

horizon

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The Amarna Project and Amarna Trust newsletter



Repairs to the Great Aten Temple include laying protective courses of mud bricks over the ancient, eroded brickwork of the outer pylon entrance. The expedition's team of brickmakers produces a daily quota of bricks made to the ancient brick size. For further pictures see pp. 7 and 10.

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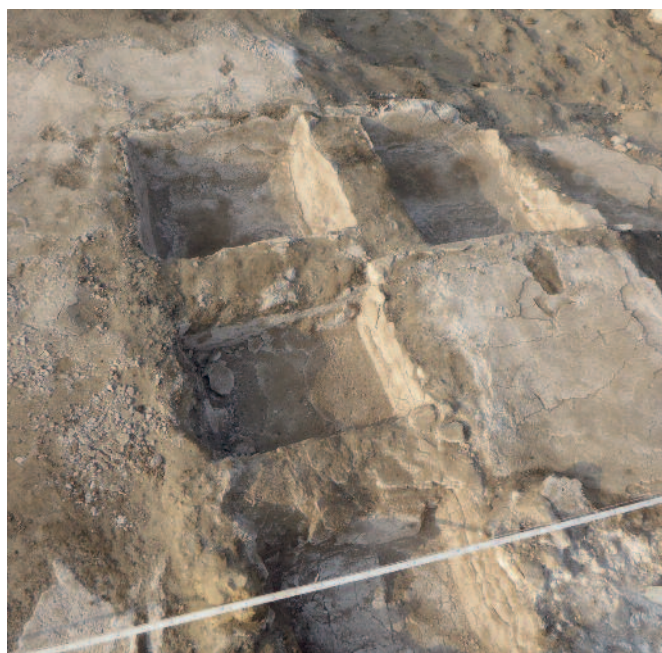
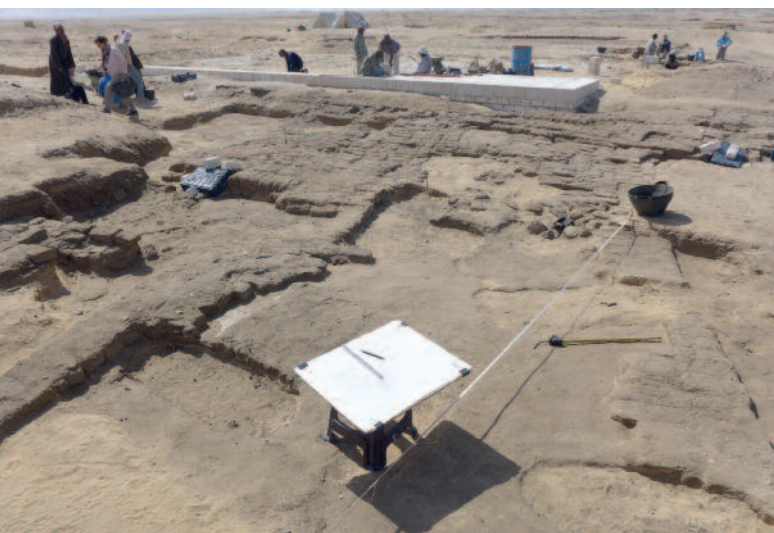
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The House of the Aten

Between 20 February and 20 April 2014 the Amarna Project continued the cleaning and re-examination of the site of the 'House of the Aten', the Great Aten Temple. The archaeological team comprised Barry Kemp, Miriam Bertram, Delphine Driaux, Anna Hodgkinson and Sue Kelly, assisted by Juan Friedrich and Julia Vilaró. Three Ministry of Antiquities inspectors (Joseph Elya Mikhail, Randa Mohammed Abd el-Rahim and Abdullah Ali Abd el-Rahman Maaruf) joined the expedition for training. Inspector Ahmed Mustafa Abd el-Aziz was responsible for the fieldwork, and Hamada Abd el-Azim Abd el-Hafiz for the magazines.

See pp. 4–5 for the full plan; pp. 8–9 for part of a statue of Nefertiti found in the course of the work.

The north-west area of the excavation, where the mud-brick ramp approaches the temporary wall enclosing the foundation platform for the colonnade. The oval pits in the foreground are the tops of modern graves. View to the south.



