# PRELIMINARY REPORT ON POLISH EXCAVATIONS AT MARINA EL-ALAMEIN IN THE 2012–2015 SEASONS

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Abstract: The Marina el-Alamein Archaeological Project concentrated on excavating the area in the northern part of the harbor town, where a street (S1) existed, running north–south toward the harbor, lined by buildings on both sides. A test trench was dug across it to study the stratigraphy. It helped to identify several street levels and at least two major building phases in this area. One of the structures (H39) contained a hypocaust furnace that led to the building interpreted as a bathhouse. A pebble mosaic was uncovered immediately west of the furnace. Opposite Building H39 and across street S1, there was a large and richly furnished residential house (H42). It encompassed two paved courtyards, which were in use in the first half of the 2nd century AD. Three seasons of excavations (2012, 2013 and 2014) were followed by a season devoted in its entirety to documentation of the pottery and other small finds from the excavations and checking of the documentation from earlier seasons.

Keywords: Marina el-Alamein, residential/domestic architecture, bathhouse, Roman, architectural decoration, mosaic, Roman pottery, oil lamps, ostraka

The Marina el-Alamein Archaeological Project conducted two successive seasons of explorations (2013 and 2014) followed by a season in 2015 devoted to the study of the finds. The main emphasis was on site stratigraphy and building development phases in the northern residential district of the town. The Project continues the investigations of an archaeological mission

from the Polish Centre of Mediterranean Archaeology University of Warsaw, directed from 1986 to 2007 by Prof. Wiktor Andrzej Daszewski. The current project, beside examining the evidence for site chronology, focuses on understanding the role of the Roman harbor in the commercial trade on this part of Egypt's Mediterranean coast.

## ARCHAEOLOGICAL EXCAVATIONS

## STREET S1

A test trench (2.50 m by 6.20 m), dug in 2014, cut across the street (designated S1) running north-south toward the putative harbor [Fig. 1]. The street follows the eastern facade of House H21, which had been cleaned and restored earlier by a Polish conservation team (Medeksza 2003; 2010; Medeksza et al. 2004; Daszewski 2007; 2011; Czerner and Medeksza 2010). Other buildings: H39, H40, and H41, lined this street on both sides as well. At least seven different street levels were identified, the surfaces of each being discernible thanks to layers of ash strewn with ordinary street refuse. A stratified collection of pottery was recorded, illustrating a chronological sequence from the 2nd century to the 4th century AD. Most of the collection was represented by cooking vessels and tableware, supplemented by amphorae, which were dated mainly to the 2nd–3rd centuries AD. The lowermost excavated layers of the street may have been from the 1st century AD judging by the ceramic evidence. Other categories of finds included pieces of Roman glasses and two fragments of Greek ostraka written on amphora body sherds [see Fig. 11:a-b].

Apart from examining the street stratigraphy and its dating, the test trench uncovered the foundations of the buildings standing along it. At least two different building phases were identified [Fig. 2] Walls of regularly cut middle-sized ashlars bonded in lime mortar were found side by side with a structure of ashlars and broken stone bonded in clay mortar. The

## Team

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foundation courses consisted of broken stone bedded in clay mortar.

#### **BUILDING H40**

Building H40, located in the southeastern corner of the examined area, is limited by Street S1 to the west and a secondary street to the north. Another test trench was dug to clarify the stratigraphy at the entrance to the building. The walls were built of small standardized ashlars. Inside, a sequence of floors was preserved and two major phases of development were recognized. A lateral chamber (H40.1), with the only entrance opening to the south, was located directly north of the main entrance to H40 from the west [Fig. 3]. The function of this lateral chamber is obscure, but its use as a doorkeeper's dwelling should be taken into consideration. The function of the building as a whole was not established.

