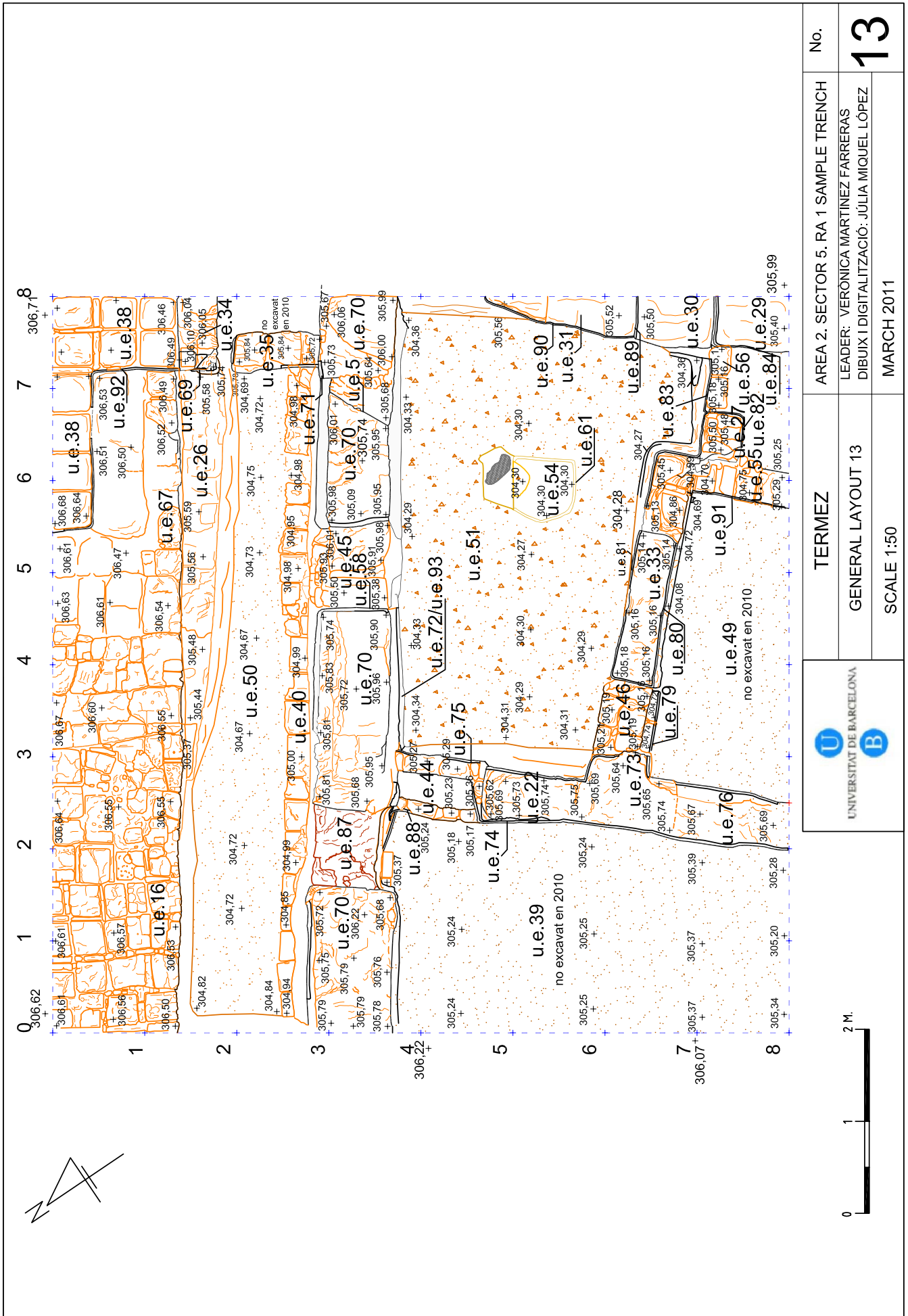



 UNIVERSITAT DE BARCELONA	TERMEZ	AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH	No.
	GENERAL LAYOUT 9	LEADER: VERÓNICA MARTÍNEZ FARRERAS DIBUIX I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ	
	SCALE 1:50	FEBRUARY 2011	

09




UNIVERSITAT DE BARCELONA 	TERMEZ	AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH LEADER: VERONICA MARTINEZ FARRERAS DIBUIX I DIGITALITZACIO: JÚLIA MIQUEL LÓPEZ MARCH 2011	No. 12
	GENERAL LAYOUT 12		

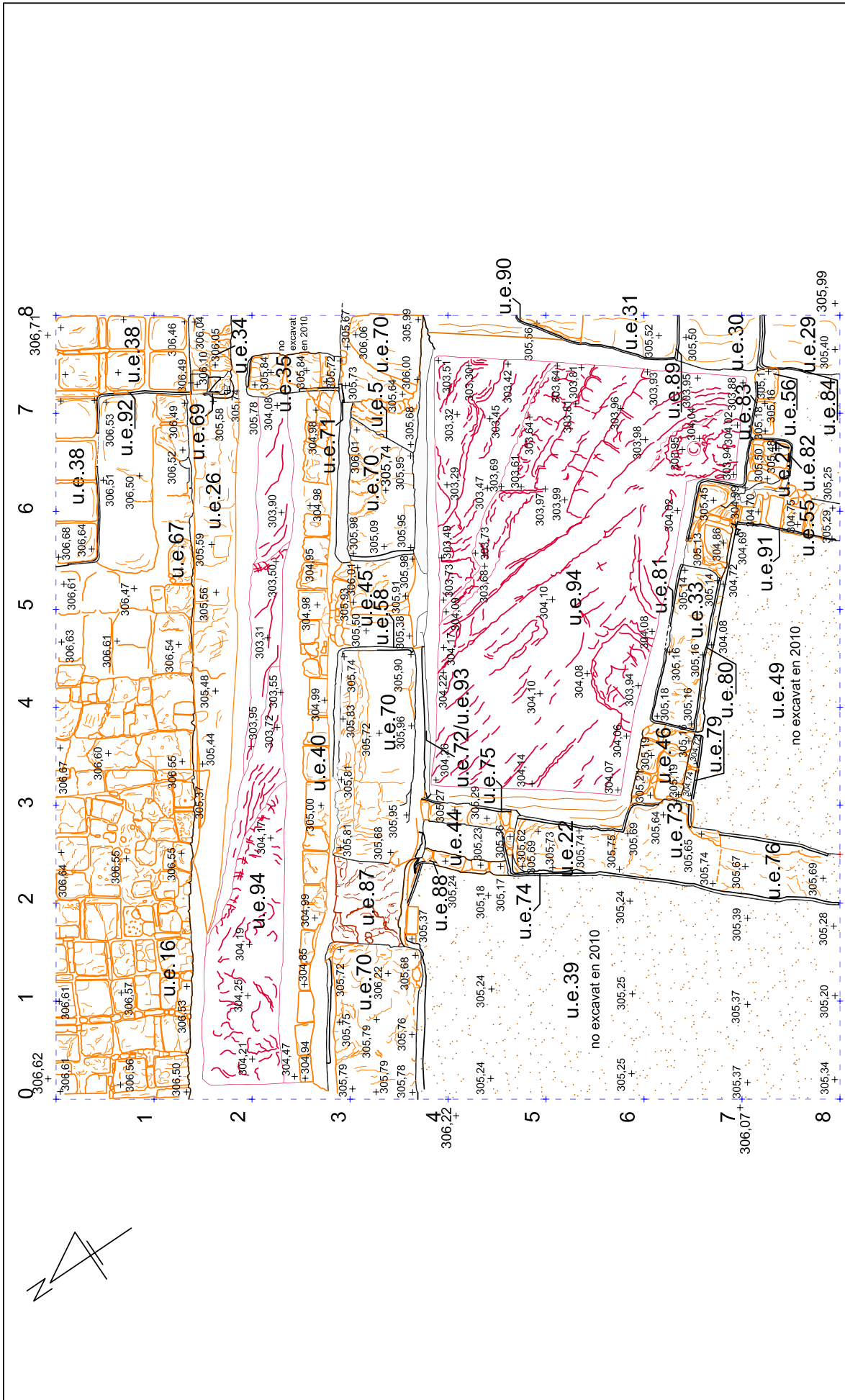



 <p>UNIVERSITAT DE BARCELONA</p>	TERMEZ	AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH	No.
	GENERAL LAYOUT 13	LEADER: VERÓNICA MARTÍNEZ FARRERAS DIBUIX I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ	13
	SCALE 1:50	MARCH 2011	

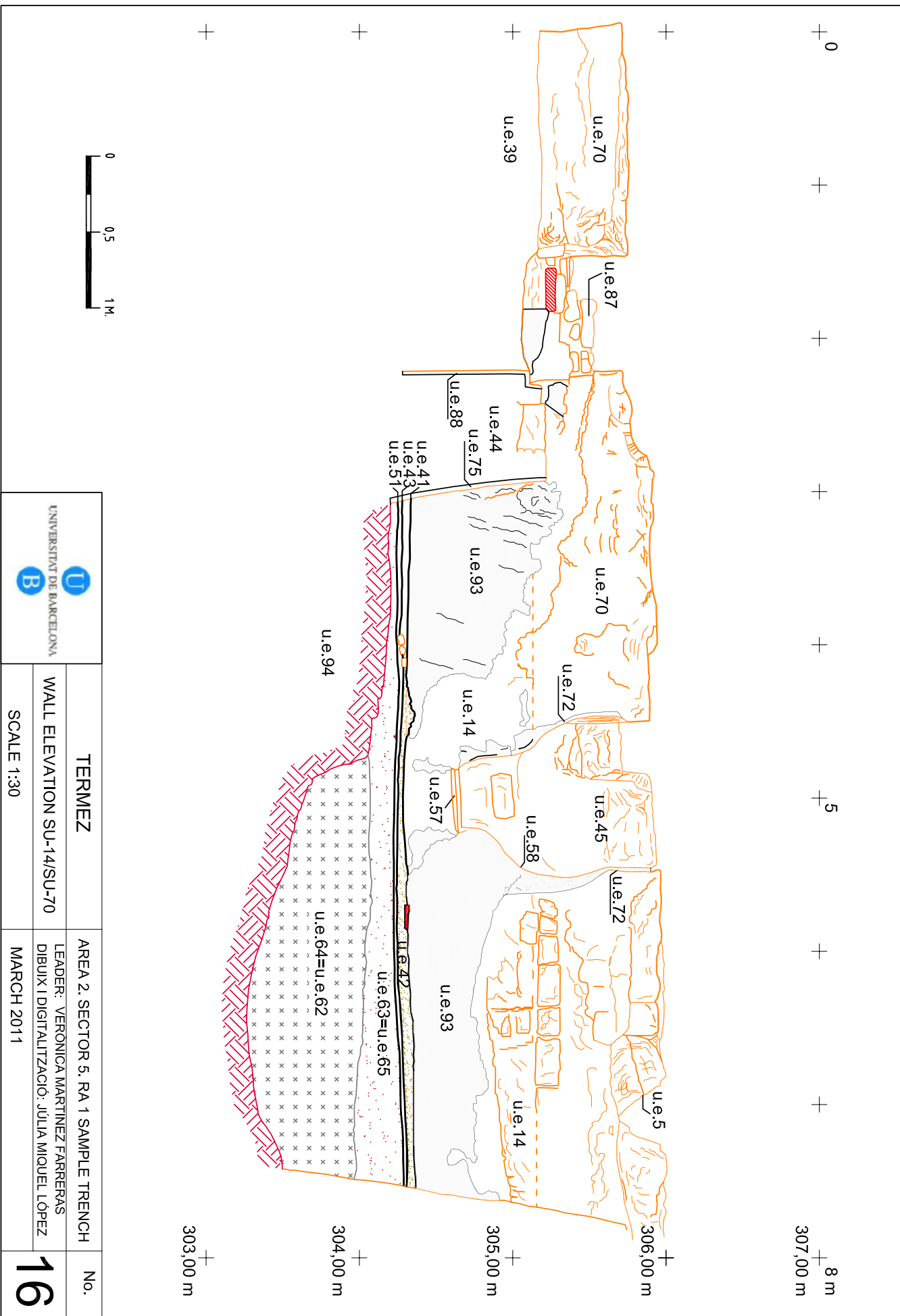





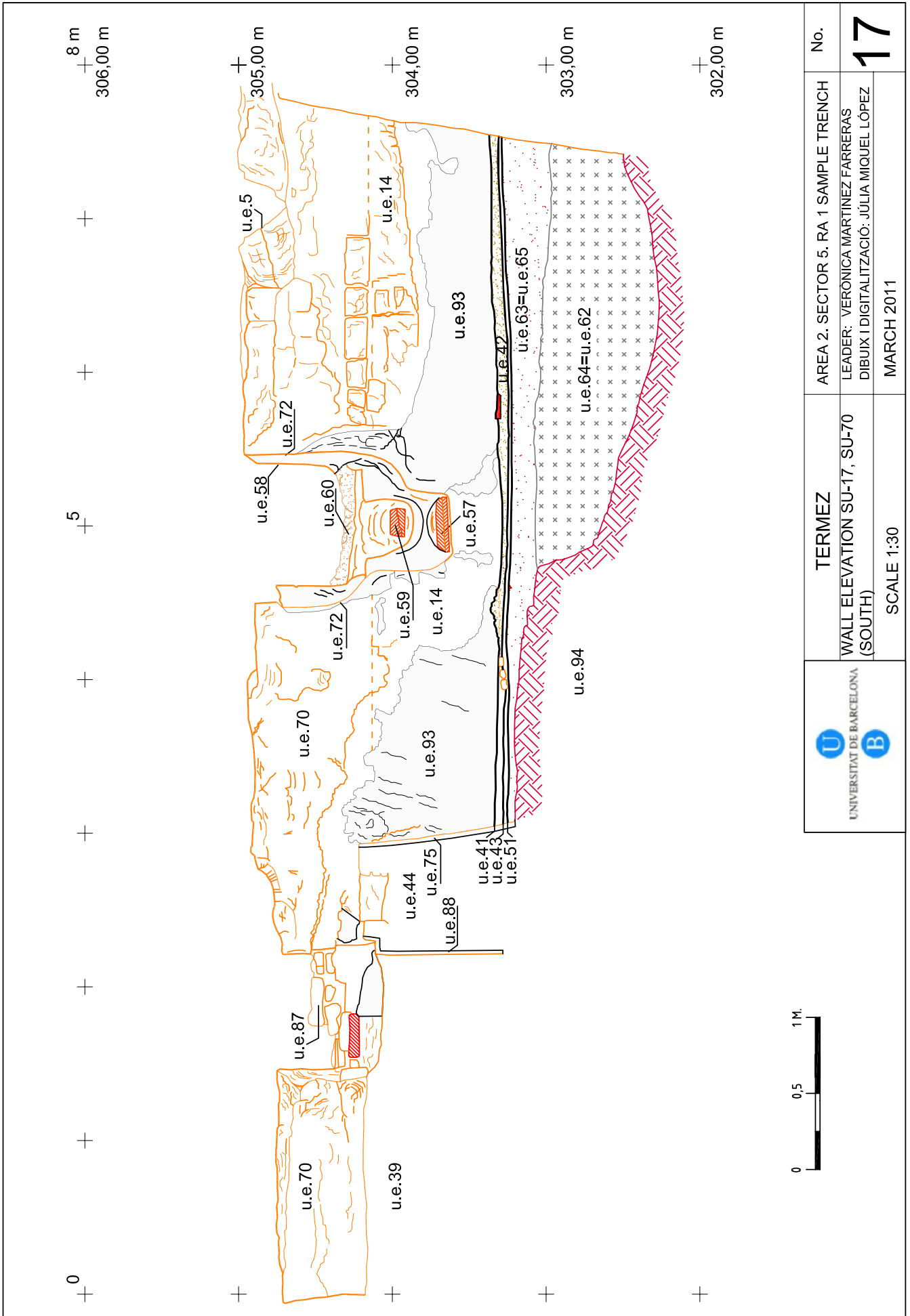
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	GENERAL LAYOUT 14		
SCALE 1:50		LEADER: VERÒNICA MARTÍNEZ FARRERAS DIBUIX I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ	14
		MARCHY 2011	




