

## ARCHAEOLOGICAL INVESTIGATIONS AT 206 NORTH QUAKER LANE (44AX193)

North Quaker Lane was a busy place during the Civil War. As part of the defenses around Washington, several forts were constructed nearby. Early in the war, Fort Ellsworth was built near Shooter's Hill to the east of Quaker Lane and Fort Worth was built not far to the west. Later in the war, in 1863, Fort Williams was built on "Cooper's Hill" just west of Quaker Lane to fill the gap between the two earlier fortifications. Also early in the war, in 1861, the Episcopal Theological Seminary, located just west of Quaker Lane and north of Seminary Road, was requisitioned by the Union Army for use as a headquarters and hospital. Troops responsible for constructing, maintaining, and manning the nearby fortifications, as well as those visiting the Seminary headquarters and hospital, traveled on Quaker Lane and likely camped on the open grounds nearby.

Recent archaeological investigations on a portion of the lot at 206 North Quaker Lane provided a glimpse of a time when what is now a quiet residential neighborhood was a bustling ground, full of the business of fighting a war.

### *Historical Background*

The property at 206 North Quaker Lane was originally part of a 627 acre tract granted to John Carr and John Simpson on November 20, 1678, for the transportation of 13 persons into the colony. Between 1681 and 1753 the

land was divided and conveyed to various owners until it was once again joined under the ownership of Hugh West. The land eventually passed to his grandson, Thomas West, who sold 300 acres of the original tract to Josiah Watson in 1791. Watson, a tobacco factor, importer of goods, and a resident of Alexandria, filed for bankruptcy in the late 1790s. His property, then known as *Stump Hill*, was seized and put up for sale for the benefit of Watson's creditors. To maximize its value, Stump Hill was subdivided into 49 lots of four to seven acres each. To provide access to the lots, two new "avenues" were created running north-south through the property. One of these became what is now known as North Quaker Lane.

Four of these lots, located together just north of Duke Street and west of the present day Quaker Lane, passed through the hands of several owners and were eventually purchased by Samuel Cooper in 1839. Cooper and his family lived in a large house, probably built by the previous owner, on the high ground towards the northern edge of his property, which he called *Cameron*. The hill on which his house stood soon came to be called *Cooper's Hill*.

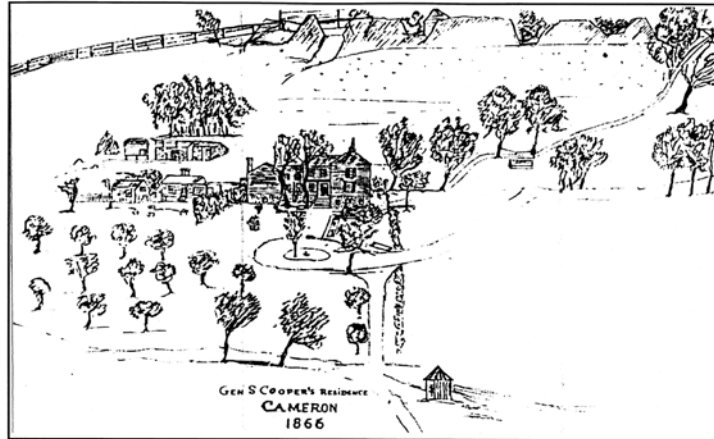
Cooper, who was born in New York and graduated from West Point, had a distinguished record of service as Adjutant-General for the U.S. Army until he resigned his command in 1861 and became a General in the

Confederate Army. His family left Cameron, and he and his wife spent the duration of the war in Richmond. During his absence, Cameron and the landscape around it underwent a radical transformation.

Early in the war, the U.S. government recognized the need to build fortifications to defend the capitol city of Washington, D.C. The western line of these defenses reached the western fringes of Alexandria and included a series of ridges north of Hunting Creek. Fort Worth was constructed in 1861 not far to the northwest of Cameron, and Fort Ellsworth was constructed on Shooter's Hill to the east. The Episcopal Theological Seminary, located north of Cameron on Quaker Lane, was requisitioned by the U.S. Army in 1861 to be used as a headquarters and hospital. By 1863 it was evident that another fort was needed to close the gap between Fort Worth and Fort Ellsworth. The location selected for this new fort was Cooper's Hill, or *Traitor's Hill*, as it was called by the troops who camped nearby. Samuel Cooper's fine house at Cameron was razed by Union troops, and Fort Williams was built on its site, reportedly with bricks and other materials salvaged from the house. Additional gun batteries were constructed west and southwest of the fort, and a line of rifle pits stretched

eastward from Fort Williams towards Fort Ellsworth.

