GIZA PLATEAU MAPPING PROJECT MARK LEHNER | ANCIENT EGYPT RESEARCH ASSOCIATES

Ancient Egypt Research Associates (AERA) carried out spring and fall field seasons during 2022–23 with both lab and field work. We returned to two areas on the south side of our flagship site, Heit el-Ghurab (HeG), on which we had last worked in the early 2000s: the Royal Administrative Building (RAB) and the structure we dubbed Enclosure 1 (E1), which lies just west of the RAB compound (fig. 1).

ROYAL ADMINISTRATIVE BUILDING

We returned to the RAB during the spring and fall field seasons, which took place from September 16 to November 30, 2022, and from January 31 to April 9, 2023 (figs. 2–4). We had previously excavated at its north end, the only portion we could access. Most of it, as well as other areas of HeG, were buried under the Abu Hol Sports Club soccer field, where we could not excavate until fall 2021 after the sports club moved. In our earlier work we exposed the bottoms of round mudbrick silos, measuring 2.62 m (5 cubits) in diameter, lining the north and west sides of a court about a meter lower than the floor level outside the court. These silos appeared to serve as the central storage for grain used as flour by several bakeries we excavated to the north in our area EOG (East of the Galleries; see fig. 1), the production yard of the RAB. During our 2022–23 seasons, we excavated targeted areas within the Silo Court and finally answered some questions lingering since the last RAB excavation in 2007.

In February and March 2023, we found the south end of the Silo Court. It measures $39 \,\mathrm{m} \times 17.5 \,\mathrm{m}$, or $682.5 \,\mathrm{m}^2$ (7,346 ft²). We found the silos of the southern row, allowing us to estimate thirty silos total in eastern, western, northern, and southern rows. So far we have excavated fifteen individual silos. Four entrances opened into the Silo Court: one on the north, two on the south, and one on the east through the outer wall of the RAB. We hypothesize that grain and other goods could have been delivered up to the RAB from boats in a harbor that filled with water during the inundation. The entire area of the RAB and southeastern part of HeG slopes down to the south, into a depression filled with sand soaked in groundwater (Lagoon 1), the remains of our hypothetical harbor.

A narrow corridor between the silos and the enclosing walls of the Silo Court at each of the four sides, with a floor level higher than the silo bases, allowed workers to fill the silos from the top. They could remove the grain or other stored goods from openings near the bottom of the silos. A low mudbrick wall ran along the court's floor, tangential to the fronts of the silos. We believe apertures for letting out grain and resealing the silos functioned somehow with this low retaining wall or curb. But so far we have not found this articulation intact on any of the silos. When they were demolished or collapsed, the side facing into the court with its aperture would have been weakest, so the bases of the silos have mostly been cut away on that side.

The floor of the Silo Court sloped down gradually from east to west, with the north row of silos following the slope. Quite unexpectedly, we found that the silos in the eastern row were based about 0.5 m higher than those on the north, such that a small ramp leads up to the silo in the northeastern corner, and the low wall along the fronts of the eastern silos rises as a retaining wall for the sand and debris of the higher foundation. Why the builders raised the eastern silos higher, we do not know. We also do not know how high

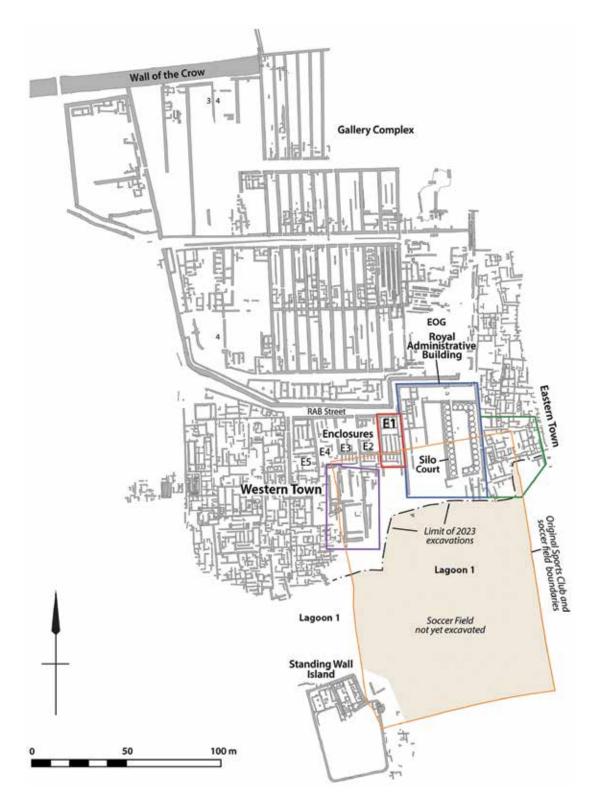


Figure 1. Map of the Heit el-Ghurab site, with areas where AERA worked in fall 2022 and spring 2023 indicated. Map by Rebekah Miracle, AERA GIS.