A set of basins from the second temple period surrounding a rectangular platform, the whole construction bearing several layers of lime-gypsum plaster and intended to hold water. Excessive water has distorted the surrounding surfaces. View to the south.



Fragment from the surface of a limestone column decorated with painted lotus/lily flowers. Registration numbers S-11448, 11458.

Three periods of activity in the north-western area of the excavation. The layer of bricks is the remains of the temporary construction ramp. It lies over an area of whitened mud-plastered floor belonging to the first temple layout. Also visible is the shape of a mud-brick offering-table which has been destroyed and covered by the building of the ramp. The oval pit is the top of a modern grave. View to the east. Photo by D. Driaux.



A set of basins from the second temple. When the site was abandoned, work was under way to make the basins wider and to reduce their number. New dividers of mud had been inserted but then left without a white plastered surface. View to the south-east. Photo by S. Kelly.



Corner block, showing the top view and the two decorated sides. The cartouches are of the Aten in their later form. It resembles corner blocks from the shrine from the house of Panehsy, now in the Egyptian Museum, Cairo. Was it to house a separate offering-table or a statue? Height of block 23 cm. Registration number S-11201.



Fragment of limestone lintel or cornice bearing cartouches of the Aten, in their later form. The block lies in a deposit of broken stonework and brick rubble close to where the fragment of a statue of Nefertiti was discovered (pp. 8–9). Photo by A. Hodgkinson.

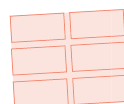


Two sides of a slab of limestone carved on both faces. The subject on one side (left) is the lower part of a human face wearing what seems to be a distinctive headdress. On the other side (right) appears a human hand. Is this a sculptor's trial piece or a votive offering? Object number 40257.



Lines of offering-table foundations from the first temple. The offering-tables themselves, when built from limestone blocks, seem to have been smaller than planned. Was this the result of shortness of time and of insufficient blocks? Original field plan and photo (of offering-table base [15363]) by A. Hodgkinson.

