Architecture Assessment of the Condition of Rooms 1, 2 and 3 at Rancho de las Cabras (41WN30), Wilson County, Texas



by Kristi M. Ulrich



Prepared for: Los Compadres de San Antonio Missions San Antonio Mission National Historical Park San Antonio, Texas Prepared by: Center for Archaeological Research The University of Texas at San Antonio Technical Report, No. 24

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Abstract

Over the course of 10 days in October and November in 2009 and 15 days in December 2009 and January 2010, archaeologists from the Center for Archaeological Research at the University of Texas at San Antonio uncover and buried the walls at Rancho de Las Cabras located in Floresville, Tx. The Center was contracted by the Los Compadres de San Antonio Missions and the San Antonio Missions National Historical Park (SAMNHP) to reveal the condition of walls that were buried after excavations that were conducted in 1985. The walls had been covered in sand 1985 to protect them from the elements. SAMNHP wanted to determine if the sand covering was a suitable means of protecting the walls from further erosion. CAR uncovered the walls to find that the sand did act as a barrier, but due to the shift in soils due to rodent disturbance and water flow, the mortar between the stones was replaced by the sand. After exposing the walls, it was found that damage from rains would compromise the wall integrity. After careful consideration, it was found that the walls needed to be recovered, using geo-fabric as a barrier between the walls and the sterile sand. Prior to covering, the walls underwent extensive documentation.

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The author would like to thank the individuals that aided in the uncovering and burial of the walls. These include Cyndi Dickey, Kelly Denham, Cody Miller, Lindy Martinez, Steve Smith, Antonia Figueroa and Nate DiVito. Special thanks to Lindy Martinez, Cody Miller, and Raymond Mauldin for conducting the documentation of the uncovered wall sections.

Thanks to Bruce Moses for providing mapping assistance and producing graphics to use during the project. Thanks also to Bruce Moses and Rick Young for producing the graphics for the final report.

Introduction

The Center for Archaeological Research at The University of Texas at San Antonio was contracted by the Los Compadres de San Antonio Missions and San Antonio Missions National Historical Park to conduct an architecture assessment of a portion of the ruins at the Rancho de las Cabras site located in Wilson County, Texas (Figure 1).

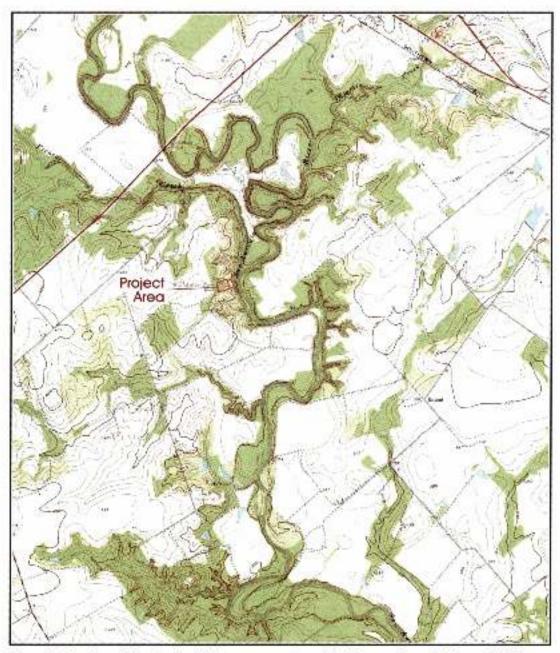


Figure 1. Location of Rancho Las Cabras on a portion of the Dewees, Tex., 7.5 minute USGS quadrangle map.

The purpose of the project was to uncover the walls of Rooms 1, 2 and 3 of the Rancho compound that were buried since 1985 (Figure 2) and assess and document their condition. Following the architectural assessment of the walls, they were to be covered by geo-fabric and sterile sand. The fabric was to be used to prevent the accumulation of sand in crevices, as well as keep sand from lying directly on top of the wall, and make for easier removal should the walls need to be uncovered in the future. The original plans called for the treatment of the sand with herbicide and the establishment of a vegetation cover on top of the sand to reduce the loss of sand caused by rainfall and windy conditions.

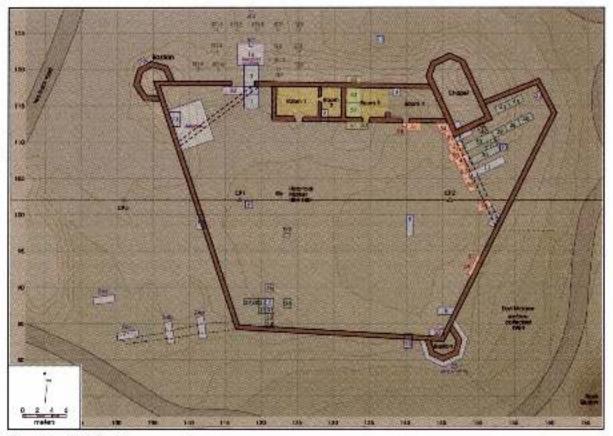


Figure 2. Rancho de las Cabras compound.

