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An iron spearhead recovered in destruction debris

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Busayra is located in southwest Jordan 20 km south of central Tafilah and 65 km north of Petra (UTM: 36R 749433 E 3404278N; 1,127 mamsl). The ancient settlement spanned a long spur of land bounded by the Wadi Janin on the east and the Wadi Qarqur on the west. Busayra is widely believed to be the ancient settlement of Bozrah, the capital of the Iron Age polity of Edom mentioned in disparaging terms in the Hebrew Bible (e.g., Amos 1:12; Jeremiah 49:13). Crystal Bennett carried out a multi-year archaeological project at the northern end of the settlement between 1971 and 1980 (Bienkowski 2002). Bennett's project identified an extensive fortification system that bounded multiple terraces descending into the wadi canyon. Bennett's team excavated two monumental buildings (Areas A and C) and two residential neighborhoods (Areas B and D) on the uppermost terrace, a 2.6 hectare parcel of land today owned by Jordan's Department of Antiquities (**Fig. 1**).

The Busayra Cultural Heritage Project (BCHP from hereon) began its work in 2013 by conducting an assessment that identified opportunities for site development and further research (Porter et al. 2014). During the next two years, the project carried out preservation activities and limited excavations in Areas A, B and D (Brown 2018; Brown et al. 2016a) and conducted a geophysical survey of unexcavated areas (2016b). Busayra was selected for site development by the USAID-supported Sustainable Cultural Heritage Through Engagement of Local Communities Project (or SCHEP) between 2014 and 2018 that saw the construction of a new perimeter fence, tourist paths, and signs (al-Adarbeh et al. 2020: 54-61). SCHEP also carried out cleaning projects that improved the site's overall appearance and improved visitor safety.

After an unexpectedly long hiatus, the BCHP resumed its research at the site between 1 and 24 July 2025. This report describes the achievements of the season which focused on the conservation and documentation of the monumental building in Area A.

Interpreting the Area A Monumental Building

Bennett excavated a large 2,325 meters squared horizontal building in Area A that is located at the highest elevation of the settlement's spur and with a commanding view of the surrounding landscape. Geophysical survey of the unexcavated area north of the Area A building determined that the building was the terminal point within a much larger complex that consisted of buildings, gates, and plazas through which visitors passed before accessing the Area A building using a narrow threshold in the northeast corner (Unit A60.1). Bennett's team excavated the Area A building in a patchwork of trenches that provide a basic understanding of the building's design (Bienkowski 2002: Figs. 4.1-2). This building was constructed and renovated multiple times during the first millennium BCE. Construction likely began in the eighth century BCE, although when in the eighth century is impossible to determine with precision.

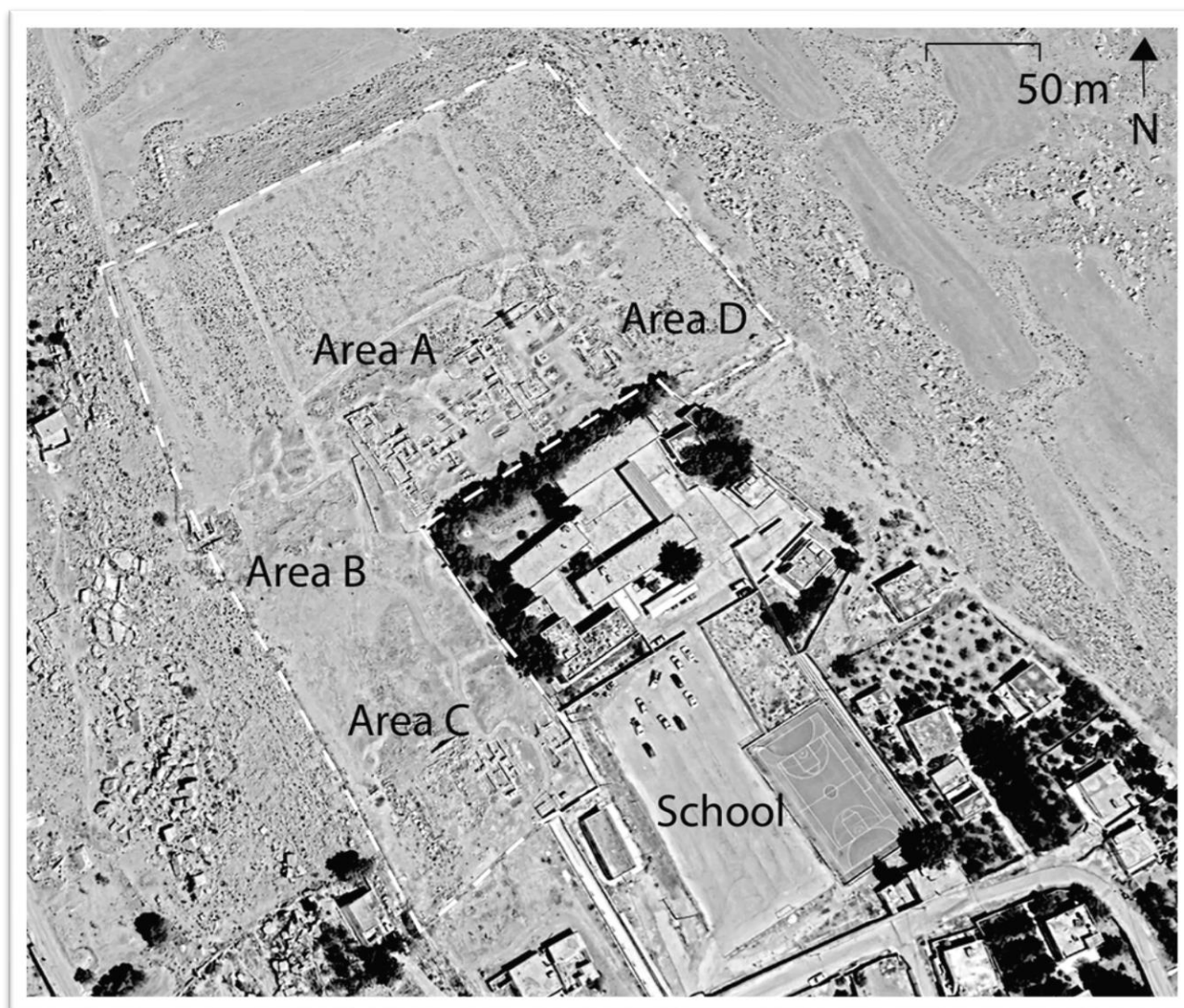


Figure 1. The Busayra acropolis detailing excavation areas.

Using Bennett's fieldnotes and photographs, Bienkowski retrospectively separates the building's construction, use, and abandonment into five phases (Bienkowski 2002: 57-109; cf. Table 14.1). The building rests on an intentionally built podium (Phase 2) of intersecting stone walls that created a lattice framework of retaining walls holding sediments. This podium elevated the building above the surrounding settlement, likely a design to enhance the building's symbolic status. The building (Phase 3) that rests on this podium is organized around two courtyards, each of which is surrounded by rooms of different dimensions. The Phase 3 building was likely renovated at least once before it was significantly burned in the late seventh or sixth centuries BCE. The western half and parts of the eastern half of the building was rehabilitated at some point between the late sixth and fourth centuries BCE (Phase 4), although it is difficult to determine precise dates based on what has been published thus far. Finally, a Nabataean or Roman-era threshing floor was installed on the extreme eastern end of the building (Phase 5), damaging the building's eastern perimeter wall.