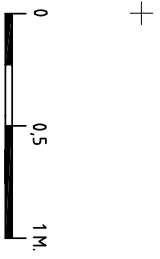
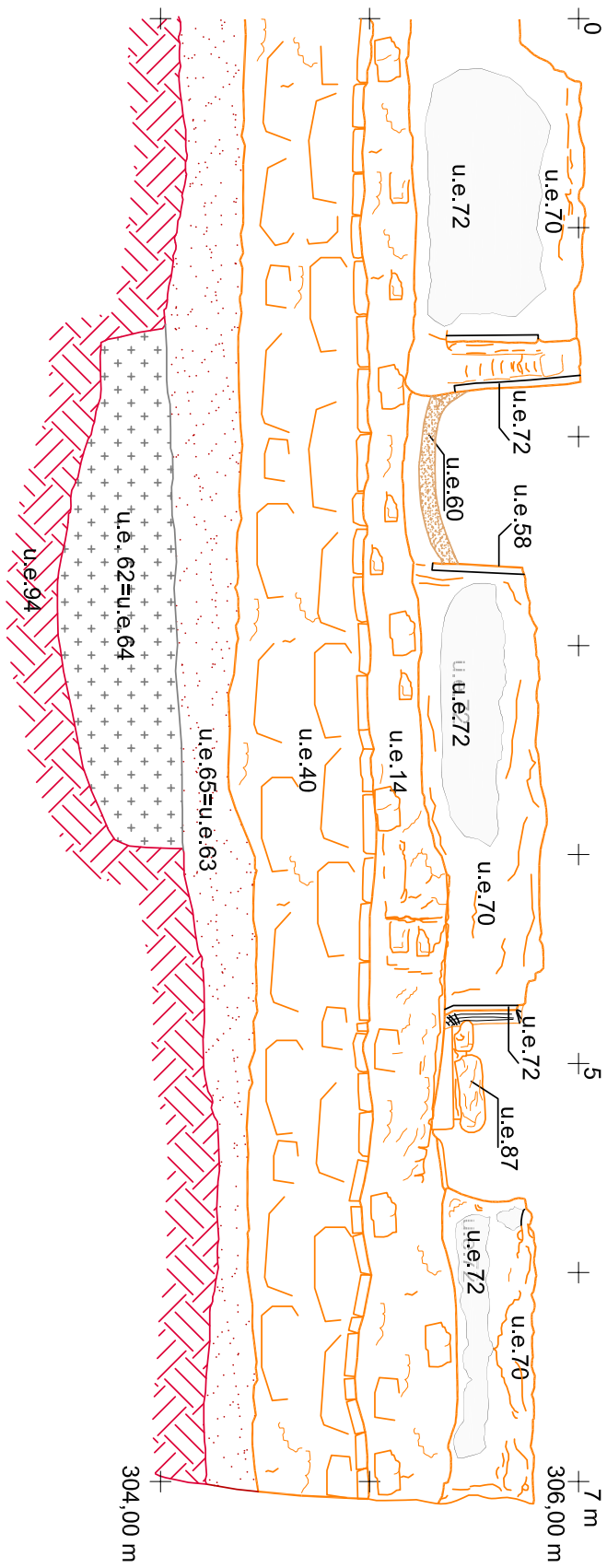
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	GENERAL LAYOUT 15	LEADER: VERÓNICA MARTINEZ FARRERAS DIBUIX I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ	15
	SCALE 1:50	MARCH 2011	



 UNIVERSITAT DE BARCELONA	TERMEZ	AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH	No.
	WALL ELEVATION SU-14/SU-70	LEADER: VERÓNICA MARTÍNEZ FARRERAS DIBUIX I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ MARCH 2011	
	SCALE 1:30		




 UNIVERSITAT DE BARCELONA	TERMEZ WALL ELEVATION SU-17, SU-70 (SOUTH)	AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH LEADER: VERÓNICA MARTÍNEZ FARRERAS DIBUJ I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ	No. 17
	SCALE 1:30	MARCH 2011	

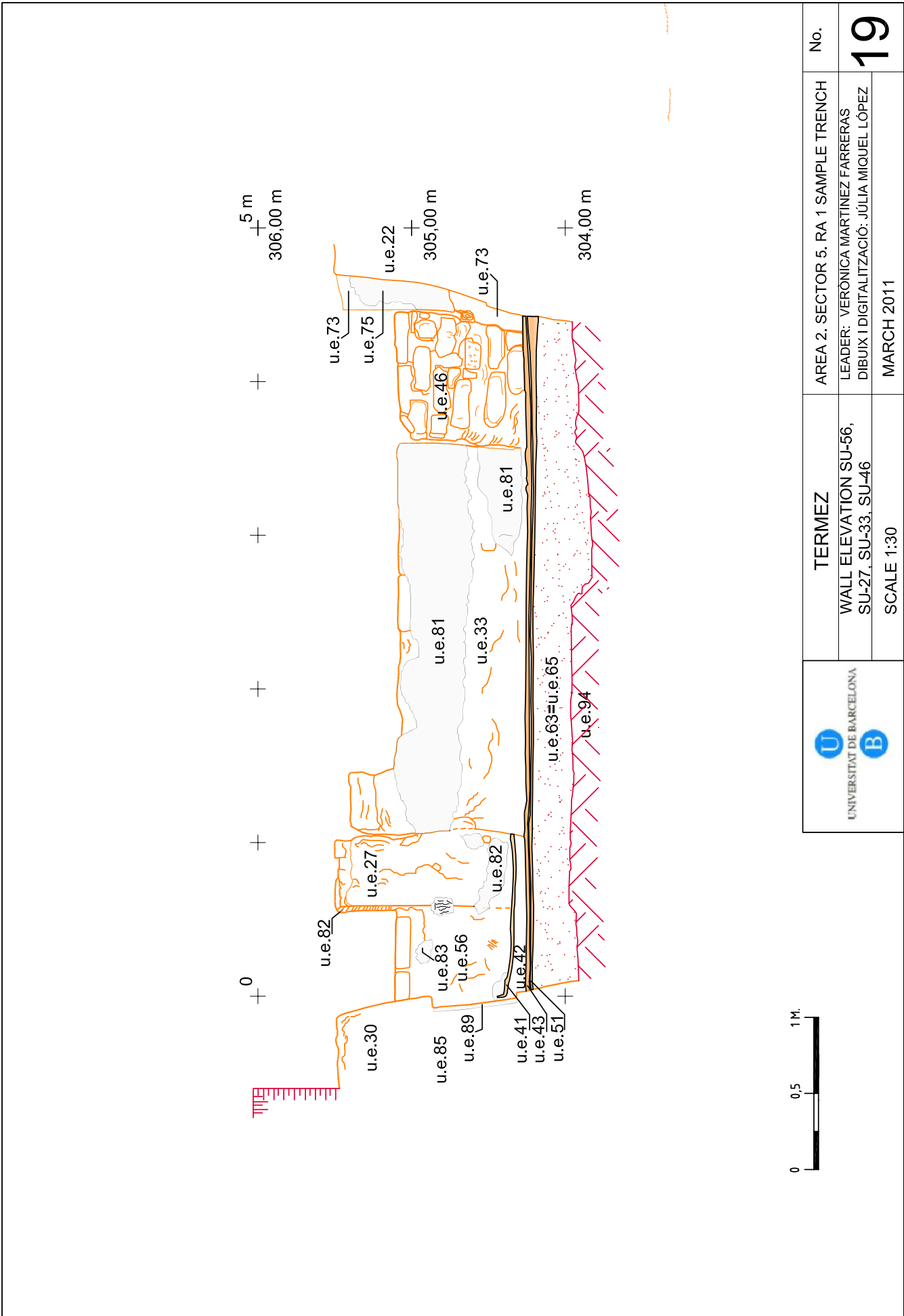



303,00 m

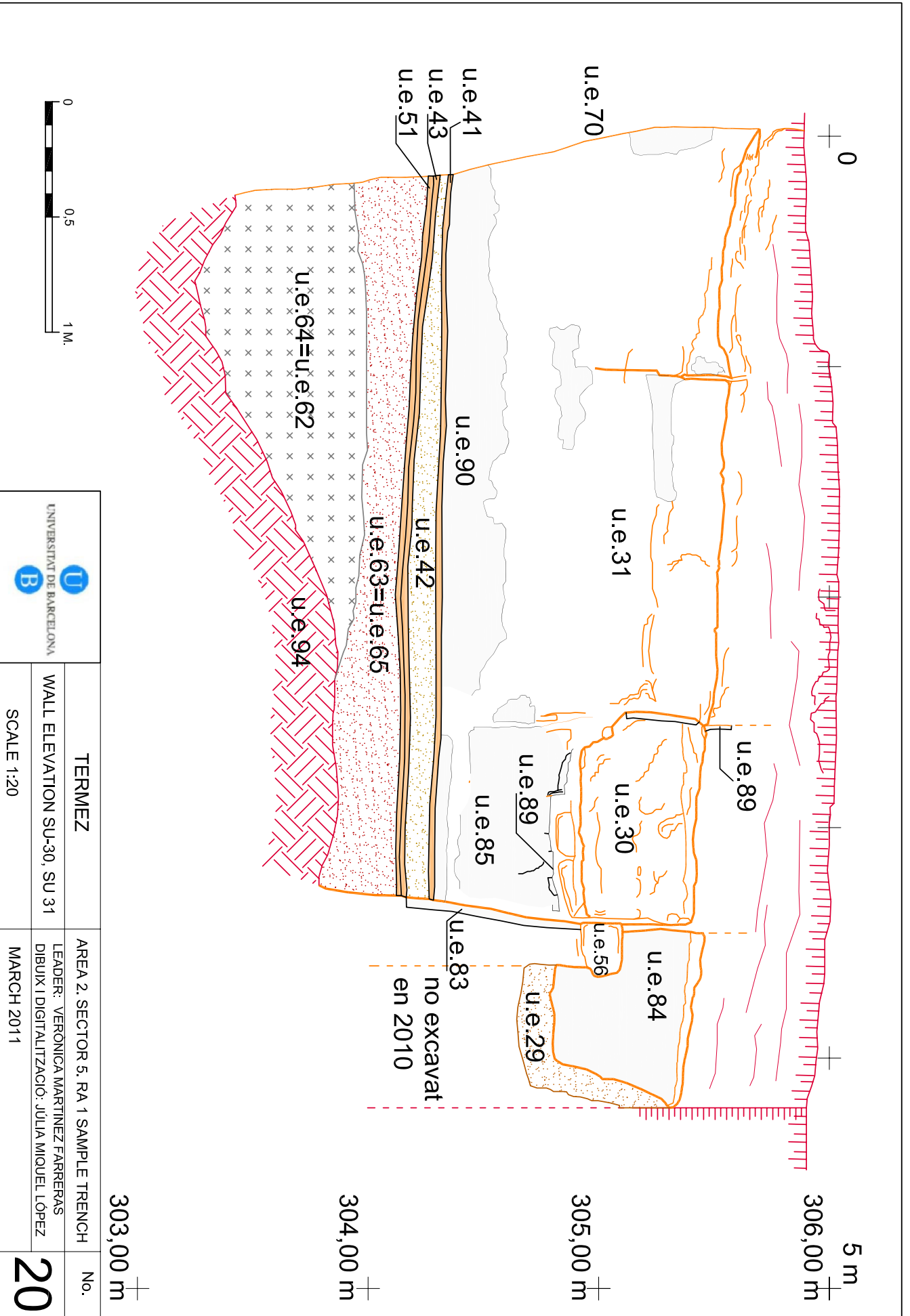
304,00 m


306,00 m

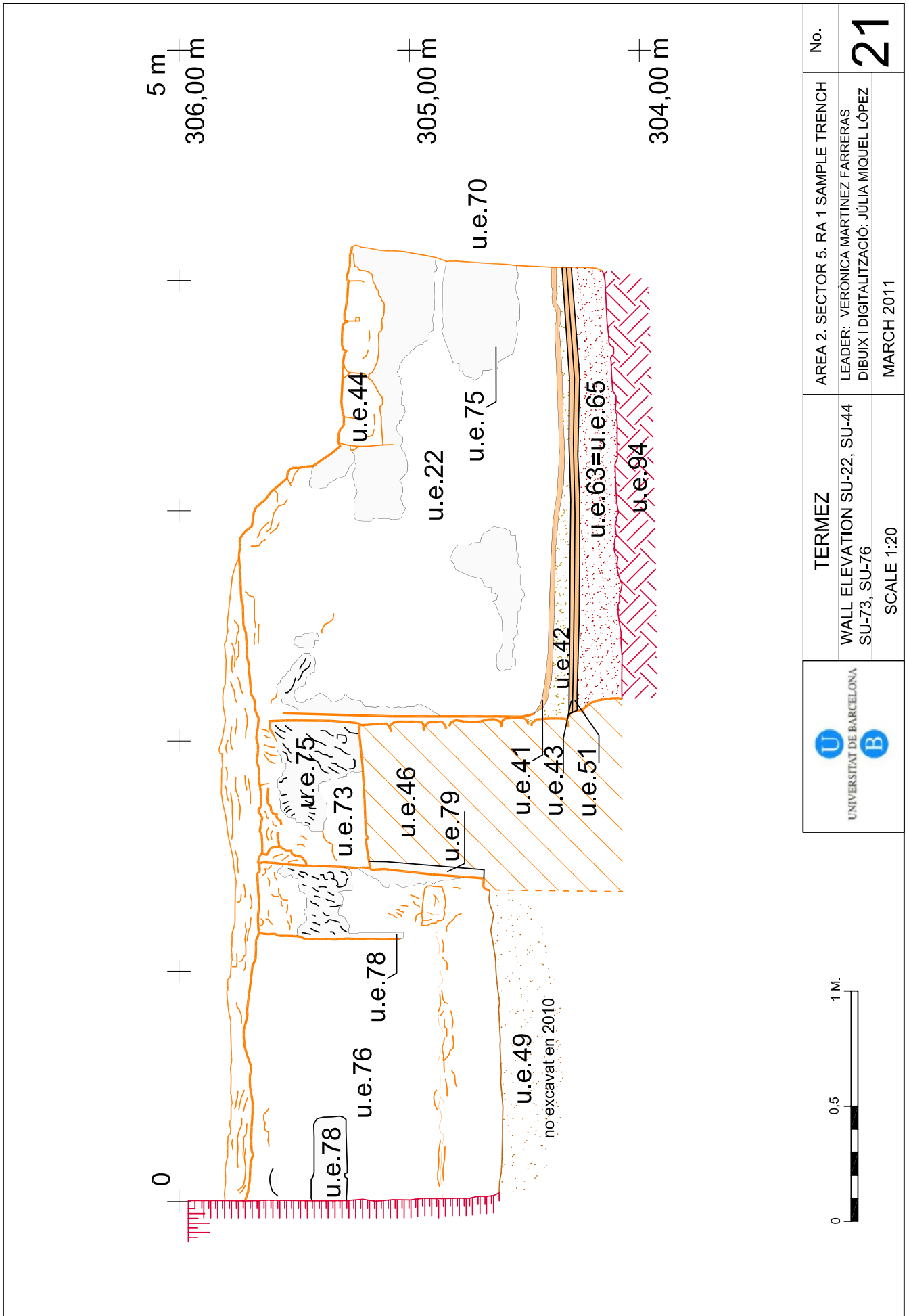
 UNIVERSITAT DE BARCELONA	TERMEZ		AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH LEADER: VERÒNICA MARTÍNEZ FARRERAS DIBUIX I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ MARCH 2011	18
	WALL ELEVATION (NORTH) SU-14/SU 70 SCALE 1:30			