#### **BUILDING H39**

The northernmost unit, H39.1, was rectangular in plan and was entered directly from Street S1. A test trench

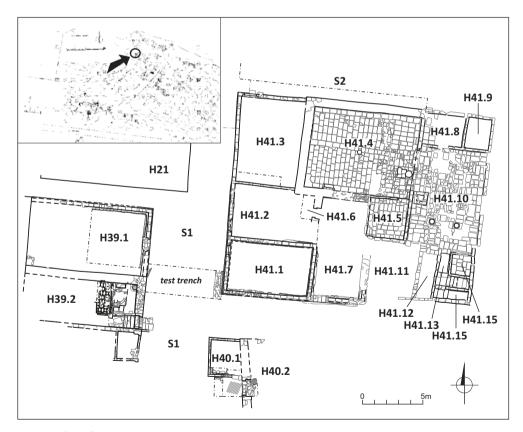


Fig. 1. Plan of excavations in 2012–2014 (Drawing S. Maślak, PCMA archives)

dug along its east wall provided material consisting of mostly kitchen ware and some tableware fragments, mainly Cypriot sigillata. The whole group dated to the 2nd and 3rd century AD; the latest objects with a more or less certain date were from the 4th century AD. Glass artifacts from a similar time horizon and a bone pin were found here as well. The dietary habits of the local population were highlighted by an abundance of animal bones, identified as sheep/goat, cattle, poultry and fish. A fireplace, its border set off with small stones, was found in the southwestern corner of the room; it appears to have functioned as a kitchen installation.

Unit H39.1 was built onto another unit to the south, H39.2, similarly rectangular

in plan and also accessed directly from Street S1. A few stone steps led down from the street inside it, suggesting a more rapid accumulation of layers in the street. Two building phases were recognized. The later phase, associated with the later of steps, was associated with a compacted clay surface serving as a floor. A small oven made of a big pottery jar was installed in the northeastern corner of this unit and it may be indicative of the room's function as a kitchen. This corresponded to the 2nd-3rd century AD phase in the adjacent room described above.

Continued excavation in room H39.2 uncovered an earlier occupational phase. Under the upper flight of steps there was another one which, similarly, led down



Fig. 2. Two building phases seen in the test trench in Street S1 (All photos K. Jakubiak)



Fig. 3. Building H40.1: threshold



Fig. 4. Remains of a furnace in Building H39, view from the east

from the street level, this time to the paved surface in front of it. On the northern side, a thin stone wall coated with lime plaster separated the stairs from the furnace area where part of a probable water boiler (miliarium) was found [Fig. 4]. This relatively large installation, certainly part of a water-heating system, was built of limestone ashlars and baked bricks. The interior of the furnace was irregular in shape, resembling a clover leaf in plan. A similar furnace or water boiler was found in the neighboring House H21, already excavated and reconstructed several years ago (Daszewski 2011: 423-429:



Fig. 5. Pebble mosaic from unit 2 of Building H39

Medeksza et al. 2011: 116-125; 2012: 84-99; Zambrzycki, Skoczylas, and Tałuć 2014: 82–84; Czerner et al. 2014: 67–75). A doorway north of the furnace led to the next room or to an open courtyard. Traces of a lintel and a jamb can be seen in the stone wall. Just behind the furnace to the west, a pebble mosaic floor was discovered. The geometric pattern consisted of triangles, squares and rhomboidal motifs [Fig. 5]. The mosaic floor was constructed over a hypocaust system, which has survived in poor condition. Clay tubuli and baked-brick installations from the heating system were found at the edge of the floor and inside the walls. The floor collapsed into the hypocaust cellar when the house was destroyed and/or abandoned. The fragility of the structure made further archaeological excavation inside this room impossible at the time. The fill overlying the furnace and the mosaic floor contained a substantial number of fragmented ceramic pipes as well as air flues. At least three types of pipes were distinguished, all with more or less the same diameter. Their abundance in this spot can be explained only by their role in the said heating system. These finds suggest that at least a part of unit H39.2 was used as a bathhouse.