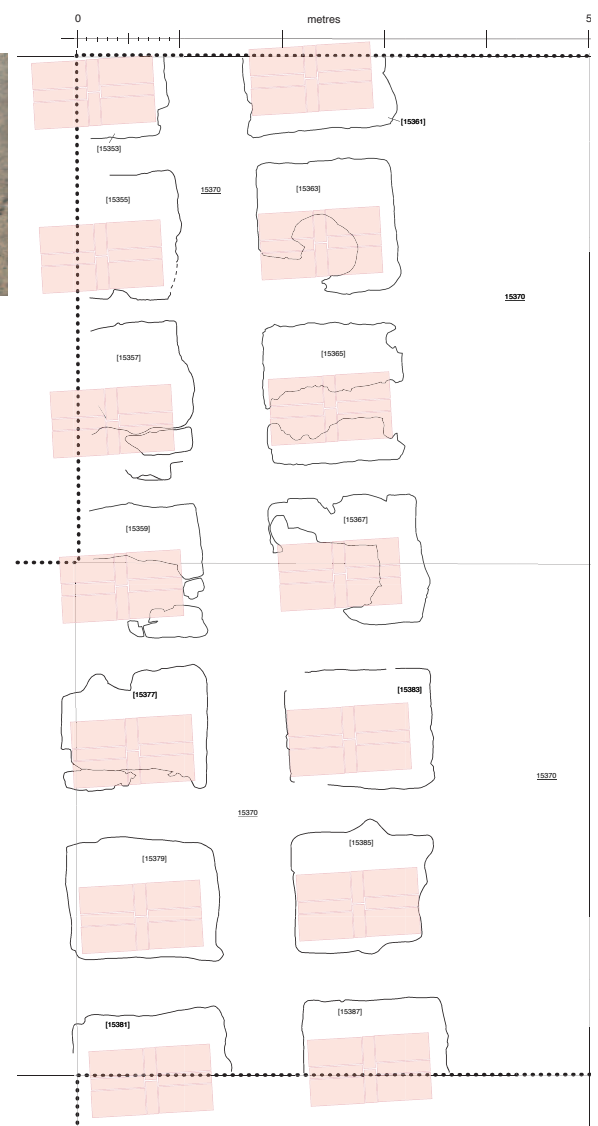
AT THE SAME SCALE

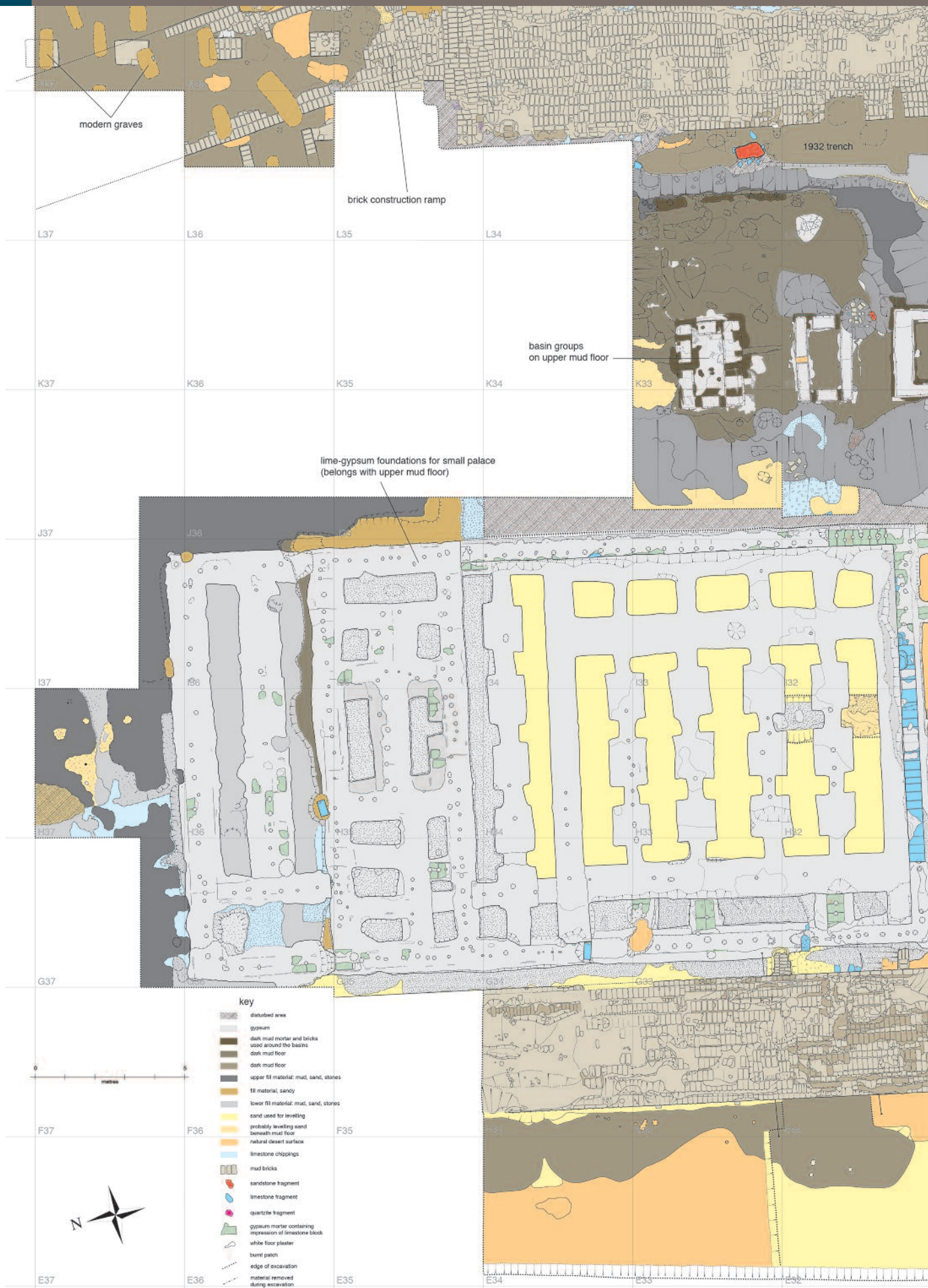


offering-table from the first court of the second temple



mud-brick offering-table from the north side of the temple, first temple period







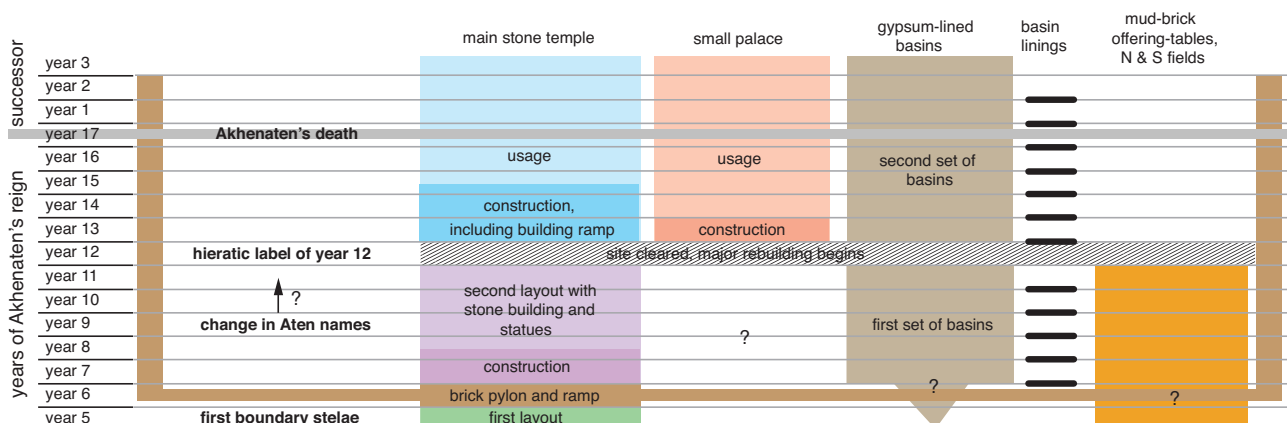