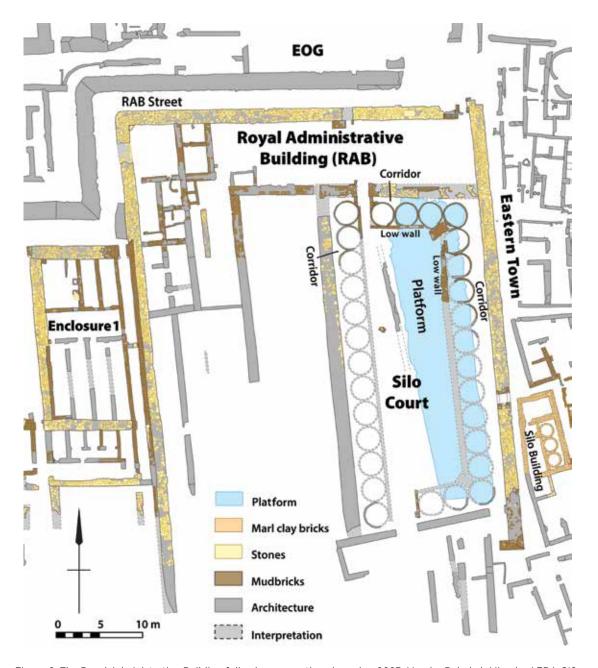


Figure 2. The Royal Administrative Building following excavations in spring 2023. Map by Rebekah Miracle, AERA GIS.

the silos stood or whether they were conical or domed cylinders, like those shown in Old Kingdom tomb scenes. The latter shape is probable.

During our most recent excavations we found evidence of activity after the reign of Menkaure, who left the third Giza pyramid uncompleted. Overall, it appears from all our work over the years that people largely abandoned the HeG settlement after his reign. But in this past field season we found a thick platform of stone over the eastern half of the Silo Court, which appears to have had some use after the silos were decommissioned. The stone debris included pieces of crude limestone furniture (from the adjacent Eastern Town?) and tons of large fragments of granite, diorite, and dolerite. A retaining wall of broken stone and a

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Figure 3. The Silo Court during excavations in spring 2023. The Khafre and Khufu pyramids loom in the background. View to the northwest. Photo by Mark Lehner.



Figure 4. Excavators work in the silos of the Silo Court during the fall 2022 excavations. View to the west-southwest. Photo by Mark Lehner.

ramp-like accretion that runs against its eastern length hold the debris in place. The platform material was dumped and held in place above the remains of the eastern silos after they had collapsed. We do not know what the platform was used for—perhaps for dragging away stones from HeG buildings for other construction projects. The western side of the platform forms a ditch with the western wall of the Silo Court, probably after the wall had collapsed. The ditch runs the length of the court and slopes down gradually to the south, toward the hypothetical harbor.

Complicating matters, we also have evidence of activity during the Fifth Dynasty that appears to *predate* the platform: six sealings bearing the name of Userkaf, the first king of the dynasty. We found them in past seasons but could not tie them to HeG until 2023. The sealings were made with the same seal, one owned by an official called the "Elder of the House." They were used to seal peg-and-string closures, most likely on doors for storage structures, such as bins and silos. The fragments that fell when the sealings were broken would not have traveled far, suggesting that the RAB silos were still in use in the Fifth Dynasty. If so, the platform came later, suggesting the site was decommissioned in the early Fifth Dynasty.

To the east of the RAB, we cleared some of the area previously under the soccer field and uncovered more evidence of the Eastern Town, a village-like district unlike other areas of HeG (fig. 5). The newly

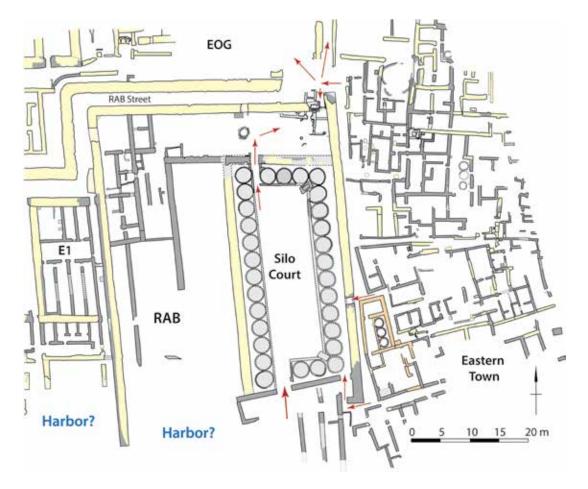


Figure 5. The newly exposed Eastern Town and southern end of the Royal Administrative Building's Silo Court. Yellow walls are composed of broken limestone pieces set in Nile Valley clay. Gray walls are Nile-clay mudbrick. Orange walls are desert marl-clay mudbrick. Red arrows indicate access into the Silo Court. Map by Mark Lehner based on one by Rebekah Miracle, AERA GIS.