Cooper and his family returned to Cooper's Hill after the war and enlarged a small frame house on the property to use as their home. Since then, the original estate has been divided and parts of it sold, but portions of the original Cameron estate are still owned by descendants of Samuel Cooper.



Portion of Samuel S. Cooper's 1866 Sketch Map of "Cameron" (Froebel 1992:197)

The lot at 206 North Quaker Lane is located south of and down hill from the location of original main house at Cameron. Archival research produced no evidence that a building ever stood on this portion of the original Cameron estate. Nevertheless, it is possible that an outbuilding was located on the project area and not documented in historic records.

*Archaeological Investigations at 206 North Quaker Lane (44AX193)*

In 2003 plans were underway to develop the western portion of the lot at 206 North Quaker Lane. Recognizing the high probability of the presence of archaeological resources on the land because of its strategic location during the Civil War and its proximity to the main house at Cameron, the City of

Alexandria required the developer to hire professional archaeologists to conduct an archaeological evaluation of the property.

Archaeological investigations at 206 North Quaker Lane began in July of 2003 and continued through September. Initial testing of the project area involved the excavation of shovel tests at regular intervals and a metal detector survey. Once it was established that archaeological resources were present on the property, additional investigations entailed the use of a backhoe for excavating test trenches and for stripping away topsoil, additional metal detecting, and the hand excavation of the single feature found at the site.

Initial testing of the property revealed that the project area had long been plowed and that a scatter of 19<sup>th</sup> century artifacts was present in the plowed soil that lay across the entire area tested. These artifacts included a great many fragments of bottles, the vast majority of which once contained liquor, spirits, champagne or brandy, and very few



**Brass-Plated Lead Filled Eagle Box Plate**

ceramic sherds, which are usually found in great abundance on 19<sup>th</sup> century domestic sites. Also among the artifacts were Civil War period bullets and

miscellaneous bits of metal hardware associated with Civil War military uniforms and equipment. These artifacts fit the profile of what would be the expected refuse at a Civil War encampment. Further investigations,



**Miscellaneous Munitions: top left and center, un-fired Minie balls; top right, melted Minie ball; center left, ball and buck shot; center right, possible Williams Cleaner bullet impacted; bottom, ferrous metal combination tool.**

