

**ARCHAEOLOGICAL DATA RECOVERY AT THE  
HORLBECK BRICKYARD (38CH1075),  
BRICKYARD PLANTATION, SOUTH CAROLINA**

**MANAGEMENT SUMMARY**

Prepared for

Brickyard Development Corporation  
Mount Pleasant, South Carolina

By

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June 1993

## INTRODUCTION

Archaeological data recovery and architectural documentation were conducted at the Horlbeck Brickyard (38CH1075), Brickyard Plantation Development Tract, Charleston County, South Carolina, by Brockington and Associates, Inc., at the request of Brickyard Development Corporation. These activities provide partial compliance with the conditions of a Memorandum of Agreement (MOA) between the South Carolina State Historic Preservation Office (SHPO) and the Brickyard Development Corporation. A detailed plan for the data recovery and documentation was approved by the SHPO; the investigations at 38CH1075 were conducted following this plan. In addition, underwater archaeology survey and reconnaissance of the adjacent portions of Horlbeck Creek were undertaken as a supplement to the data recovery plan approved for the terrestrial portions of 38CH1075.

Activities conducted at 38CH1075 included archival research, archaeological excavations, architectural documentation of a small industrial structure, and underwater archaeological survey and reconnaissance. Archival research was conducted in an effort to expand the current knowledge of the operation of the brickyard; sources of information in the South Carolina Historical Society, Charleston County Register of Mesne Conveyance, South Carolina Department of Archives and History, and in private collections were sought and reviewed with varying measures of success.

Archaeological field investigations included (1) hand excavations to acquire samples of artifacts associated with previously identified features/structures at the site (the commissary building, four kilns, and outlying shop areas) and (2) mechanical excavations to expose and document the kiln and workshop areas. The methods employed and the results of the archival research and the archaeological excavations are briefly summarized below.

Architectural documentation involved the recording of the former structure with photographs and measured drawings. Archival research concerning the age and function of the structure also were undertaken. The results of the documentation were submitted to the SHPO for review and comment in April 1992, prior to the installation of a new culvert at the location of the former structure.

Underwater survey and reconnaissance were conducted in Horlbeck Creek adjacent to areas scheduled for development. The methods and results of the underwater investigations have been reported in separate submissions presented to the SHPO in August 1992 (underwater survey- Tidewater Atlantic Research [TAR] 1992a) and December 1992 (underwater reconnaissance- TAR 1992b).

Data recovery excavations at 38CH1075 were conducted in two temporal phases. Initial excavations were conducted on 17 February-4 March 1992; the subsequent field activities were conducted on 29 September-30 October 1992. Mr. Jeff Gardner served as

Field Director for the initial excavations; Dr. Eric Poplin directed the subsequent excavations and serves as Principal Investigator for the project. Ralph Bailey, Alvin Banguilan, Terry Benton, Steve Corsini, Claudyne Fewell, Michael Kell, Mike Reynolds, Aram Stith, Ken Styer, and Pete Von Loewe assisted with the field investigations. Archival research was conducted between February and December 1992 by Marian Roberts. Architectural documentation of the electrical generating site was conducted in March of 1992. Mr. Scott Butler collected architectural information concerning the remains of the small structure; David Diener prepared photographs and measured drawings of the structure.

## **RESEARCH METHODS**

### **ARCHIVAL RESEARCH**

Archival research included the review of materials concerning the past ownership of the Brickyard Plantation Development Tract. Information was collected from public sources in the Charleston County Register of Mesne Conveyance, the South Carolina Historical Society (SCHS), and South Carolina Department of Archives and History (SCDAH). These sources of information provided a fairly complete history of the ownership of the Brickyard Tract, including 38CH1075. Information concerning the daily operations of the Horlbeck companies, engaged in construction and brick manufacture, were reviewed.

Additional information was sought concerning the operation and history of the actual brickyard. Efforts to contact the descendants of the former Horlbeck owners of the property produced varying results. Mr. John Horlbeck Sr. reportedly is preparing a family history (John Horlbeck Jr., personal communication, 1992). All of the family papers not in collections currently available in the SCHS or SCDAH are in his or his brother's (Fred Horlbeck) possession. This collection may be quite sizeable. However, Mr. John Horlbeck has refused previous researchers in the area access to this collection of materials since he is currently using them to write a family history (Wayne 1992:19). Interviews with Mr. Fred Horlbeck, now of Wadmalaw Island, did provide some useful information concerning the nature of the site during the 1930s. This information consisted of verbal reminiscences of the site and the surrounding lands. Mr. Horlbeck does possess some of the family papers; however, they are in no organized fashion and could not be reviewed without extreme difficulty. Mr. Horlbeck did not offer to provide access to these materials.