Environmental Setting

Rancho de las Cabras is located in Wilson County, Texas, just three miles southwest of Floresvile, TX. The rancho is approximately 37.5 km southeast of Mission San Francisco de la Espada. The property consists of two parcels of land that lie between County Road 144 and the San Antonio River. The main portion of the site is 55.18 acres in size and includes a narrow (approximately 100 foot wide) access road to the site. The site is located in the San Antonio River valley within the Gulf Coastal Plains province (Oculus 1998). Rancho de las Cabras is located on a high terrace that overlooks the San Antonio River.

The River is located approximately 0.175 km to the east of the rancho complex.

Soils typical of the site consist of tan to reddish brown sandy clay loam and silts, which are from the Venus-Aransas-Loire soil association found along the banks of the San Antonio River (Taylor and Fox 1985; Oculus 1998). This soil association overlies yellow brown calcareous clay subsoils. The site is located within the South Texas Brushy Plains vegetation region, though historic and recent land-use practices have dramatically altered the native plant communities in the vicinity of the site. Vegetation characteristic of this region include prickly pear (*Opunia engelmannii*), bunch grasses, short grasses, mesquite (*Prosopis glandulosa*), huisache (*Acacia smalii*), mountain cedar (*Juniperus ashei*) cut-briar (*Smilax hona-nox*) and Spanish dagger (*Yucca treculeana*). The areas immediately adjacent to the site are overgrown with whitebrush (*Aloysia gratissima*) and mesquite (*Prosopis glandulosa*). Pecan (*Carya illinoinensis*), post oak (*Quercus stellata*), and live oak (*Quercus virginiana*), are prominent along the banks of the river. In areas that are not over grown with mesquite, short grasses are typical.

The area surrounding the site is currently used as pastureland. Photographs taken in the 1980s reveal that the vegetation outside the compound walls used to be open pasture with only sparse seedar or oak trees dotting the landscape (Figure 3-4).

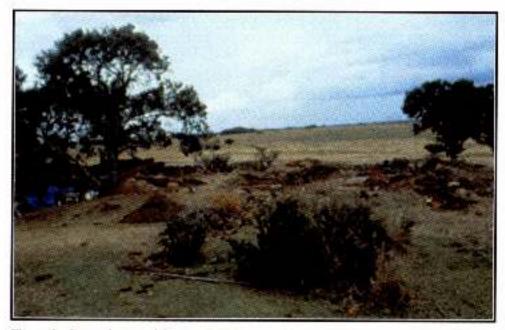


Figure 3. General view of the site that shows the open pasture that was present in the 1980s.

Since the 1980s, the area immediately adjacent to the Rancho compound has become overgrown with mesquite and mountain cedar.



Figure 4. North wall of Room 3. View shows the lack of vegetation in the 1980s.

The History of Wall Burial

The decision to bury the walls of the Rancho was made in 1985 and the walls were buried at the conclusion of the 1985 excavations conducted by the Center on healf of Texas Parks and Wildlife, the managers of the property at that time. It was hoped that the sand would provide a barrier to prevent wind and water from entering in direct contact with the stone walls. In addition, the sand would also keep these architectural features enveloped in a matrix that would stabilize the walls and keep them from shifting, even if wildlife and domestic cattle were to enter the property.

Photographs of the Rancho walls taken at the time of the 1985 field season show that in places, the standing wall segments reached over a meter in height (Figures 5-7) prior to burial. These photos also showed the extensive wall fall that had already occurred prior to the decision to attempt to stabilize the ruins through burial. Equally important, however, is the detail provided by these photographs related to the location of distinctly shaped stones that could be used as markers of the amount of movement or dislocation that may have occurred during the burial or subsequent to it on site. Such marker stones were critical in allowing us to orient the 1980s photos and position our photo documentation appropriately to provide a comparative perspective to the condition of the walls 25 years after their burial.



Figure 5. The south side of the north wall of Room 1 taken during the 1980s, facing north.