What, exactly, took place in the Area A building has remained a matter for debate. Bennett saw a Mesopotamian influence in the building's design based on the courtyards and the use of a monumental podium. This is a reasonable suggestion given that the Assyrian empire had established its dominance over the Southern Levant starting in the eighth century, making the Kingdom of Edom a vassal who paid the empire annual revenues to maintain its sovereignty (Crowell 2021: 107-133). Just how much this building can be attributed to direct Assyrian influence, however, is questionable given how common open-courtyard monumental buildings elevated on podia were during the eighth and seventh centuries BCE in the Levant and Mesopotamia (Kertai 2018). Such building designs can be found in the Assyrian capitals (Khorsabad, Nineveh, and Nimrud) as well as in major political centers in the northern Levant (e.g., Sam'al, Karkemish) and southern Levant (Ekron Temple Complex 650, Hazor Area B Citadel Stratum III, the Lachish residency, and Megiddo Stratum III Buildings 1052 and 1369, to name only a few). The building's layout consisting of a large courtyard surrounded by smaller rectangular suites suggests the building should be attributed to the "Assyrian composite tradition" that Kertai suggests is a combination of Mesopotamian and Northern Levantine architectural traditions (Kertai 2018).

Bennett suggested on multiple occasions that the building was a temple whose eastern half was dedicated to ritual practices while the western half supported the temple's administration (Bennett 1977; 1983), an interpretation that Bienkowski largely supported in his analysis of Bennett's excavation records (Bienkowski 2002: 94-95, 479). A handful of architectural elements in the eastern courtyard, some of which are described below, suggest visitors participated in libation-associated rituals while in the presence of a deity whose material form resided in a cella on the courtyard's western side. While Bennett's and Bienkowski's claim is feasible, the legacy evidence raises a number of questions that require additional research to confirm this interpretation and clarify how this building supported ritual practices in Iron Age Edom.

The Area A building gains its significance from the fact that it is one of the few monumental Iron Age buildings that is visible for visitor interpretation. Despite the decades that have elapsed since Bennett completed excavations, the building's architecture is in remarkably good condition. However, archaeological deposits in trenches are eroding and tall spoil heaps obscure architectural elements or confuse visitor interpretation. The Area A building therefore presents an opportunity to integrate site development and archaeological research into a single program that will simultaneously enhance the building's interpretation while developing it for archaeological tourism.

The BCHIP therefore selected the eastern half of the Area A building to focus their work because it offered opportunities to carry out extensive site cleaning and preservation activities as well as document at-risk archaeological deposits (**Fig. 2**). USAID-SCHEP and the Department of Antiquities installed a platform on the building's northern edge that allows visitors an elevated view of the building's eastern half. It therefore makes sense to improve the building's presentation in this area to enhance visitors' interpretation of the building.

Readers should note the deliberate use of nomenclature designed to avoid confusion between Bennett's legacy documentation and the BCHIP's new documentation. The unit and wall numbers assigned by Bienkowski are preserved in BCHIP's research. Bennett's units in Area A begin with the letter 'A' (e.g., A01) while BCHIP units are assigned a double 'AA' (e.g., AA02). Walls excavated by Bennett's team and described in legacy documentation receive the label "PB" (e.g., PB.Wall 33) while newly documented walls by the BCHIP receive no label (e.g., Wall 33). Readers are advised to familiarize themselves with the published legacy report (Bienkowski 2002: 57-109), especially figures 4.1 and 4.2, before studying the new information below.



Figure 2. Eastern courtyard of Area A building detailing key features and 2025 excavation units.

Defining the Area A Building's Eastern Courtyard

One outstanding question plaguing the documentation of Building A is the uncertainty surrounding the extent of the courtyard's perimeter. As the published plans demonstrate (Bienkowski 2002: Figure 4.2), Bennett's team identified the courtyard's perimeter walls, PB.Walls 8, 26, 31, 34, and 44, and measured the space to be approximately 19.5 by 20.5 meters, or ~ 400 square meters (Bienkowski 2002: 76). In reality, the northern and southern perimeter walls, PB.Walls 26 and 34, were only partially documented.

Therefore, the BCHP prioritized the documentation of the courtyard's northern and southern perimeters during the 2025 season.

The USAID-SCHEP Project's removal of a large spoil heap on the northeast corner of the building created an opportunity to document the eastern courtyard's northern perimeter wall and the building's northern exterior wall. The published plan presented fragments of PB.Wall 23 that eventually leads to a narrow entrance into the building's eastern courtyard (Bienkowski 2002: Figure 4.5). The BCHP cleaned the portions of PB.Wall 23 that have not yet been documented in plans, although it was not possible to clean beneath the portion shielded by the viewing platform. East of the staircase, the wall's top courses were visible and found to be intact. However, west of the staircase the wall's upper courses had collapsed. This collapsed rubble of stones was left intact so as not to disturb the deposits. Careful cleaning determined that the wall is intact beneath the rubble.

The spoil heap's removal also offered the opportunity to better define the space between Walls PB.23 and 26, and Walls PB.27 and 44, which together likely create a 3 x 18 m rectangular room leading from the eastern courtyard. Bennett excavated Units A26 and A60 that included deposits on either side of this long room. The section profiles remaining from these excavations offered 'windows' into the contents of these rooms upon cleaning. Unit A60's western section identified a plaster surface 1.5 meters below a substantial deposit of construction materials associated with the construction of Walls PB.23 and PB.26 (**Fig. 3**). White plaster was concentrated on the northern half of the section while unconsolidated red mudbrick material was concentrated on the southern half. Medium and large stones were scattered throughout the section. Unit A26's eastern section likewise identified a plaster surface about one meter below ground level (**Fig. 4**). Medium and large stones associated with the partial collapse of Wall PB.23 described earlier extended from this surface to the current ground level.



