

Public Summary

Archaeological Evaluation of the ABC-Giant Property, 500 First Street & 901 St. Asaph Street, Alexandria, Virginia

Introduction

Goodwin & Associates, Inc. (Goodwin) conducted archaeological evaluation and monitoring of the ABC-Giant property in Alexandria, Virginia on behalf of Gables Residential. The archaeological study was completed between March and September of 2017. Both mechanical-trenching and later construction monitoring were completed in order to assist the developer in complying with the City of Alexandria's Archaeological Ordinance No. 3413 and in support of the permitting process for the redevelopment of the property. The study focused on investigating three archaeological resources located within the Project Area: the Alexandria Canal turning basin (ca. 1843-1886); an associated brick-lined culvert; and, a lime kiln operated by Emanuel Francis (ca. 1868-1886).

ABC-Giant Property (Block 311)

The ABC-Giant property is located in northern Old Town Alexandria on Block 311. Block 311 is bounded by First, N. Pitt, Montgomery, and N. St. Asaph streets and includes two urban lots: 500 First Street (Lot 1) and 901 N. St. Asaph Street (Lot 2). Historically, Block 311 included a mix of commercial, industrial, and recreational uses. At the beginning of this study, both lots were developed commercially with the Giant Food grocery store occupying Lot 1 and a former Virginia Alcohol and Beverage Control (ABC) store located on Lot 2. Both structures were razed over the course of the archaeological work (between March and May 2017).

Historically, Block 311 was left undeveloped until 1840, when both lots were purchased by the Alexandria Canal Company. The Block was to become the location of a turning basin at then eastern end of the Alexandria Canal. Construction of the turning basin was completed in 1843 and served an important link between the C&O Canal and the Potomac River wharves for the next 41 years. When the canal closed, the property was once again sold and by 1949-1950 commercial properties occupied both lots with the southeast portion of Lot 2 being the only open space. By 1969, Lot 2 was redeveloped and the Virginia ABC Store and offices were opened.



USGS (1983, photo revised) 7.5' topographic map showing the location of the Project Area.



G.M. Hopkins' 1879 Map of Alexandria showing the nineteenth century development of the Project Area. (Library of Congress)

Alexandria Canal Company (1840-1888)

Frustrated at being shut out of the river trade after the C&O Canal was built 12 miles upriver, Alexandrians began petitioning for a canal of their own in the early 1830s. In May 1830, they formed the Alexandria Canal Company, which received permission to acquire land for the project — whether by purchased or, if necessary by condemnation. Work on the canal soon followed. Construction relied on both free and enslaved laborers. After the Civil War, free African Americans continued to play a pivotal role in keeping the canal running.

Spa Spring, a popular spring for its “chelate,” or cleansing waters, was one of the obstacles in the path of the canal. Ultimately the Canal Company conveyed Spa Creek through a culvert beneath the turning basin rather than simply allowing it to flow directly into the basin. The Spa

The SPA SPRING north of the town, and near the Canal, to which there is so pleasant a walk, and yielding really so valuable a water, as a tonic, has not been buried or injured by the embankment made near it. Care has been taken to preserve the fountain, and, it is understood, that the Spring, as soon as convenient, will be fitted up and embellished, and made more acceptable than ever. This will be very gratifying to our citizens generally.

Alexandria Gazette, Aug. 5, 1843

Spring culvert was constructed similar to roadway culverts with some adaptations. Newspapers of the time reassured residents that the Spring was not only preserved, but would be more attractive and accessible than ever.

The turning basin which sat on the northern two-thirds of the Project Area was completed in 1843 and on December 2nd of that year the Canal was officially opened. In celebration a canal boat known as *Pioneer* completed an inaugural trip from Georgetown to the turning basin carrying representatives from the Canal Company and the City of Alexandria.

The turning basin itself, as shown on historic maps, measured approximately 190 feet in width and was at least 650 feet long. The size of the basin spanned just over two city blocks! This allowed canal boats to fully rotate within the 5 feet deep basin and serve as a waiting area for multiple boats at the lift locks. By 1845, the canal was connected to the Potomac River through a series of four locks. Just five years later the C&O Canal was completed to Cumberland, Maryland allowing for trade from western Maryland.