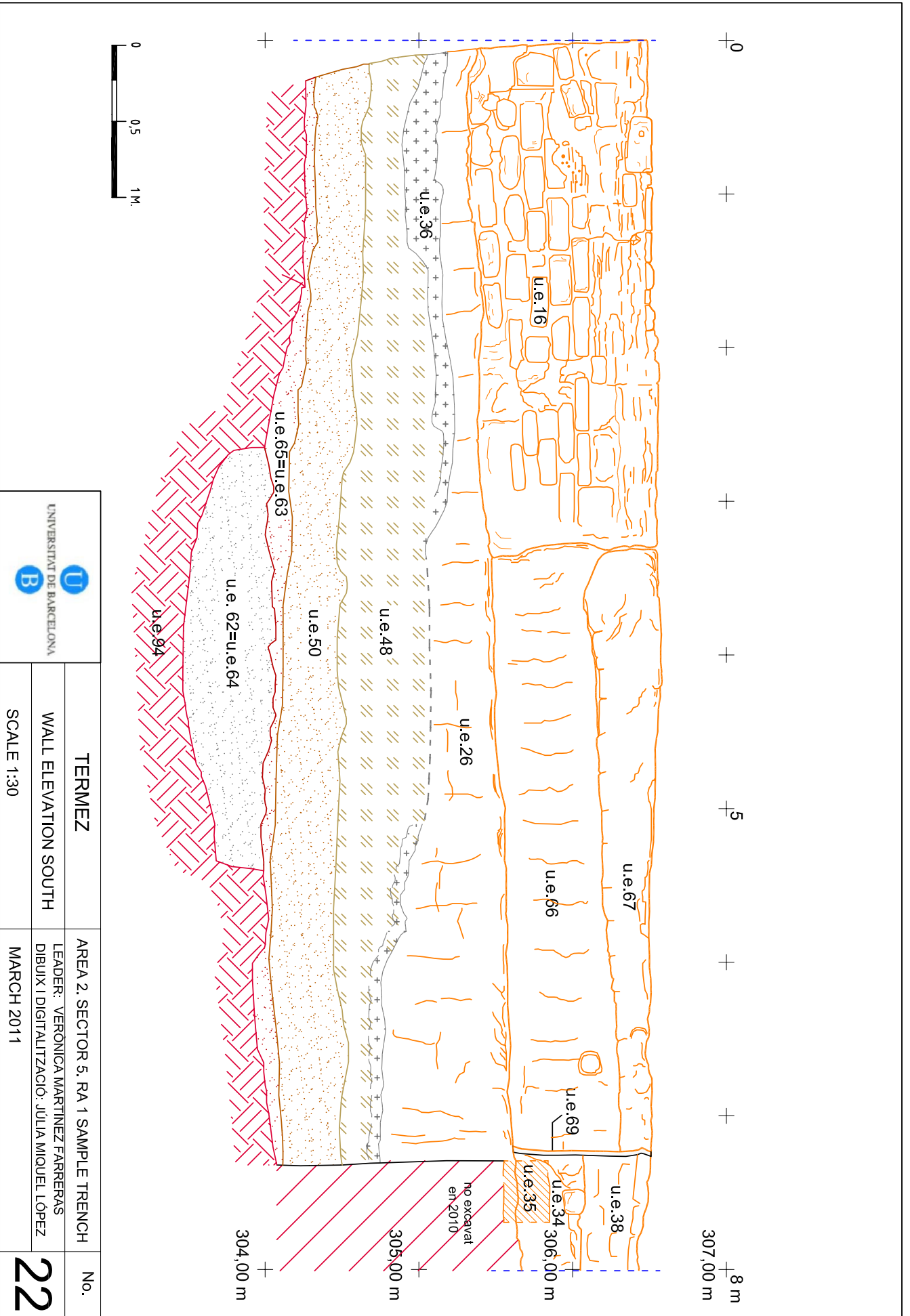
 UNIVERSITAT DE BARCELONA	TERMEZ WALL ELEVATION SU-56, SU-27, SU-33, SU-46 SCALE 1:30	AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH LEADER: VERÓNICA MARTÍNEZ FARRERAS DIBUIX I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ MARCH 2011	No. <h1>19</h1>
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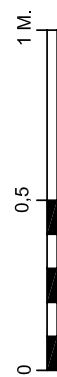
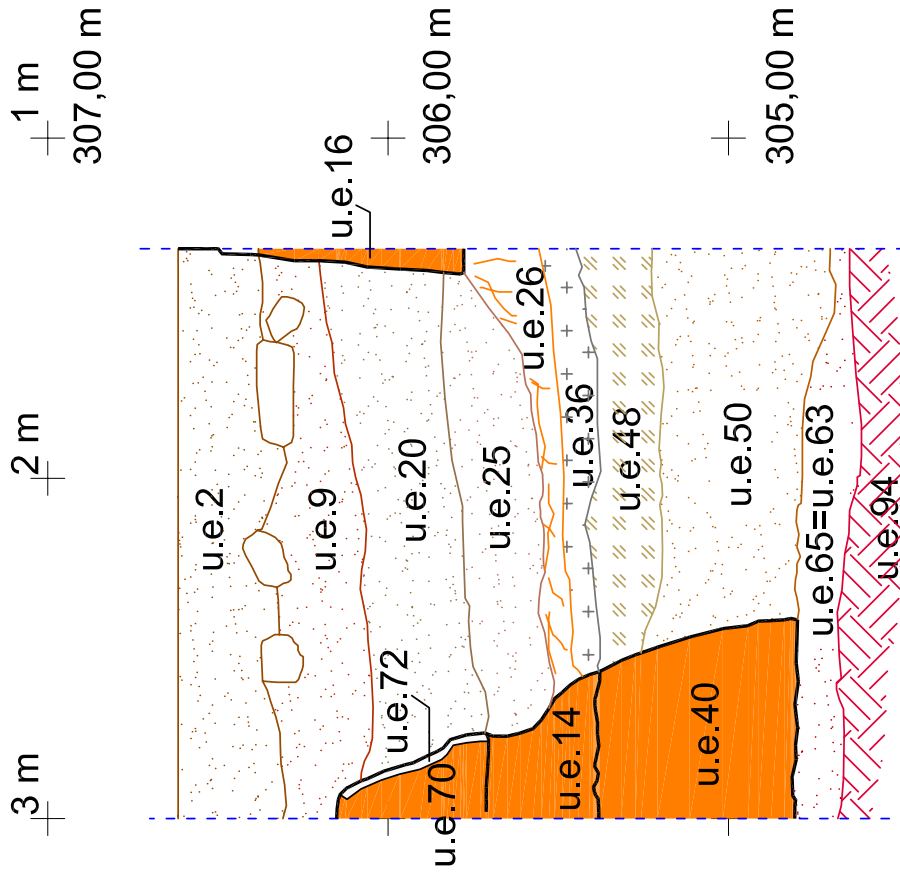
 UNIVERSITAT DE BARCELONA	TERMEZ	AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH	No.
	WALL ELEVATION SU-30, SU 31	LEADER: VERONICA MARTINEZ FARRERAS DIBUIX I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ MARCH 2011	20




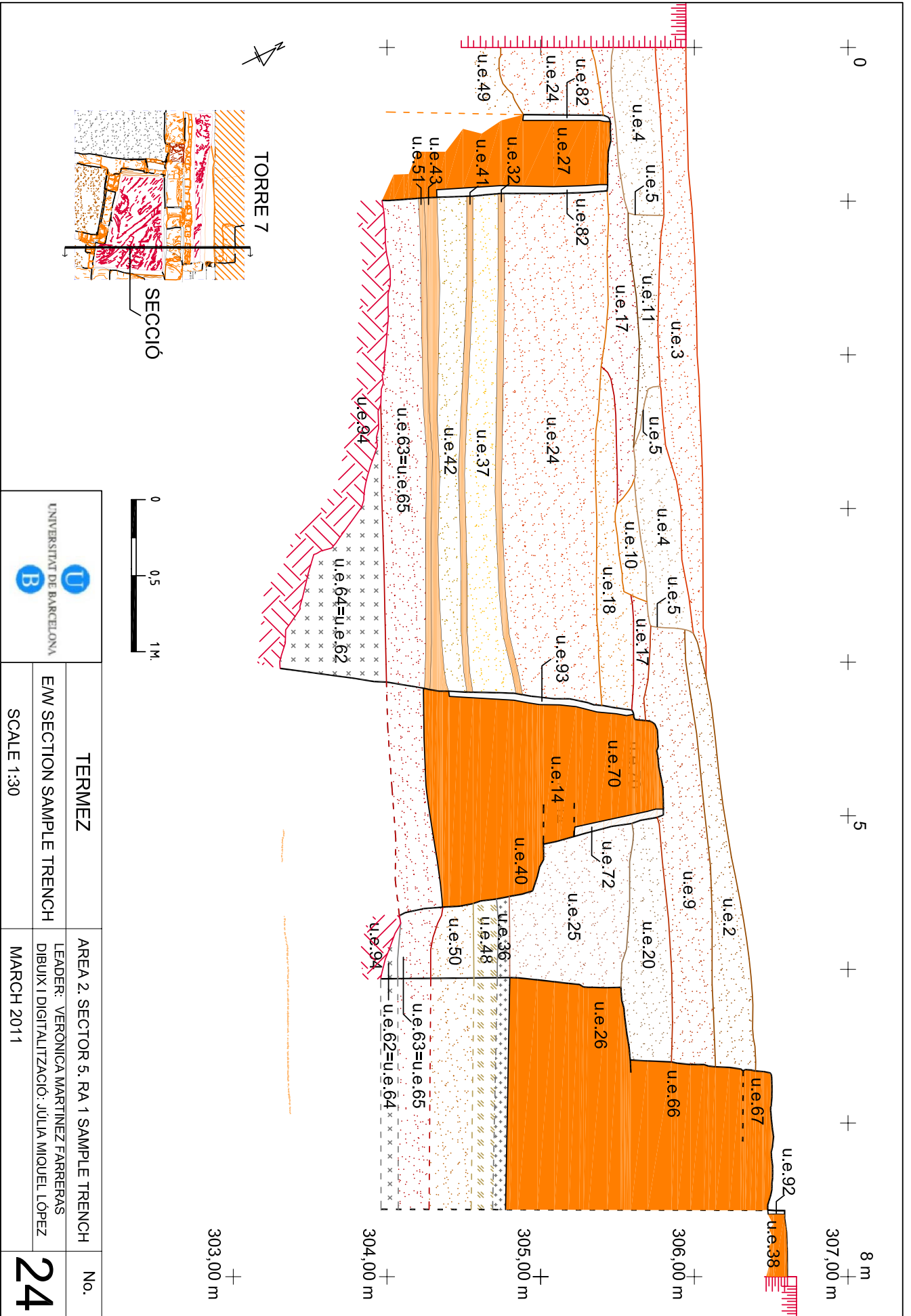
 UNIVERSITAT DE BARCELONA	TERMEZ WALL ELEVATION SU-22, SU-44 SU-73, SU-76 SCALE 1:20	AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH LEADER: VERÓNICA MARTINEZ FARRERAS DIBUIX I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ MARCH 2011	No. <h1>21</h1>
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 UNIVERSITAT DE BARCELONA	TERMEZ	AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH	No.
	WALL ELEVATION SOUTH	LEADER: VERÓNICA MARTÍNEZ FARRERAS DIBUIX I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ	
	SCALE 1:30	MARCH 2011	22



 UNIVERSITAT DE BARCELONA	TERMEZ	AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH	No.
	NORTH SECTION SCOPE RA-1	LEADER: VERÓNICA MARTÍNEZ FARRERAS DIBUIX I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ	23
SCALE 1:20	MARCH 2011		



UNIVERSITAT DE BARCELONA

TERMEZ
 E.W. SECTION SAMPLE TRENCH
 SCALE 1:30

AREA 2. SECTOR 5. RA 1 SAMPLE TRENCH
 LEADER: VERÓNICA MARTÍNEZ FARRERAS
 DIBUIX I DIGITALITZACIÓ: JÚLIA MIQUEL LÓPEZ
 MARCH 2011

No. **24**

RA1 - SU 1

Definition: Surface level of the trench.

Interpretation: Current level of circulation.

Observations: Current surface level of circulation covering the entire surface of the trench, probably formed by dragged and deposited materials. Light-brown sandy matrix with a sparse covering of vegetation. Contains pebbles, fragments of adobe bricks and limestone from ruined architectural structures, also potsherds.

Material: Slipware: 1 shapeless frag
 Common ware: 1 shaped frag., 2 shapeless frag.

Archaeologist: V. Martínez

<i>Composition</i>	sand, adobe bricks, limestone fragments
<i>Dimension</i>	64 sq m
<i>Formation</i>	natural agents
<i>Thickness</i>	10 cm
<i>Covering (Stratum)</i>	2-3

RA1 - SU 2

Definition: Level of fallen adobe bricks.

Interpretation: Collapse of a facing wall of adobe bricks that may correspond to the first fortification (SU 38) or reinforcement (SU 16 and SU 67) buttressing the interior of the first wall.

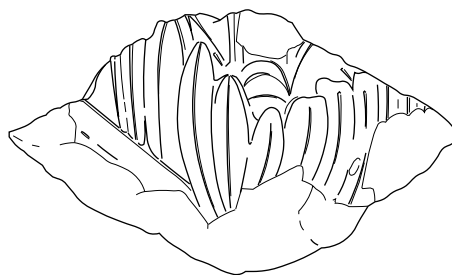
Observations: Level made up of fallen adobe fragments in a sandy clay matrix from the fortification. To a lesser extent, there are adobe fragments and fragments of sculptural relief in limestone arising from the architectural elements from the ancient town planning. This level has an east-west slope. The level lies beneath the surface level (SU 1), against the buttresses (SU 16 and SU 67) of the interior curtain wall of the fortification (SU 38). This level appears to be equivalent to SU 2 identified in sector RC, although no whole adobe brick has been recovered and it does not present such a high level of humidity, given that humidity is found at a depth farther below the surface.

Material:

Slipware:	20 shaped frags., 28 shapeless frags.
Common ware:	19 shaped frags., 110 shapeless frags.
Cooking ware:	2 shapeless frags.
Large containers:	3 shaped frags., 12 shapeless frags.
Stone building elements:	(1 fragment decorated with acanthus leaves)
Mud bricks	4 frags.
Bone:	35 frags. (62 grs.)