### **FIELD INVESTIGATIONS**

Archaeological field investigations included site mapping, hand excavations, and mechanical excavations. A site grid was established oriented to magnetic north. All

excavation units were placed with respect to the site grid. In addition, all extant cultural features (structures, probable kilns, etc.) were located with respect to the site grid. Elevations were taken at regular intervals across the site area to permit the construction of a topographic map of the site area. Figure 1 provides a plan view of the excavation areas and primary features at 38CH1075.

Hand excavations were initiated around the commissary building in the east central portion of the site (Figure 1). A total of 20 m<sup>2</sup> of the site surface was excavated in 10 separate units surrounding the existing structure. These units were removed in 10 cm arbitrary levels until sterile subsoil (usually a light gray to reddish clay) was encountered. Units extended 25-40 cm below the ground surface. These units included:

155 N / 200 E	156 N / 190 E	165 N / 190 E
164 N / 218 E	165 N / 218 E	165 N / 200 E
174 N / 188 E	176 N / 210 E	180 N / 195 E
181 N / 195.8 E.		

Artifacts recovered from these units included architectural debris (nails, window glass, brick fragments), some Kitchen class remains (ceramics and glass), a few Personal items (toys), and miscellaneous metal fragments. Evidence of previous use of the site included a series of ditches and a brick parquet floor. The ditches were encountered in Units 174 N/188 E and 180 N/195 E-181 N/195.8 E, on the north side of the existing structure. The ditches are oriented in a northwesterly direction, toward Horlbeck Creek. These ditches were excavated 20-30 cm into the clay subsoils. They contained numerous small brick fragments and other debris. One section of the ditch was excavated like a feature. No pipes or other conduits were encountered. It is presumed that coarse fill (brick rubble, refuse, etc.) was placed in the excavated ditches to permit water to flow away from the existing structure below the ground surface. Similar drainageways occur in townhouses in Charleston and in gardens in eighteenth century plantation sites in the Mid-Atlantic states.

The brick "parquet" floor was encountered in Units 164 N/218 E, 165 N/218 E, and 165 N/220 E. This floor is oriented in a northwest/southeast direction similar to the ditches. A photograph of the brickyard from the early twentieth century indicates that at least three low shed-like buildings were present behind the structure that remains at 38CH1075 today. An unnamed informant contacted during the original survey of the Brickyard Tract described these buildings as being 20 ft by 40 ft (Espenshade and Grunden 1989:18). It is assumed that this "floor" represents the floor of the former structures. The precise function of these structures has not been determined. Presumably, they served as covered work areas or drying sheds for bricks and tiles prior to firing.

A wooden beam also was encountered in Unit 176 N/210 E, at approximately 60 cm below ground surface. This beam was not associated with any other artifacts or stains. It was oriented in a similar direction to the ditches to the northwest and the brick floor to the

