# Great Aten Temple Spring 2014 Season 

## Preliminary Report



Repairs to the mud-brick pylon of the temple, with recreation of the limestone threshold.

[^0]April 2014


Figure 1. The underlying map is that of the Egypt Exploration Society 1932 season. Details from the 2012 and 2013 seasons have been overlaid. Red lines indicate the areas of the 2014 work.

## Introduction

The spring season of the Amarna Project in 2014 ran between February 20th and April 20th. The fieldwork was concentrated at the Great Aten Temple. Several excavating teams, under the supervision of Miriam Bertram, Delphine Driaux, Anna Hodgkinson and Sue Kelly, assisted by Juan Friedrich and Julia Vilaró, were deployed across the front area. Three Ministry of Antiquities inspectors (Joseph Elya Mikhail, Randa Mohammed Abd elRahim and Abdullah Ali Abd el-Rahman Maaruf) joined the expedition for training. Inspector Ahmed Mustafa Abd el-Aziz was responsible for the fieldwork, and Hammada Abd el-Azim Abd el-Hafiz for the magazines.

The re-examination of the temple, that includes the removal of Pendlebury spoil heaps, was spread across several areas, the pattern of work to some extent dictated by the trenches and spoil heaps of the 1932 excavation. The attached map indicates the location of each area compared to the plan of the 1932 excavation. The excavation was conducted within a grid of $5 \times 5$ metre squares.

Area A, the excavation area covering squares F27, G27, E28, F28, G28, E29, F29, G29.

A large spoil heap that had buried the southerly of the two mud-brick outer pylons was removed, exposing the remains of the pylon itself. This was 4.25 m thick and reached a length of at least 15 m (the southern end has not been reached this season). At some time in the past the bricks of the pylon have been extensively robbed, and what looks like a long mixing pit made in the middle, in which bricks have been turned into a mud mix, perhaps for the making of newer bricks at a more convenient size. On the east side, the spoil heap also covered a firm floor of trampled earth and mud. This is probably the original floor surface that belongs to the second phase of the temple's history. A vertical section cut through this by the Pendlebury expedition had left the mud floor of the earlier temple visible. Where it joins the base of the pylon, a narrow foundation trench was discovered in which the mud bricks of the pylon had been laid.


Figure 2. View, to the south, of the mud-brick southern pylon in the course of excavation.


Figure 3. The south pylon tower of the mud-brick pylon, fully excavated, showing the large mixing pit made within it. View to the north.


Figure 4. The south pylon tower at the end of the excavation, with the mixing pit filled with rubble and sand ready for final layers of mud brick planned for next year.

Area B, the excavation area covering squares M31 and part of N31 to the east.

This area lies along the original axis of the temple. All that survives is the mud floor of the first temple. A set of rectangular basins was discovered, cut into the floor and lined with a thick layer of white gypsum plaster.

They had been arranged around the four sides of a rectangular pedestal made of mud and also coated with gypsum plaster. It had been 1.10 m wide, but along its length only around half survived. The remainder had been destroyed in the Amarna Period when the second temple was built. Then a deep trench had been dug through it, to contain the foundations for a stone wall. Before this had happened, the basins had been completely filled with mud and made invisible.

The excavation was also extended a short way across the other side of the foundation trench, into the sand fill beneath a gypsum concrete layer that formed the basis for a stone pathway that ran between two sets of huge columns on sturdy concrete foundations (Area F). The sand fill, in turn, buried more of the mud floor of the first temple.


Figure 5. In the centre of the picture (and looking to the north) is the foundation trench for the stone wall of the second temple. It has cut through a set of basins lined with gypsum, which lie on the left. In the background is the North Pedestal (Area F), a set of foundations made to support the northern colonnade. of the portico.


Figure 6. The set of basins, lined with gypsum, that have been cut through by the trench for the second temple. View to the north-west.

## Area C, the excavation area covering squares J33-L33.

This strip of ground is next to a 5 -metre wide strip excavated last year. Within it, a further set of rectangular basins lined with gypsum plaster has been revealed, surrounding a rectangular platform of mud coated with gypsum, measuring $1 \times 2 \mathrm{~m}$.

At the same time, the top of the wide area of mud brickwork that has the appearance of a wall around the northern gypsum concrete platform has been cleaned and planned. It is 3 m broad. This runs through squares M32 to L34/ M34. At intervals the remains were found of wooden beams that had been inserted into the brickwork at ground level. This wall extends into Area D.


Figure 7. An east-west strip between the Small Palace and the North Platform (Area F) was surfaced with a thick mud floor. A set of rectangular basins, lined with gypsum plaster, had been made within this floor. View to the north-east. At this stage in the excavation the basins were still filled with sand.