Archaeologist: V. Martínez

<i>Composition</i>	Fragments of adobe brick in a clay matrix
<i>Dimension</i>	
<i>Formation</i>	Natural and/or human agents
<i>Thickness</i>	Between 40-20 cm
<i>Covered by (Stratum)</i>	1-3
<i>Covering (Stratum)</i>	11-9
<i>Leaning on (Structure)</i>	16-67



0 5 cm

RA1 - SU 2



SU 2



SU 2, 6, 7, 8, 5, 10

RA1 - SU 3

Definition: Level of sand

Interpretation: Level of deposition of sand, probably formed by natural effects caused by the slope dragging and/or windborne contributions.

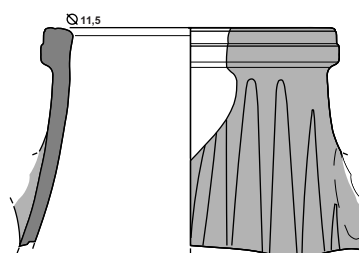
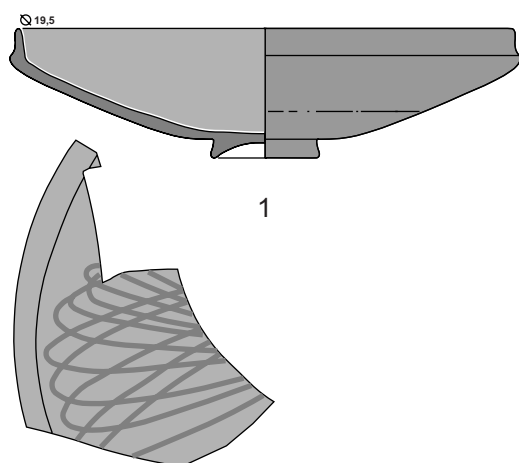
Observations: Level of grey-brown sand. The level lies below SU 1, partly covering the northwestern end of SU 2. It follows an east-west slope, presenting low thickness on the east side and greater thickness on the west side. It contains sparse pottery, most of which was recovered on the east side.

Material:

Slipware:	35 shaped frags., 55 shapeless frags.
Common ware:	43 shaped frags., 142 shapeless frags.
Cooking ware:	1 shaped frag., 6 shapeless frags.
Large containers:	3 shaped frags., 18 shapeless frags.
Channels:	(earthen pipe: 3 frags.)
Stone building elements:	(Limestone: 2 frags.)
Bone:	1 frag. (0,14 grs.)

Archaeologist: V. Martínez

<i>Composition</i>	sand
<i>Formation</i>	Natural agents. Wind action
<i>Thickness</i>	25-30cm
<i>Covered by (Stratum)</i>	1
<i>Filling (Negative)</i>	8
<i>Covering (Stratum)</i>	28-7-2-4



0 5 cm

RA1 - SU 3



SU 3, 2, 4, 5

RA1 - SU 4

Definition: Infill of modern trench

Interpretation: Level of infill of a modern military trench.

Observations: Stratum composed of yellowish sand and silt with pebbles, pottery, charcoal and modern elements of military use. It fills the negative of the trench (SU 5) and appears covered by SU 3.

Material: Common ware: 1 shapeless frag
Stone building elements: (1 fragment decorated with acanthus leaves)

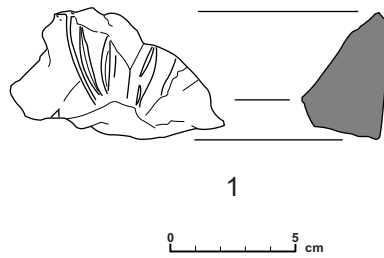
Archaeologist: V. Martínez

<i>Composition</i>	sand, gravel and remains of adobe bricks
<i>Formation</i>	Natural and human agents
<i>Thickness</i>	30-40 cm
<i>Covered by (Stratum)</i>	3
<i>Filling (Negative)</i>	5
<i>Covering (Stratum)</i>	10

RA1 - SU 4



SU 4, 5



RA1 - SU 5

Definition: Modern trench

Interpretation: Interface resulting from the excavation of a military trench with a pit at the western end.

Observations: Negative SU, running east-west on the south side of the trench. It cuts across part of the stratigraphy and is filled in by SU 4. It has a greater width in the western end of the trench.

Archaeologist: V. Martínez

<i>Composition</i>	
<i>Formation</i>	human agents
<i>Thickness</i>	30-40 cm
<i>Filled in by (Stratum)</i>	4-10
<i>Intersecting (Stratum)</i>	17-18-7-11-15-24-13
<i>Intersecting (Structure)</i>	70-27-33-55



SU 5, 10

RA1 - SU 6

Definition: Ash in a clay matrix

Interpretation: Level of organic material, vegetation in nature, charred, in a clay matrix. It could correspond to the burning of some plant element associated with the reinforcement (SU 16 and/or SU 67) of the interior curtain wall of the fortification (SU 38).

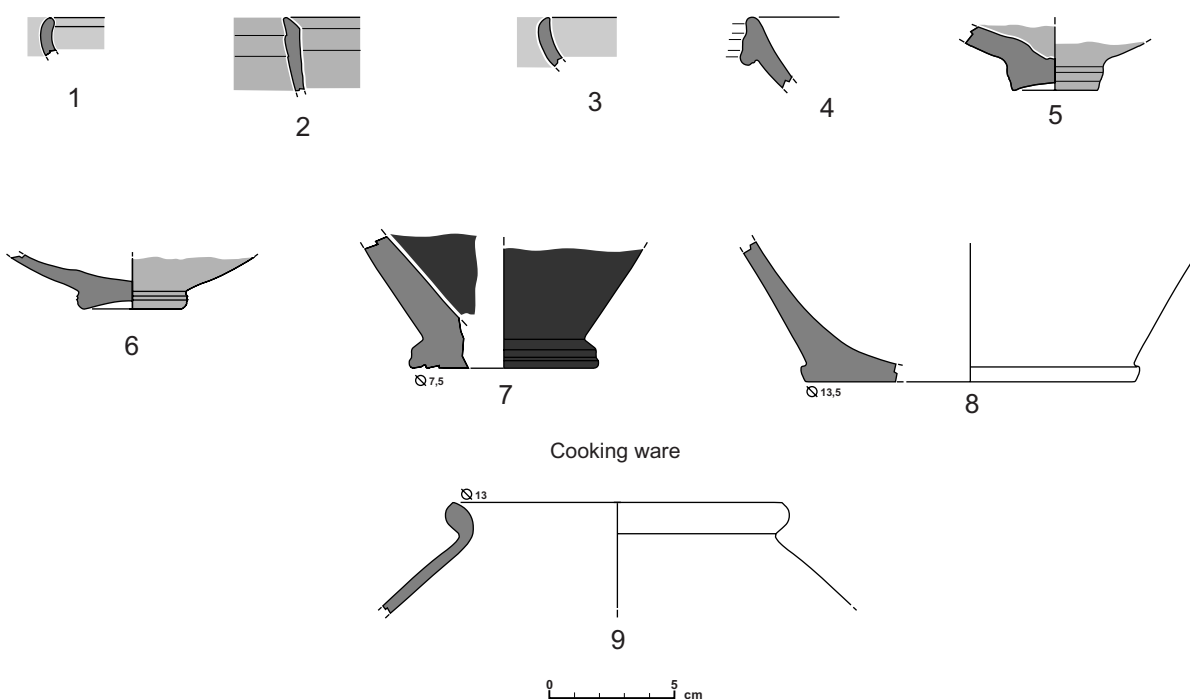
Observations: Stratum formed of ash and isolated fragments of charcoal in a clay matrix, dark-brown in colour. The stratum follows an east-west slope, showing greater thickness at its western end. SU 6 lies beneath SU 2 (on its most westerly side), beneath SU 3 in the central part of the trench and over SU 9 on the west side, disappearing before it reaches the western boundary of the trench. SU 6 is equivalent to SU 11, which lies on the south side of the trench. Both strata correspond to the same level, which was cut by SU 5 when excavating the modern military trench.

Material:

Slipware:	7 shaped frags., 10 shapeless frags.
Common ware:	20 shaped frags., 28 shapeless frags.
Cooking ware:	1 shaped frag.
Large containers:	4 shapeless frags.
Mud bricks:	1 vitrified frag.

Archaeologist: V. Martínez

<i>Composition</i>	sand, charcoal, ash
<i>Formation</i>	natural and/or human agents
<i>Thickness</i>	5-10 cm
<i>Equivalent to</i>	11



RA1 - SU 6



SU 6=11, 9, 12, 5, 10



SU 6=11, 9, 12, 5, 10

RA1 - SU 7

Definition: Deposition of sand and adobe

Interpretation: Level of deposition of sand and remains of adobe, probably formed by natural effects caused by slope dragging and/or windborne contributions.

Observations: Stratum of sand and remains of crumbling adobe bricks, light-brown in colour, lying on the western side of trench RA, beneath SU 3 and over SU 6. It appears cut by the modern military trench (SU 5).

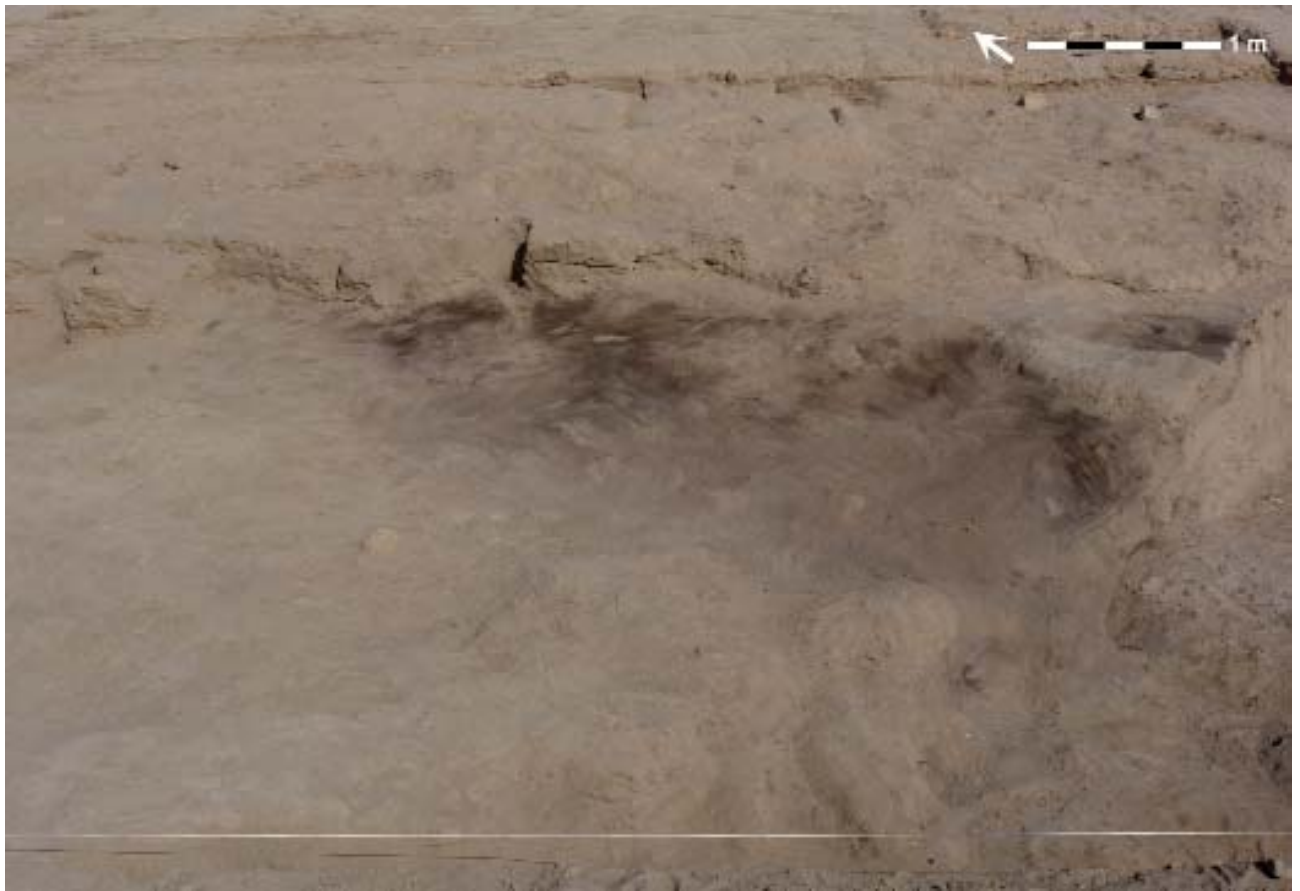
Material:

- Slipware: 6 shaped frags., 25 shapeless frags.
- Common ware: 9 shaped frags., 50 shapeless frags.
- Cooking ware: 1 shaped frag., 2 shapeless frags.
- Channels: (earthen pipe: 2 frags.)
- Stone building elements: (Limestone: 2 frags.)
- Bone: 12 frag. (43 grs.)
- Metal: 2 shapeless frags. of bronze

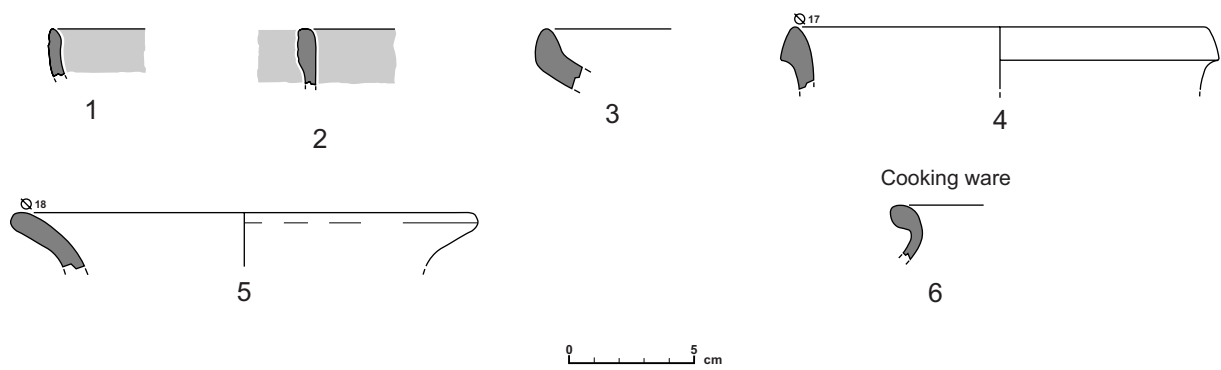
Archaeologist: V. Martínez

<i>Composition</i>	adobe brick in a sandy clay matrix
<i>Formation</i>	natural and/or human agents
<i>Thickness</i>	5-10 cm
<i>Covered by (Stratum)</i>	3
<i>Intersected by (Negative)</i>	8-5
<i>Covering (Stratum)</i>	11

RA1 - SU 7



SU 7, 6, 2



RA1 - SU 8

Definition: Negative

Interpretation: The interpretation of this negative unit cannot be determined at the present time.

Observations: Negative SU, rectangular in shape, excavated in a surface measuring 1.90 cm long by 60/80 cm wide, although it extends beyond the northern and western boundaries of the trench. It intersects SU 7 and is filled in by sand from SU 3.