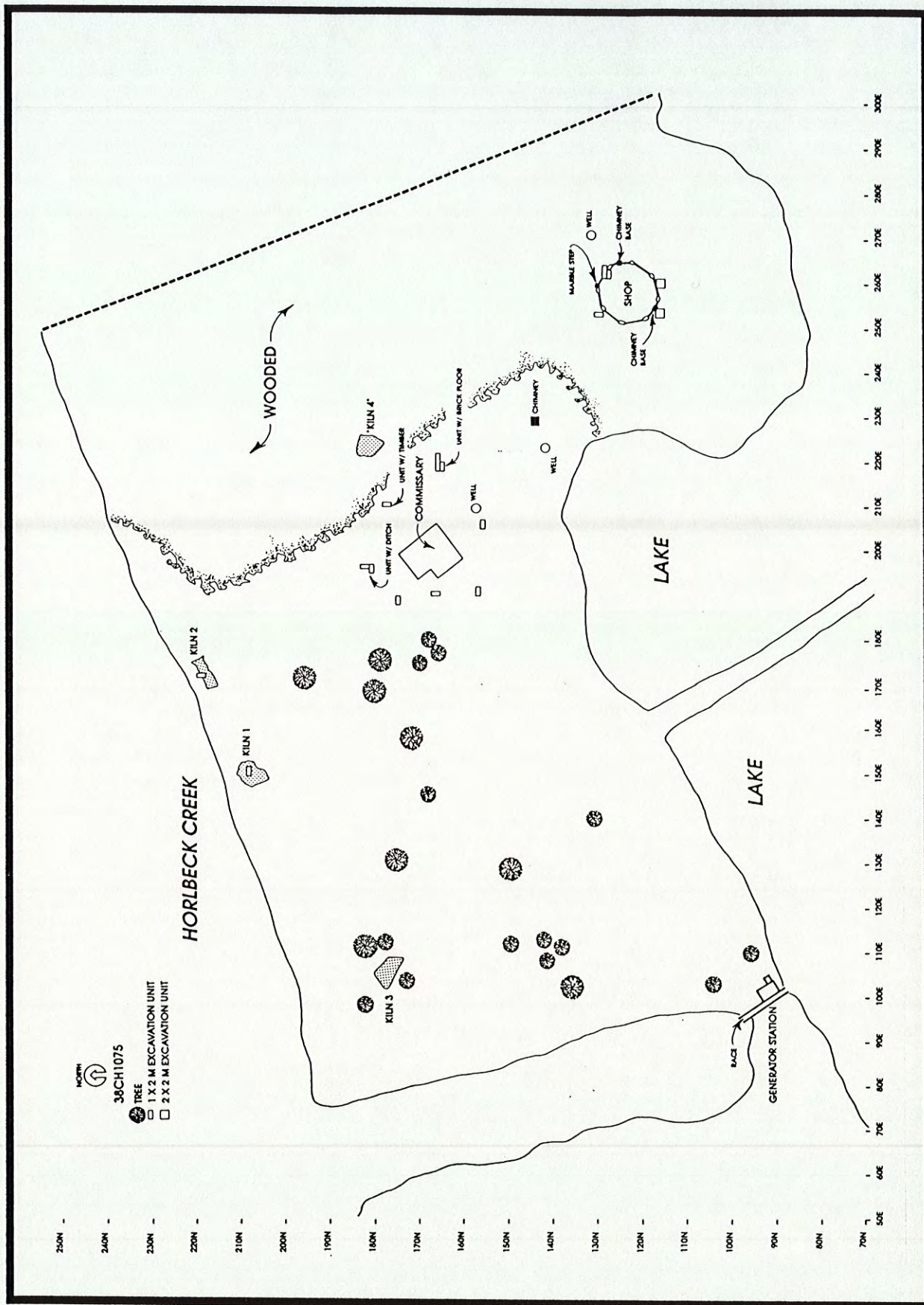


Figure 1. Plan View of 38CH1075.

south. This beam may represent another drainage feature or a footing associated with the former shed-like structures that existed behind the commissary building during the early twentieth century.

Hand excavations also were undertaken in the "shop" area in the southeast corner of the site (Figure 1). Low earthen mounds or platforms had been identified in this portion of the site in association with several small wells. Presumably, these mounds represented the remains of collapsed workshops or other facilities associated with the former brickyard. A 1 m by 2 m or 2 m by 2 m unit was excavated in four of these low mounds; these units encompassed a total of 12 m<sup>2</sup> of the surface of the site. Units excavated in the "shop" area of the site included:

115.5 N / 253 E      115 N / 259.5 E      129 N / 253.5 E      128 N / 263 E.

Fill from these units was removed in a single horizon until the clayey subsoil was encountered. These units extended 5-15 cm below surface.

Architectural remains, consisting of a chimney base and the base of a narrow brick wall, were encountered in three of these units (chimney in 115.5 N/253 E and walls in 115 N/259.5 E and 128 N/263 E). The walls and chimney base were not oriented such that a single rectangular structure could be defined. Additional excavations were undertaken adjacent to 128 N/263 E in an effort to locate any additional structural features that may have been present. Three additional 1 m by 1 m units were excavated contiguous to the southwest corner of that unit (Units 128 N/262 E, 127 N/262 E, and 127 N/263 E). Additional portions of the base of the wall were exposed. In addition, the area "inside" the wall (i.e., to the west) contained brick rubble. Similar debris was not present to the east side of the wall. Probing adjacent to the brick features exposed in the excavation units suggested that additional intact segments of articulated brick were present. This area was originally scheduled for mechanical excavation to expose the structural remains once a potential structure had been located by hand excavation. However, the shallow nature of the soil deposits and the relative density of small pine trees throughout this portion of the site prompted additional hand excavations to expose the suspected architectural features.

