

Kourion Urban Space Project: Preliminary Report of the 2018 Season

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Abstract: The 2018 season of the Kourion Urban Space Project (KUSP) continued the excavation of Building 4, a large structure situated just to the southwest of the Earthquake House on the Kourion promontory. Focusing on tracing the architecture of this building, this season revealed the northwest perimeter wall and identified two internal rooms: the courtyard and Room 35. Building 4 continues to yield high quality and imported artifacts including glass vessels and fragments of marble statuary along with imported marble and stone construction materials. These artifacts combined with the overall large size of this structure and construction materials suggest that this building served the elite class at Kourion, though it is still uncertain if it served a public or private purpose. This report was lodged with the Department of Antiquities, Cyprus, in January 2022 and is published here with the authors' affiliations as they were at the time of the excavation.

The Life of the Ancient City of Kourion

The ancient city of Kourion is located near the modern village of Episkopi on a promontory overlooking the Mediterranean Sea. Situated between Paphos and Amathous, Kourion was a thriving city from the first century BCE until the late 4th Century CE. Kourion was a dynamic city. Moderately sized in the Hellenistic period, Kourion was complete with a theatre in the city centre by the 2nd century CE and a stadium and sanctuary dedicated to Apollo to the west.

Kourion underwent many changes throughout its life, growing and shrinking with political and environmental changes. Perhaps the strongest influence on Kourion, shaping and reshaping its urban layout, were the earthquakes that occurred throughout its life. Cyprus lies just north of the Cyprus Arc, the tectonic boundary of the African and Eurasian lithospheric plates. It is the collision of these plates just southwest of the island that causes the majority of the earthquakes felt on Cyprus (Papadimitriou and Karakostas 2006). Historical analysis of earthquake activity along the Cyprus Arc indicates that this boundary will cycle through long periods of inactivity and shorter active periods (Kythreoti et.al. 2005). One such active period occurred between 1995 and 1999 with a series of very strong earthquakes averaging 5.6-6.5 on the Richter scale (NGDC 2018). It is apparent from archaeological evidence as well as written sources that during the Hellenistic and Roman periods, seismic activity affected life in the coastal cities of Cyprus.

The earthquake of 15 CE described by Dio Cassius (54.23.7; Penelope 2011) affected both Paphos and Kourion with the former city so devastated that imperial

intervention was required. The Kourion theater was damaged during this event and required restoration work. A later earthquake in 76 CE may have also affected this structure and prompted renovations. This earthquake was felt along the entire southern coast and eastern coast of the island at Paphos, Salamis and Kition (Costello 2011). There are no indications of seismic activity during the 2nd century, or at least no devastating earthquakes were described. In the 2nd Century, the city center of Kourion expanded and was renewed; colonnaded stoas were added to the Forum, a second water conduit was added to bring water to this naturally dry city, the House of Achilles which likely fulfilled a public function was built, and the theater was again renovated. Outside of the main city, the Sanctuary to Apollo was also renovated and a stadium was built. Sometime in the 3rd century the House of the Gladiators and the House of the Apsed Triclinium were also built.

The 4th century brought major changes to Kourion and disruptions to life within the city. A series of earthquake storms or a period of intense seismic activity occurred during this century. Two earthquakes were recorded at Salamis in 332/3 and 342. The second of these events was so destructive that Salamis was re-founded as Constantia, a smaller city and the new capital of Cyprus. It is possible that other parts of Cyprus felt these earthquakes, but no major damage is described. The date of the earthquake that destroyed Kourion is uncertain; Soren and colleagues (1985) have argued that it is the same earthquake described by Ammianus Marcellinus as occurring on 21 July 365. This earthquake caused damage across the Mediterranean, producing a tsunami that destroyed several cities on Crete. Mediterranean