Archaeologist: V. Martínez

<i>Composition</i>	
<i>Dimension</i>	1.90 cm long, 60-80 cm wide
<i>Formation</i>	human origin
<i>Thickness</i>	15 cm
<i>Filled in by (Stratum)</i>	3
<i>Intersecting (Stratum)</i>	7



SU 8, 14, 17, 70

RA1 - SU 9

Definition: Level of fallen adobe bricks

Interpretation: Collapse of a facing wall of adobe bricks that may correspond to the first fortification (SU 38) or the interior reinforcement (SU 16 or second fortification) supporting the interior of the first wall.

Observations: Level made up of adobe fragments from the fortification, highly decomposed and mixed with a sandy clay matrix. It appears to adjoin the inner facing of the second interior wall or reinforcement of the fortification (SU 16 and SU 67), beneath SU 2 and SU 6. This level is equivalent to SU 15 that lies on the south side. The two levels appear to have been cut by the military trench (SU 5). There were elements used in architectural decoration, carved with reliefs, possibly from a pilaster or cornice, as well as potsherds, bone and charcoal.

Material:

- Slipware: 21 shaped frags., 35 shapeless frags.
- Common ware: 10 shaped frags., 64 shapeless frags.
- Cooking ware: 3 shapeless frags.
- Large containers: 1 shapeless frag.
- Channels: (earthen pipe: 2 frags.)
- Stone building elements: (Limestone: 1 frag., pilaster or cornice decorated with reliefs: 1 frag.)
- Mud bricks: 2 frags.
- Bone: 19 frag. (43 grs.)
- Metal: 3 frags. of an iron needle (same specimen)

<i>Composition</i>	Fragments of adobe brick in a clay matrix
<i>Formation</i>	Natural and/or human agents
<i>Thickness</i>	30 cm
<i>Covered by (Stratum)</i>	11-2
<i>Covering (Stratum)</i>	20-15
<i>Covering (Structure)</i>	35-70-34
<i>Leaning on (Structure)</i>	66-16

RA1 - SU 9

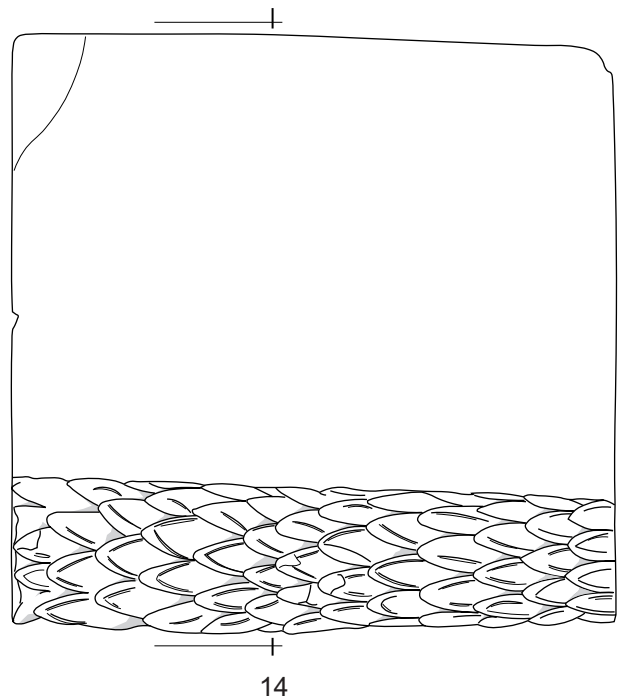
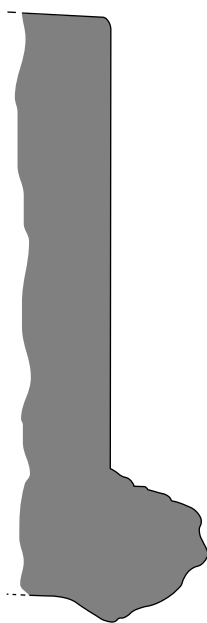
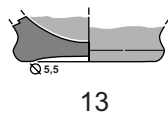
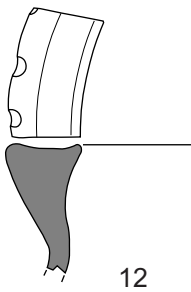
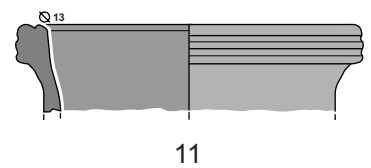
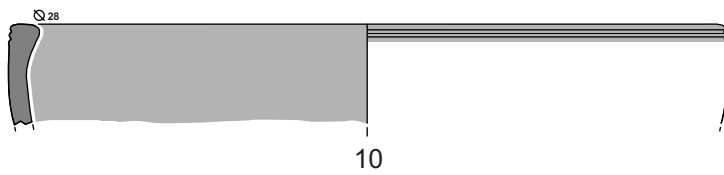
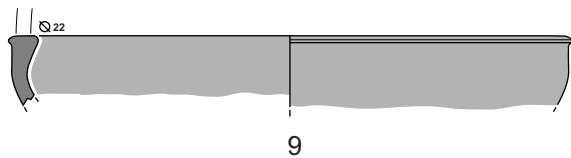
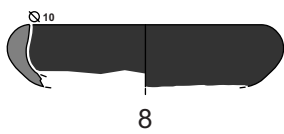
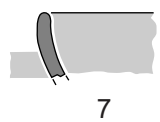
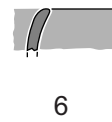
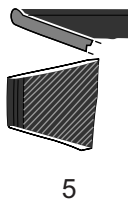
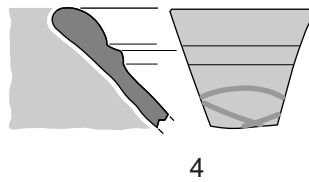
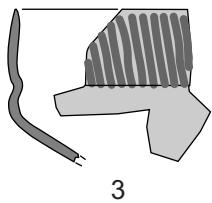
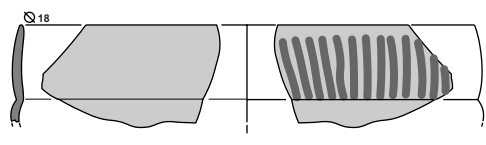
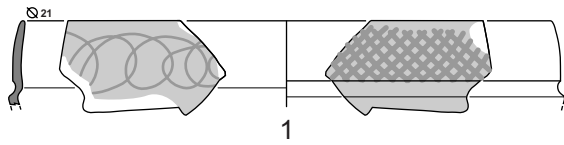


SU 9, 12, 13, 10, 16, 22, 23, 8



SU 9 pilaster

RA1- SU 9



0 5 cm

RA1 - SU 10

Definition: Level of circulation in interior of military trench

Interpretation: Level of circulation in interior of military trench (SU 5).

Observations: Level of light-brown silt of little thickness, lying in the modern military trench (SU 5), beneath SU 4. It has a crust on the surface indicating that it has been exposed for some time.

Material: Slipware: 2 shaped frags.
Common ware: 8 shapeless frags.

Archaeologist: V. Martínez

<i>Composition</i>	sand
<i>Formation</i>	human and/or natural agents
<i>Thickness</i>	5-10 cm
<i>Covered by (Stratum)</i>	4
<i>Filling (Negative)</i>	5



SU 10, 5, 67, 9, 6=11

RA1 - SU 11

Definition: Ash in a sand matrix

Interpretation: Level of charred organic material, vegetation, that could correspond to the destruction of some plant element associated with the curtain wall of the fortification.

Observations: Stratum form of ash and isolated fragments of charcoal in a sand matrix, dark brown in colour, lying in the southern end of the trench. It slopes east-west, showing greater thickness in the western end of the trench. It lies beneath SU 3 and beneath SU 2 (on its most westerly side). SU 11 is equivalent to SU 6, which lies on the north and central side of the trench. Both strata correspond to the same level, which was intersected by SU 5. Because there is no contact between the two levels, they have been identified as two equivalent stratigraphic units.

Material:
 Slipware: 3 shapeless frags.
 Common ware: 2 shaped frags., 1 shapeless frag.
 Large containers: 1 shapeless frag.

Archaeologist: V. Martínez

<i>Composition</i>	sand, charcoal, ash
<i>Formation</i>	natural and/or human agents
<i>Thickness</i>	5 cm
<i>Intersected by (Negative)</i>	5
<i>Covered by (Stratum)</i>	7-2
<i>Equivalent to</i>	6
<i>Covering (Stratum)</i>	9-15
<i>Covering (Structure)</i>	70

RA1 - SU 12

Definition: Level of sand

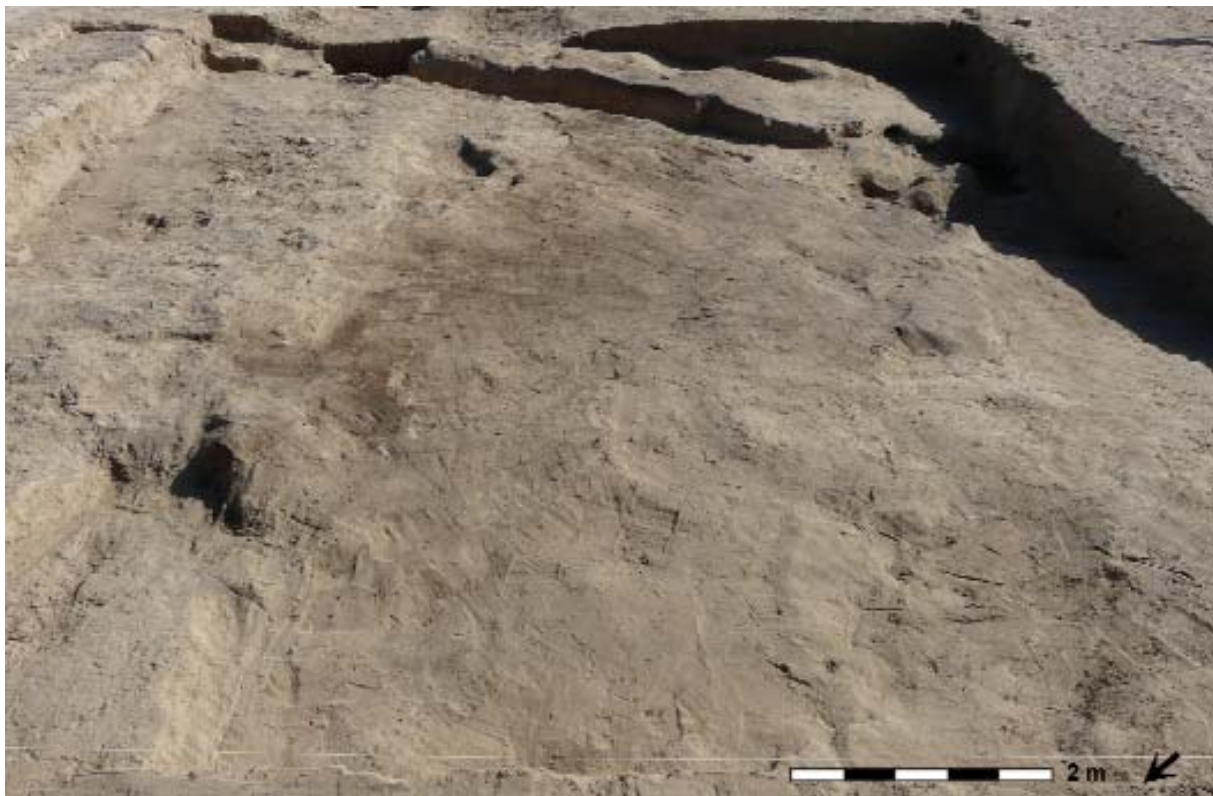
Interpretation: Level of deposition of sand and adobe remains, probably formed by natural effects caused by slope dragging and/or wind action, together with remains of the destruction of nearby adobe structures, arising certainly from abandonment.

Observations: Level of light-brown sand with remains of decomposed adobe bricks, covered by the stratum of ash and charcoal (SU 6) and covering SU 9 only on its western side. SU 12 covers structures SU 22, SU 73 and SU 76. SU 12 is equivalent to SU 15, which lies to the south of the modern military trench (SU 5)

Material: Slipware: 1 shapeless frags.
Common ware: 1 shaped frags.

Archaeologist: Oriol Achón

<i>Composition</i>	sand
<i>Formation</i>	natural and/or human agents
<i>Thickness</i>	5 cm
<i>Equivalent to</i>	15



SU 12, 9, 6, 11, 5, 10

RA1 - SU 13

Definition: Ash in a sand matrix

Interpretation: Level of destruction of a structure composed of organic material (possibly a roof).

Observations: Level of charred organic material in a sand matrix, grey-dark brown in colour, lying in the north-central part of the trench under SU 9 and SU 13. It adjoins the lime cladding (SU 72) and wall painting (SU 93) of structure SU 70 and the lime cladding and wall painting (SU 75) of structures SU 22, SU 73 and SU 76. Presence of pottery and a small bronze coin.

Material:

Slipware:	6 shaped frags., 13 shapeless frags.
Common ware:	5 shaped frags., 15 shapeless frags.
Common ware:	1 shapeless frag.
Large containers:	1 shaped frag., 5 shapeless frags.
Mud bricks:	1 frag.
Bone:	1 frag. (1 gr.)
Other:	1 vitrified frag.

Archaeologist: V. Martínez

<i>Composition</i>	adobe bricks, sand, charcoal, ash
<i>Formation</i>	natural and/or human agents
<i>Thickness</i>	10 cm
<i>Intersected by (Negative)</i>	5
<i>Covered by (Stratum)</i>	15
<i>Covering (Stratum)</i>	17
<i>Leaning on (Structure)</i>	75-93-72

RA1 - SU 13



SU 13, 17, 70, 8, 9, 10, 16

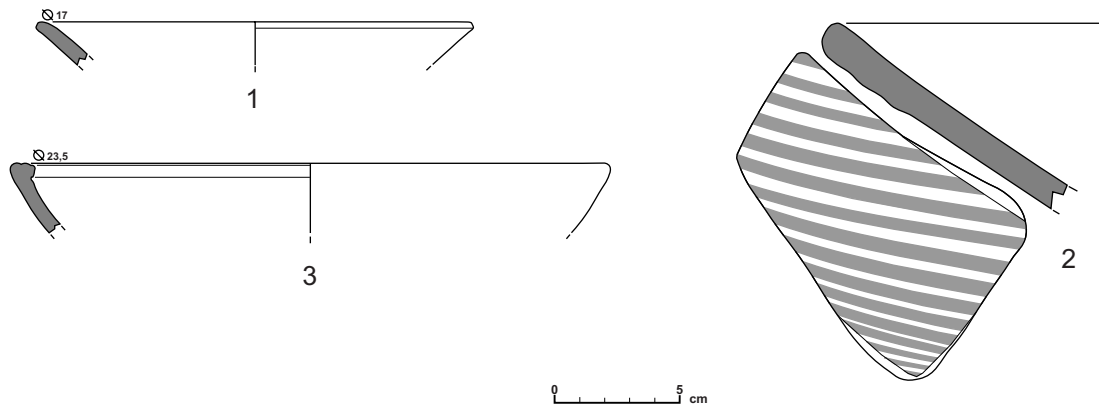


SU 13, 17, 70, 9, 10, 16, 67

RA1 - SU 13



SU 13, 17, 70, 9, 10, 16, 67, 38



RA1 - SU 14

Definition: Pakhsa (cob) wall

Interpretation: Large wall running parallel to the inner facing of the fortification SU 38. Given its size and its disposition parallel to the fortification at other points of Tchingiz Tepe, it must be an important structure in the town's design. It defines a narrow (50-100 cm) space between the fortification reinforcement and wall SU 14 (sector RA1). In addition, structure SU 14 bounds several rooms.