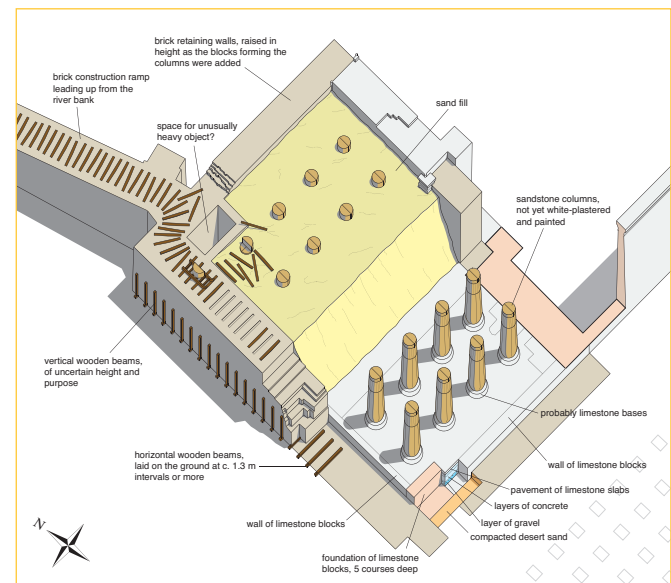
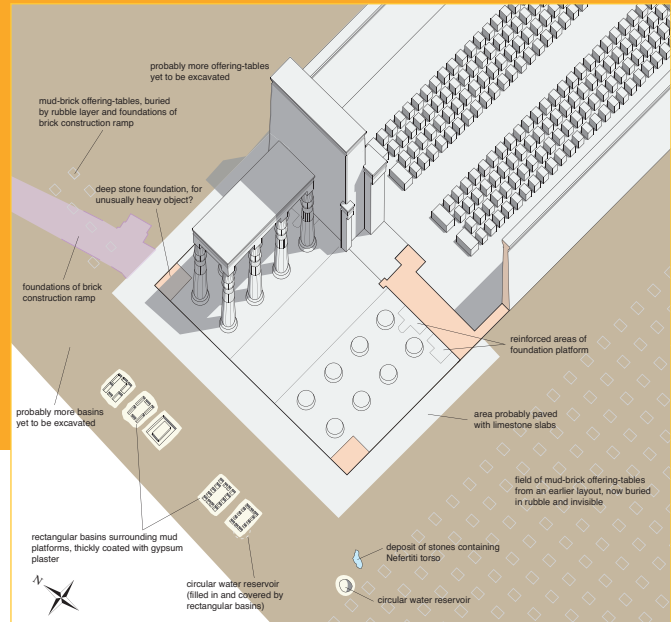
The building history of the 'House of the Aten'

Gradually a history of the building of the temple is emerging. The timetable given here attempts to incorporate the key findings so far, but is bound to be open to revision.