Coarse wares from the fill overlying the heating structures in unit H39.2 constituted a substantial part of the pottery finds from this place. They can be dated to the mid 1st and early 2nd century AD, shedding light on the issue of the date when this bathhouse fell into disuse. Public bathhouses are known from the site (Daszewski 2011: 423–429; Medeksza et al. 2011: 116–125; 2012: 84–99; Zambrzycki, Skoczylas, and Tałuć 2014: 82–84; Czerner et al. 2014: 67–75),

but this is the first time that a bathing installation has been found inside a structure which seems to be a private house.

The southernmost unit of Building H39 currently uncovered lies just behind the south wall of unit H39.2. It was rectangular in plan, and was entered from the east. Its walls were built mainly of ashlars and it was intended most probably as storage. Some Middle Roman amphorae were discovered inside it, in its northeastern corner. Another unit, located to the west of the previous one, had an entrance from the south. The walls of these structures show heavy, most probably quake-related damages.

The bathhouse facility and the building phase associated with it in H39 can be dated to the late 1st or 2nd century AD, similarly as Building H41 on the opposite side of Street S1 (see below). The stratigraphy shows clearly that Building H39 in its bathhouse phase was older than House H21 located further to the north.

#### HOUSE H41

The structure designated as Building H41 extends along the eastern side of Street S1, immediately opposite Buildings H39 and H21 [see Fig. 1]. Its layout seems to vary from other structures identified on the site. A test trench along its north wall revealed the uppermost street level existing in this part of the site. The pottery assemblage found on its surface dated to the 2nd–3rd century AD, and included an ostrakon [see Fig. 11:c]. A relatively small quantity of diagnostic sherds consisting of Cypriot sigillata and some cooking ware from



Fig. 6. Building H41, unit 4, view from the southeast

inside Building H41 dated it to the late 1st and the 2nd or even 3rd century AD. No other artifacts were discovered save for a few fragments of glass and some animal bones (mainly fish).

A rectangular unit in the northwestern corner of the building, unit H41.3, was entered through the doorway in its north wall directly from the secondary street (S2). The floor consisted of tamped earth mixed with ashes and crushed pottery. It was not a household courtyard however. The relatively narrow stone wall, 0.18 m thick, seems to have been a partition wall, separating this unit from another one, H41.2, located further to the south.

East of unit H41.3, an authentic courtyard, unit H41.4, was excavated. It was surrounded by walls 0.70-0.72 m

thick and paved with rectangular slabs of irregular dimensions. In the central part of the unit, the pavement is significantly lower compared to its corners, which could suggest the presence of a collapsed water cistern below it [Fig. 6]. The rubble overlying the pavement of the unit included several pieces of good quality architectural decoration, i.e., fragments of niches or aedicules of types usually found in houses in Marina el-Alamein (Medeksza et al. 2004; Czerner 2005; Czerner and Medeksza 2010) [see Fig. 10].

Double stone doorways in the east wall of unit H41.4 were found intentionally blocked. Between these passages a circular base for an altar or the lower part of a massive thymatherion was found, with ash spread east of it. The coating of lime



Fig. 7. Building H41, unit 5, view from the north



Fig. 8. Eastern part of Building H41



Fig. 9. Southern part of Building H41

plaster on the adjacent wall just behind the base bore traces of burning. A kind of stone steps on the pavement directly in front of the base may have facilitated access to the altar.

A small square unit, H41.5, was entered from courtyard H41.4 through an entrance located in the southeastern corner. The floor here was about 0.20 m higher than the flagging of the courtyard. Both pavements were made of local limestone slabs. Nothing but some fragments of marble statuary and pottery were found in the deposits from unit H41.5.

Another courtyard, H41.10, was located east of unit H41.4. There was a small stone structure on the original pavement in the northern part of this unit. This structure was constructed of most prob-ably reused blocks, standing about 0.40 m above the original floor. It may

be evidence of the final rearrangement of the courtyard following a huge conflagration. Traces of burning were found all over the building. In the northwestern corner of unit H41.10 there was a small oven. The pavement of the courtyard was found badly damaged, not only by fire, but also by a quake-related dislocation. A few slabs were discovered lying in their original position elsewhere than in the western and southern parts of the unit. Squatter-like structures, similar to the walls of unit H41.8, survived in the western part of the courtyard. Massive square structure with an opening to the underground cistern, built of ashlars against the west wall of unit H41.10, bore also some evidence of post-destruction building activities. The structure is coated with waterproof plaster. Its opening was found blocked.