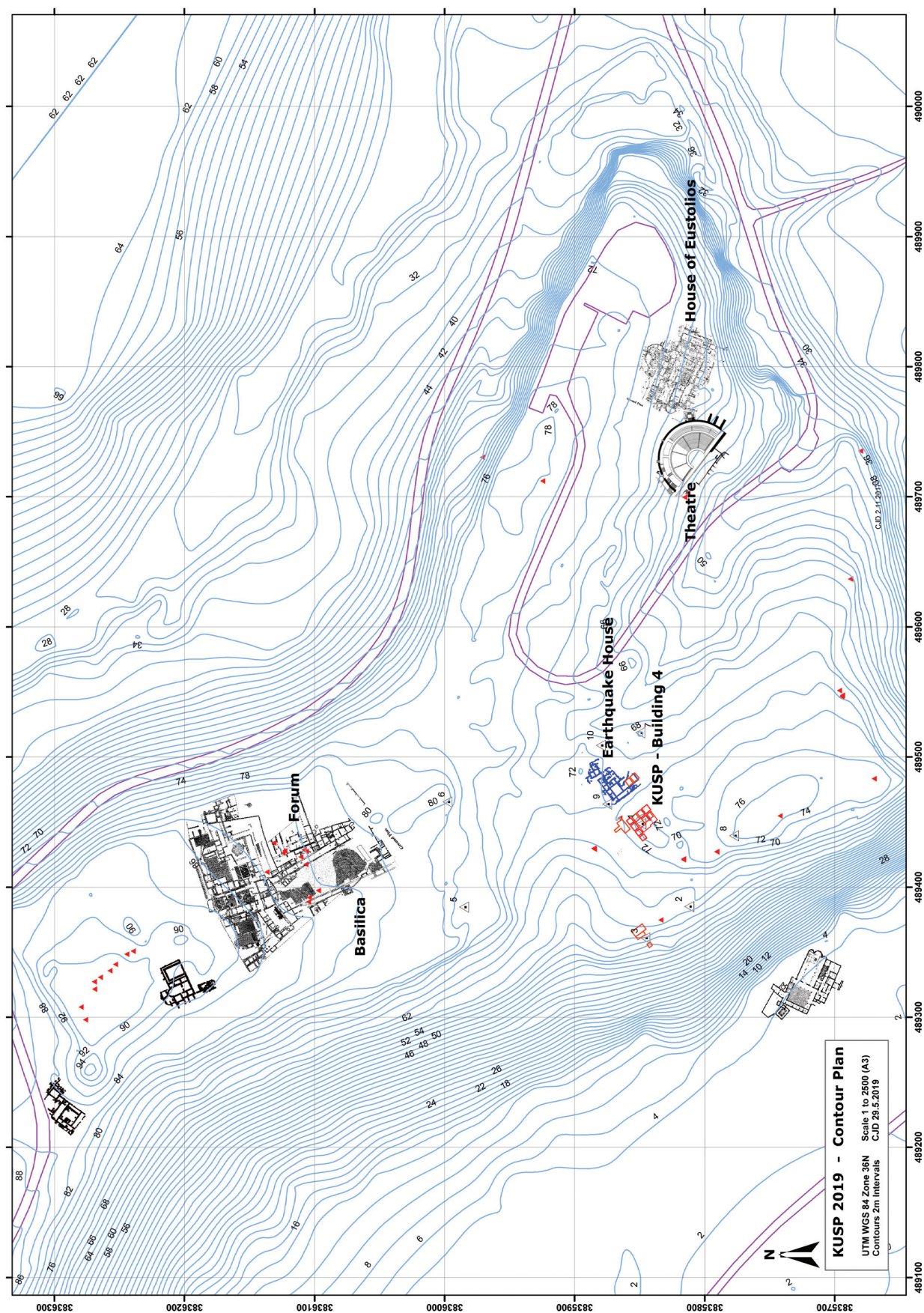


Figure 1: An annotated contour plan of Kourion prepared by KUSP.

tsunamis are rare but have been documented as associated with earthquakes in 1222 and 1953 (NGDC). Costello (2011) has argued that it is unlikely that the earthquake that devastated Kourion was the same that hit Crete, but archaeological evidence suggests that the destruction of Kourion occurred sometime in the late 4th century.

The events that followed the Kourion earthquake are uncertain, however the city appears to have been abandoned for at least forty years (Costello 2011: 39). Clean-up and reoccupation were slow, with minimal squatter occupations appearing first (Soren 1987). The character of Kourion was completely changed when rebuilding began. Most of the major buildings that had been destroyed were never rebuilt and those that were preserved, did not continue to serve the same function (Costello 2011). Prominent at the archaeological site today, and a major change to the Kourion promontory, was a new Christian basilica that was built on the foundations of the Roman civic basilica. It functioned as the seat of the Bishop of Kourion. Also added to the city at this time was the House of Eustolios. The function of this building is unknown; however, a mosaic inscription indicates that whomever Eustolios was, he was involved in rebuilding the city or ‘restoring calm in the earthquake-struck land’ (Mitford 1971).