Canal boats found on the C&O and Alexandria canals were designed for shallow water and needed less than 5 feet of water to navigate the water ways. Vessels found on the Alexandria Canal regularly carried to the city coal and other products such as wheat, corn, whiskey, corn meal, and flour from Maryland and exported fish, salt, plaster, and lumber west.

The trade offered by the canal spurred the establishment of businesses hoping to profit from proximity to the canal. Within the Project Area, Emanuel Francis built a lime kiln by 1868 on land he leased along the southern edge of the canal basin. Little is known about the kiln, except that it was reported that it was built close enough to the canal that limestone could be thrown from the boats directly into the new kiln.



The canal surface within the turning basin as seen in the northern portion of Trench 2. The surface was visible approximately 4.5 feet below surface.

Costly repairs and the growth of the new rail industry in the years following the Civil War would result in the permanent closure of the canal in 1888. The Alexandria Canal Company sold the lands within the Project Area at public auction. Both lots were purchased by Seymour Stoutenburgh, a local contractor and real estate dealer, from the Company that same year. He and his wife, Annie's heirs finally sold the property in 1944 and a short two years later it was purchased by Alexandria Stores, Inc. The property sat undeveloped through the first half of the twentieth century when the canal was fully filled in and commercial properties were constructed.

Archaeological Evaluation of Block 311

The goal of archaeological evaluation within the Project Area was to assess the potential for intact archaeological resources related to the nineteenth century development of the Project Area. In March of 2017 the first four trenches were excavated. In May 2017, after the demolition of the standing structures and removal of the parking lots, three additional trenches were excavated. Archaeological trenches were placed according to historical documentation in areas of significant nineteenth century resources: the Alexandria Canal turning basin; the Spa Spring culvert; and, E. Francis' lime kiln.

The Alexandria Canal Turning Basin

The lower extent of the Alexandria Canal turning basin was uncovered in Trenches 1, 2, 5, and 6. Elements of the canal prism (the watered channel of the canal) and the northern berm of the turning basin were identified. At the surface of the prism, a thin lens of dark, organic soil indicated that the basin was left open after its abandonment and plant growth suggested it was no longer filled with water. Clay and sand layers were identified that formed the impermeable lining of the base and sides of the basin. The soils used to construct the canal's sub-structure appear to have been obtained locally. Clay in the base of the turning basin was laid using a *puddling process*. Puddling took finely chopped clay mixed with water and laid down in a fluid consistency. To retain their moisture and impermeability, the puddling layer was covered with sandy soil. Although the construction was alike to other canals, the number of layers of clay and sand revealed that the

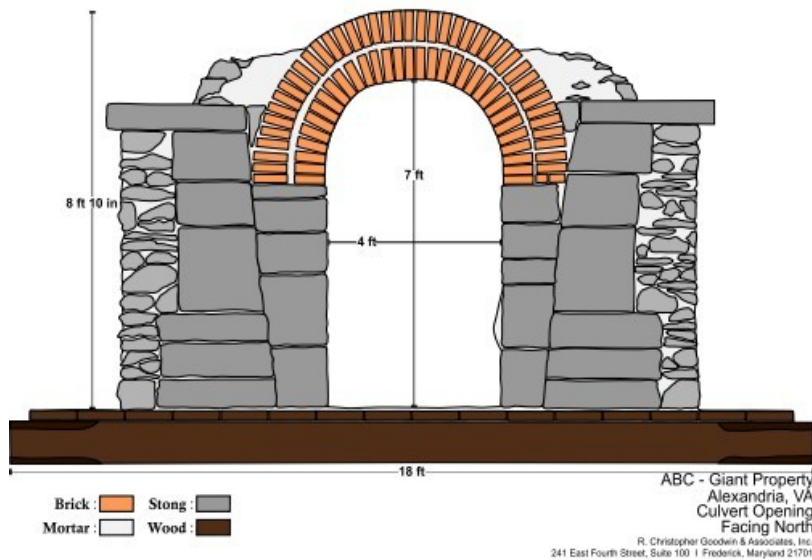


Detail of *puddling layer* within the central portion of Trench 1



Southern opening of the Spa Spring culvert and the two retaining walls on either side of the culvert opening.

landscape was not ideal for a turning basin and required extensive filling of the natural landscape. Excavation also indicated that mid-twentieth century grading had significantly disturbed the turning basin.