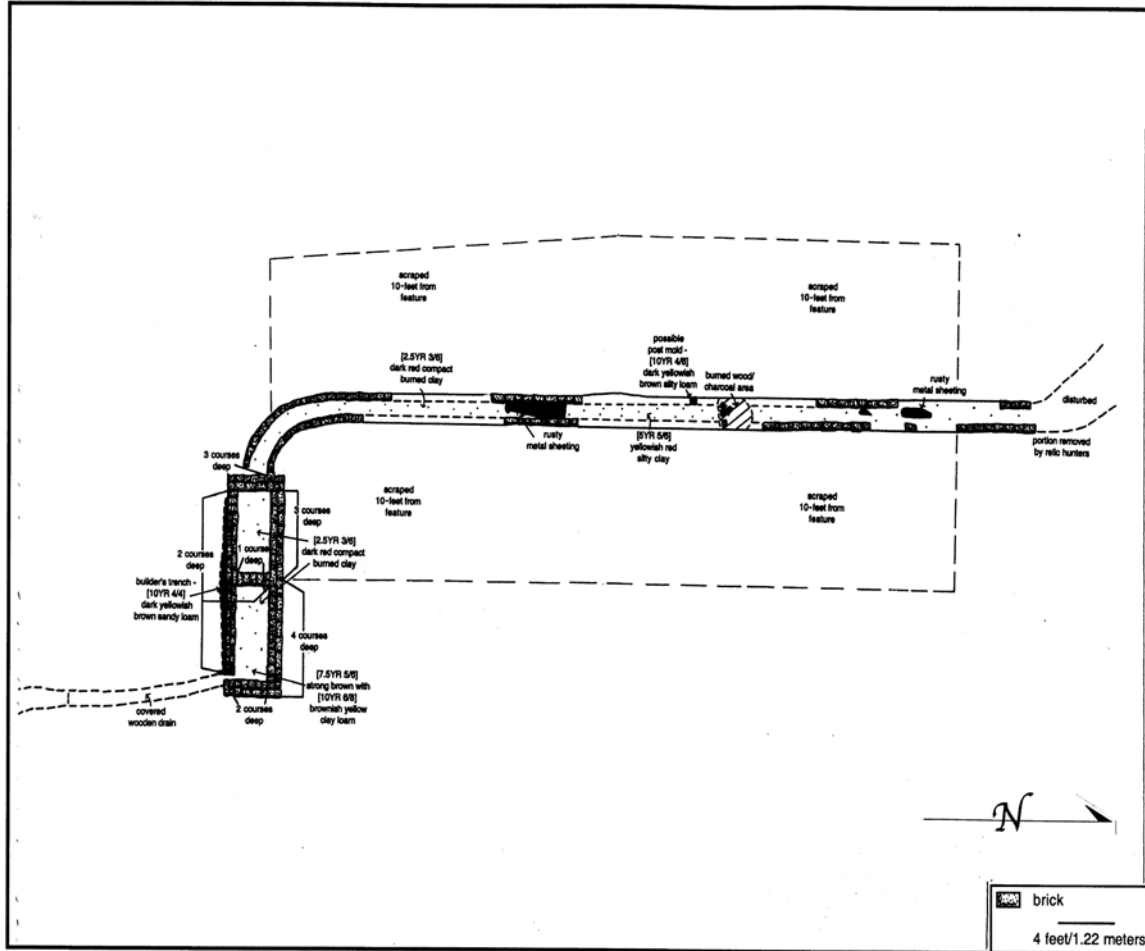
however, failed to produce any evidence of the tent platforms, company streets, pits, or hearths that might have remained of a camp. Either the camp was nearby and never extended into the project area, or post-Civil War plowing and other activities had destroyed all such evidence.

Investigations in one portion of the site did, however, reveal a cluster of buried bricks. Expanding on this initial opening, the excavators eventually uncovered the remnants of what at first appeared as a somewhat bewildering brick construction. The construction appeared initially as a 50-foot long brick-lined trench terminating at one end in a partitioned brick-lined box. Further exploration of this feature and additional historical research revealed that this curious feature was the remnants of a heating device.

*A Civil War Period Heating System: The "Crimean Oven"*

The remains of the heating device found at 206 North Quaker Lane stand as unique evidence of one of the more innovative and little known technologies used during the Civil War. The simple

covered or completely lined with sheet metal, and heat radiating from it would have heated the tent or tents that stood over it. It probably terminated at a chimney on its upper end. The function of the east half of the firebox is uncertain, although it may have served as a storage area for fuel or simply as a



Plan Map of "Crimean Oven" Brick Feature

system consisted of an exterior heat source, which was located in the brick-lined fire box and connected to a long subterranean brick-lined flue. The west side of the firebox housed a stove, probably made of iron, which provided the heat source. Heated air was forced -- or simply rose -- through the brick-lined flue that ran up the slope north of the box. This flue was either

way to access the stove for refueling and/or cleaning. A lip of bricks on the interior of the east half may have supported a wooden platform or floor that kept the contents (or user) above the sticky clay subsoil into which the entire firebox was built. A wooden box drain served to drain excess water out of the box, which certainly collected run-off from the slope

above it.

A review of reports of excavations at



Picture of Excavated "Crimean Oven" Brick Feature Facing North from Brick-lined Fire Box.

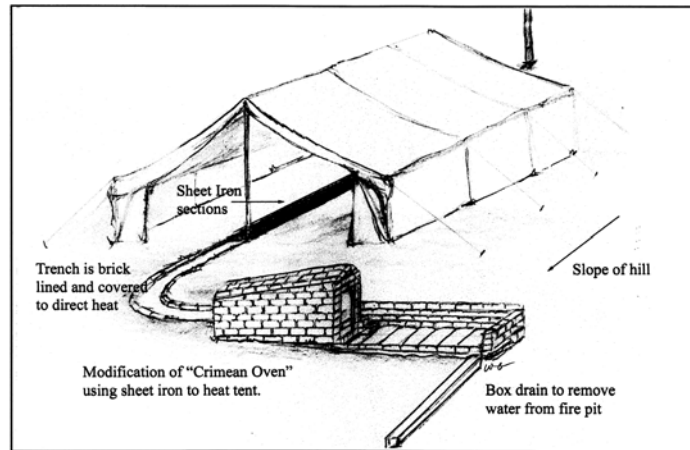
other Civil War camp sites failed to provide other examples of such heating systems.