Figure 3. Unit A60 section between Wall PB.36 and Wall PB.23 looking west

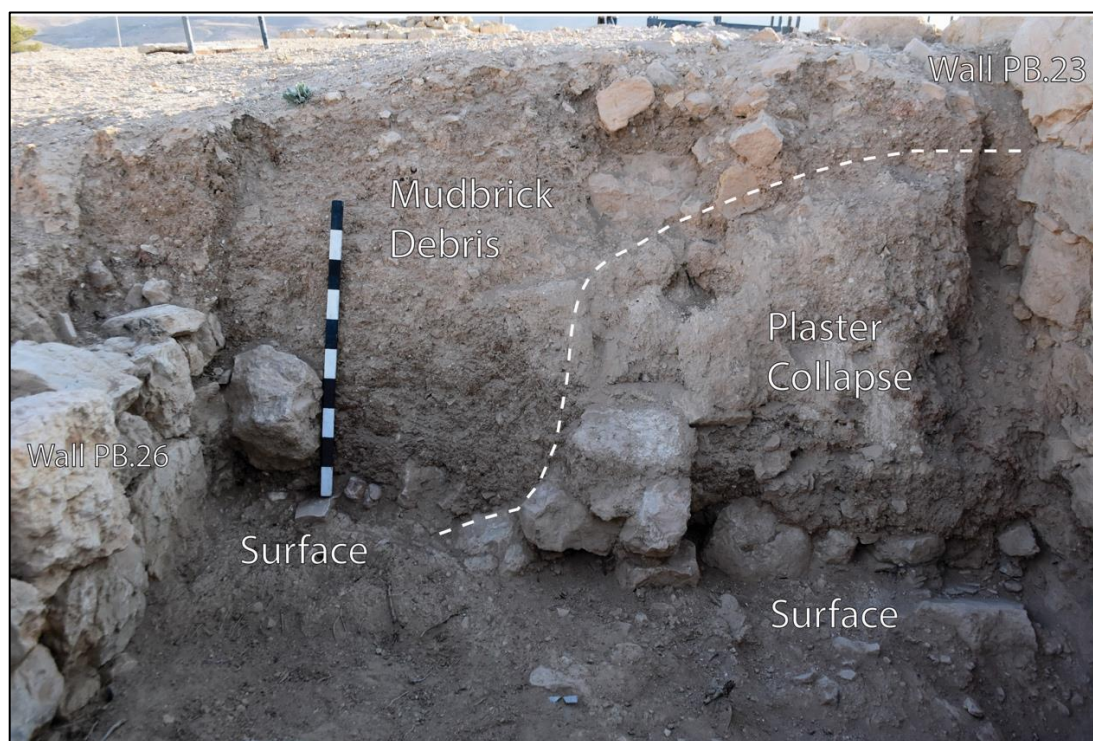


Figure 4. Unit A26 section between Wall PB.23 and Wall PB.26 looking east.

These two sections reveal that excavations in this room will require the removal of a substantial amount of collapsed materials before reaching the room's first surface. Excavation will also expose tall sections of Walls PB.23 and 26 that will require extensive conservation to preserve them in place. Therefore, research in this room should proceed carefully with the plan of immediate conservation. Dry-laid reversible buttress walls were constructed against both section profiles after documentation to prevent additional erosion.

The BCHIP also documented architectural elements on the courtyard's southern perimeter. Bennett's team documented about 7 meters of Wall PB.34 before ending their work (Bienkowski 2002: Figs. 4.1-2). Erosion exposed more of the wall over the decades and had left archaeological deposits on the north side of the wall vulnerable to erosion. The BCHIP established two units, Units AA02 and AA05, to excavate above and on either side of Wall PB.34, BCHIP's Wall AA02.Locus 3 (Fig. 5). This work determined that the entire length of Wall PB.34 was 20 meters long. Mudbrick debris (AA02.Locus 2) was found in some places adhering to the top of the wall, an indication that the stone wall had supported a mudbrick infrastructure.

Wall PB.34 ended 2.5 meters before reaching Wall PB.8. Upon this discovery, Unit AA.07 was established to study Bennett's excavations here to determine if this interruption in the wall was a threshold or the result of damage. Bennett's team had documented Wall PB.8 here during their excavation of Unit A1.25. Work in Unit AA07 required extensive cleaning of Bennett's Unit A1.25 to locate the now-buried Wall PB.8 and understand its relationship to Wall PB.34. Cleaning and limited excavation determined that the stones associated with Wall PB.11 and 13 had most likely fallen from Wall PB.34 and Wall PB.8, creating a small feature that had appeared to the Bennett team as a wall. The BCHIP team therefore identified a 2.5-meter wide threshold between the eastern courtyard and the yet-to-be excavated area south of Wall PB.34 (Fig. 6).



Figure 5. Wall PB.34/Wall AA02.Locus 3 in Units AA02 and AA05. Fill AA02.Locus 7 runs up to Wall AA02.Locus 3 and over Surface AA02.Locus 8.



Figure 6. Threshold between Wall PB.34 and Wall PB.8 identified in Unit AA07 after cleaning A1.25. Stones in the threshold are collapse from surrounding walls.

Documenting and Dating the Area A Building's Phase 3 Destruction

Bennett's excavations of Unit A4.1 and the erosion occurring on top of Wall PB.34 had destabilized a two-meter wide strip of archaeological deposits on the north side of Wall PB.34. The BCHIP determined these deposits to be at-risk of collapse and decided to excavate what remained. This work also provided an opportunity to compare the BCHIP's results with those that Bennett excavated in the adjacent Unit A4.1. Unit AA02 was established here spanning six by four meters. A thick plaster surface (AA02.Locus 8) with multiple laminations ran up to Wall PB.34 (**Fig. 7**). The surface was quite thick and consisted of at least two surface/sub-surface components, and possibly as many as four. The sub-surface components were identifiable because they consisted of plaster fragments, less compact gravel, and very little silt and clay. The sub-surface was predominantly plaster fragments mixed with gravel, and each sub-surface was approximately 3-4 cm thick. The surface component, in contrast, was much smoother and void of any gravel. The two distinct surfaces that could be measured were 0.8 cm and 1.0 cm in thickness. These laminated surfaces were in phase with those that Bennett's team excavated in Unit A4.1. That Wall PB.34 had been plastered was determined by the presence of a significant amount of plaster debris resting above the surface (AA02.Locus 7). Remnants of plaster were also visible on Wall PB.34's northern face (**Fig. 8**). Bennett's team had also reported plaster fragments on the walls and floors of the courtyard, so these discoveries were expected.

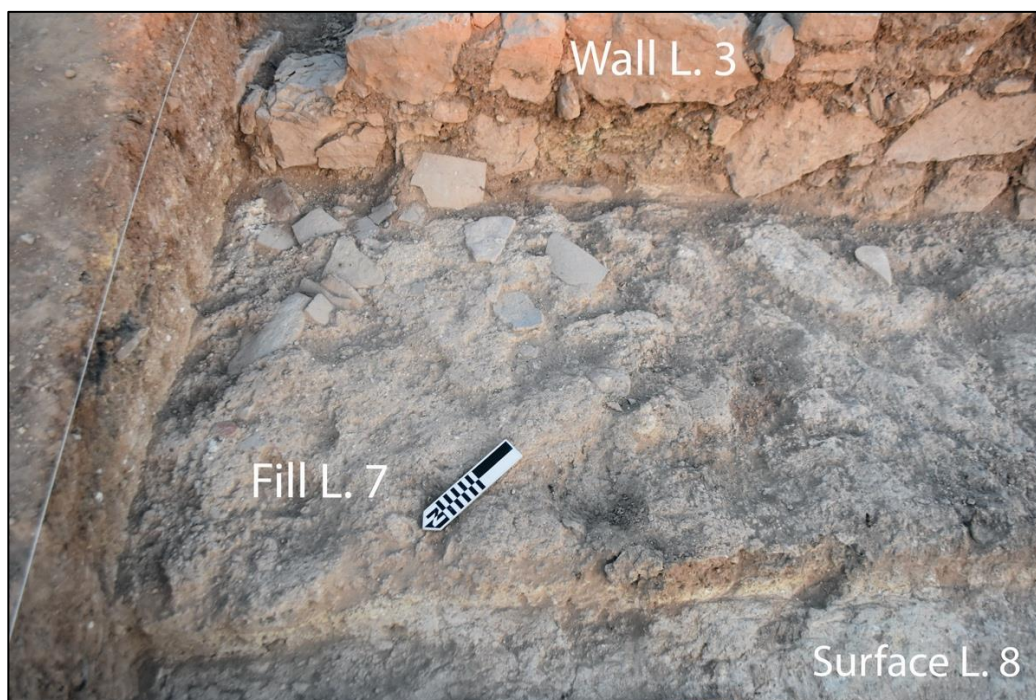


Figure 7. Fill AA02.Locus 7 running up to Wall AA02.Locus 3 and over Surface AA02.Locus 8. Iron Age ceramic vessel fragments and mudbrick debris were embedded in the fill.