The major break in continuity was the destruction of all that had been built in the first part of Akhenaten's reign and the making of a fresh start on a new and presumably grander temple. This took place in or after the king's 12th year of reign.

The new design included a portico of giant sandstone columns added to the outermost stone pylon. In order to raise the sandstone column blocks it seems that the foundations (large pedestals made of lime-gypsum concrete) were surrounded by a thick temporary wall of mud bricks joined to a sloping ramp of bricks which must have led to the construction site from somewhere to the north along the river bank. The wall created a huge box, which was filled with sand and progressively raised in height until the level of the portico roof was reached. The temporary wall was then demolished apart from the bottom 70 cm, which was buried in a layer of rubble, incorporating the removed bricks, to create a higher general ground and floor level. The remains of a layer of cement, probably a firm underlay for a stone pavement, still cover parts of the brick wall and confirm that it had only a temporary existence.

A surprising discovery is that the fields of mud-brick offering-tables which were laid out on the north and south sides of the main stone building were buried, and in some cases removed, during the rebuilding and so were no longer visible when the main temple was brought back into use.





The front entrance to the temple near the end of the 2014 season, view to the north-east. Across the front run the twin wall thickenings of the outer pylon. They flank an entrance ramp where the side walls of mud brick are being strengthened with new bricks. The position of the door threshold is being marked with a layer of limestone blocks. In the background can be seen the outlines of the small palace, completed in 2013.



The northern platform made from lime-gypsum concrete which provided solid support for a colonnade of eight huge sandstone columns. It was surrounded by a trench that had originally contained the foundations for a wall of limestone blocks. The wall trenches, having been emptied of sand, are being filled with a network of thin walls made from small local limestone blocks. The spaces will be filled with sand, and the whole covered with a single course of fine Tura limestone blocks. View to the east, along the 200-m line of the north stone wall of the temple.



▲ The final course of Tura limestone blocks at the north-west corner of the northern platform, viewed to the west. The ground level will be made up with sand and stone chippings to the top of the blocks.

▼ Schematic plan of work being undertaken at the northern platform of the temple entrance system, partly cut away to show the lower level of stonework.

Marking out the plan of the 'House of the Aten'

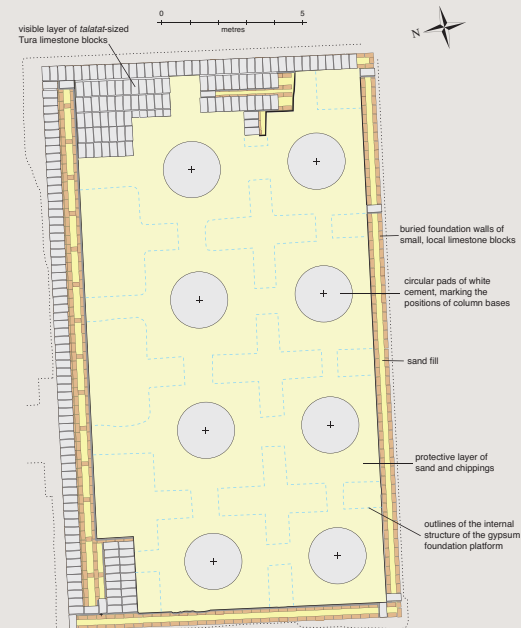
The cleaning and recording of the foundations of the Great Aten Temple run in parallel with a scheme to mark permanently the outlines of the building in fresh materials.

In the case of the brick pylons along the western end new bricks of sun-dried mud made to the same size as the ancient bricks (see p. 1) are added as protective layers.

Where there were walls of stone blocks, the originals were removed not long after the end of the Amarna period, often leaving clear traces of their positions on the foundation layer. Over this, a thin protective layer of sand is spread. Above this, the foundations are

built up to the ancient ground level either with fresh cement or with a network of small limestone blocks from local quarries. The final stage, and the only one intended to be visible, is a course of blocks of fine Tura limestone cut to the ancient standard block size of 52 x 26 cm. For mortar we use white cement mixed with crushed travertine or calcite.