Further historical research, however, confirmed that systems such as the one found at Quaker Lane were in use during the war. In a letter written in

November of 1861 and addressed to the Chief of Staff of the Army of the Potomac, Charles S. Tripler, Surgeon and Medical Director of the Army of the Potomac, expressed his concerns about

providing adequate shelter for the soldiers during the coming winter months. Regarding the issue of heating the tents, Tripler says, "... For warming the tents and drying the ground a modification of the Crimean oven, which has been devised and put in operation by Dr. McRuer, the surgeon of General Sedgwick's brigade, appears to me to be the cheapest and most effective." He continues, citing McRuer's report on his heating device:

*A trench 1 foot wide and 20 inches deep to be dug through the center and length of each tent, to be continued for 3 or 4 feet farther, terminating at one end in a covered oven fire-place and at the other in a chimney. By this arrangement the fire-place and chimney are both on the outside of the tent; the fire-place is made about 2 feet wide and arching; its area gradually lessening until it terminates in a throat at the commencement of the straight trench. This part is covered with brick or stone, laid in mortar or*



Contemporary Interpretive Drawing of Brick Feature (Courtesy of Wally Owen)

*cement; the long trench to be covered with sheet-iron in the same manner. The opposite end to the fire-place terminates in a chimney 6 or 8 feet high; the front of*

*the fire-place to be fitted with a tight moveable sheet-iron cover, in which an opening is to be made, with a sliding cover to act as a blower. By this contrivance a perfect draught may be*

*obtained, and no more cold air admitted within the furnace than just sufficient to consume the wood and generate the amount of heat required, which not only radiates from the exposed surface of the iron plates, but is conducted throughout the ground floor of the tent so as to keep it both warm and dry, making a board floor entirely unnecessary, thereby avoiding the dampness and filth, which unavoidably accumulates in such places. All noise, smoke, and dust, attendant upon building the fires within the tent are avoided; there are no currents of cold air, and the heat is so equally diffused, that no difference can be perceived between the temperature of each end or side the tent. Indeed, the advantages of this mode of warming the hospital tents are so obvious, that it needs only to be seen in operation to convince any observer that it fulfills everything required as regards the warming of hospital tents of the Eighth Brigade, and ascertain by observation the justness of this report.*

Dr. McRuer's description of his innovative heating system conforms closely to the evidence found at North Quaker Lane, and it gives us some clues as to when this system was built, who may have built it, and what sort of structure it may have serviced. The system was probably built and used during the winter of 1861-1862. It could have been one of the systems originally built by Dr. McRuer for the Eighth Brigade or it could have been built for another brigade following his specifications. Dr. McRuer specifically recommends that this system be used for hospital tents. The system at North Quaker Lane, with its 50-foot flue, would have been large enough to heat

one and possibly two of the larger tents usually used for hospitals.

The system was probably abandoned after the first winter when the adjoining camp was relocated after the winter months. The remnants of the heating system had been filled with soil and camp refuse. Perhaps troops encamped on the property or nearby after that first winter found the abandoned brick-lined trench a convenient place to dispose of their trash. After the war, the brick feature had been buried with soil and the ground above and around it leveled by plowing, leaving no trace of it visible on the ground surface.

#### *Conclusion*

After excavating the soil above, within, and around it and carefully documenting its construction, the brick heating device at North Quaker Lane was once again buried. Fortunately, the planned construction for the property will not destroy what is left of this unusual example of Civil War era technology. Using readily available materials and simple engineering, Dr. McRuer's heating device improved the health and comfort of the sick and wounded soldiers unfortunate enough to need the services of a hospital during that first winter of the war. In the face of all the hardships of war, such small but effective innovations must have been much appreciated by those few who benefited from their use. The archaeological discovery of this unusual device evokes a time when what was before and is again a residential neighborhood was a place dominated by the concerns of war, and it instills an appreciation for the efforts of those who

sought to provide comfort for the men  
whose job it was to fight.

**This summary is based upon a 2004 report  
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