Figure 8. Plaster preserved on the north face of Wall AA02.Locus 3.

Sealing this plaster material was a thick layer of collapsed mudbrick material filled with plaster fragments, mudbrick debris, and burnt materials (AA02.Locus 5, 7). Broken flat-lying ceramic vessels were found resting on and above the plaster debris, suggesting that this material had been located nearby prior to falling on the surface (**Fig. 7**). Iron fragments, including an iron spearhead (**Fig. 9**), were also associated with these materials. More architectural debris was located above these materials (AA02. Locus 4) that included boulders, cobbles, and mudbrick, although few ceramic fragments were recovered.



Figure 9. Iron spearhead AA02.Locus 5.30 recovered in destruction debris north of Wall AA02.Locus 3

This depositional pattern suggests this deposit was created by a destruction event characterized by burning. The presence of iron weapon fragments additionally suggests this destruction may have been instigated by a violent attack. The mudbrick wall that Wall PB.34 had supported collapsed during or soon after the destruction event. Bennett's team identified similar depositional patterns in the eastern courtyard, but the published documentation for the associated evidence is wanting. The evidence documented in AA02 therefore offers a more detailed picture of the courtyard's destruction.

Ceramic vessel fragments recovered from the architectural debris in Units AA02, AA05, and AA07, and on the surface of AA02 provide a relative terminus post quem date for the courtyard's

destruction. All vessel forms are represented in the vessel catalog in the published record (Bienkowski 2002: 233-351), most of which was based on Marion Oakeshott's typology (1978) and later refined by Bienkowski in the published report. Their nomenclature is used here for ease of classification. Three types of jars were present, Jar A1, A2, and E, versions of which Bennett's team documented in or near the courtyard (**Fig. 10.8-10; Table 1**). Jar E is notable as examples have only been found in the Area A building. Likewise, familiar ceramic stands were also documented (**Fig. 10.x**). Cooking pots A and B were also present (**Fig. 10.6-7**); these forms became popular in the seventh century and are found with Judean cooking pot styles in the northeastern Negev settlements (Danielson's CP4; Danielson 2024: 23-38). Bowls in Oakeshott's A, B, C, D, F, N, and P series were also documented (**Fig. 10.1-5**). Some forms (e.g., **Fig. 10.2, 4**) are decorated with combinations of red and black pigments, a class of decorated serving vessels known as Busayra Painted Wares that Danielson and others have identified in settlements in the northeast Negev, southern Jordan, and northwest Arabia (Danielson 2024: 38-45; fig. 15).

Figure No.	Reg. No.	Form	Type	Dm (cm)	Fabric Color	Exterior	Interior	Treatment	
								Exterior	Interior
10.1	AA07.13.5	Bowl	A1a	18	7.5YR7/6	2.5YR8/3	2.5YR7/6		burnish; two black lines
10.2	AA07.13.4	Bowl	D3b	24	7.5YR5/1	5YR7/6	5YR7/6		red slip
10.3	AA07.11.1	Bowl	F2	25	10YR8/1	10YR8/2	10YR8/2		
10.4	AA07.13.3	Bowl	N1a	15	7.5YR6/1	n/a	n/a	red and black paint on white slip	
10.5	AA02.43.1	Bowl	P1c	26	10YR5/1	10R6/8	10YR5/1		
10.6	AA07.11.2	Cooking pot	A	13	10R6/4	2.5Y5/1	2.5Y5/1		
10.7	AA07.13.1	Cooking pot	B	12	10YR5/1	10YR7/2	10YR7/2		
10.8	AA02.35.1	Jar	A1	21	2.5YR5/3	2.5YR6/6	2.5YR6/6		
10.9	AA02.28.1	Jar	A2	20	10YR5/1	7.5YR6/1	10YR7/3		slip or lining; 10YR8/2
10.10	AA02.28.2	Jar	E	10	2.5YR7/6	2.5YR7/6	2.5YR7/6		

Table 1. Ceramic vessels from Units AA02 and AA07. See Figure 10 for illustrations.

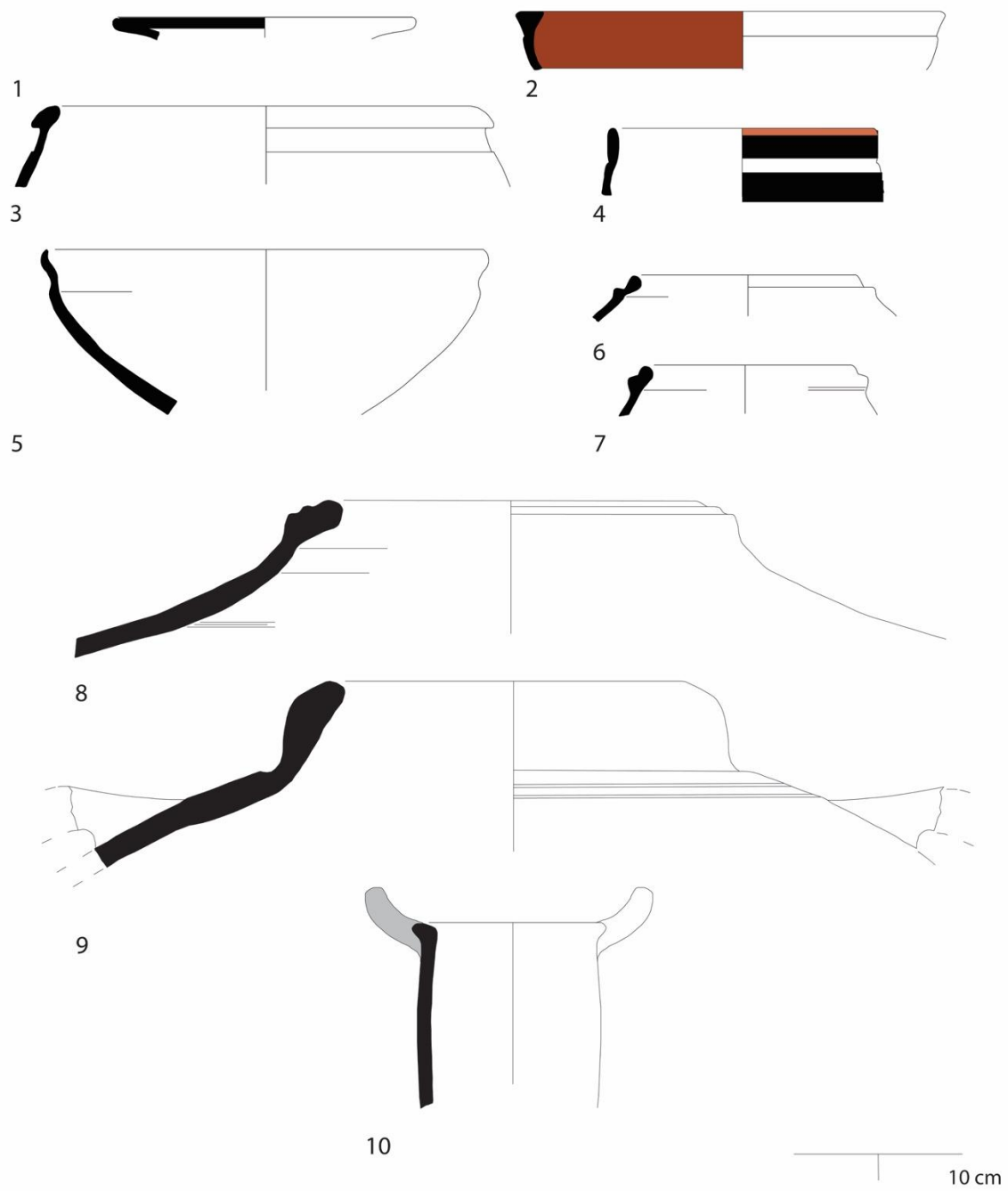


Figure 10. Ceramic vessels from units AA02 and AA07. See Table 1 for provenience.