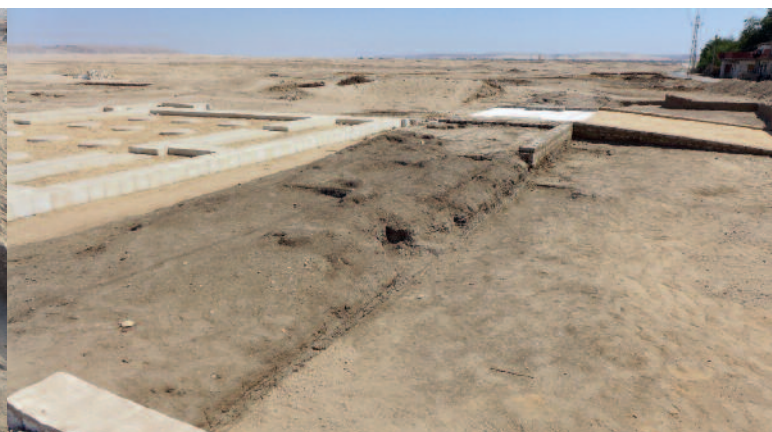
The scheme is still in its early stages and is a major undertaking for the expedition. The northern stone wall of the main temple – marking it out is a priority because it will simultaneously help to protect the site – is 200 m long.



The mud-brick pylon, viewed to the north, before the start of repairs and consolidation. At the top left edge of the picture runs a plastered revetment of stone blocks intended to hold in place the remaining spoil from the 1932 excavation. Photo by M. Bertram.



View to the south of the front of the Great Aten Temple at the end of the 2014 season, just outside the line of the mud-brick pylon.



The Hatnub quarry area, where fractured pieces of weathered siliceous limestone litter the surface.

Photo by J. Harrell.



Statue fragment S-8264, when first uncovered within a deposit of stones and brick rubble in square L26 at the Great Aten Temple. The height of the fragment is c. 30 cm. Photo by A. Hodgkinson.

A new Nefertiti statue and its place of origin

Amongst the pieces of worked stone recovered in the spring from the Great Aten Temple is part of the body of a finely carved statue, almost certainly of Nefertiti. The preserved part extends from just above her navel to nearly the bottom of her hips. She is shown wearing a pleated robe and, draped over it, a long red sash made by filling a deep groove with red pigment, largely lost. The back pillar to the statue was unusually short, beginning only at the point below her buttocks where the lower part of the statue is broken off. The piece was found in a dump of stones buried as an integral part of the thick layer of rubble which was used to raise the level of the temple ground prior to the completion of the second temple. It has the inventory number S-8264.



Worked block of siliceous limestone in the northern workings of the Hatnub limestone quarry. The scale is 10 cm long. The block is 1.2 m in length and was probably intended for a standing statue.

Photo by J. Harrell.

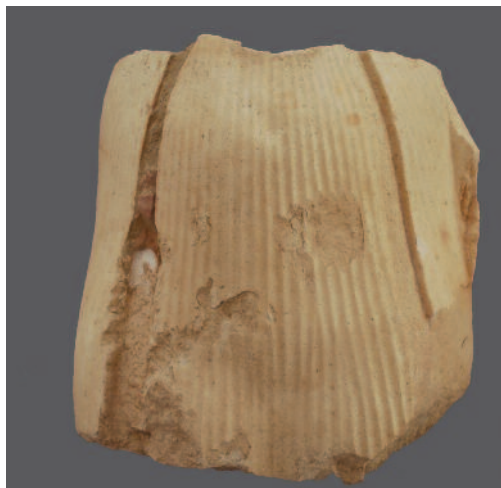
Geologist Jim Harrell has the following to say about the hard pale stone from which the statue was carved.

Some statuary coming from Amarna is carved from what has been termed “indurated limestone”. This is a recrystallized limestone that sometimes consists of essentially pure calcite (the ‘non-siliceous or ordinary crystalline’ variety) and at other times contains significant amounts of microscopic silica (quartz), which makes it much harder (the ‘siliceous crystalline’ variety). Worked examples of these stones are, respectively, the recently destroyed ‘S’ boundary stela, and the fragmentary statue of Nefertiti found in the Great Aten Temple in March 2014 (S-8264). Both

limestone varieties occur in the Amarna area with the siliceous one especially abundant. An 18th Dynasty quarry is known only for the latter stone and this is near the famous Hatnub quarry for travertine (or Egyptian alabaster), 15 km south-east of Amarna. It was originally discovered by Ian Shaw in the mid-1980s but the extent and nature of the workings were not fully recognized at the time.