Fig. 10. Two examples of cornices from unit 4 in Building H41

Two column bases in their original positions survived in the southern part of unit H41.10 (courtyard) [Fig. 9]. They emphasized the monumental character

of the architectural decoration. In some places, remains of a wall separating and blocking a part of the structure can still be seen. This and other walls



Fig. 11. Selected finds: ostraka (from top left), from Street S1, level 7, from Street S1, level 5, and from Street S2, north of Building H41; bottom, from left, oil lamps: from Building H40.1, layer 6 and layer 5; bottom right, silver coin from the 1st century AD and bronze coin of Antoninus Pius from unit 8 in Building H41

here were raised in a process of space reorganization after the fire. Through this column portico, courtyard H41.10 communicated with units located to the south of it. One of the rooms here had an extra doorway aligned on the main axis running between the two column shafts [Fig. 9]. An entrance in the southwestern corner of the courtyard led to unit H41.11, and, as the original floor of this unit was at least several dozen centimeters below the courtyard's pavement, communication between them was by means of steps.

Three small units were cleared in the southeastern corner of Building H41. As usual, they were built of ashlars. The easternmost unit (H41.14) was paved with regular flagstones. As confirmed by the ceramic evidence in the fill, this unit may have served as storage. The central L-shaped unit (H41.13) was divided into two parts. One of them was most probably a staircase leading to an upper floor. Three steps were still preserved in place. Calculations of the staircase flights suggest that the upper-floor must have been 3 m above the pavement

of unit H41.14. Another narrow and rectangular room (unit H41.15), located immediately behind the possible staircase to the south of it, and along the southern border of the house, very likely served as a latrine. The third narrow chamber (unit H41.12) in the southeastern part of the building was also rectangular in plan. The function of this room was not determined.

The pottery assemblage from courtyard H41.10 consisted of sherds of Cypriot sigillata from the 2nd century AD, as well as similarly dated cooking wares, coarse wares, and a small quantity of storage jars. Two coins were found on the original floor of unit H41.8, next to the northwestern corner of the courtyard. The large silver coin can be dated to the late 1st century AD. It is badly worn, proving that it was long in circulation. The other coin is a corroded bronze from the reign of Antoninus Pius (identification after preliminary conservation), that is, from the mid 2nd century AD. This coin, bearing an allegoric image of the River Tiber on the reverse, was minted most probably in Rome [see *Fig. 11:g,h*].

## THE POTTERY ASSEMBLAGE

The documentation season in 2015 was devoted to cleaning, documenting and studying the excavated pottery assemblage as well as small finds. The pottery material was repacked in safe storage.

The assemblage studied in detail in 2015 came from the test trench opened in Street S1 and Building H39. The earliest finds were dated to the 1st century AD, whereas the main phases of occupation referred to the 2nd–3rd centuries AD with trace occupation in the 4th century AD.

The material included a superior number of Cypriot sigillata to the exclusion of local tablewares, some coarse ware and an abundance of cooking wares and finally storage and transport containers. An analysis of the imported vessels confirmed the known range of contacts: Cyprus, Cilicia, Crete, Asia Minor, Lebanon and Syria [Table 1; Figs 12–14]. Imitations of early Roman amphorae produced in Egypt in the 1st century AD were noted as well [see Fig. 14]. Cypriot sigillata constituted