Observations: Built structure using the pakhsa (cob) technique combining levels of clay matrix and sand matrix. It runs north-south on the east side of the trench, parallel to the reinforcement (SU 16, SU 66 and SU 67) of the eastern facing of the fortification (SU 38) of Tchingiz Tepe. The structure has been documented in the 8m of trench RA1, built over a previous wall (SU 40), although it has been identified at other points of the northern sector of Tchingiz Tepe following the same line and orientation. Resting lengthwise on structure SU 14 is structure SU 70, which has the same orientation, but less width. On its western façade, structure SU 14 has a lime cladding (SU 72) and pink pictorial plasterwork (SU 93), which is the same cladding that appears on the western façade of the superimposed wall SU 70. As a result, it is impossible to distinguish the interface between the two structures on this façade. Only on the western façade is it possible to make out the stratigraphy of the levels adjoining both structures, because wall SU 14 is not clad and the superimposed wall (SU 70) can be clearly differentiated, because SU 70 does have lime cladding. On the eastern façade, two levels (SU 25 and SU 26) are adjoining and may have functioned with the level of circulation SU 36 in sector 1. Other levels have also been documented against the western façade of wall SU 14.

Archaeologist: V. Martínez

<i>Composition</i>	pakhsa (cob)
<i>Dimension</i>	8m long, 96 cm wide, 10-38 cm high
<i>Formation</i>	human origins
<i>Supporting (Stratum)</i>	24-25-36
<i>Abutted by (Structure)</i>	35-68
<i>Rested on by (Structure)</i>	70-87-45-72
<i>Intersected by (Negative)</i>	58
<i>Resting on (Structure)</i>	40



SU 14, 70, 40

RA1 - SU 15

Definition: Level of sand

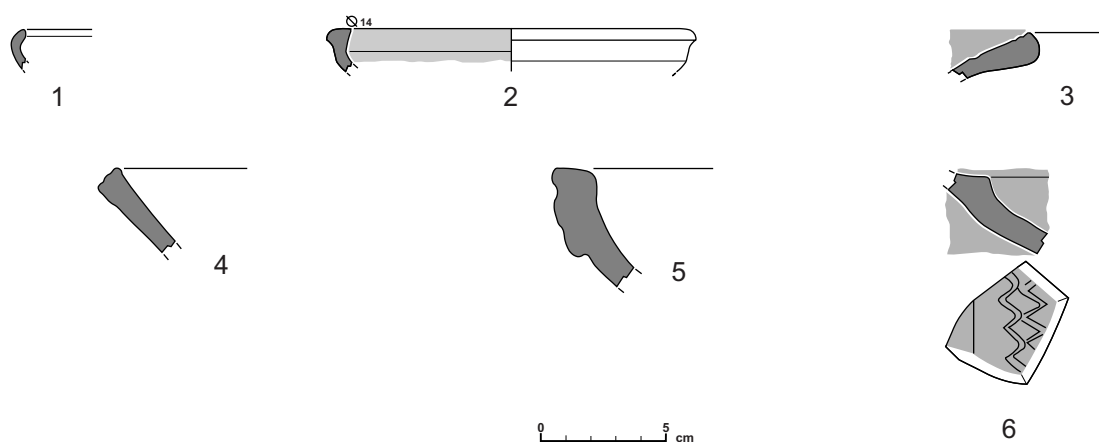
Interpretation: Collapse of a wall of adobe bricks (SU 16) or of the first fortification.

Observations: Level made up of sand and fragments of decomposed adobe from nearby architectural elements. This level is equivalent to SU 12, but it lies on the south side of the modern military trench (SU 5) beneath SU 11.

Material:
 Slipware: 5 shaped frags., 12 shapeless frags.
 Common ware: 9 shaped frags., 21 shapeless frags.
 Mud bricks: 1 frag.

Archaeologist: Oriol Achón

<i>Composition</i>	sand and adobe fragments
<i>Formation</i>	natural and/or human agents
<i>Thickness</i>	5-10 cm
<i>Intersected by (Negative)</i>	5
<i>Covered by (Stratum)</i>	9-11
<i>Equivalent to</i>	12
<i>Covering (Stratum)</i>	
<i>Leaning on (Structure)</i>	73-22-76



RA1 - SU 16

Definition: Adobe fortification wall

Interpretation: Adobe wall attached to the interior facing of the fortification of Tchingiz Tepe in front of tower 7. It may have functioned as interior reinforcement of the first fortification.

Observations: Structure built of adobe, situated on the northeast side of sector 1 of the trench RA1. The wall has eight courses of adobe bricks fixed to a sand base. In the space that defines the trench RA, this structure has a length of 3.30m, a visible width of 1.40m and a thickness of 1.20m. It has been built over the structure of pakhsa (cob) SU 26 and, on its south side, is attached to the structure of pakhsa (cob) SU 66 and the adobe structure SU 67 that lies over SU 66.

Archaeologist: V. Martínez

<i>Composition</i>	adobe bricks
<i>Dimension</i>	3.30m long, 1.40m wide, 1.20m high
<i>Formation</i>	human origins
<i>Supporting (Stratum)</i>	25-20-9-2
<i>Abutted by (Structure)</i>	67-66
<i>Resting on (Structure)</i>	26
<i>Adjoins (Structure)</i>	92



SU 16, 94, 66, 67

RA1 - SU 17

Definition: Level of compact sand

Interpretation: Possible level of collapse of prior adjoining structures together with sand contributed by wind action.

Observations: Stratum made up for sand and silt, highly compact and hardened, running toward the west from wall SU 14 to near the western end of the trench. It is covered by the level of ash SU 13 in the north-central part of the trench and it is covered by SU 15 on the south side (to the south of the modern military trench SU 5), where it is partly cut the modern military trench. Toward the southwestern end, it covers a number of structures (SU 27, SU 29, SU 30 and SU 31) and stratum SU 18. Toward the central part of the trench, it covers stratum SU 19 and adjoins the wall cladding SU 72 and SU 93 of structure SU 70 and the wall cladding SU 75 of structures SU 22, SU 73 and SU 76. At the northern end, it covers levels SU 21 and SU 23. Presence of pottery and charcoal.

Material:

Slipware:	9 shaped frags., 40 shapeless frags.
Common ware:	10 shaped frags., 75 shapeless frags.
Cooking ware:	1 shaped frag., 2 shapeless frags.
Large containers:	10 shapeless frags.
Mud bricks:	1 frag.
Bone:	21 frags. (64 grs.)
Other:	Blue glass disk, 6 mm in diameter A bronze coin

Archaeologist: V. Martínez

<i>Composition</i>	sand
<i>Formation</i>	natural and/or human agents
<i>Thickness</i>	5-10 cm
<i>Intersected by (Negative)</i>	5
<i>Covered by (Stratum)</i>	15-13
<i>Covering (Stratum)</i>	19-23-18-21
<i>Covering (Structure)</i>	30-27-29-31
<i>Leaning on (Structure)</i>	93-72-75-74

RA1 - SU 17

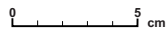
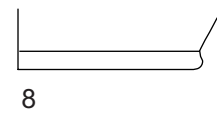
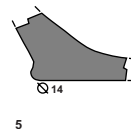
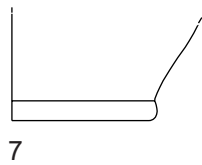
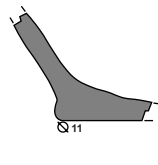
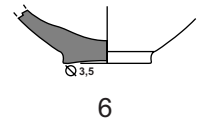
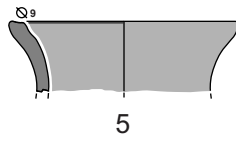
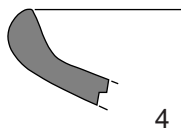
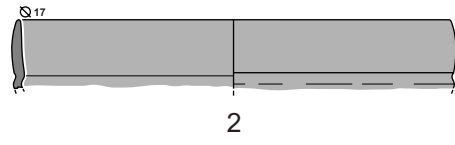
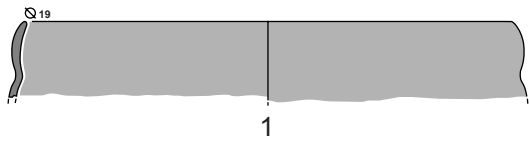


SU 17, 70



SU 17, 70b

RA1- SU 17



RA1 - SU 18

Definition: Silt with lime

Interpretation: The presence of remains from adobe structures and lime cladding indicate that this level corresponds to the destruction of dwelling structures.

Observations: Level of yellowish sand and silt with white patches of lime, more abundant in the lower depths of the level, and some isolated concentrations of ash. SU 18 lies in the south-central part of the trench beneath SU 17 and it is covered by the level of charcoal SU 19 in the northern end of the stratum. It slopes east-west. It lies against the lime cladding (SU 72) and wall painting (SU 93) of structure SU 93 and lime cladding (SU 90) of structure SU 31. Contains pottery and bone.

Material:

Slipware:	10 shaped frags., 13 shapeless frags.
Common ware:	5 shaped frags., 44 shapeless frags.
Large containers:	10 shapeless frags.
Mud bricks:	3 frags.
Bone:	32 frags. (120 grs.)

Archaeologist: V. Martínez

<i>Composition</i>	silt and lime remains
<i>Formation</i>	natural and/or human agents
<i>Thickness</i>	5-10 cm
<i>Intersected by (Negative)</i>	5
<i>Covered by (Stratum)</i>	19-21-17
<i>Covering (Stratum)</i>	23-24
<i>Leaning on (Structure)</i>	75-74-93-72-90

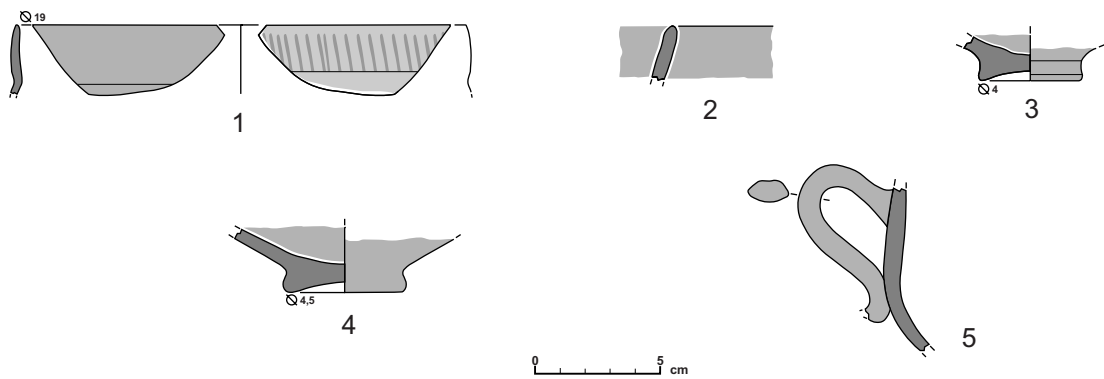
RA1 - SU 18



UE 18, 19, 70, 21, 22, 23



UE 18, 22, 23, 70, 16b



RA1 - SU 19

Definition: Ash and charcoal in a sand matrix

Interpretation: Level of destruction of a structure composed of organic material (possibly a roof)

Observations: Level of charcoal, ash and remains of organic material, grey-dark brown in colour, lying in the central part of the trench, beneath SU 17. It adjoins the lime cladding (SU 72) and wall painting (SU 93) of structure SU 70, covering part of the sediment that fills in the northern opening of this wall (SU 87). Toward the south of this level, it covers stratum SU 18 and, toward the north, it abuts structure SU 22. It slopes east-west. Presence of pottery and a small bronze coin.

Material:

Slipware:	3 shaped frags., 7 shapeless frags.
Common ware:	1 shaped frags., 11 shapeless frags.
Cooking ware:	1 shapeless frag.
Mud bricks:	1 frag.
Bone:	1 frags. (2 grs.)

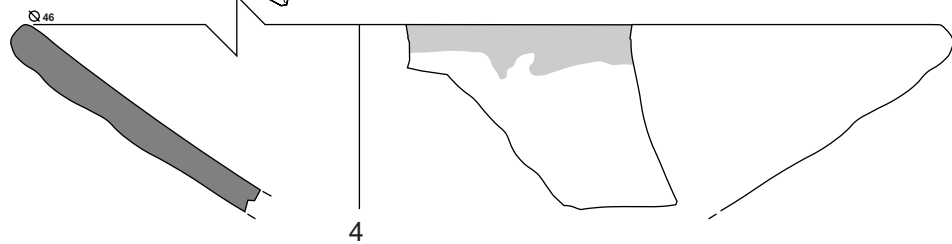
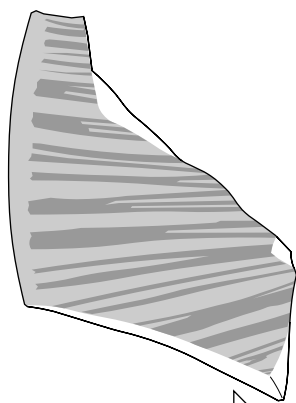
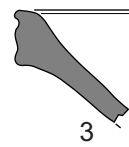
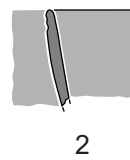
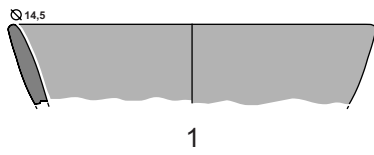
Archaeologist: V. Martínez

<i>Composition</i>	sand and charcoal
<i>Formation</i>	natural and/or human agents
<i>Thickness</i>	10-20 cm
<i>Covered by (Stratum)</i>	17
<i>Covering (Stratum)</i>	21-18
<i>Leaning on (Structure)</i>	70-22

RA1 - SU 19



SU 19, 18, 70, 21, 22, 23



RA1 - SU 20

Definition: Level of sand and clay

Interpretation: Level of abandonment produced by the gradual destruction and sedimentation of remains largely from the reinforcement of the fortification wall.

Observations: Heterogeneous level made up of fine layers, some sandier and others more clayey, running from the buttressing of the fortification (SU 16 and SU 66) to structure SU 70 on the east side of the trench and filling in the northern entrance to SU 70. Covered by SU 9.

Material:

Slipware:	18 shaped frags., 75 shapeless frags.
Common ware:	17 shaped frags., 52 shapeless frags.
Cooking ware:	5 shapeless frag.
Mud bricks:	2 frags.
Bone:	39 frags. (135 grs.)