Fill was removed from around the exposed brick structures outside the excavated units without screening. Observed artifacts were retained. In this manner, the foundation of an octagonal building was exposed. This structure formerly possessed eight walls, with each inflection of the wall supported by a pier. The wall was two courses of bricks wide between the piers, with an additional course inside the wall at its base. The piers usually contained three rows of four bricks per course. Chimney bases were present on the eastern and southwestern walls of the structure. A small marble step, approximately one brick wide, was present on the inside of the northwest "corner" pier.

Metal artifacts, including threaded rods, large screws, and bars of iron/steel, were recovered from the areas excavated adjacent to the foundations of the former structure.

Several small medicine bottle fragments also were recovered. Two areas on the outer edge of the foundation (one on the north and one on the northwestern walls) contained many small fragments of unfired anthracite coal. A single 1 m by 1 m unit (Unit 126 N/256.5 E) was excavated in the northwest quadrant of the structure to recover a sample of artifacts from its interior. Only brick and tile rubble was removed from this unit.

The precise function of this former structure is unknown. Similar structures served as kilns during the late nineteenth and early twentieth centuries. However, the structure at 38CH1075 displayed little or no fired clay beneath the rubble in its interior. Also, the marble "step" on the northwest wall pier would suggest that the interior was not exposed to extreme levels of heat, as could be expected inside a brick oven, since marble/limestone generally breaks down quickly under such conditions. None of the archival sources described such a structure. Mr. Fred Horlbeck also could not remember any such structure being present during the early 1930s. The presence of the numerous metal artifacts, high quality coal, and heat-intolerant materials suggests that this structure may have been a metal workshop or smithy.

Mechanical excavations were undertaken at four suspected kilns. Three of these kilns were located to the west of the commissary (Kilns 1, 2, and 3); the fourth kiln (Kiln 4) was in the woods behind the existing structure (Figure 1). A backhoe was employed to strip away the upper soil horizons and brick rubble at these locales. Additional layers of brick were removed until the presumed lowest "floor" of brick in the former kiln was exposed. Irregularly shaped areas were exposed in this fashion. Plan views of the lowest floor in Kilns 1, 2, and 3 were prepared.

"Kiln 4" was an extremely thin layer of brick similar to the "parquet" floor encountered in excavation units to the southeast of the commissary. A low brick wall was encountered at the edge of the scraped area, oriented in a similar direction to the floor and ditches noted above. This "kiln" is interpreted as the remains of another of the sheds present in the early twentieth century photograph. The density of small pines and the apparent lack of a kiln at this location precluded additional scraping in and around the exposed brickwork. No further investigation of "Kiln 4" was undertaken.

Following mapping and photographing of the other three kilns, hand excavations were undertaken in Kilns 1 and 2 to expose the underlying portions of the kiln structure. Hand excavations were not undertaken at Kiln 3 because of disturbance caused by several large oaks adjacent to the former kiln. This disturbance prevented any interpretation of the orientation of the former kiln or the delineation of its former boundaries. Further investigation of Kiln 3 was not undertaken.

A 1 m by 2 m unit was excavated in the margins of Kilns 1 and 2. The unit in Kiln 1 was oriented parallel to the direction of the bricks exposed on the kiln floor (parallel to Horlbeck Creek). The unit in Kiln 2 was oriented parallel to a darkened course of bricks that looked like a flue at the base of the kiln (perpendicular to Horlbeck Creek). Similar

fills and profiles were exposed in both units. Figure 2 displays the profile of the south wall of Unit 218 N/171.5 E in Kiln 2.

