

CONSERVATION WORK AT MAREA IN 2006¹

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Conservation and restoration of the masonry structures within the Byzantine bath, basilica, and the funerary chapel, excavated by the Polish Archaeological Mission in Marea, began on 30 August and was

completed on 26 September, 2006. Most of the work was of an emergency nature and included securing of the structures in danger of collapse and protection of the historic fabric of these structures.



Fig. 1. Byzantine baths. Hypocaust F: before conservation (left) and after (Photo J. Kucy)

¹ The conservation work was directed by Barbara Wrońska-Kucy, architect, representing Bone/Levine Architects, New York, the sponsor of the conservation work; technical and photographic services were provided by Jacek M. Kucy; Joanna Babraj participated in the work on the basilica-kiln wall. The Supreme Council of Antiquities of Egypt was represented by Amal Hassan Hamid, archaeologist, and Rabeia Ibrahim Mohamed, conservator.

WORK IN THE BYZANTINE BATHS

Emergency repairs were required in several areas. Work in the hypocaust (F) included reconstruction of the brick pillars (supporting the floors) and adjacent arched openings and sections of the hypocaust walls [Fig. 1].

Work around the furnace area (O) included reconstruction of the crown of the outer wall surrounding the furnace, and repairs to the brickwork of the furnace lining [Fig. 3].

An arched opening leading to the furnace (O4) between the cellar area (A2)

and (A1), and the adjacent hypocaust brick pillar and arched opening were partially reconstructed [Fig. 2].

The vault of the cellar, between the rooms (B) and (C) was repaired with matching brick and re-pointed to prevent possible collapse of this part of the vault. All reconstructions within the bath were done using the original brick, set in a lime-sand mortar mixed with small amounts of crushed red brick (as per original mortar), and a small amount of white cement for structural strength where required.



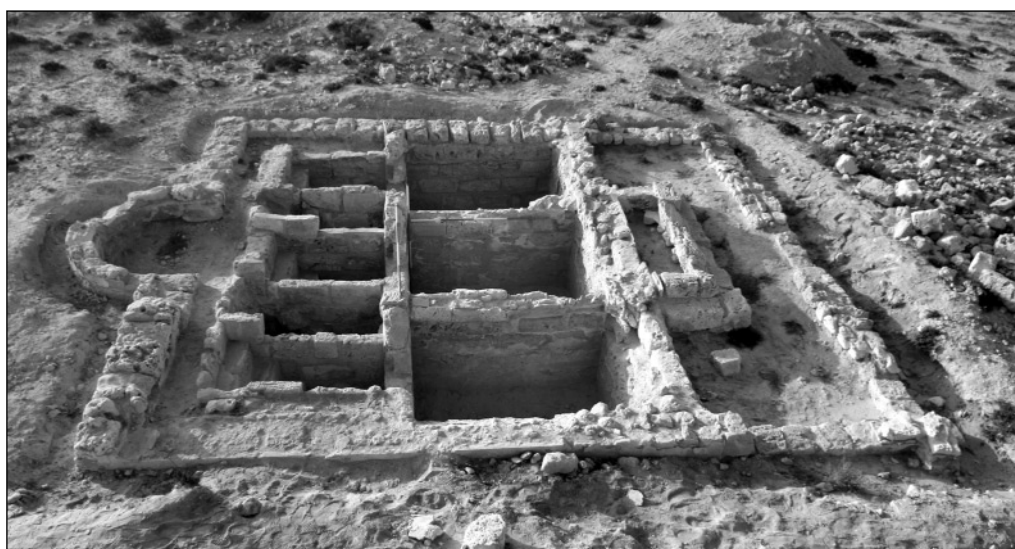
Fig. 2. Byzantine baths. Furnace O4: before conservation (left) and after (Photo J. Kucy)



*Fig. 3. Byzantine baths. Furnace O: before conservation (top) and after
(Photo J. Kucy)*



Fig. 4. Wall of the kiln for firing amphorae: before conservation (top) and after (Photo J. Kucy)



*Fig. 5. Funerary chapel: before conservation, detail (top) and after (general view)
(Photo J. Kucy)*

THE BASILICA – KILN AREA

The outer wall of the kiln surrounding the grate was constructed of mud brick; it shows evidence of burning due to heat generated inside of the kiln. This burned surface was suitable for treatment with an impregnating breathable solution (30 l) of FUNCOSIL SNL (by Remmers).

The crown and outer face of the wall are severely deteriorated and have soft, powdered surfaces [*Fig. 4*]. In order to prevent further deterioration of this wall, a temporary mud-brick coping was installed, manufactured on site, using locally available clay, sand, and chopped

straw, and very small addition of cement, to increase the water resistance of the brick. This coping with pronounced drip edges, was set in a mud mortar bed (no cement added). Small sections of the wall were patched with original brick found on site, and with new mud brick. It should be emphasized that the new coping is not an attempt at reconstruction; it has been installed merely as a preventive measure against the elements. The mud coping can be removed in the future, if required for the following conservation seasons.

THE FUNERARY CHAPEL

The vault walls of the chapel and a footprint of the structure are preserved to approximately half a meter below the chapel floor (not existing). The interior walls of the chambers are exposed to the level of the wall footing. Due to deep excavation and loose stone bond, some partitions adjacent to the

stairs have collapsed [*Fig. 5*, top]. The reconstructive work in the chapel included reconstruction of these walls, and supporting of the stairs [*Fig. 5*, bottom]. All the chambers were backfilled with compacted dirt (post-excavation fill) in order to stabilize the wall foundations.