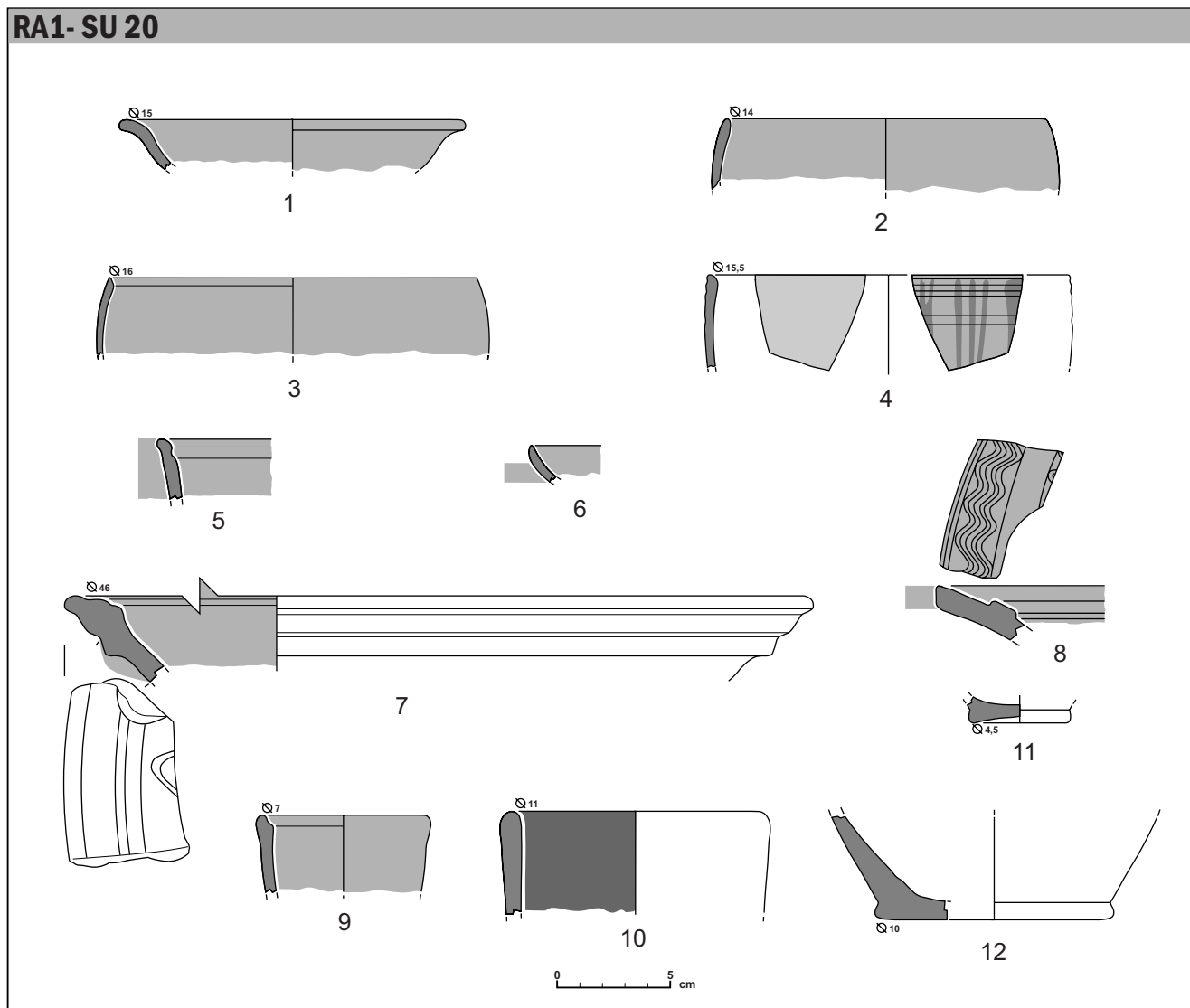
Archaeologist: V. Martínez

<i>Composition</i>	sand and clay
<i>Formation</i>	natural and/or human origins
<i>Thickness</i>	30-36 cm
<i>Covered by (Stratum)</i>	9
<i>Covering (Stratum)</i>	25
<i>Leaning on (Structure)</i>	16-70-66-35

RA1 - SU 20



SU 20, 34, 35, 70, 18, 19



RA1 - SU 21

Definition: Level of broken adobe bricks

Interpretation: Level of abandonment produced by the gradual destruction and sedimentation of remains from adjacent structures.

Observations: Level made up of fragments of broken adobe bricks, in a sandy clay matrix, reddish-brown in colour. It runs from the contiguous walls SU 22 and SU 76, to which it is attached, to the northern boundary of the trench. It is covered by SU 17 and partly covers SU 23 and SU 18.

Material:

Slipware:	4 shaped frags., 15 shapeless frags.
Common ware:	6 shaped frags., 31 shapeless frags.
Cooking ware:	2 shapeless frags.
Bone:	2 frags. (4 grs.)

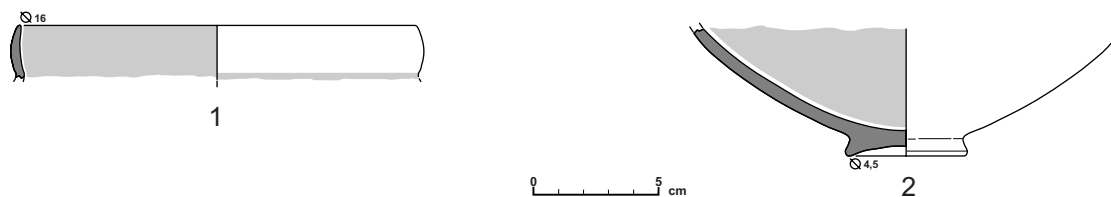
Archaeologist: V. Martínez

<i>Composition</i>	adobe bricks in a sandy clay matrix
<i>Formation</i>	natural and/or human agents
<i>Thickness</i>	5-10 cm
<i>Covered by (Stratum)</i>	17-19
<i>Covering (Stratum)</i>	32-18
<i>Leaning on (Structure)</i>	72-93-74-22



SU 21, 14, 5

RA1 - SU 21



RA1 - SU 22

Definition: Plaster wall

Interpretation: Wall defining sector 2 of the trench on the north. Subsequently, various structures were attached to it, defining sector 2 on the west, as well as new areas.

Observations: Structure running east-west, situated on the north side of the trench, built of pakhsa (cob). It has white lime cladding with remains of pink paint (SU 75) on its southern façade. It is covered by SU 12, and abutted by the levels of abandonment-destruction SU 13, SU 17, SU 18, SU 21, SU 23 and SU 24, the floors SU 32 and SU 41 and the levels of destruction and preparation of floors SU 37 and SU 42. The visible plasterwork (SU 75) on the southern façade of wall SU 22 functioned with the floor SU 43, although the wall SU 22 was already built when the floor SU 51 beneath SU 43 was in use. However, no remains of surface cladding are extant. SU 22 also has white lime cladding (SU 74) on its northern façade. It was built directly on level SU 63, similarly to the walls that define room 2 of trench RA1. The total stratigraphic sequence against wall SU 22 on its northern façade is not known, because the excavation at this point of the trench has been partial and has affected only several strata of destruction and abandonment. Of these, SU 12, 13, 17, 19, 18 and 24 cover both sides of the wall, while SU 21 and SU 23 only adjoin the northern façade of wall SU 22. Lastly, it is abutted by three structures that do not appear to be contemporary in time. On its western face, it is abutted by wall SU 76, which is of equal width and shares the same cladding. On the east, it is abutted by the adobe wall SU 44, with which it shares the same cladding on the northern façade (SU 74) and on the southern façade (SU 75), while on the southern façade it supports the wall SU 73, with which it also shares surface cladding (SU 75).

Archaeologist: V. Martínez

<i>Composition</i>	sand and clay
<i>Dimensiones</i>	2.10m long, 0.30-0.40m wide, 1.46m high
<i>Formation</i>	human origins
<i>Covered by (Stratum)</i>	15
<i>Supporting (Stratum)</i>	21-19-51
<i>Abutted by (Structure)</i>	44-73-76
<i>Rested on by (Structure)</i>	75-74
<i>Resting on (Stratum)</i>	65

RA1 - SU 22



SU 22, 44, 75

RA1 - SU 23

Definition: Level of sand and charcoal

Interpretation: This is possibly a level of sporadic use, where pottery and charcoal from a fire were discarded and later covered and mixed with a thick level of sand probably formed by natural agents carried by the wind.

Observations: Stratum of sand lying at the northwest end of the trench. It is covered by SU 17 at the northwest end and by SU 21 at its eastern end. It adjoins structure SU 22 and is intersected by SU 8.

Material:

Slipware:	16 shaped frags., 30 shapeless frags.
Common ware:	5 shaped frags., 25 shapeless frags.
Cooking ware:	1 shaped frag., 4 shapeless frags.
Large containers:	1 shaped frag., 10 shapeless frags.
Bone:	21 frags. (70 grs.)
Other:	Frag. of bronze plate, very fine, 1+0.5 cm

Archaeologist: V. Martínez

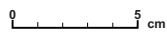
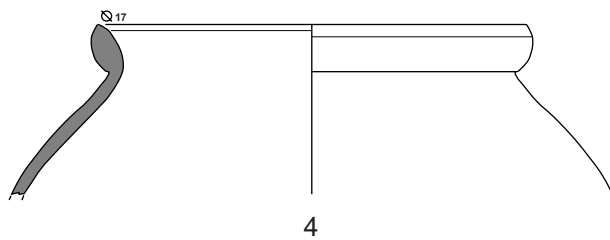
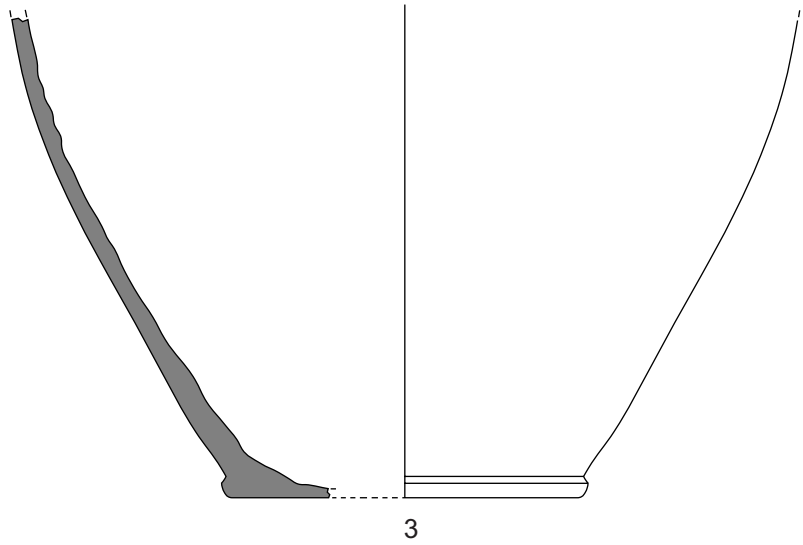
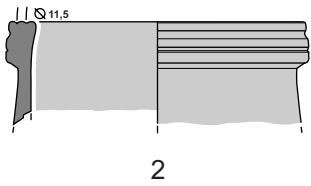
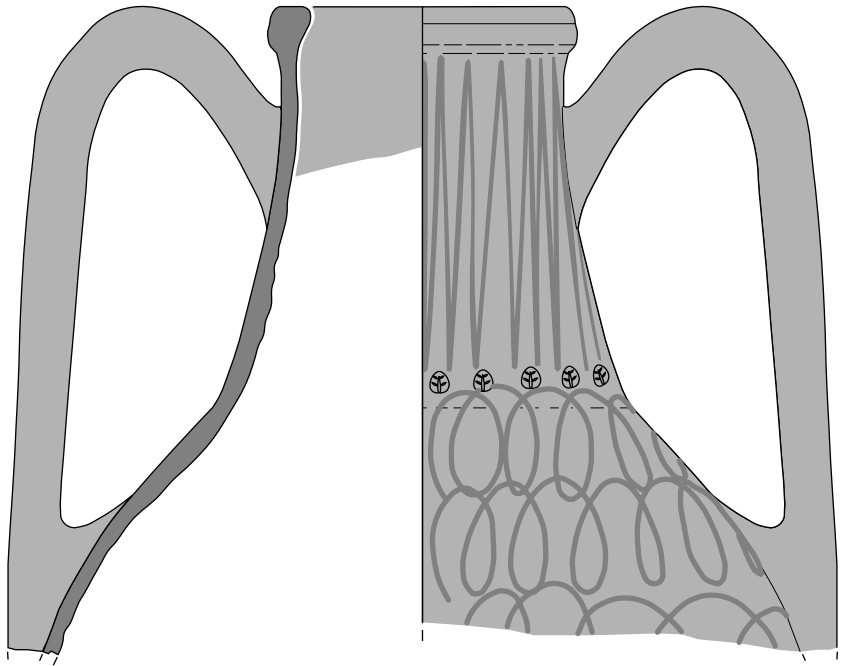
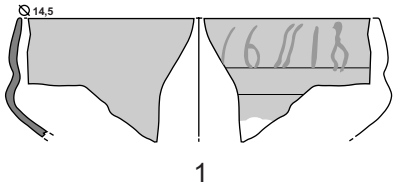
<i>Composition</i>	sand, charcoal
<i>Formation</i>	natural
<i>Thickness</i>	20-40 cm
<i>Covered by (Stratum)</i>	17-21-18
<i>Covering (Stratum)</i>	39
<i>Leaning on (Structure)</i>	74

RA1 - SU 23



SU 23, 24, 22

RA1- SU 23



RA1 - SU 24

Definition: Level of fallen adobe bricks and lime cladding

Interpretation: Thick level of collapse of adjacent adobe structures.

Observations: Level of fallen adobe bricks, largely fragmented or decomposed, reddish-brown in colour. It is covered by SU 18 and SU 43. It adjoins the lime cladding (SU 72) and paint (SU 93) of wall SU 70, fills in the northern and southern openings of wall SU 14, and leans on the levels of infill from these two openings (SU 87 and SU 45, respectively). It abuts the cladding (SU 82) of wall SU 27, as well as the cladding SU 90 of wall SU 31, SU 89 of wall SU 30 and SU 84 of wall SU 29.