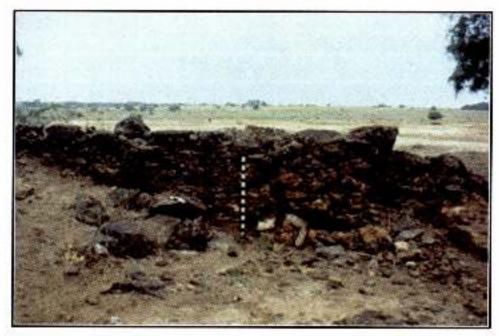


Figure 6. View of the north wall, facing north, that shows the open pasture to the north of the site (Room 1).



Figure 7. The north side of the north wall of Room 1 taken during the 1980s, facing south.

Archival research and discussions with individuals who had been present during the burial of the walls indicated that the sand used to bury the walls was obtained from the San Antonio River. The sand was dumped onto the walls with 5-gallon buckets. Photographs and slides indicate that much of the walls in Rooms 1 through 3 were exposed (Figures 4-7). Some of the wall foundations, specifically the south wall of Rooms 1 and 2, were exposed through small trenches that followed the outline (Figures 8-9). This information was used at the time to create the map of the compound that we reference today.

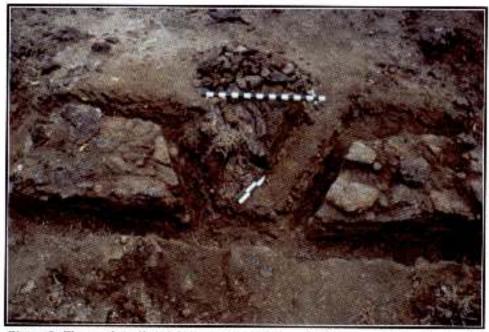


Figure 8. The south wall and door opening to Room 1. Photograph taken during the 1980s.



Figure 9. The east wall and door opening of Room 2. Photograph taken during the 1980s.

Slides of the 1985 excavations reveal that the archaeologists were screening within the rooms as well (Figures 10 and 11). Notes do not indicate where the screened dirt was deposited after excavations were over but the photographs suggest that the dirt was simply used to backfill the excavated units.

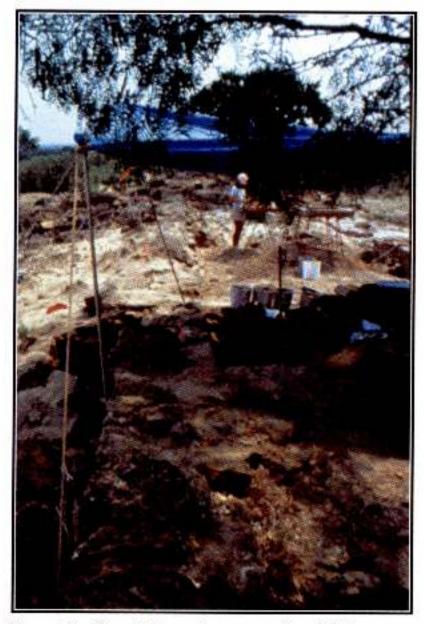


Figure 10. View of the north compound wall facing east showing the screening within the rooms.



Figure 11. View of the excavations within Room 3 with screening occurring in Room 4, facing west

Uncovering the Walls

Room 1

Uncovering the Rancho's walls commenced on October 23, 2009. The scope of work called for Rooms 1, 2, and 3 to be uncovered (Figure 2). Sand was to be removed by hand using shovels. As it was removed, the sand was placed in wheelbarrows and moved to nearby temporary slorage piles. Subsequently, a skid steer was brought in to help move the sand from the temporary piles to a more distant location off away from the compound ruins. Uncovering the walls took approximately 10 working days.

Removal of the sand on the first day began near the doorway in the north wall just west of Room 1 (Figure 2) since the break in the wall was clearly visible and it provided a known starting point. The removal of the sand began on the outside (north) of the north wall and within hours shifted to the inside as to maintain even amounts of sand on both sides of the wall. Along the outside of the wall, a few stones were already exposed on the surface due to natural erosion. These stones provided the starting point and a guide as to how much sand needed to be removed. As the sand was being removed, it became evident that there was a lot of wall fall on both the exterior and the interior of the compound (Figures 12 and 13). Sand was carefully removed from between the wall fall stones. The wall fall was sitting directly on the original ground surface.

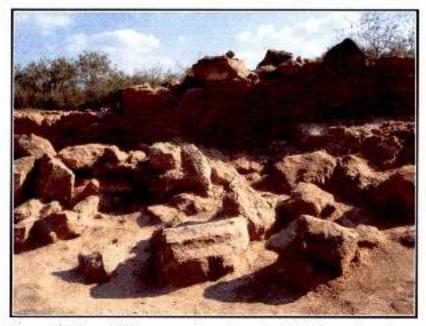


Figure 12. The wall fall present along the north side of the north wall between Rooms 1 and 2, facing south.