Figure 8. The set of gypsum-lined basins in Area C, viewed to the east, The basins were being renovated when the temple was abandoned. The renovation was making the basins wider. The dividing walls had not yet been plastered.


Figure 9. Detaled view, looking to the south, of the gypsum-lined basins that were in the process of renovation when the temple was abandoned. This basin was being widened and lengthened at the same time.
Area D, extending across squares M35, M36, M37, N35, N36.

Here the brickwork turns the corner of the large gypsum platform to run eastwards, and also puts out an extension to the north, at an angle to the temple axis. Our interpretation is that this is the remains of a ramp that allowed the large stones that were to form the columns on the concrete platform to be dragged upwards on to a bank of sand kept in place by the thick wall. After the columns had been erected, wall and ramp were demolished. They had originally been built over a thin layer of sand that had covered the mud floor of the first temple. Traces were found of an original cover of white plaster and of several mud-brick offering-tables that also belonged to the first period of temple building.

Across this area graves had been dug through all of the archaeological layers, for burials that belong to the village cemetery of El-Till although they probably date to the early part of the 20th century or even earlier.

Area E. This part, composed of squares K26, L26, K27, L27, J28-L28 and J29, K29, covers three separate zones.


Figure 10. View to the north along the brick wall and foundation for a construction ramp at the northwest corner of the second temple.


Figure 11. View southwards across Area D. Most of the brickwork belongs to the construction ramp and wall of the second temple. Early modern grave pits are visible, as is a single mud-brick offering-table from the earlier layout and an adjacent patch of white floor.


Figure 12. At the top runs the brickwork of the construction ramp of the second temple. Beneath it is an area of whiteplastered earlier mud floor, on which lie the remains of a rectangular offering-table of mud brick. An early modern grave pit is to the left. View to the east.

The northern zone is a low mound made from the sand and rubble layer that separates the floors of the first and second temples, partly covered by spoil from the 1932 excavation. Excavation revealed two more sets of gypsumlined basins surrounding rectangular platforms. They had, however, been badly damaged by earlier digging into the surface. A short distance to the south was the remains of a large circular basin, 1.7 m in diameter, also lined with gypsum plaster.

The central zone is the remains of a wide trench excavated in 1932. This had removed the sand and rubble levelling layer completely, so that the mud floor of the first temple lay close beneath the surface. In squares L27 and K27 two lines of rectangular gypsum foundations ( $1.40 \times 1.10 \mathrm{~m}$ ) were found, each intended to support the stones of offering-tables. These had been first discovered in 1932. Seven of the foundations were uncovered in each of the rows.

The southern zone (squares K26, L26) was largely occupied by the layer of sand and rubble that had separated the two temple levels. A second deep circular basin, lined with gypsum plaster, had been cut into the upper surface. The rubble was completely excavated only in a space, 3 m wide, in L26. Beneath it ran the well preserved mud floor of the first temple. A small grave, containing the bones of a child within the remains of a simple coffin made of sticks, had been cut into the floor to a depth of only 30 cm . Beneath the jaw was a small and poorly made faience amulet of a god, perhaps Ptah or Isis. The layer of rubble that covered it had included many large pieces of stone, and there was no sign that the grave had been cut down through it. It does appear that the burial is of the Amarna Period.


Figure 13. Central zone of Area E. Part of two rows of rectangular foundations, made from gypsum concrete, for offeringtables made from limestone blocks. They belong to the frst temple and were either demolished or buried when the temple was rebuilt. View to the north west.


Figure 14. Central zone of Area E, the two rows of bases for stone offering-tables belonging to the first temple. Viewed to the east.

Within the rubble, in addition to mud bricks, lay pieces from sandstone columns of large diameter, part of a limestone cornice or architrave bearing the cartouches of the Aten (probably the later version), a piece of balustrade carved in indurated limestone and the mid-part of a limestone statue, roughly two-thirds life size, of a royal woman clad in an elaborately pleated garment.


Figure 15. Southern zone of Area E. The burial of a child, made before the deposition of the layer of rubble on which the floor of the second temple was made. View to the south-east.


Figure 16. The child burial, in the remains of a simple stick coffin. The burial had been slightly disturbed.


Figure 17. Southern zone of Area E. Gypsum-lined basin of the second temple, dug into the layer of levelling rubble that covered the first temple. View to the north-west.


Figure 18. Northern zone of Area E. In the foregrund the surface of the ground of the second temple has been partly destroyed by the trenches of the 1932 excavation. In the backgrund are the remains of a set of gypsum-lined rectangular basins. View to the east.


Figure 19. Making a record of the northern zone of Area E became a training project for three inspectors from the Ministry of Antiquities.