The Hatnub quarry for siliceous crystalline limestone consists of four areas of workings, a main one about 35 m across and three smaller ones 60 m to the south that each span about 10 m. Extraction in all parts of this quarry occurred within a single bed of limestone that was exposed at the surface. This bed was already

broken up along many natural fractures, and so all the quarrymen had to do was lever the blocks out along the gaps. Many extracted blocks litter the quarry floor and among these are several statue roughouts, including one each for standing and seated statues (both about 1.2 m long), and three enigmatic forms all of the same size (about 1.6 m long) and shape (resembling one half of a square bracket). There is also a nearly rectangular block measuring 2.0 x 0.85 x 0.55 m. While it is not impossible that the stone used for the Nefertiti statue came from elsewhere in the Amarna area, given the evidence for statue production in the Hatnub quarry it seems very likely that this was its source.



Back, front and side views of statue fragment S-8264.



Interested in supporting the work at Amarna?

The first part of 2015 will see two major field projects taking place at Amarna: at the 'House of the Aten' (the Great Aten Temple) and at one of the cemeteries of the people of Amarna.

The easiest way to make a donation is by means of the online fundraising sites:

www.justgiving.com/northcemetery

<https://secure.thebiggive.org.uk/project/greatatentemple>

Donations can also be directed towards other projects on request. Contact Barry Kemp at: bjk2@cam.ac.uk or see our web site www.amarnatrust.com



In the Cairo office, Mafdy Mansour scans the excavation archive (a project supported by Peter Borromeo).

Following the creation of a freely available pdf version of Volume I of Amarna Reports, Volume II and Volume III are also now available in this format (with the agreement of the Egypt Exploration Society).

www.amarnaproject.com/downloadable_resources.shtml



Earlier in the year a section of the face of the western outer enclosure wall of the Workmen's Village collapsed as a result of weathering. If allowed to remain in this condition, a complete breach of the wall would have developed. Following discussions with the local office of the Ministry of Antiquities, the expedition's regular team of builders was sent to carry out repairs in May. For the result, see the next page.

The Amarna Trust

The Amarna Trust is registered with the **Charity Commission** as no. **1113058**. Its registered address is

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The Amarna Trust submits an annual set of accounts to the UK Charities Commission. None of its income is used in the furtherance of raising funds. Its overheads are modest.

The objectives of the Trust are:

To advance public education and to promote the conservation, protection and improvement of the ancient city of Tell el-Amarna, Egypt and the surrounding area for the benefit of the public in particular but not exclusively by:

- i) creating a permanent facility for study (the research base – The Amarna Centre);
- ii) undertaking and supporting field research (and publishing the useful results of such research);
- iii) promoting training in archaeological field skills;
- iv) providing, and assisting in the provision of, lectures and publications in furtherance of the stated objects;
- v) developing displays and exhibitions at a site museum for the benefit of the public and an educational outreach programme for the benefit of pupils at schools; and
- vi) working in partnership with the Supreme Council of Antiquities of Egypt to maintain the ancient city for the benefit of the public.



The damaged length of enclosure wall at the Workmen's Village, following repairs by the expedition's building team in May of this year.

The Trust invites donations from individuals or from corporations. Donations can be earmarked for particular purposes or they can be allocated by the Trust in pursuit of the stated objects of the Trust. The Trust is able to benefit from the present UK tax legislation by reclaiming tax on donations from UK tax-payers under the Gift Aid scheme, which increases the value of the gift by nearly a third. For this it is necessary to accompany each donation with a Gift Aid declaration form or a similar letter. There are further tax advantages for donors who pay at higher rates.

For residents of the USA, donations can be made either to the Amarna Research Foundation or to the Cambridge in America Foundation (both 501(c)(3) tax-exempt organisations) with the request that the donation be made into a grant for The Amarna Trust.

Further information, including downloadable forms, are available at www.amarnatrust.com where you can also donate on-line. Donations can also be made via www.justgiving.com/northcemetary secure.thebiggive.org.uk/project/greatatentemple



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All work done at Amarna relies upon the support and agreement of the Ministry of State for Antiquities of the Arab Republic of Egypt. We are indebted to its personnel, both local and in Cairo.

Thanks to those who have recently supported the Amarna Project

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