Figure 13. View of the wall fall on the either side of the north wall in Room 1, facing east.

A distinct soil change was noted that made it easy to distinguish between the sand fill and the 1985 surface. While the introduced fill consisted of clean light colored sand (see Figure 14), the substrate also was sandy but it retained a noticeable clay component and was dark gray in color (see Figure 14) and therefore it could be distinguished both visually and by feel (texture).

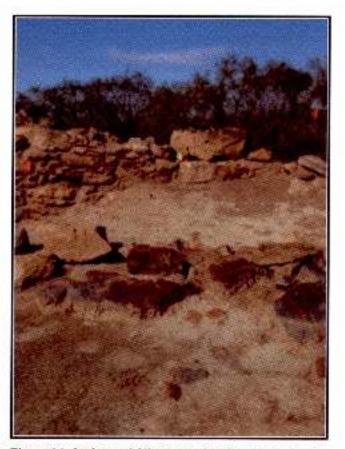


Figure 14. Light sand fill on top of dark gray sandy clay representing original 1985 ground surface.

During the early stages of the sand removal, the outline of the west wall of Room 1 was noted. The river sand appeared to have ended just on top of the wall. The sand was removed, leaving the soil with increase clay content. The wall outline was at ground level. The north wall of Room 1 was approximately 98 cm at its highest point on the exterior of the wall and 123 cm in height on the interior of the room. A depressed area was noted on the inside of Room 1 near the western wall of the room. This depression was interpreted as a looter's pit during the 1985 excavations. The North wall of Room 1 was 42 cm at its lowest point on the outside of the wall. The 1985 map showed "looters' pits" immediately adjacent to the north wall on the inside. Excavations continued into the other rooms, though it was noted that a lot of soil appeared to have built up in the northeast corner of Room 1. This may he due to the screening that occurred within the rooms which was evident in the pictures taken in the 1980s with backdirt piles in the rooms (Figure 10 and 11). When compared to the older photographs, the north wall appeared to have been more exposed in 1985.

The southern portion of Room 1, including the south wall of the room, was covered by only a thin layer

of fill although the photographs of the wall indicated that the outline of the wall had been uncovered and the doorway had been revealed. The southwest corner of the room was revealed by removing the vegetation that had grown in the area. Only a thin layer of sand covered the top of the wall at this corner and therefore only the top of the wall was exposed.

During the removal of the sand in Room 1, the doorway in the south wall was not well defined (Figure 15) compared to how well it is shown in the 1985 photographs (Figure 8). A section of the south wall close to Room 2 appears to be missing at this point, though photos from 1985 show it as intact then.



Figure 15. Southeast corner of Room 1 showing doorway and northeast corner of room.

A small portion of the interior wall between Room 1 and 2 was uncovered. On the Room 1 side, the wall is at surface level. On the Room 2 side, the wall is approximately 50 cm in height. The map indicates that a larger portion exists, and that an opening appears between the two rooms (Figure 9). Removal of the sand did not reveal the opening, and only the eastern facade of the wall was exposed in the northwest portion of Room 2 (Figure 16). The wall appears to abut the north wall, and is not joined. Also, the interior wall appears to have been built using a different construction technique than the north wall. Soil covered portions of the top of the wall, and the entire western facade.



Figure 16. The eastern façade of the northern portion of the wall dividing Rooms 1 and 2, facing west.

Room 2

Removal of sand from within Room 2 revealed that the layer of sand was in general thicker along the north and east walls and thinned toward the south and west walls. The highest point of the wall within the rootn was located along the east wall and measured 44 cm in height. Portions of the south wall were at surface level, though the eastern portion measured 38.2 cm at its highest point near the corner. A pocket of sand was noted in the northwest portion of the room, which had been identified as a "looters pit" in the map created in 1985. The removal of the sand from this pit revealed a portion of the eross-wall between Room 1 and 2 (Figure 16). Photographs taken in the 1980s reveal that the entirety of the wall was exposed with a doorway between the rwo rooms. Removal of the sand during this project found that beneath the river sand is a sandy elay which covers a portion of the wall and obscures the outline of the doorway. This layer likely represents screened backdirt derived from the 1985 excavations (see earlier photos). In the southern portion of the room, only a few centimeters of sand was removed before encountering the soil change. The majority of the southern wall is absent near the southwest corner. Previous excavations resulted in a depression in this area and may be responsible for the absence of wall stones. The cross-wall between Room 2 and Room 3 was uncovered and appears to be in rather good condition.