The Kourion Urban Space Project excavation of Building 4

The Kourion Urban Space Project (KUSP), begun in 2012, has focused its archaeological work on the years leading up to the destructive earthquake and the effect of this event on the urban topography, and socio-economic and religious systems of this period. In particular, KUSP examines and compares the lifeways of elite and non-elite inhabitants of Kourion before and after the earthquake to understand the link between changes in the socio-economic system and the structure of the urban environment.

The KUSP archeological area is situated just southwest of the Earthquake House in a depression that separates the basilica and forum or centre of the city from the theatre and the House of Eustolios (Figure 1). This area has produced at least three new buildings (Buildings 2-4), the manipulation of the landscape for walking surfaces and a water holding tank. The focus of KUSP’s work in the 2018 season was the excavation of Building 4, just south of the Earthquake House. Originally thought to be a natural hill, the excavations beginning in 2013 revealed that this land form was not the product of the natural deposition of Aeolian sand and subsequent soil formation but was instead created by the remains of a large structure. We estimate that this building is around 20 m wide, based on its proximity to other structures, and 70 m long, ending just where the ground level abruptly slopes downward towards the Sea (Figure 1).

Building 4 Stratigraphy

It is apparent from the thick deposit and depositional pattern of tumbled wall stones that Building 4 was suddenly and catastrophically damaged. Preliminary analysis of pottery below the tumble indicates that it was destroyed during the earthquakes of the late 4th century. It is uncertain, however, if this building was in use up to its destruction or was abandoned and subsequently destroyed. During the 2014 excavation season, KUSP unearthed the commingled and disarticulated skeletal remains of four individuals: an adolescent, a child, a young child and an infant (Osterholtz 2014). These individuals may have been inhabitants of the building during its use-life or may represent squatters using an abandoned building. They may also have run into the buildings seeking refuge only to be killed by falling walls and roofs. As more of this building is unearthed and artifacts on floors are examined, we will have a clearer understanding of its use life and destruction.

While it is uncertain if Building 4 was in use up to the earthquake, it is evident that it was never rebuilt after its destruction. Atop the tumbled wall stones is a ribbon of broken artifacts, primarily pottery and glass. It appears that this depositional pattern is the product of a particular action common throughout the city of Kourion; following the earthquake, refuse in the form of broken objects and sometimes wall stones that were not reused elsewhere were dumped in abandoned areas to aid the clean-up of the city. This ribbon of finds on top of the destroyed remains of the building seem to indicate this action, and the final abandonment of the building.

The 2018 Excavation Season

The KUSP excavation plan since 2016 has been to trace the architectural extent of the building and interior divisions of the space (Figures 2 & 3). As such, we have not reached the floor in most of the rooms we have isolated. Previous reports of our work have described the floor assemblages that have been excavated in Units A3, 7 and 9, corresponding to Rooms 28, 36 and 41 (Grimsley et al. 2023). We have revealed the architecture for roughly 400 square metres of this building or a 20 m x 20 m area and have isolated at least five interior rooms, and a possible staircase and courtyard.

Excavations during the 2018 season focused on identifying the northwest perimeter wall of Building 4, and the architecture in what might be the centre of the building. Excavation units A15-18 were placed along the northwest extent of our excavation, and A10, 11 and part of 7 were revisited.

Excavation units A15-18 and building 4’s exterior wall

Units A15-18 revealed a long, straight wall running north-southwest, designated WX. Because of the proximity of this wall to Building 3, previously excavated by KUSP, it



Figure 2: A plan of Building 4. Rooms 35 and 41 are indicated. Wall names begin with the letter *W*. Rooms are indicated by numbers in squares. Excavation Units begin with the letter *A*.

is very likely that WX is the perimeter wall of Building 4 on this side. WX was constructed from both cut blocks at the base, primarily found in Units A17-18, and unworked cobbles of local limestone. The stones were mortared together, and gaps were filled with both small stones and pottery used as chinking. WX is, on average, 0.65 m wide and is at least 11 m long based on the portion that has been revealed. At its northern extent, WX joins to WV. This forms the north corner of Building 4.

Courtyard

The excavation of Units A17 and 18 in 2018 and the discovery of the perimeter wall WX has delineated the northwest boundary of what we think is a central courtyard within Building 4. Partially excavated in 2016, this section of the building appears to be an open space, as no cross-cutting walls have been found running through it. The earthquake debris in this area varied from large cut-architectural stones in the northwest to small stones and then back to larger blocks to the southeast. The southern section of the courtyard yielded the largest deposit of roof tiles we have associated with Building 4. It is possible that this courtyard was partially roofed; the roof collapsed either during the earthquake and, perhaps, decayed further over time as roofbeams rotted. In the northern section of

the courtyard, fragments of painted plaster and marble revetment or floor covering were found among the plain and decoratively carved architectural stones.