Two layers of fired bricks were present at the surface of the excavated area. The upper layer (Layer 1) was laid flat and oriented perpendicular to Horlbeck Creek. Bricks in Layer 2, beneath Layer 1, were placed "on edge" and perpendicular to Horlbeck Creek. A layer of mortar was present beneath Layer 2. A third layer of bricks (Layer 3) was present beneath the mortar. This layer was laid in the same manner as Layer 1 above (i.e., flat and perpendicular to Horlbeck Creek). A layer of sand or decomposed mortar was present beneath Layer 3. Another layer of bricks was present beneath the sand/mortar horizon. These bricks were oriented as Layer Two above except they were unfired. These bricks were formed of raw clay but had never been exposed to sufficient heat to result in their ceramicization. Approximately 10 cm of dark gray clay was present beneath the unfired bricks of Layer 4. Beneath the dark clay was a reddish brown clay subsoil similar to that observed throughout 38CH1075. The dark clay was different from all other soils observed at 38CH1075 or 38CH1078. It was a very dark gray to black color with some mottling. It appears to have been placed on the natural subsoil (the reddish clay), presumably serving as a floor for the construction of the kiln.

Kiln 1 displayed two layers of bricks in a similar stacking arrangement as Layers 1 and 2 in Kiln 2. However, only these two layers were still present. These lower bricks were resting directly on the same dark gray mottled clay observed at the base of Kiln 2. This clay extended to almost 30 cm below the lowest bricks, significantly deeper than this horizon under Kiln 2. None of the sand/mortar levels were observed; nor was any evidence of the layer of unfired bricks encountered beneath Kiln 1.

## ARCHITECTURAL DOCUMENTATION

Documentation of a former generator station in the southwest corner of the site was undertaken prior to its removal. The dike between the large lakes (former borrow pits?) on the south side of 38CH1075 and Horlbeck Creek contained a race and an associated structure that housed an electric generating system. Documents in the SCHS indicate that this system was installed in the 1930s by Thomas Stone, who had purchased Boone Hall Plantation and surrounding tracts (including Brickyard) from the estate of John S. Horlbeck. None of the generating apparatus remained at the time of the documentation. Only the platform and remnants of the structure that housed the generator and its storage batteries were present. The generator was driven by the wheel in a race between the lake and Horlbeck Creek. Tidal fluctuations permitted sufficient flow into or out of the creek to generate electricity for most hours of every day. Energy was stored in the batteries during periods of slack water.

Documentation of the former generator station involved photographing the structure from all faces, preparation of measured drawings of each face of the structure, and the