Room 3

The sand layer that was removed in Room 3 decreased in thickness toward the east across the room. The area along the western wall of the room appeared to have the most sand. The west wall measured between 37 and 58 cm in height along the interior of Room 3 (Figure 17).



Figure 17. View of Room 3 showing west and south walls, facing southwest.

Units 59 and 60 had been excavated in this area. It appears, from what was revealed during the sand removal, that the units were backfilled with the screened soil. Because the screened soil was not enough to backfill the units to the original ground level, commercial grade yellow sand was used. Then, the sand from the river was placed on top to cover the west wall. The interior of the room appears to slope down from the walls, the north and west walls having the most prominent slope, with the very center of the room visibly different in elevation than the edges. Either no sand was used in the center of the room, or the natural erosion process has moved the sand out of the center. The vegetation that had grown throughout the room was removed to allow for a better look at the layout of the walls as well as the amount and position of the wall fall within the room.

The map created in the 1980s of the rancho compound indicates that a small protrusion from the south wall of Room 3 acts as the break between Room 3 and Room 4. According to the map, the protrusion is approximately 2 meters to the east of the south opening in the wall. Initially, approximately 2.5 meters to the east of the south opening in the wall. Initially, approximately 2.5 meters to the east of the south opening was cleared, and a few stones were found to be perpendicular to the south wall.

More of the fill from the interior of Room 3 was removed to east, and another protrusion was located. This one could to be the same one in the 1985 photograph, although there is less height to the wall at present (Figure 18). This is likely due to the backfilling, or screening within the room during the 1980s excavations. The majority of the south wall of Room 3 is several centimeters in height at present. Due to the amount of fill from screening in the 1980s, it is difficult to determine exactly which protrusion is the one that was depicted in the map of the complex.



Figure 18. The south wall of Rooms 3 and 4 showing the protrusion that could possibly be the division of the two rooms.

Sand Removal Outside the North Wall of Rooms 1, 2 and 3

The largest quantity of sand removed was from the north side of the north wall. Removal work initially began at the furthest west portion of the wall, but after approximately 3 meters was exposed, the section north of Room 2 was removed. As the sand was removed from north of the north wall, it was evident that there was a lot of wall fall present. Comparison of the 1980s photographs to the current view found that much of the wall fall in certain areas has not changed. One photograph did reveal that a few stones moved over the years in the vicinity of the junction of the wall between Rooms 2 and 3 and the north wall (Figure 19).



Figure 19. View of the intersection of the interior wall for Rooms 2 and 3 and the North wall. The conglomerate stone on top was found north of the wall when the sand was removed during this project.

Not one photograph was located that show an overall view of the amount of the wall fall present during the 1980s. However, a number of photographs, CAR found indicate that the wall fall along much of the western portion of the north wall is in the same condition as in the 1980s. Nonetheless, because of missing documentation, we cannot determine the previous condition of a section of the north wall extending from the eastern portion of Room 1 and the entirely of Room 2.

Artifacts Recovered

A handful of artifacts were collected throughout the course of the removal of the fill. It is possible that some of the artifacts recovered may actually have been picked up in the sund fill that was procured from the banks of the San Antonio River. In other cases, the artifacts may have been incorporated into the sand fill through rodent disturbances. Finally, a few artifacts were collected off the 1985 site surface found immediately below the sand fill. In these cases, cleaning of the 1985 surface revealed artifacts embedded into the top of this surface and warranted their recovery. Table 1 presents the artifacts recovered during the fieldwork and their recovery context.

FS#	Provenience	Artifact Category	Count
1	Outside of Room 1	Bone	2
1	Outside of Room 1	Barbed wire	5
2	West of Room 1	Undecorated Majolica	1
3	Central portion of Room 1	Bone	8
3	Centrel portion of Room 1	Goliad	21
4	Interior of Room 1	Bone	2
4	Interior of Room 1	Goliad	1
4	Interior of Room 1	Puebla Blue on White	- 19 -
5	Interior of Room 2	Hone	1
6	North of Room 2	Bone	1
7	Top of wall between Rooms 2 & 3	Goliad	1. 11
8	North of Room 3	Hone	1
B	North of Room 3	Goliad	1
9	Southeast interior of Room 1	Flake	1
10	Interior of Room3	Metal strap	- 21
11	South of RoomS	Metal knob	
12	Rodent mound 2	Bone	1
13	Rodent mound 3	Bone	8
14	Rodent mound 5	Bona	6
15	West side of East wall of Room 2	Mortar sample	collected
16	Rock North of North wall	Plaster sample	collected

Table 1. Artifacts recovered during the removal of sand.