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revealed architecture included a building with three domestic silos, built entirely of yellow, desert marl-clay bricks, distinct from the dark-gray bricks made from Nile Valley clay. With its points of open access on the south, an entrance on the east, a doorway into the northern RAB on the northeast, and, on the northwest, a corridor ramp leading from the higher, northern floor level down into the Silo Court, the RAB now seems eminently accessible to, and entangled with, the Eastern Town.

ENCLOSURE 1 AND THE WESTERN TOWN

In 2002 and 2005, we uncovered and partially excavated the northern ends of five large magazines, E1–5 (figs. 6 and 7). In spring 2022 we uncovered the footprint of the southern ends of E1, E2, and E3, which had been buried under the soccer field. Each one featured matching sets of four chambers within it. South of E3 and E4 we found three additional broad galleries extending south about 20 m. More walls extend farther south and disappear under sand soaked in groundwater. Altogether these enclosures, and their adjunct

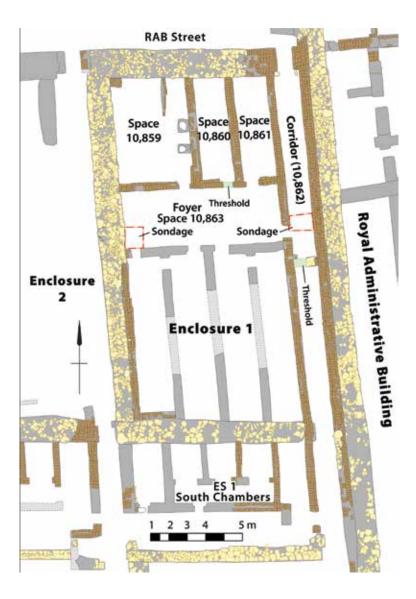


Figure 6. Map of Enclosure 1 and adjacent areas. AERA excavated the north end of E1 and the corridor. Map by Rebekah Miracle, AERA GIS.



Figure 7. Excavators working in Enclosure 1 in spring 2023. View to the north. Photo by Mark Lehner.

sets of chambers and broad galleries, appear to have comprised an impressive, orthogonal port structure for both storing and processing commodities. Located next to the seasonal harbor, they could be easily accessed from boats making deliveries.

In spring 2023 we found further evidence suggesting this area received deliveries from the harbor southwest of E1–3. In the district we call the "Western Town," after clearing down to the ruin surface once covered by the soccer field, we discovered ramps that slope up gradually from the east, from the sand-filled depression we think was the harbor, to two entrances of a large, stone-built structure.

In the northern end of E1, we excavated three rooms opening off a small, common, central court or foyer (Space 10,863), accessed by a long corridor (Space 10,862) running from RAB Street down the entire eastern side of E1. In the northwestern corner, Space 10,859, we excavated through floors of a workshop. These floors predated a small platform and bread pots for baking bread that one of our field-school teams excavated in 2005. In the earlier, main use of this space, craftsmen created alabaster and other stone objects. We found drill cores, drilled negatives with concave surfaces, a cache of cylindrical cores excavated from drilling vessels, and hundreds of worked pieces with flat surfaces, probably from boxes and small vessels (fig. 8). Craftsmen's tools were here too—stone drill bits, whetstones, abraders, pounders, axes, grinders, and polishers—as well as raw material: a large block of alabaster. Two clay sealings impressed with craftsman-related titles also turned up in the workshop. Two round, shallow stone emplacements against the eastern wall were probably used for working stone objects, possibly for drilling out vessels. The workshop space was unroofed for ventilation and light.

The room just east of the stone workshop, Space 10,860, may have served administrative functions. It contained no features or installations. The bright-white plaster floor was not robust enough for heavy manual labor or heavy foot traffic. It appears to have been made of alabaster dust, perhaps mixed with limestone or gypsum powder. We have not found anything like this white-plaster floor elsewhere in HeG. In the



Figure 8. Stoneworking discards and tools used to create stone objects found in the stone workshop, Space 10,859, in Enclosure 1. Clockwise from bottom: drill cores left from drilling out round vessels, a drill core, an abrader, and a drill bit. Photos by Mark Lehner.

third space—10,861 on the east—we found no installations; nor did we find any objects that might suggest how it was used.

At some point the two doorways that opened onto the eastern corridor were blocked, as was the corridor along E1's southern wall. But the entrance from RAB Street apparently remained open. We wonder whether such blockings came with the official abandonment of the HeG site. Perhaps the corridor had been put to a new use other than as an access route into E1 and farther south. Like the north–south ditch and stony platform in the RAB Silo Court, people may have used the corridor as a track for carrying away

material from the northern parts of HeG down to the seasonal harbor, or to a lower, dry delivery track, for use at other sites.

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