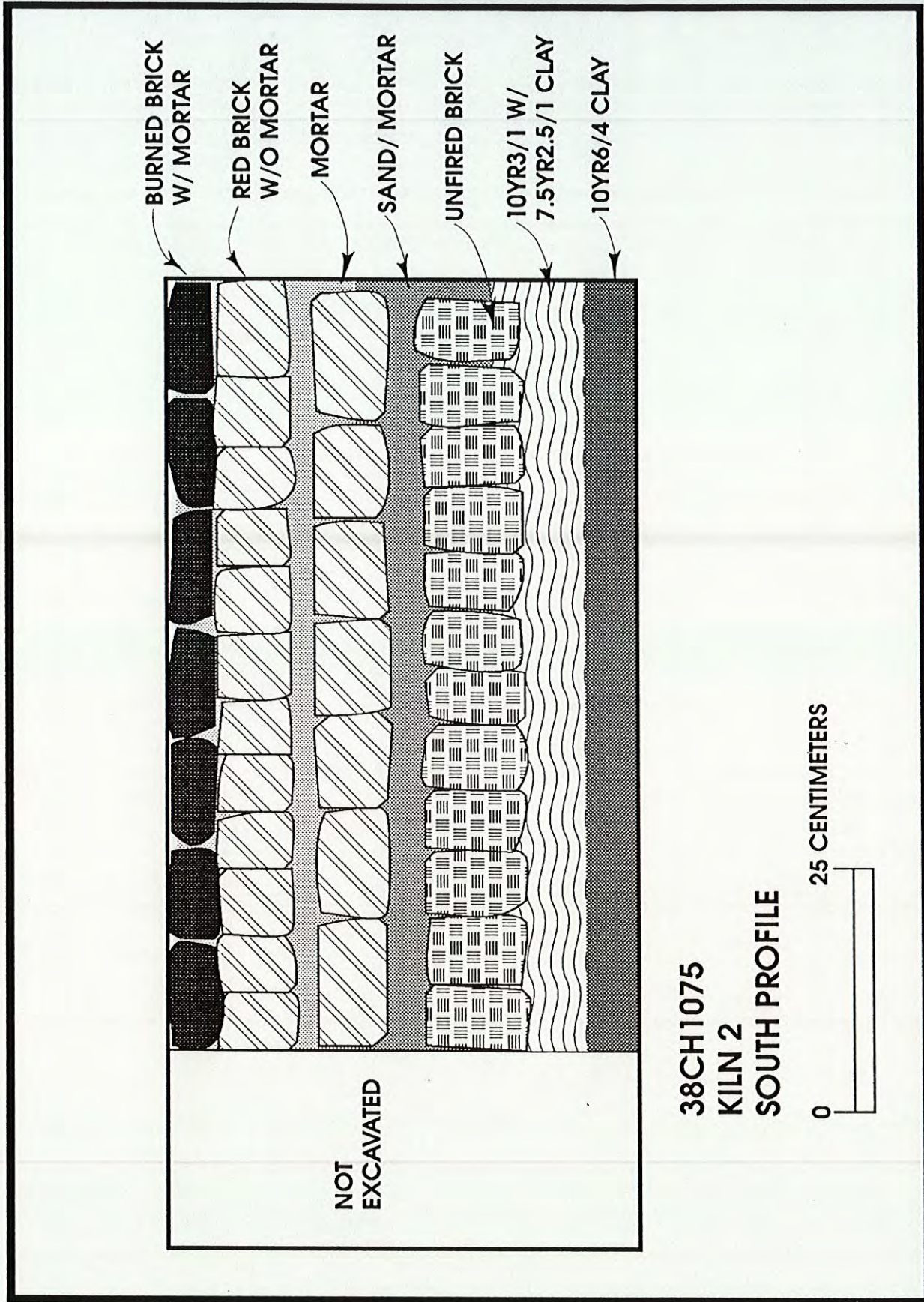


Figure 2. Profile of South Wall of Unit 218 N/171.5 E in Kiln 2.

recording of additional details through drawings and photographs. Copies of these drawings and photographs were submitted to the SHPO for review in April 1992, prior to the removal of the structure and the race. A new culvert was placed in the dike to permit more efficient drainage of the lakes into Horlbeck Creek. Increased drainage was necessary to prevent flooding throughout the Brickyard Tract and adjoining lands to the south and east.

## **UNDERWATER INVESTIGATIONS**

Two phases of underwater investigations were conducted in Horlbeck Creek in the northeast and north central portion of the site. These investigations were designed to assess the potential for underwater cultural resources associated with 38CH1075 to be present. An intensive survey of a proposed community dock area in the northeast corner of the site was initially undertaken (TAR 1992a). Brick rubble associated with a former retaining wall was encountered along the entire portion of the bankline examined. This rubble extended from the high water line to near the center of the creek. Probing through the brick rubble failed to produce any evidence of underlying vessels, former dock structures, or artifact deposits.

A reconnaissance of the remainder of the bankline was then undertaken (TAR 1992b). Brick rubble scatter similar to that observed in the community dock area was encountered along the remaining bankline. Thus, no indications of submerged vessels, former dock structures, or extensive underwater artifact deposits associated with 38CH1075 were encountered in Horlbeck Creek.

## **SUMMARY AND RECOMMENDATIONS**

Field investigations and archival research at 38CH1075 have recovered a sample of information concerning the structures and facilities associated with the former Horlbeck brickyard. The field investigations were not entirely successful in documenting brick manufacturing procedures; however, useful information concerning the construction of kilns along Horlbeck Creek was recovered. Archival information concerning the daily operation of Horlbeck businesses in the Charleston area did prove an excellent source of information concerning the operation of the brickyard and its role in the local economy. It is unlikely that additional archaeological field investigations could contribute information beyond that recovered from the site to date. Therefore, proposed development activities within the portions of 38CH1075 not set aside for preservation in place should be allowed to proceed as planned.

Preparation of the Draft Report of the data recovery activities at 38CH1075 is underway. Completion descriptions of the artifacts recovered as well as detailed plans of the various features and structures encountered will be presented in this report. An

extensive outline of the history of the site, as reconstructed from the archival information, also will be presented. It is anticipated that this report will be completed in the fall of 1993.

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