Removal of the sand on the exterior of Room 1 produced several fragments of barbed wire, as well as two faunal teeth fragments. It is very likely that the burbed wire is a direct result of the sand originating from the San Antonio River as it was found within the sand matrix. The bone fragments may be related to the occupation of the rancho, though due to the presence of rodent tunnels and knowing that the sand was not sterile, it can not be confidently placed within that temporal period. The interior of Room 1 produced two fragments of undecorated, Native American wares, also referred to as Goliad wares. One fragment of Puebla Blue on White majolica also was recovered from within the room. One heavily worn lithic flake was recovered from the southeast corner of the room. The severe rounding of the flake scar ridges, in combination with the polish present on both faces of the flake indicate that it was most likely brought to the site with the sandy fill obtained from the banks of the San Antonio River. Ten bone fragments were collected from within Room 1. The majority of these (n=8) were found in the central portion of the room, in the area that was marked as the looter's pit in the 1985 map. These eight bone fragments were the largest, in size, to be recovered during the course of the removal of the sand.

One bone fragment was recovered from within the walls of Room 2. In addition, one fragment of Goliad ware was recovered that was sitting on top of the wall between Room 2 and Room 3. This fragment was collected because it was felt that leaving it subject to the elements would result in the possibility of not recovering the artifact in the future. During a visit by SAMNHP personnel, the wall between Room 2 and

Room 3 was inspected to determine if any mortar remained. Between a few stones, a sandy clay was noted that was different from the river sand that was used to cover the walls. A small sample of the sandy clay was collected and brought back to the lab for future examination. One fragment of bone was recovered during the sand removal north of the north wall of Room 2.

One fragment of ferrous strap metal was recovered from within the outline of Room 3. Just south of Room 3, in an area that was not cleared during the sand removal; a heavy metal knob was noted on the surface and subsequently collected. During the removal of the sand on the north side of the north wall of Room 3 one bone fragment and one Goliad ware sherd was recovered.

As the sand was removed from north of the north wall of Rooms 2 and 3, archaeologists encountered a series of rodent tunnels. In a few areas, rodent "beds" were removed consisting of tunnels filled with grasses and/or roots. On several occasions when archaeologists returned to the site, mounds of soil had been pushed up by rodents. On one occasion, 5 rodent mounds were produced between visits to the site (Figure 20). One of the mounds consisted of pure yellow commercial grade sand (Rodent Mound 1). It was the first time that this yellow sand was noted along the wall. Further investigations showed that rodents had been pushing the sand out of the backfilled units located within Room 3. The matrix seen in the four other mounds appeared to consist of sandy clay that was very similar to the natural soil at the site. Three rodent soil mounds produced animal bones. These artifacts were collected and returned to the CAR laboratory.



Figure 20. Mounds of dirt pushed up by rodents that appeared during the course of the removal of sand. On this day five mounds were created, producing artifacts in a few of them.

Processing of the artifacts was conducted to the level that the artifacts need to be entered into the NPS system. The artifacts will be entered into the ANCS+ database at a later date, most likely in conjunction with the processing of the artifacts from the archaeological field school and volunteer days.

Architectural Assessment and Documentation

The walls were constructed using large sandstone slabs and smaller irregular stones employed as chinking. Given the obvious rectangular shape of many of the building stones, is is likely that some of them were quarried and possible also shaped before incorporating them in the walls of the Rancho. In general, the outer walls were 80-85 cm in maximum thickness (Figure 21) and there was no particular patterning regarding the placement of small or large stones along the tops or bottoms of the walls. As mentioned above, the tallest surviving but partial outer wall remnant was 1.35 meters high. Inner dividing walls appeared to be slightly narrower (75-80 cm) than outer walls.

Viewing the walls immediately after they were uncovered gives the appearance that the wall stones were held in place by mortar. However, the sand surrounding the individual rocks is loose and most likely represents fill sand rather than decomposing mortar. Cleaning of the wall revealed that small amounts of clay matrix or perhaps mortar, was left between the stones. However, it difficult to determine whether this matrix represents the remnants of mortar or clay that has leached from the sandy fill.

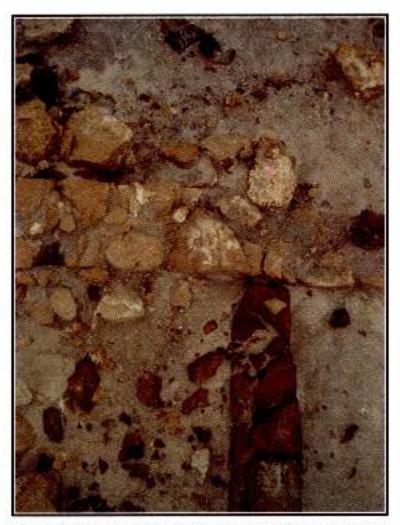


Figure 21. Intersection of the cross-wall between Rooms 2 and 3 and the south wall of the rooms.