Collectively, this assemblage resembles those documented in seventh century BCE settlements in the southern Levant's arid zones. Unsurprisingly, this assemblage most strongly resembles those found in settlements in southern Jordan such as Umm al-Biyara (Bienkowski 2011: 55-78), Tawilan (Bennett and Bienkowski 1995) and the mountain-top settlements in Petra's vicinity. Some aspects of this assemblage, notably the cooking pots and decorated Busayra Painted Ware also appear in assemblages in the northeastern Negev settlements that lined the Nahal Beersheba (e.g., Tel 'Aro'er Stratum IIb (Thareani 2011: pls. 132-184); Tel 'Ira Stratum VI (Freud 1999); Tel Malhata IIIa (Freud 2015), among others). Finally, some forms (e.g., Jars A1, A2) are found in settlements to the north in west-central Jordan, notably at Balu'a, Dhiban, and Umayri (Bienkowski 2015: 420-422; plates 3.6.2-4). These associations suggest a date of the late seventh or early sixth century BCE for the eastern courtyard's destruction. Unfortunately, southern Jordan's ceramic vessel corpus is not yet sensitive enough to offer a more precise date and radiocarbon dates from short-lived organic evidence is not an alternative due to the poor quality of the mid-first millennium BCE's calibration curve. The Babylonian king Nabonidus's fragmentary campaign itinerary describing his c. 550 BCE attack of Edom and the rock relief inscribed at nearby Sela' (Da Riva 2020), a few kilometers from Busayra, remain the best evidence available for identifying who destroyed the Area A building and when (Crowell 2007). A fuller analysis of Area A's ceramic vessel corpus and its implications for dating the building's destruction will appear once more examples from secure contexts are gathered.

Scrubbing the So-Called Purification Room

Cleaning the eastern courtyard provided an opportunity to study the features that Bennett excavated in Units A5.1, A5.2, and A5.3 in the southwest corner (Bienkowski 2002: 78; plate 4.4). Bennett's team documented a flagstone surface abutting Wall PB.31 on the west and Wall PB.34 on the south. This flagstone surface eventually gives way to the white plaster surface that extends across the Building A courtyard. A channel cuts into the flagstone pavement and drains toward the cistern in the courtyard's center. In the corner where Walls PB.31 and PB.34 connect, a plaster-lined installation was constructed above a portion of the flagstone surface with the plaster climbing the faces of Walls PB.31 and PB.34. The co-occurrence of plaster and a drain led Bennett to interpret this installation as a "washing" or "purification" room associated with rituals that supported the sacred space she understood to be located in the cella (1977: 4-6; 1983: 15). In the process of cleaning the area, the BCHIP was able to confirm and refine the installation's design, answering questions that had been raised when consulting the published interpretation of Bennett's records.

Once the plants, rocks, garbage, and sediments that had accumulated since Bennett's excavations were removed, attention was paid to two specific areas where intact sediments were identified. These areas were visible in published plans and images and appeared to be a north and east wall constructed of

mudbrick that presented the installation as bounded on four sides, a design that suggested the installation was a tank that could store water.

When the first area was compared with the published image (Bienkowski 2002: plate 4.4), it was estimated that 25-50 cm had eroded since the 1970s. Two stones visible in the original section had collapsed to its north side in the ensuing decades. This area was eventually labeled Unit AA06 and systematically excavated because 1) it was fast eroding and 2) it offered a final opportunity to understand the archaeological deposits that had once covered the installation.

Thick deposits of white plaster (AA06.Locus 4) adhered to the east face of Wall PB.31; a careful cleaning and close study revealed multiple laminations of the materials, each 3-5 cm thick. A thick lens of ash (AA06.Locus 5) rested on this plaster and extended across the plaster installation (**Fig. 11**). Fill deposits (AA06.Loci 1-3) of soil, brick, and ceramics were found above this burnt layer. Altogether Unit AA06 consisted of a series of horizontal deposits easy to separate according to color and texture. These distinct laminations were deposited after the plaster installation passed out of use, yet exactly when remains a question. The brickly and plaster contents of these deposits were unquestionably remnants of the building's construction materials surrounding the installation and not, say, windborn materials. The outstanding question is what event led to their deposition and when? Burnt brick, jumbled plaster, and ash materials mirror that of deposits found in A002.Loci 5 and 7, described earlier, suggesting that the two contexts were destroyed in the late seventh or sixth centuries BCE.

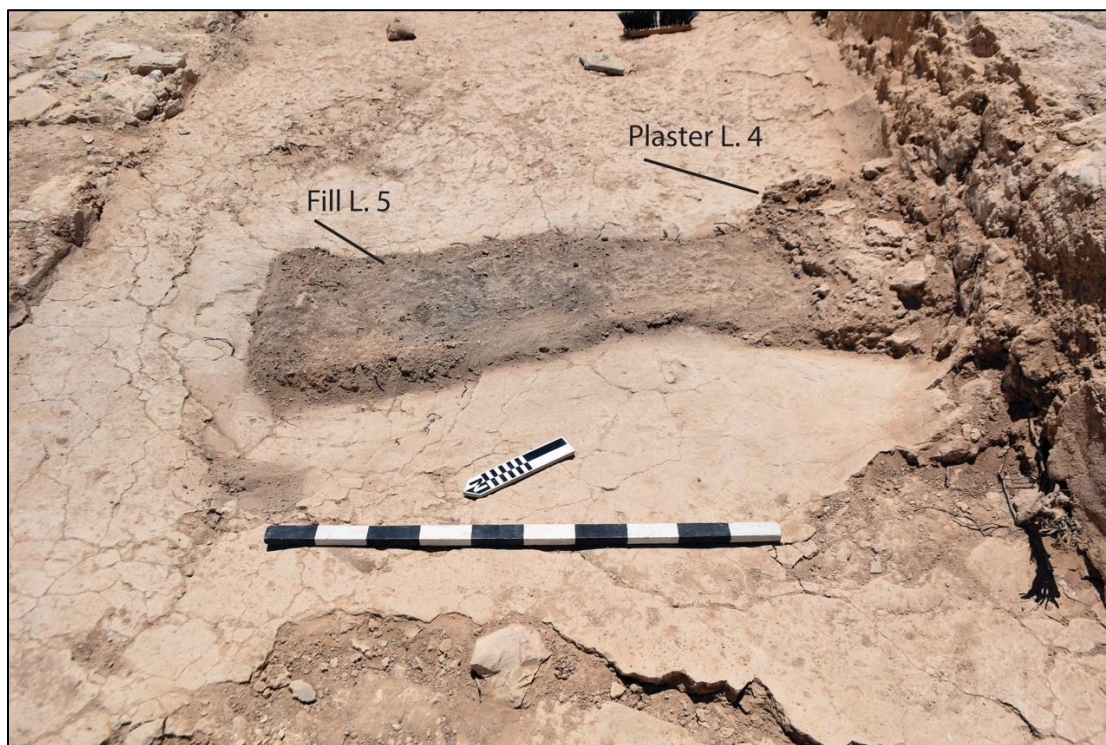


Figure 11. Ashy fill AA06.Locus 5 and Plaster AA06.Locus 4 resting on the original plaster lining in Units A5.1 and 5.3.