Work at the temple site has provided many pieces of broken stone architecture and broken pieces of faience inlay. These have been stored inside the Amarna site magazine, to await further study.

## Repairs to the ancient fabric

As the re-examination of the temple has continued, the team of builders has worked on repair and reconstruction. One job has been the laying out at ground level of the northern set of large column bases on their foundation platform of gypsum concrete (Area F). To achieve this, the deep foundation trenches have been filled with a network of walls of small local limestone blocks. These have provided a solid foundation for a final layer of Turalimestone blocks cut to talatat size. This has been put in place on the north and west sides, the plan being to add the south and east sides next year. The upper surface of the whole rectangle has been filled with a layer of clean sand. The intention is to create on top of this eight circular pads of white cement with a diameter of 2.50 m , occupying the positions of eight huge column bases that stood there originally.

Repairs have also been done to the mud-brick pylon. We have concentrated on the northern pylon tower, capping the ancient brickwork with newly-made bricks that have also filled deep holes that had been dug into the brickwork in the past. The entrance through the pylon towers is marked by the walls of an approach ramp. This shows that the threshold of the pylon entrance was 6.16 m wide. This surface has been protected with a layer of sand, and over it a single course of Tura-limestone slabs has been laid. At the same time, the sloping side walls of the ramp have been repaired with new courses of bricks, and the surface of the ramp given a layer of clean sand.

The builders have also made a low stone retaining wall around the edge of the excavation on the west that defines the front of the site and holds up the embanked debris along this side.


Figure 20. Area F: the northernmost of the pair of gypsum-concrete foundations for large columns. Here the foundations are being laid for a row of limestone blocks that will recreate the original surrounding wall. View to the south-west.


Figure 21. View northwards of the North Platform at the end of the season. The top layer of fine stone has been laid on the north and west. It remains to do the same on the east and south. The positions of the large columns (eight of them) also need to be marked.


Figure 22. The North Platform at the end of the season with, in the forground, a length of the northern temple enclosure wall foundations exposed. In the future this will be filled with stone support for a final layer of fine limestone blocks.


Figure 23. The Amarna brickmaking team.


Figure 24. The first steps in recreating the threshold between the mud-brick pylons. Laying down a bed of clean sand over a layer of new bricks and pieces of brick rubble. The northern edge of the doorway has been remade in new bricks. View to the north-east.


Figure 25. Repairing the brickwork of the north pylon tower and laying a new layer of limestone blocks to recreate the threshold of the entrance. View to the east.


Figure 26. The mud-brick pylons and temple entrance, at the end of the season. View to the north.


Figure 27. The mud-brick pylons and temple entrance, with approach ramp, at the end of the 2014 season. View to the south.

## Work within the expedition house

Several members of the expedition came to work within the expedition house. Andy Boyce completed nearly a month of drawing finds both from the South Tombs Cemetery and from the temple. Alexandra Winkels, on a research visit, was able to set up a portable laboratory in the house that allowed her to pursue her scientific studies of ancient plasters, especially those that go under the heading 'gypsum'. Marsha Hill and Kristin Thompson continued their studies on the statues and other hard stone pieces of sculpture that we have stored in the site magazine. Geologist Jim Harrell made a return visit to investigate sources of gypsum and indurated limestone, paying visits to a quarry area in the north, to Hatnub and to a quarry area south of El-Hawata. At Hatnub he identified a limestone quarry as a source of indurated limestone, a material often used at the Great Aten Temple. Jackie Williamson visited and discussed her work at Kom el-Nana as a result of involvement with a new film being made on the subject of Queen Nefertiti.

## Object selection



Figure 28. A faience amulet, perhaps of the god Ptah, perhaps of the goddess Isis, found at the neck of the child burial in Area E, southern zone. Height 3.5 cm . Object no. 40256.


Figure 29. Fragment of limestone cornice or lintel bearing the names of the Aten, probably in their later form. Area E, southern zone.


Figure 30. Limestone trial piece, object no. 40257. On one side is a carving, in sunk relief, of the chin and lips of a man wearing either a helmet or an unusual style of hair. On the other side is a rough carving of a human hand and wrist, perhaps the end of an Aten ray.


Figure 31. Limestone torso of a female figure draped in linen. The deep groove visible on the left side was originally filled with red pigment, to depict a long red sash. Height 30 cm . Sculpture no. S-8264.


Figure 32. Fragment of cornice or lintel made from indurated limetone, S-8326. The spaces cut into the surface were for inlaid pieces cut from quartzite and grano-diorite, of which several examples have been found individually. In the top picture a selection of four has been inserted to illustrate the style of decoration.


[^0]:    Barry Kemp