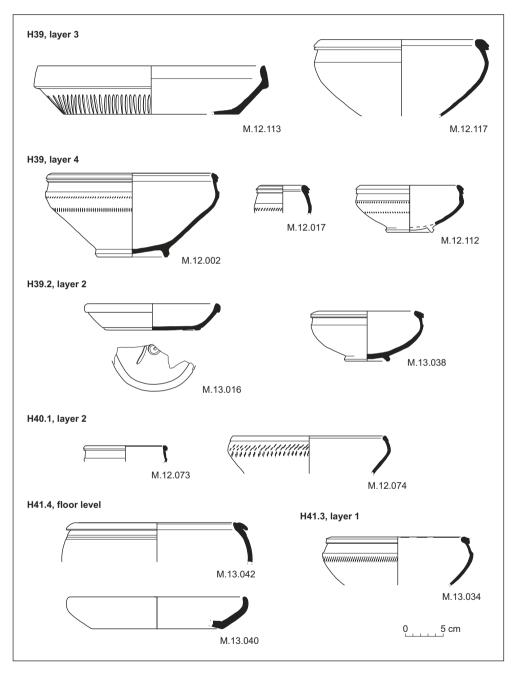


Fig. 12. Cypriot sigillata tableware, presented by stratigraphic units (for details, see Table 1) (Drawing K. Szajkowska; digitizing S. Maślak)

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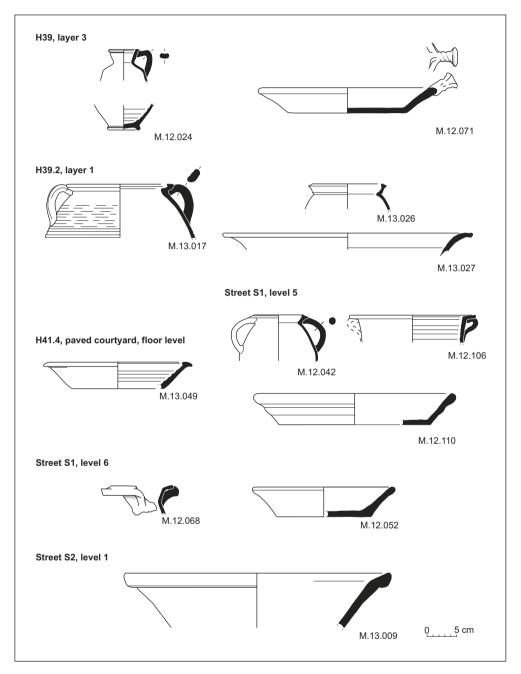


Fig. 13. Coarse and plain wares from the 2012–2013 seasons, presented by stratigraphic units (for details, see Table 1) (Drawing K. Szajkowska; digitizing S. Maślak)

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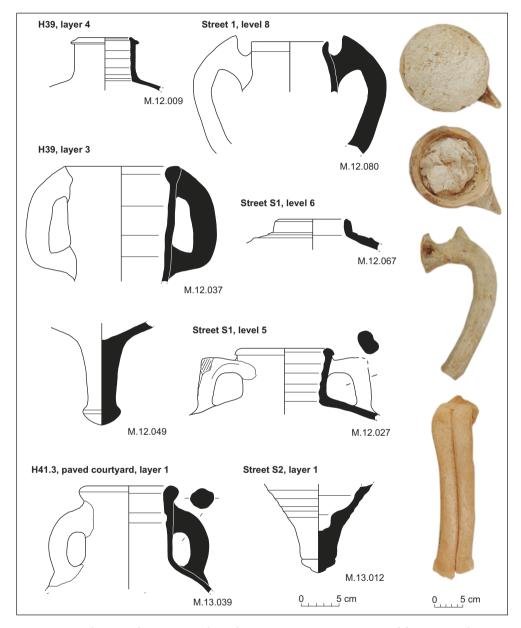


Fig. 14. Amphorae and storage jars from the 2012–2013 seasons, presented by stratigraphic units (for details, see Table 1); amphora rim with stopper, Mau XXVII/XXVIII, from Cilicia, 2nd—3rd century AD; Dressel 43 (Cretoise 4) amphora handle, from Crete, 1st–mid 3rd century AD; Dressel 2–4 amphora handle from the Mareotis, local make, mid 1st–mid 3rd century AD (Drawing K. Szajkowska; digitizing S. Maślak; photos A. Dzwonek)

Table 1. Pottery from stratigraphic units in Houses H39, H40, H41, as well as Streets S1 and S2 [Figs 12–14]