A second deposit of unexcavated materials was identified sitting above Wall PB.31 and adjacent to Unit AA06. Again, the published image of the installation demonstrated that Bennett's team left these materials on the wall, possibly to preserve the plaster on the wall's west face (Bienkowski 2002: plate 4.4). The deposits were determined to be too thin for systematic excavation and were therefore promptly removed in order to document the full extent of Wall PB.31. A third deposit was located above a north-south Wall PB.43. The published image shows how this feature was preserved at irregular heights, likely to preserve the plaster that is visible on the west face. Most of the deposits sitting on the wall had eroded, although a small amount of bricky materials were located on the wall's north end, sitting immediately above the flagstone surface (Fig. 12). This material was the remnant of a mudbrick wall of unknown height sitting on a stone foundation that is Wall PB.43. While removing deposits, a narrow floor drain that allowed water to escape the installation and flow toward the flagstone surface was identified.

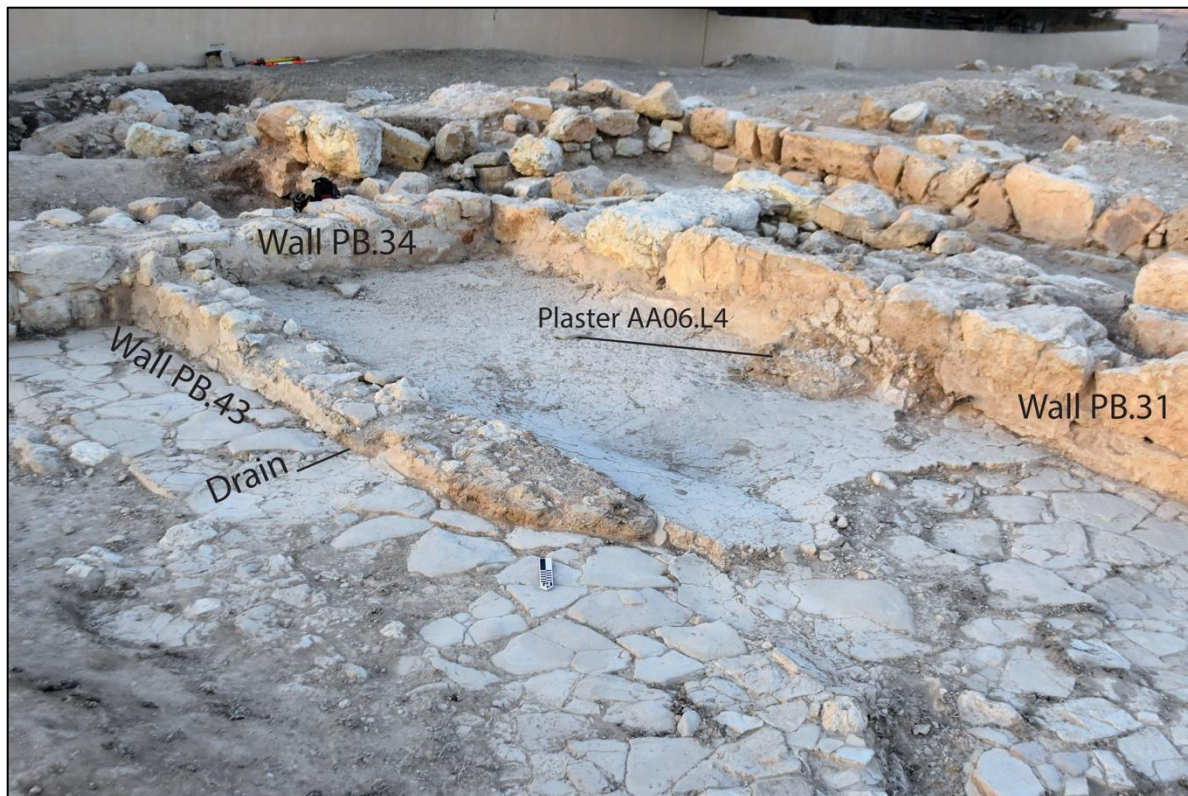


Figure 12. Overall view of the so-called purification room in Unit A5.1-5.3. The room's original plaster lining documented in AA06.Locus 4 and the small drain (unexcavated) through Wall PB.43 are visible.

The BCHP also defined the relationship between the flagstone surface and adjacent features. To some extent, Bennett's archaeological team had done this work, but the documentation was unfortunately thin in the published record and these architectural relationships required confirmation. The BCHP removed soils in Units A5.2 and A5.4 that had accumulated since 1980 to the point where Unit A5.2 ends and Unit A4.1 begins. The thick white plaster surface that likely extends across Area A's eastern courtyard was recovered during the cleaning of these deposits, an indication that the limits of the flagstone surface had been reached. There was an additional interest in linking Unit AA02's Locus 8, the laminated surfaces and sub-surface identified to the north of Wall PB.33 described earlier, with the flagstone surface. Deposits leading up to the small area immediately to the west of AA02 were cleaned and the relationship between AA02 and the flagstone surface was confirmed to be in phase with each other. The relationship between the flagstone surface and the entrance to the cella was also confirmed. Unit A5.3 was cleaned along Wall PB.31 revealing that the flagstone surface ran up to, and possibly beneath, the burnt stones that create a shallow stairway leading into the cella (**Fig. 13**; cf. Bienkowski 2002: 78-80; Plate 4.53).



Figure 13. Unit A5.3 was cleaned along Wall PB.31 to determine that the flagstone surface ran up to, and possibly beneath, the shallow stairway leading into the cella.

These cleaning and excavation activities refined the architectural relationships inside and adjacent to this important installation. The discovery that AA06 was an unexcavated section and not a wall bounding the north side of a possible bath is important as it has been represented as such in drawings. This unexcavated section provided a retrospective look at the sequence of deposited materials that Bennett's team had excavated but had not been described in the published record. The cleaning of the entire installation also determined that it is in phase with surrounding architectural features that are largely assumed to date to Area A's Phase 3 (Fig. 12).

Revisiting the Cella

An architectural space that is key to the interpretation of the building's purpose is located in a horizontal room on the west side of the eastern courtyard. Bennett's team excavated the room in its entirety in Units A3, A5, and A26, and Bienkowski assigned the space to Phase 3. Bennett argued that the space served a ritual purpose as a cella, or 'holy of holies,' where statues and ritual equipment would have been visible to worshippers standing in the eastern courtyard. Supporting this hypothesis was a paved threshold of red fire-cracked stones on which either side was a pedestal that supported pillars or statues. The interior of the room was paved with a thick white plaster. Semi-circular stone podia on which pillars or statues could have sat, framed this entrance. Aside from a copper alloy chair fitting that may have been associated with a throne (Bienkowski 2002: plate 206, 207), very few objects that could be associated with ritual activity were excavated.