Scaled drawing of the Spa Spring culvert by Goodwin & Associate archaeologists. The drawing details the curved brick roof, reinforced stone retaining walls, and wooden cribbing that formed the base.

Spa Spring Culvert

The brick-lined culvert was found during construction monitoring. Crossing diagonally through the northwestern portion of the Project Area, the culvert was found at 18 - 20 feet below the modern surface. The Spa Spring culvert was built in the same manner as a road culvert. Comprised of brick and stone and set on a foundation of wooden cribbing, the culvert was reinforced with an exterior sheeting of stone chipping debris mixed with cement and had an arched roof constructed of two courses of brick. The culvert measured over 196.9 feet in length and with an interior width of 4 feet and a height of 8 feet. Thick, stone retaining walls protected the southern opening of the culvert, but extensive disturbance from twentieth century landfilling obscured how Spa Spring would have followed through the structure. At least 5.9 feet of soil was placed over the culvert at Spa Spring before the base layer of clay for the canal turning basin was laid.

Emanuel Francis Lime Kiln

No direct evidence of the Francis Lime Kiln was identified. An area of stonework identified in Trench 3 was tentatively thought to be the foundation remains of E. Francis' lime kiln. However, it was later revealed that the section of stonework was incomplete and dry-laid extending only one course in depth. Although it appears that the stonework was laid intentionally, its association

is unclear. Also unclear was a horse burial discovered south of the stonework. Both of these anomalies were identified 25 feet below surface where the culvert outflow was exposed.

Recordation of Archaeological Resources

Construction plans required that the entire Project Area be excavated to 25 feet below the modern surface to accommodate a parking facility. Additionally, based on the type of resources and condition of these resources, physical preservation was not recommended. This requirement and feasibility of preservation meant that archaeological resources would need to be extensively documented during excavation. This was achieved through photography, mapping, and drawing during both the trenching and monitoring phases of the work. Archaeologists from Goodwin & Associates and Alexandria Archaeology monitored the resources during all phases of construction.

Periodic site visits were made to check on site conditions, observe ground-disturbing excavation, and fully record all of the archaeological resources present within the Project Area. The culvert, for example, was discovered and documented during this monitoring period. Monitoring concluded in September 2017 when the maximum depth was reached.

Twentieth Century Use

Following the closure of the canal and dismantling of the Francis kiln, the property apparently was unused and essentially abandoned. Between 1944 and 1949, when the property was sold for commercial development, the Project Area was filled and graded. The southern portion of the Project Area including the turning basin was filled with a combination of household and industrial waste. Bottles deposited in the landfill deposit dated from 1938-1942. Landfill was eventually found to extend over much of the southern portion of the Project Area to a depth of 30 feet below the modern surface. A sample of these landfill materials were retained and analyzed to better characterize the deposit. In the northern portion of the Project Area, the turning basin's northern berm was removed and the canal was filled with gravel. Grading in this area was significant and destroyed all evidence of pathways that traversed the top of the canal berm.



Example of some of the bottle recovered from the twentieth century fill found across the Project Area. Most of the bottles dated from ca. 1938-1942 and represented common consumer products from the first half of the twentieth century.



Photo showing layers of twentieth century fill in the Project Area.

Summary

In summary, the archaeological evaluation and monitoring of the ABC-Giant property focused on the likely locations of significant nineteenth century resources related to the Alexandria Canal and the Francis lime kiln that were known to be located within the Project Area. Focusing on the locations of these resources, Goodwin and Associates archaeologists in consultation with Alexandria Archaeology conducted trenching and construction monitoring at the Project Area in 2017 that resulted in the identification of a portion of the Alexandria Canal turning basin and the Spa Spring culvert. Documentation of these resources revealed that the Alexandria Canal and associated resources were constructed using typical methods, but were impacted by the unsuitable natural landform. Therefore, filling was necessary to turn the Spa Spring drainage into a workable turning basin. The closure of the canal in the final decade of the nineteenth century left the property abandoned until it was redeveloped for commercial use in the mid-1940s. Its twentieth century redevelopment included considerable landfilling and grading activities that impacted the archaeological resources and left them buried under up to 30 feet of household and industrial landfill material.