Figure	Inv. No.	Form	Date	Context
		Building H39		
Fig. 12	M.12.113	Eastern sigillata B (Asia Minor: Ephesos?), form 60	2nd century AD (first half?)	Locus 3
Fig. 12	M.12.117	Cypriot sigillata, form P41	2nd century AD	Locus 3
Fig. 13	M.12.024	Small jug, local production	2nd century AD	Locus 3
Fig. 14	M.12.049	Amphora base		Locus 3
Fig. 14	M.12.037	Amphora AE3	2nd/3rd century AD	Locus 3
Fig. 12	M.12.002	Cypriot sigillata, form P41	2nd century AD	Locus 4
Fig. 12	M.12.017	Cypriot sigillata, form P17	1st century AD	Locus 4
Fig. 12	M.12.112	Cypriot sigillata, form P22B	1st/2nd century AD	Locus 4
Fig. 14	M.12.009	Storage jar/big jug(?)	2nd century AD(?)	Locus 4
Fig. 13	M.12.071	Frying pan	Late 1st-beginning of 2nd century AD	Locus 5
Fig. 13	M.13.027	Big bowl	2nd century AD	Unit H39.2, layer 1
Fig. 13	M.13.017	Cooking pot	2nd century AD	Unit H39.2, layer 1
Fig. 13	M.13.026	Cooking pot	2nd century AD	Unit H39.2, layer 1
Fig. 12	M.13.016	Cypriot sigillata, form P11	Second half of 1st–first half of 2nd century AD	Unit H39.2, layer 2
Fig. 12	M.13.038	Cypriot sigillata, form P22B	1st/2nd century AD	Unit H39.2, layer 2
		Building H40		
Fig. 12	M.12.073	Cypriot sigillata, form P28	1st century AD	Unit H40.1, layer 2
Fig. 12	M.12.074	Cypriot sigillata, form P31A	2nd century AD	Unit H40.1, layer 2
		Building H41		
Fig. 12	M.13.034	Cypriot sigillata, form P40	2nd century AD	Unit H41.3 (paved courtyard), layer 1
Fig. 14	M.13.039	Tripolitanian amphora	2nd century AD	Unit H41.3 (paved courtyard), layer 1
Fig. 12	M.13.040	Cypriot sigillata, bowl	Fist half of 2nd century AD	Unit H41.4, paved courtyard (floor level)
Fig. 12	M.13.042	Cypriot sigillata, form P40	2nd century AD	Unit H41.4, paved courtyard (floor level)
Fig. 13	M.13.049	Basin or small mortarium	Late 1st–beginning of 2nd century AD	Unit H41.4, paved courtyard (floor level)

#### FGYPT

most of the tableware recorded from the street as well as from the buildings on either side. This tableware was dated mainly to the 1st and 2nd century AD. Copies of Cypriot sigillata manufactured in Egypt were dated to at least half a century later.

Table 1. Continued

Figure	Inv. No.	Form	Date	Context
		Street S1		
Fig. 13	M.12.106	Cooking pot	2nd century AD(?)	Level 5
Fig. 13	M.12.042	Cooking pot, local manufacture	2nd century AD	Level 5
Fig. 13	M.12.110	Deep dish/frying pan?	2nd century AD(?)	Level 5
Fig. 14	M.12.027	Pinched-handle amphora	2nd century AD (contextual date)	Level 5
Fig. 13	M.12.068	Cooking pot	1st century AD	Level 6
Fig. 13	M.12.052	Frying pan or deep dish	Late 1st-beginning of 2nd century AD	Level 6
Fig. 14	M.12.067	Amphora rim	2nd century AD	Level 6
Fig. 14	M.12.080	Pseudo-Coan amphora	1st century BC–1st century AD	Level 8
		Street S2		
Fig. 13	M.13.009	Basin	2nd–3rd century AD	Layer 1 (along north facade of Building H41)
Fig. 14	M.13.012	Amphora base	2nd century AD	Layer 1 (along north facade of Building H41)

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