The 2018 excavations in the northern extension of the courtyard revealed more decorative marble that once adorned walls and floors, but also several fragments of sculptures. A fragment of a leg, and knee or elbow were found as well as the leg of an animal. Porphyry, a purple-red stone imported from Egypt, was also found in this area. Flat on both sides, it was most likely used as decorative wall or floor covering.

Rooms 35 and 41

Room 35 lies just below what was once the apex of the Building 4 hill. The highest preserved walls of this building border Room 35; it is impossible to say at present if this is because Room 35 is actually a second story room, or if the preservation of the walls is a result of how the building responded to the earthquake waves. The former hypothesis is supported by Room 41 tucked into the northern corner of Room 35. Room 41 has been published elsewhere as a possible stairway (Grimsley et al. 2018). The 2018 excavations did not refute this possible function, though additional excavation in this area did not elucidate the function of this small space.

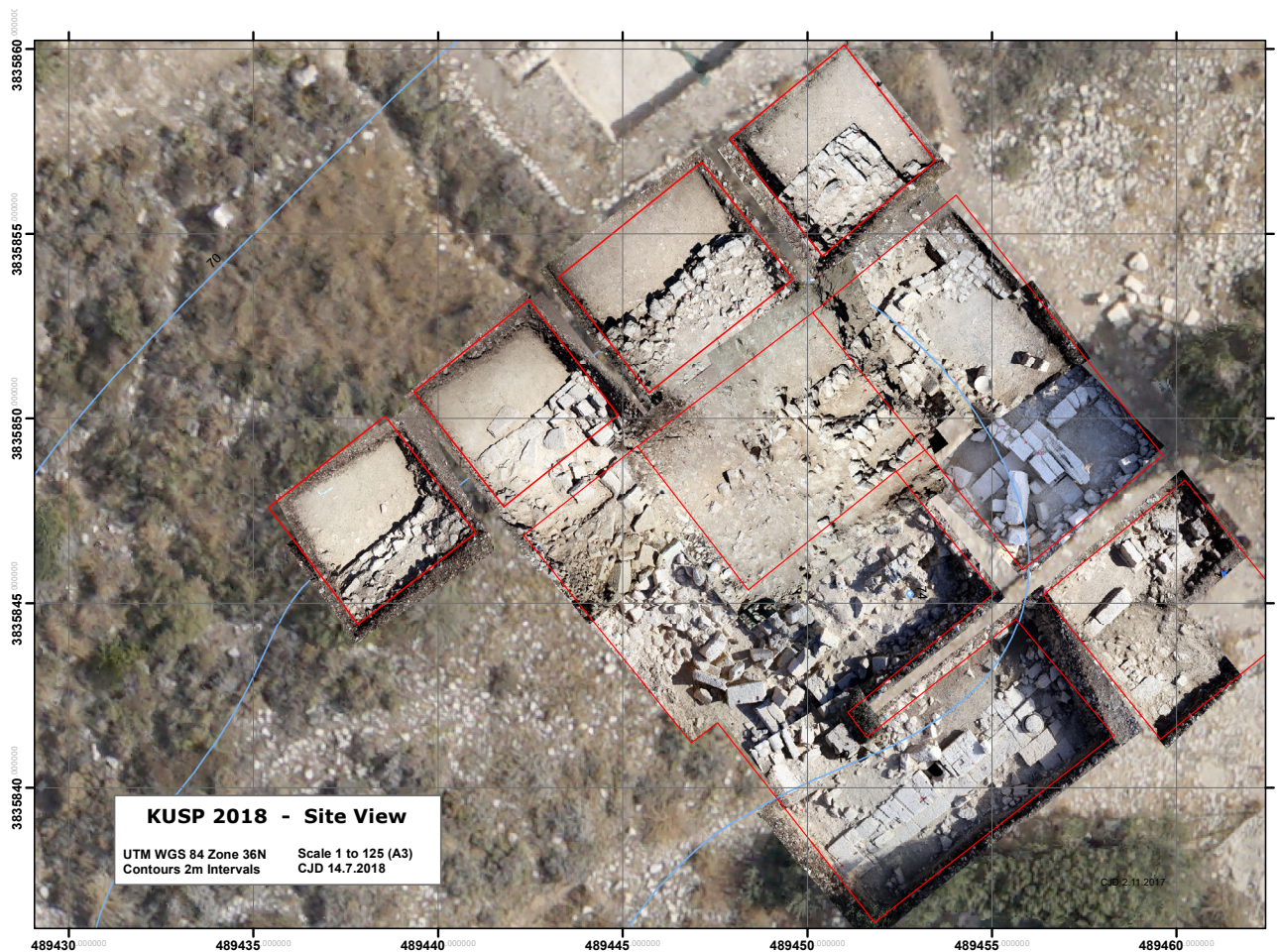


Figure 3: A composite geo-referenced overhead orthophotograph of Building 4.