An outstanding question concerns the cella's architectural design and phasing. At first glance, the prominent Wall PB.33 appears to frame the cella's back wall. However, a closer look reveals a far more complex arrangement. Bennett's team observed that Wall PB.33 was added after the construction of the cella's plaster floor (Bienkowski 2022: 80; cf. 109, fig. 4.26). That is, Wall PB.33 cut the cella's first plaster surface, a suggestion that the room was potentially larger and deeper in its original design. Bennett's team also observed that the wall's upper courses are consistently offset from the lower courses on the east side, indicating that the prominent wall consists of at least two building episodes. The BCHP was interested in confirming Bennett's observations about Wall PB.33's relationship to the first Phase 3 surface.

In order to do so, the BCHP conducted a thorough cleaning of the cella and surrounding spaces. Plants, garbage, and recent sediments were removed, and medium and large rocks that had fallen from Wall PB.44 were used to reconstruct the wall. Sediments that had accumulated on top of Walls PB.23, 33, and 43 were also removed to improve visibility.

Bennett's team left two unexcavated sections of intact deposits that obscured architectural elements in the cella. Both sections were in a state of collapse and required prompt excavations. The first section, Unit AA03, was located between Bennett's Units A3 and A12. At the start of the 2025 season, a segment of Wall PB.35 was visible under an eroding section. This wall's existence had been documented (e.g., Bienkowski 2002: 60, plate. 4.4), but not fully exposed, despite forming a corner with Wall PB.33 to enclose the cella from the south. Cleaning the top of Wall PB.35 and removing the eroded debris exposed a southern continuation of Wall PB.31, the eastern border of the cella, upon which Wall PB.35 abutted. A thick deposit of white plaster (AA03.Locus 9) was found to the south of Wall PB.35, inside the corner it formed with Wall PB.33. This discovery was enigmatic. It appeared to have originally crawled up the corner formed by the two walls, but was cut by a later foundation trench. The plaster was not excavated, and will need to be explored in the future. Walls PB.31 and 35 as well as AA03.Locus 9 were covered over by mudbrick debris that originated from the building superstructure (AA03.Locus 8). It was not possible to determine whether the mudbrick collapse was caused by a fiery destruction, and only a small quantity of pottery was found in this unit. The brick debris and Wall PB.35 were both cut by a foundation trench (AA03.Locus 10), into which the stones belonging to a rebuild of Wall PB.33 were placed. This rebuild phase could be easily differentiated from the initial construction of Wall PB.33 due to the stones of the rebuild phase being offset from the original wall. This rebuilding phase correlates to Bienkowski's Phase 4. Excavation in Unit AA03 did not extend down far enough to assess the relationship between the original Wall PB.33 and the plaster surfaces inside the cella (see Unit AA04 below).

The second intact deposit, Unit AA04, was located at the north end of the cella. Unit AA04 was equivalent to the northwestern quadrant of Bennett's Unit A26. Bennett's team left an unexcavated section that revealed the stratigraphic sequence within this important room. A published drawing of this section suggested the massive Wall PB.33, the back wall of the cella, was not included in the original design of the building (Bienkowski 2002: 109; fig. 4.26). The BCHP cleaned and redrew the section, and then carried out minimal vertical excavation. This work confirmed the phasing presented in the original excavation report. **Table 2** lists excavated loci in Unit AA04 and their equivalent number in Bennett's excavations. Diagnostic ceramic sherds were not recovered during excavations despite the screening of all soil.

BCHP Locus No.	BCHP Locus Type	Bennett Context No.
1	Mudbrick fill	26.1.17
2	Fill of foundation trench	N/A
3	Cut of foundation trench	26.1.9
4	Wall	Wall 33
5	Wall	Wall 44
6	Mudbrick debris	26.1.17
7	Surface	26.1.18
8	Mudbrick fill with plaster	26.1.17
9	Mudbrick fill	26.1.17
10	Fill of foundation trench	26.1.9
11	Fill below surface	26.1.21, 22
12	Subsurface	26.1.18a, 18b
13	Equals L. 9	26.1.17
14	Stone monolith	N/A
15	Wall	Wall 23
16	Buttress	N/A

Table 2. Table providing equivalent locus numbers for BCHP's Unit AA04 and Bennett's excavations.

A reexamination of Bennett's section suggests the earliest activity in the unit was the construction of Walls PB.44 and 23, both made of large boulders. A relatively thick fill (AA04.Locus 11) with many lime inclusions was deposited against Wall PB.44 and topped with a thick plaster surface that was composed of a layer of dense plaster (AA04.Locus 7) and a subfloor layer of white plaster with small pebbles (AA04.Locus 12). A rectangular stone monolith (dimensions: 0.8 x 0.5 x 0.3 m), not previously documented by Bennett's team, was found lying flat on Surface 7 (**Fig. 14**). Toolmarks were found on the monolith's edges, an indication that it had been intentionally shaped; the monolith was uninscribed. It is unclear whether or not the object stood upright or not during its use as it was discovered lying flat. The monolith may have been a standing stone that served as the focus of cult practices.



Figure 14. Stone monolith Locus 14 resting on Surface Locus 7 in AA04.

Surface AA04.Locus 7 was covered by a layer of deteriorated mudbrick, consisting of some different laminations within (AA04.Loci 1, 6, 8-9). The thinness of the mudbrick layer (total depth: 0.39 m) does not befit the massive mudbrick superstructure that would be expected to be carried by the monumental Walls PB.23 and 44. Instead, this fill layer was an intentional deposit to prepare for the construction of a second, later surface that buried and decommissioned the stone monolith (PB 26.1.8; see Bienkowski 2002: 109, Fig. 4.26). This fill was cut by a foundation trench (AA04.Locus 3) into which the earliest phase of Wall PB.33 was founded (**Fig. 15**). The trench fill (AA04.Locus 10) and mudbrick layer were then capped by a second plaster floor (PB 26.1.8). This second, later surface was not preserved in the excavated section the BCHP excavated in 2025 and was eroded in the recent past. However, a published image clearly shows the surface abutting Wall PB.33 (Bienkowski 2002: 80; plate 4.58).



Figure 15. Foundation trench Locus 3 cut Surface AA04.Locus 7 during the construction of Wall PB.33's earliest phase. Stone monolith AA04.Locus 14 is beginning to appear.

In Phase 4, the latest phase observed in the unit, Wall PB.33 was rebuilt. As in Unit AA03, here too the latest phase could be differentiated based on its differing construction style, including the use of less standardized cut stones and heavier use of snecking. This phase of the wall was built over Wall PB.23, offset from the lower courses on the east side, ending at a quoin supported by a monumental buttress made of stepped ashlar blocks (Bienkowski 2002: 85; plates 4.65-4.67). No floor surface could be associated with this phase by either excavation team. This is likely due to Wall PB.33 use in Phase 4 as an exterior east wall for the rectangular building constructed on the western half of Area A Phase 3 walls.