After the sand covering the walls and rooms was removed, the walls were documented using a documentation protocol developed for the SAMNIIP for Mission Espada. Specifically, the walls were divided into sections. Detailed drawings were made of each section, specifically noting any anomalies (Figure 22). Next, digital photographs of the wall sections were taken to add to the drawings (Figure 23).

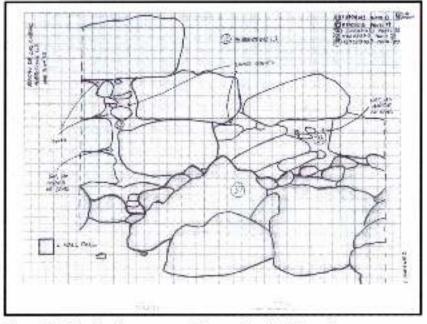


Figure 22. Sketch of a segment of the north wall of Room 1.



Figure 23. Detail of a portion of the sketched wall shown in previous figure.

For each section of wall, a form was filled out that recorded specific attributes for the wall. On these forms, the wall was described, noting any characteristics such as color, presence of roots/plants, shape of

stones, etc. Next the condition of the wall was assessed. If the wall was found to be in urgent need of stabilization, the factors leading to this condition were identified when possible. The drawings referenced any photographs that were taken, and each photograph was recorded on the form. The data was then returned to the CAR laboratory, where the information was entered into a database. Each entry includes the digital photographs, the information on the forms, and links the section to the drawing.

The architectural assessment of the rooms uncovered at Rancho de las Cabras was submitted to the San Antonio Missions National Historical Park via a hard-drive prior to the submission of this report.

The Reburial of the Walls

During late October and early November several strong rainstorms passed through the Floresville and San Antonio region. During subsequent visit to the site following the storms, it was noted that the sand was washing out of the unprotected walls. The loss of sand and some chinking stones from between the stacked stones appeared to greatly destabilize segments of the wall (Figure 24). The north wall of Room 1 suffered the most deterioration as water seemed to rush through the interior of the room and around the wall to the north.

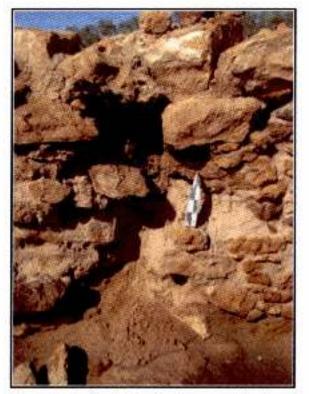


Figure 24. Sand washed out from between the building stones along the north wall of Room 1.

To prevent further damage and in agreement with the staff of the San Antonio Missions National Historical Park it was decided to rebury the walls. A fine-grained, sterile sand was selected as the covering. To prevent the sand from coming in direct contact with the walls, a water permeable geotextile, Mirafi 180N, was selected as a cover.

Mirafi@ 180N is a nonwoven geo-textile that is composed of polypropylene fibers that are water permeable, but will not allow the sand to pass through the barrier. The geo-textile comes in a roll measuring 4.5 meters in width and 91 meters in length. Sheets were cut from the roll to cover sections of the rooms from the north to south. Each sheet was over-lapped approximately 30-40 cm. The geo-textile was fitted over the walls and in between the crevices of the wall fall so that the sand could fill all voids (Figure 25). In the section of the wall that was subjected to the most deterioration while exposed, a section of geo-textile was placed against the wall and sandstone rocks (from a pile formed over the years of discarded stone) were placed in the void to buttress the wall segment. These rocks were again covered with geo-textile before being covered in sand.



Figure 25. Geo-textile pulled over the cross-wall of Rooms 2 and 3 prior to being covered with sand, facing northwest.

The sand used was a fine-grained version referred to as "washed sand" by the supplier. The sand was brought to the site in 12 ton loads. A total of 120 tons of sand was used to cover the Rancho walls. The sand was placed on the walls by hand. Wheelbarrow-toads of sand were dumped in staging locations around the walls, and then shoveled into place (Figure 26).



Figure 26. Backfilling with sand using shovels and wheelbarrows.

The crew was instructed to maintain equal slopes on either side of the walls as they were being re-buried to ensure even pressure from the weight of the sand on the walls. Approximately one foot of sand was placed on the tops of walls and the wall fall surfaces within the rooms (Figures 27-30).