Room 35 is difficult to interpret at present. Three walls seem to run parallel through this space but do not completely divide the room (Figure 4). Two of the walls are significantly slumped to the south, leaning on top of Aeolian sand fill. WT, the northern most wall, is the most vertical and extends the farthest forming one side of Rooms 41 and 36. Room 36 has been reported on before, but it is interesting to note here that this section of WT is lifted and twisted as a result of the earthquake waves uplifting and moving the ground beneath the building. These three walls as they exist in Room 35 appear to have been partially destroyed in the earthquake and decayed over time, slumping under their own weight onto sand that infilled after the building was abandoned. This process formed what appears to be a bipartite or tripartite division. Future work in this area will test the hypotheses that this series of walls formed a divided storage area, a tripartite entry way, part of the stairway that led to the second floor or second floor walls.

The majority of the artifacts recovered from this room were found between the series of three walls. The high quality of the artifacts mixed with many floor mortar fragments seems to support the hypothesis that the remains in this room are the collapsed upper story of the building and do

not reflect a clean-up and dumping episode following the earthquake. Among the notable artifacts recovered from between these walls and mixed with wall tumble was a restorable cooking pot and cooking pot lid and six coins that date from the 1st-4th centuries. Of the six copper-alloy coins found, four were issued during Valens reign (364-378), and one under Julian II (361-363). The sixth coin was minted in Philippi, Macedonia. Victory facing left is depicted on the obverse; three Roman legionary standards are on the reverse.

This room has yielded fragments of several high-quality glass vessels. Previous excavations in this room revealed fragments of a mosaic glass plate imported from Egypt. Reported on before (Grimsley et. al. 2023; Swantek and Grimsley 2016), this plate measures roughly 60 cm in diameter and is made from a green matrix with inset yellow rods. Along with this plate, a fragment of a glass vessel decorated with a raised hexagonal pattern and another with blue marquis shaped insets were found. Three joining pieces of a glass cage cup were also unearthed in this room (Figure 5). This vessel is dated to the 4th century and was probably produced during the Constantinian dynasty and imported to Cyprus (O’Hea Pers. Comm. 2018). Cage cups are extremely rare, around



Figure 4: A 3D view Units 10, 11 and 16. The three slumped walls in Room 35 are in the foreground. The view is looking southwest. Image: generated by Agisoft Photoscan.

fifty fragments have survived (Harden 1987). Perhaps the most famous cage cup is the Lycurgus Cup made from dichroic glass, now in the British Museum (Online 2019). The fragmentary cage cup found in Building 4 was probably once clear glass with a clear or milky white and green cage. This colour combination is similar to the Cologne cage cup in the Romano-Germanic Museum in Cologne; this cup is decorated with a raised glass inscription in Greek reading ‘Drink, live well forever’ (Trier and Naumann-Steckner, eds. 2016).

KUSP’s Future Work

The architectural remains and artifacts recovered from Building 4 from 2013 to 2018 suggest that this structure served the elite of Kourion as either a public building or private residence. Imported marble and porphyry was used as wall and floor covering, painted plaster adorned walls in most rooms and carved gypsum and limestone trim likely used along walls and ceilings indicate that the visual presentation of this building was both important and reflected the status of its users. Artifacts found below tumble and on floors supports the hypothesis that this building reflects elite lifeways at Kourion prior to the destructive earthquake.

Archaeological investigations of Building 4 will continue in the coming years. KUSP intends to continue to trace the perimeter and internal walls of this structure and determine its overall vertical and horizontal size.

Excavating to the floors of Building 4’s rooms has presented a conservation challenge as many of the floors are mosaiced. Working along with the conservators from the Department of Antiquities, we will follow their protocols for exposing and preserving these mosaics. Further challenges are faced with Building 4’s slumped walls and the removal of the unstable sandy fill on which they rest. We are devising a method to digitally map these walls and the order and placement of stones within them, so they can be rebuilt and stabilized.

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Figure 5: The restored fragments of the cage cup found in Room 35.

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