BCHP's 2025 excavations in Unit AA04 therefore answered key questions about the cella's development and purpose. The discovery of the stone monolith, an object that can potentially be interpreted as a standing stone, on a Phase 3 surface indicates that the cella was a ritual space even before the construction of monumental Wall PB. 33. The fact that the monolith was found on an exceptionally well-made and unusually clean plaster surface strengthens the room's ritual use. The room at the time of the monolith's use extended west although the extent to which it did is unknown. The Area A building's plan changed at some point during Phase 3 when Wall PB.33 was constructed and the stone monolith was

buried beneath a new surface. The cella was then segregated from the Area A building's west wing. Both of these phases are included in Bienkowski's Phase 3, while the construction of Wall PB.33's offset extension is assigned to Bienkowski's Phase 4. At present, no evidence exists to interpret the cella's purpose in Phase 4. No occupational debris or new floor levels were unearthed by Bennet or the BCHP within the room. A topic of future research will be how much of the eastern wing of the building was left unused in Phase 4 while activity was concentrated on the west side of the wall.

Additional Site Cleaning and Preservation Achievements

The BCHP dedicated time and resources to additional site cleaning and preservation in and around Area A. All architectural elements were assessed for the quality of their preservation and any evidence of damage was documented. The corners of three walls had been damaged recently so efforts were made to reconstruct them using associated stones. These corners included the corner to the entrance to the building (Unit A60.1); the doorway east of Unit A2 (A1.34); and a doorway in the SE building (A1.24). Wall PB.8 was severely damaged on its eastern face so a reversible buttress was constructed to stabilize the wall until it can be conserved.

Eroding archaeological deposits were identified throughout the Area A building in Units A1.2-3, A26.1, A26.5, and A60.6. These were buttressed with reversible stone walls to prevent further collapse. Extra attention was paid to sections and walls that were undercut due to poor drainage during winter rains. In these instances, deposits were straightened before stone walls were constructed and then lined with smaller rocks to encourage drainage away from deposits. These protective walls will be monitored and, if necessary, repaired in future seasons.

The most at-risk portions of Area A are located on the eastern edge where auxiliary rooms were constructed east of the building's courtyard (Units A1 and A50). The reuse of the building during the Roman period saw the removal of Wall PB.5 that, if left intact, would have buttressed Iron Age archaeological deposits. Without this buttress, however, archaeological deposits are collapsing and eroding down a short slope. The BCHP built reversible stone buttresses against at-risk deposits to slow this erosion. In the future, this area should be cleaned and stabilized. Intact deposits that are adjacent to areas excavated during Bennett's research should be excavated before this information is lost.

One additional challenge to Area's A development is the legacy spoil heaps created during Bennett's excavations that obscure the building's design or limit access to archaeological deposits. Already mentioned was a substantial spoil heap sitting above Walls PB.23 and 26 that was removed by the USAID-SCHEP project to make a space for the area's viewing platform. The BCHP removed about 40% of an additional spoil heap between Units A1 and A12. Materials removed from this spoil heap were used to fill

in deep trenches in Units A8, A10, and A11 that were unsafe for visitors. The vicinity surrounding the steps leading to Area A's viewing platform was littered with small and medium-sized stones. Much of this area was cleaned so that the approach to the stairway is clear of tripping hazards.

Conclusion

The BCHP carried out a short season with many achievements in 2025 that answered a handful of outstanding questions about the Area A building. The perimeter walls of the eastern courtyard were defined; architectural relationships in the so-called purification room and cella were confirmed and clarified where the published record was limited or vague; and evidence was gathered that strengthened the likelihood that the Phase 3 building in Area A was destroyed in the mid-sixth century, possibly by the armies of the Babylonian king Nabonidus. The BCHP also contributed a substantial amount of time to preserving and cleaning the eastern half of Area A.

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Bibliography

- al-Adarbeh, N., S. Carter, S. Smith, and S. Abu Aballi 2020. *The Story of SCHEP: The Sustainable Cultural Heritage Through Engagement of Local Communities Project, 2014-2018*. Amman, Jordan: ACOR.
- Bennett, C. 1977. Excavations at Buseirah, Southern Jordan, 1974: Fourth Preliminary Report. *Levant* 9: 1-10.
- Bennett, C. 1983. Excavations at Buseirah (Biblical Bozrah). Pp. 9-17 in J. Sawyer and D. Cline (eds.), *Midian, Moab, and Edom: The History and Archaeology of Late Bronze and Iron Age Jordan and North-West Arabia*. Sheffield: JSOT Press.
- Bennett, C. and P. Bienkowski. 1995. *Excavations at Tawilan in Southern Jordan*. Oxford: Oxford University Press.
- Bienkowski, P. 2011. *Umm al-Biyara: Excavations by Crystal-M. Bennett in Petra 1960-1965*. Oxford: Oxbow Books.
- Bienkowski, P. 2015. Iron Age IIC: Transjordan. Pp. 419-434 in S. Gitin (ed.), *The Ancient Pottery of Israel and Its Neighbors from the Iron Age through the Hellenistic Period*. Jerusalem: Israel Exploration Society.
- Brown, S. 2018. *Living on the Edge of Empire: Edomite Households in the First Millennium B.C.E.* PhD Dissertation, University of California, Berkeley. <https://escholarship.org/uc/item/98n930w8>
- Brown, S., B. Porter, and A. Wilson. 2016a. The Busayra Cultural Heritage Project's 2014 and 2015 Seasons Archaeology in Jordan, 2014 and 2015 Seasons. *American Journal of Archaeology* 120(4): 655-656.
- Brown, S., B. Porter, K. Simon, C. Markussen, and A. Wilson 2016b. Newly Documented Domestic Architecture at Iron Age Busayra (Jordan): Preliminary Results from a Geophysical Survey. *Antiquity Project Gallery* (<http://antiquity.ac.uk/projgall/brown350>).
- Crowell, B. 2007. Nabonidus, as-Sila', and the Beginning of the End of Edom. *Bulletin of the American Schools of Oriental Research* 348: 75-88.
- Crowell, B. 2021. *Edom at the Edge of Empire: A Social and Political History*. Atlanta: Society for Biblical Literature.
- Danielson, A. 2024. *Edom in Judah: Trade, Migration, and Kinship in the Late Iron Age Southern Levant*. Elements in the Archaeology of Ancient Israel. Cambridge: Cambridge University Press.
- Da Riva, Rocío. 2020. The Nabonidus Inscription in Sela (Jordan): Epigraphic Study and Historical Meaning. *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 110(2): 176-195.

Freud, L. 1999. Pottery: Iron Age. Pp. 189-289 in I. Beit-Arieh (ed.), *Tel 'Ira: A Stronghold in the Biblical Negev*. Tel Aviv: Institute of Archaeology, Tel Aviv University.

Freud, L. 2015. The Pottery of Strata V-III. Pp. 153-479 in I. Beit-Arieh and L. Freud, *Tel Malhata: A Central City in the Biblical Negev*. Tel Aviv: Institute of Archaeology, Tel Aviv University.

Kertai, D. 2018. The Assyrian Influence on the Architecture of Hospitality in the Southern Levant. Pp. 139-161 in S.Z. Aster and A. Faust, *The Southern Levant under Assyrian Domination*. University Park: Eisenbrauns.

Oakeshott, M. 1978. *A Study of the Iron Age II Pottery of East Jordan with Special Reference to Unpublished Material from Edom*. PhD Dissertation, University College of London.

Thareani, Yifat 2011. *Tel 'Aroer: The Iron Age II Caravan Town and the Hellenistic-Early Roman Settlement*. Jerusalem: Nelson Glueck School of Biblical Archaeology, Hebrew Union College-Jewish Institute of Religion.