Figure 27. Sand covering the north wall of Room 1, facing southeast.

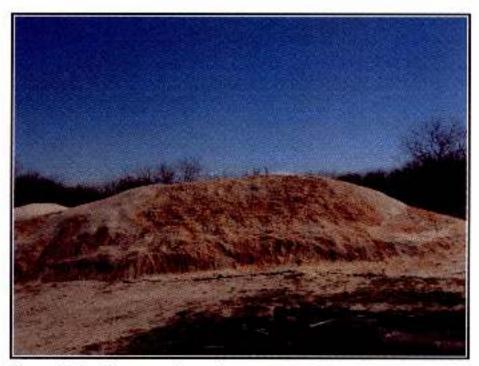


Figure 28. Sand covering the northwest portion of the northern wall that was exposed, facing south.

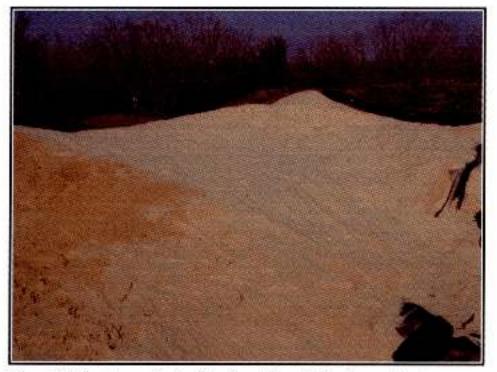


Figure 29. Sand covering the interior of Room 2, facing northeast.



Figure 30. Sand covering the walls and interior of Room 3.

Once the walls were reburied, CAR archaeologists used all of the remaining geo-textile supplemented by 3 millimeter-thick black plastic to cover the sand to prevent it from washing or blowing away (Figure 31-32). This step was simply a preventative measure until an appropriate vegetative cover could be identified and placed on the mounds of sand by SAMNHP staff. It took approximately 15 days to recover the walls by hand.



Figure 31. The north wall of Room 1 covered with geo-textile after the completion of the project, facing east.



Figure 32. Overview of the rooms covered in black plastic and remaining geo-textile at the completion of the project, facing west.

Summary and Conclusions

The goal of this project was to remove the sand cover from Rooms 1, 2, and 3 at the Rancho de las Cabras site, in Wilson County. As a protective measure, the walls of the ruins have been covered in a thick layer of sand since 1985. The purpose of this project was to assess how well the walls faired under the sand over the 25 years since their burial. The three rooms were uncovered in approximately 10 days. The sand was removed by use of shovels and trowels. The sand was moved to a temporary staging area just north of the north wall of the compound. From here, a skid steer was used to remove the sand pile to the location of the sand pile that was created in the 1980s, found southwest of the Rancho compound. Artifacts that were encountered during the sand removal were collected and returned to the CAR laboratory. The artifacts were processed and will be catalogued into ANCS+ system maintained by CAR on behalf of the SAMNHP. The small collection of artifacts and the project-related documentation is permanently curated at the CAR facility.

Immediately following the removal of the sand from the walls, the architectural documentation was conducted. Each wall section was examined and its attributes were recorded. Photographs were taken of each section and recorded on field forms. The finished forms were returned to the CAR laboratory. The information on the forms was added to a database, which contained links to photographs and a drawing of the respective wall section documented on the forms. The database has been delivered to the SAMNIP prior to the completion of this report. Photographs of the exposed walls were taken quite frequently throughout the project to monitor any changes that may have occurred in the short period. Several days of inclement weather occurred after the walls were uncovered. The CAR staff noticed that sections of the walls were compromised by the storms. Subsequently and in coordination with the staff of the SAMNHP, it was decided that the walls should be recovered to prevent further damage.

Mirafi@ 180N geo-textile was used to cover the exposed walls. In areas that appeared to be weakened by the storms, geo-fabric was placed against the wall, then stones that had been recovered during previous excavations were used to buttress the wall, and additional geo-textile was placed over the rocks and bolstering stones. In a few areas, the geo-textile was not used to the entire extent that the remainder of the rooms had because these areas may undergo controlled excavations possibly during the summer field school. The fabric was extended to just north of the south wall of Room 2 to allow easy access for future field schools to investigate the not previously excavated area of the room. After the geo-fabric was placed, the sterile sand was deposited on top of the covered walls. The sand was placed on the walls by hand. Wheelbarrow-loads of sand were dumped in staging locations around the walls, and then shoveled into place. The entire portions of Rooms 1 through 3 that had been exposed were reburied by the completion of the project.

References

Oculus

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