Material:

Slipware:	30 shaped frags., 51 shapeless frags.
Common ware:	29 shaped frags., 90 shapeless frags.
Cooking ware:	2 shaped frags.
Large containers:	5 shaped frags., 31 shapeless frags.
Channels:	(earthen pipe: 5 frags.)
Stone building elements:	(Limestone: 2 frags.)
Mud bricks:	1 frag.
Bone:	1 frag. (1 gr.)
Other:	1 frag. vitrified slag
	1 whole stopper of coarse paste

Archaeologist: V. Martínez

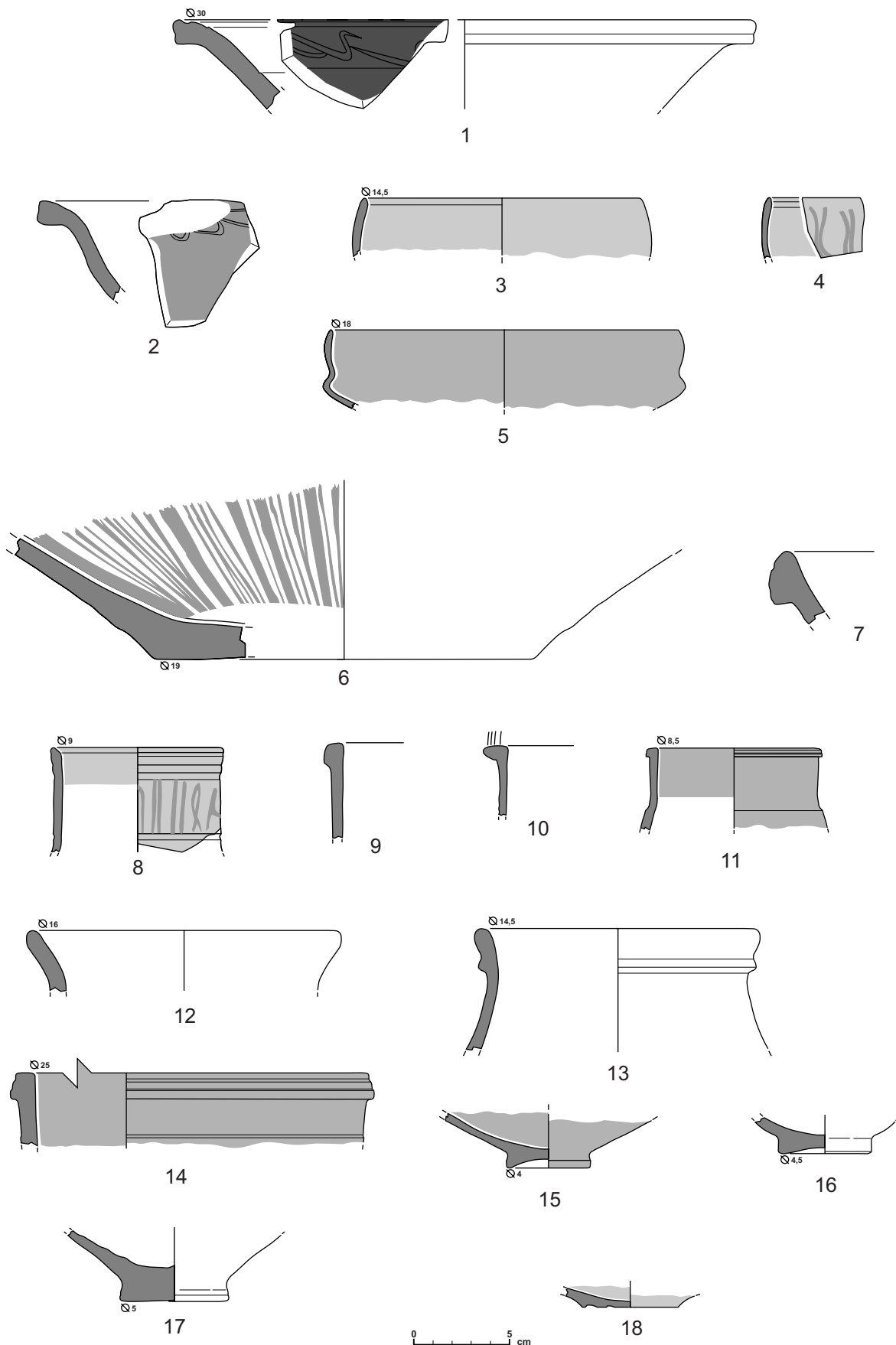
<i>Composition</i>	adobe bricks in a sandy clay matrix
<i>Formation</i>	natural and/or human agents
<i>Thickness</i>	50-80 cm
<i>Intersected by (Negative)</i>	5
<i>Covered by (Stratum)</i>	47-18
<i>Covering (Stratum)</i>	32-49
<i>Covering (Structure)</i>	33-82-87-81-56-55-44-45-46
<i>Leaning on (Structure)</i>	84-70-75-14-29-88-74-80-93-89-72-90-78

RA1 - SU 24

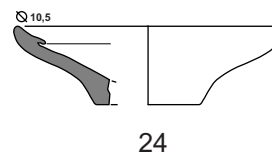
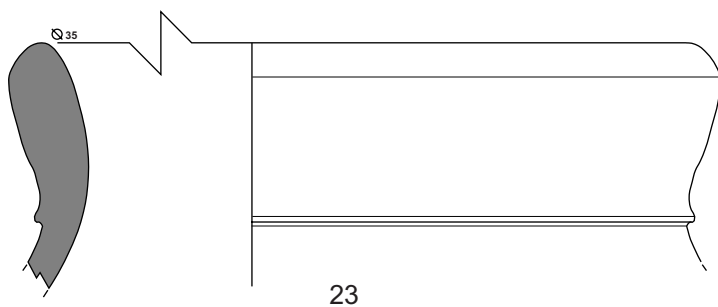
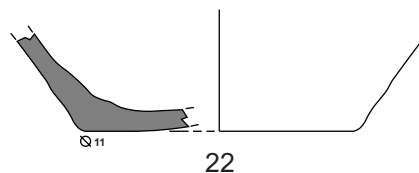
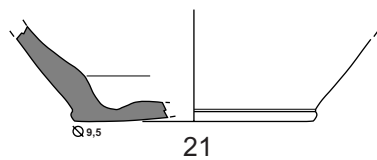
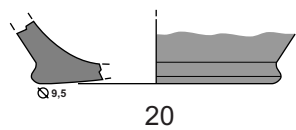
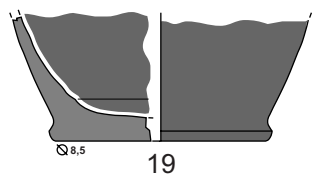


SU 24, 70

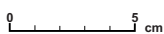
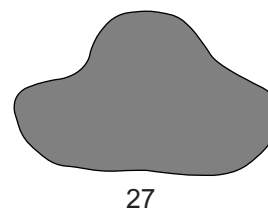
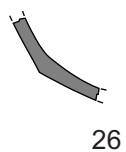
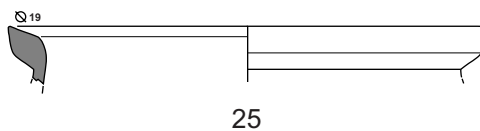
RA1- SU 24



RA1- SU 24



Cooking ware



RA1 - SU 25

Definition: Level of destruction of adobe bricks

Interpretation: Thick level of collapse of adjacent structures, possibly the reinforcement of the fortification (SU 16 and SU 67) and wall SU 70.

Observations: Level of broken and highly decomposed adobe bricks, mixed with a clay matrix, lying in the corridor formed by the walls SU 16 and SU 14, although it does not come into contact with wall SU 16 because of the presence of the pavement SU 26. Lying beneath SU 20, it adjoins the walls SU 70-SU 14, SU 35 and the pavement SU 26. Presence of a bronze coin, fauna and potsherds.

Material:

- Slipware: 14 shaped frags., 43 shapeless frags.
- Common ware: 15 shaped frags., 94 shapeless frags.
- Cooking ware: 3 shaped frags., 6 shapeless frags.
- Large containers: 9 shapeless frags.
- Bone: 9 frag. (99 grs.)
- Other: Tokens of Slipware
A bronze hoop, 2.5x2 cm in width
A bronze ball, 7 mm in diameter
A bronze coin

Archaeologist: V. Martínez

<i>Composition</i>	adobe bricks, clay, sand
<i>Formation</i>	natural and/or human agents
<i>Thickness</i>	60-80 cm
<i>Covered by (Stratum)</i>	20
<i>Covering (Structure)</i>	26
<i>Leaning on (Structure)</i>	66-71-16-68-70-35-14

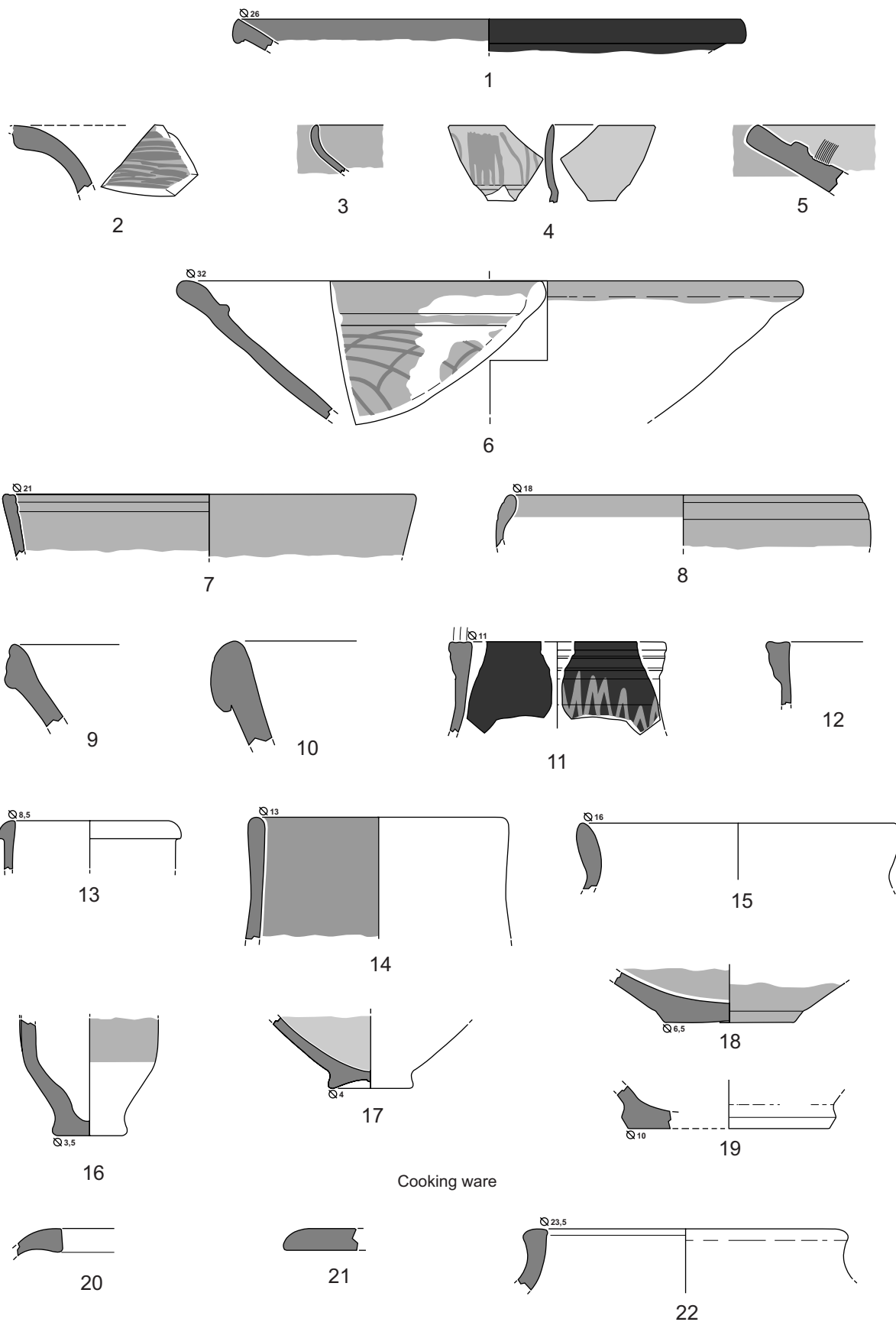
RA1 - SU 25



SU 25



RA1- SU 25



RA1 - SU 26

Definition: Pakhsa (cob) structure

Interpretation: Wall of pakhsa (cob) that serves as a base for the construction of several units that make up the reinforcement of the first fortification. Its construction marks a new phase in the settlement of area 1 of the trench, because it seals off the levels of destruction and/or abandonment of the first fortification and the level of use associated with wall 14, which defines the space on the western side.

Observations: Structure of pakhsa (cob), formed of layers of compact clay and finer layers of sand. It lies over the level of charcoal SU 36 in the open space of area 1, sealing off that level of use. It also adjoins the wall SU 14, which encloses the area on the west. It has a variable width from north to south, ranging from 20 cm in the north to 86 cm in the south. Toward the east side of area 1, SU 26 lies beneath the adobe wall SU 16, which serves to buttress the first fortification, while on the south side, it lies beneath another pakhsa (cob) structure (SU 66), which similarly serves as reinforcement for the first fortification. In the southern end of the area, it is supported by the wall SU 35. In the open space of area 1, this structure appears covered by the stratum of destruction and/or abandonment SU 25.

Archaeologist: V. Martínez

<i>Composition</i>	clay and sand
<i>Dimension</i>	20 cm to the north and 86 cm to the south
<i>Formation</i>	human origins
<i>Rested on by (Structure)</i>	16-66
<i>Covered by (Stratum)</i>	25
<i>Abutted by (Structure)</i>	68
<i>Resting on (Stratum)</i>	36
<i>Attached to (Structure)</i>	92-69

RA1 - SU 26



SU 26, 66, 67, 16, 34, 35

RA1 - SU 27

Definition: Structure of adobe and mud bricks

Interpretation: Small wall of adobe bricks of quadrangular shape built to delineate area 2 on the west side, together with structures SU 46 and SU 33. From its shape, it could reflect the end of a doorway that might subsequently have been filled in by structure SU 56.

Observations: Structure on the southwest side of the trench, with lime cladding and pink plaster on its southern, eastern and western sides (SU 82). It measures 54 cm in length, 44 cm in width and a conserved height of 1.14 m. Built on stratum SU 63, it only has cladding from the level of use SU 41 to its maximum conserved height. On its northern side, it adjoins structure SU 55, while the structure SU 56 abuts it on the southern side. Covered by SU 17, it is supported by strata SU 24, SU 32, SU 37, SU 41, SU 42, SU 43 and SU 51. The northern side of SU 27 is partly cut by the modern military trench (SU 5).

Archaeologist: V. Martínez

<i>Composition</i>	adobe bricks
<i>Dimension</i>	0.54m long, 0.44m wide, 1.14m high
<i>Formation</i>	human origins
<i>Intersected by (Negative)</i>	5
<i>Covered by (Stratum)</i>	17
<i>Supporting (Stratum)</i>	51
<i>Abutted by (Structure)</i>	56
<i>Rested on by (Structure)</i>	82
<i>Resting on (Stratum)</i>	55
<i>Attached to (Structure)</i>	65

RA1 - SU 27



SU 27, 56



SU 27, 84, 30, 85, 89, 56, 29

RA1 - SU 28

Definition: Level of sand

Interpretation: Level of infill made of sand from a natural depression on the west side of the trench. The formation of this level doubtless stems from wind action.

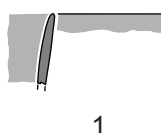
Observations: Level of sand lying on the south side of the trench, between the wall SU 22 and the negative of the modern military trench SU 5.

Material:

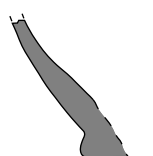
Slipware:	1 shaped frag., 3 shapeless frags.
Common ware:	2 shaped frags., 3 shapeless frags.
Cooking ware:	1 shapeless frag.

Archaeologist: V. Martínez

<i>Composition</i>	sand
<i>Formation</i>	natural and/or human agents
<i>Thickness</i>	20-40 cm
<i>Covered by (Stratum)</i>	3
<i>Covering (Stratum)</i>	48
<i>Leaning on (Structure)</i>	78



1



2

0 5 cm

RA1 - SU 29

Definition: Wall of pakhsa (cob)

Interpretation: Wall of pakhsa (cob) corresponding to the end of a room next to structure SU 27, since both are connected by a window sill or door sill (SU 56). The walls SU 30 and SU 31, built according to the same method and with the same orientation, must reflect a second room, possibly earlier.

Observations: Structure at the southwest end of the trench, running east-west. It must continue beyond the western and southern boundaries of the trench. It has lime cladding on its northern and eastern facades (SU 84). The partial excavation of this structure only permits documentation over an area that measures 80 cm in length, 54 cm in width and 90 cm in height. On its east side, it supports the structure of identical orientation SU 30 and SU 85, while on its northern side, it adjoins structure SU 56. Covered by SU 17, it abuts SU 24.

Archaeologist: V. Martínez

<i>Composition</i>	compact clay and sand
<i>Dimension</i>	0.80m long, 0.54m wide, 0.90m high
<i>Formation</i>	human origins
<i>Covered by (Stratum)</i>	17
<i>Supporting (Stratum)</i>	24
<i>Rested on by (Structure)</i>	84
<i>Resting on (Stratum)</i>	65

RA1 - SU 29



SU 29, 30, 56, 27, 33, 55, 46, 76, 77, 73, 22, 44