

CONCLUSIONS AND RECOMMENDATIONS

Cultural Resource Recommendations

Phase I and II archaeological investigations, consisting of both archival and archaeological research, were conducted over one mile of pipeline right-of-way along Route 896 in New Castle County, Delaware. This testing consisted of the pedestrian survey and surface collection of cultivated areas, and the excavation of shovel test pits, test units, auger tests, and where discovered, features. The Phase I and II survey of the Route 896 Transmission Pipeline right-of-way resulted in the identification of three historical agricultural complexes. Two of the historical sites identified, the Andrew Eliason Site (7NC-F-69) and the Richard Griffith Site Areas A and B (7NC-F-71A and B), are considered to be eligible for inclusion in the National Register under criterion D, as both are likely to yield significant archaeological information about the past, and the Andrew Eliason Site (7NC-F-69) is also eligible under criteria B. The historic context for the 1830 to 1940 period for agriculture in Delaware (De Cunzo and Garcia 1992:315) advises that in order for an Agricultural Complex to be significant because of its association with a person significant in local and regional history, it must contain intact and undisturbed archaeological resources directly associated with that person. The Andrew Eliason Site does contain intact archaeological resources that are associated with Andrew Eliason.

Only a small portion of the Appleton Site (7NC-F-70) is located within the direct impact zone of the Route 896 Transmission Pipeline right-of-way. The archaeological evidence of the agricultural complex within the right-of-way consists of a scatter of historical artifacts dating to the mid-nineteenth and twentieth centuries and remnants of non-structurally related post features. The integrity of the site area within the project area has been compromised by private construction in the northern and southern portions of the site. Based on guidelines outlined in the Delaware historical archaeological management plan (De Cunzo and Catts 1990:192-196) and the historic context for the 1830 to 1940 period for agriculture in Delaware (De Cunzo and Garcia 1992:298-300), the portion of the Appleton Site that is contained within the pipeline project area is not considered to be historically significant and no further archaeological work is recommended within the pipeline right-of-way. The extant dwelling, outbuildings, and landscape of the agricultural complex within the remaining portion were not subjected to archaeological testing and its eligibility for nomination to the National Register of Historic Places cannot be determined within this report. However, potential historically significant cultural materials are located less than 100 feet of the western limits of the pipeline right-of-way and the area surrounding the extant structures and undisturbed yard areas should be protected and unaltered during construction of the pipeline.

The western 1/3 of the Griffith Site Area B (7NC-F-71B), the area in which the proposed pipeline right-of-way is located, has already been compromised by road construction and the integrity of this portion of the site is poor. Therefore, no further archaeological testing is recommended within proposed pipeline right-of-way. However, significant cultural resources related to the Richard Griffith Site Area A are located just outside the direct impact of the proposed pipeline right-of-way. The undisturbed portion of the Richard Griffith Site Area B is part of an agricultural complex that has yielded and is likely to yield additional information relating to the Rothwell occupation of the Richard Griffith Site Area A and as such, should be protected and remain undisturbed during construction of the proposed pipeline. Table 9 summarizes the results of the Phase I and II investigations.

TABLE 9
**Summary of Current Management Status of Sites in
the Route 896 Transmission Pipeline Project Area**

CRS number	Site number	Site name	Segment location	Work completed	Site status	Recommendations
7NC-F-69	N-12812	Andrew Eliason	2	Phase I/II	National Register eligible	further work recommended
7NC-F-70	N-12813	Appleton	3	Phase I/ partial Phase II	Out of Right-of-Way	no further work recommended
7NC-F-71A	N-12814	Richard Griffith, Area A	5	Phase I/II	National Register eligible	further work recommended
7NC-F-71B	N-12814	Richard Griffith, Area B	6	Phase I/II	Out of Right-of-Way	no further work recommended

Implications for Regional Prehistory

Based on several prehistoric site location predictive models (Kellogg 1993a; Custer 1986; and Lothrop, Custer, and De Santis 1987) the geographic area of the Route 896 Transmission Pipeline right-of-way has the potential for containing prehistoric archaeological sites. A total of 170 prehistoric artifacts were recovered, dispersed along the entire project area and no concentrated areas of prehistoric artifacts were identified. All the prehistoric artifacts were found in the plow zone in disturbed contexts, and no intact subsurface features were discovered.

The project area falls within all three (low, medium, and high) probability zones predicted by Kellogg (1993a). The high probability of identifying a prehistoric site is most likely related to the intermittent branch of Crystal Run that cross-cuts the northern portion of the project area. Soils are both poorly and well drained (Table 1), creating a suitable environment for prehistoric occupation.

Although archaeological investigation of the Route 896 Pipeline project area did not locate any prehistoric sites, two Woodland I points were recovered, one found in Segment 2 within a low probability zone predicted by Kellogg (1993a) and the other found in Segment 6 within a high probability zone. Although the total project area was relatively small and no sites were identified, the presence of debitage and bifaces suggests that a prehistoric occupation existed somewhere nearby. Custer (1986) indicated that this area had moderate potential for containing Woodland I and Woodland II base camps and procurement sites.

Although Crystal Run does cross the project area, it is only an ephemeral stream which would not have provided a reliable source of water. Given the location of two known sites with Woodland I and II components near Joy Run, 2,000 feet (600 meters) from the project area, it is more likely that sites would be located near a reliable water source rather than within the project area. The site location model prepared by Lothrop, Custer, and De Santis (1987) indicated that a prehistoric site would more likely be located within 200 meters of the nearest source of surface water, a theory that is supported by the absence of prehistoric sites within the Route 896 Transmission Pipeline project area.

Implications for Regional History

The Phase I and II archaeological survey of the Route 896 Pipeline project identified three historical archaeological sites. All three properties were once part of a large tract of land called “Green’s Forest” owned by Edward Green in 1686. Richard Griffith purchased a large portion (305 acres) of “Green’s Forest” in 1750. In fact, all the land on either side of present-day Route 896 within the project area once belonged to Richard Griffith. The Andrew Eliason Site (7NC-F-69) and the Richard Griffith Site Areas A and B (7NC-F-71A and B) were determined to be eligible for listing on the National Register. Both sites were agricultural complexes with intact dwellings, outbuildings, trash and landscape features. The Andrew Eliason Site was owner-occupied from the late eighteenth to the mid-nineteenth centuries. The site was tenant-occupied from the mid-to-late nineteenth century, after Andrew Eliason built a new dwelling (the Hermetage, N-413) nearby.

The property on which the Griffith Site Areas A and B was located was owned by two families, the Griffith family and the Rothwell family, for at least 150 years. The Griffiths owned the property until the early nineteenth century when it was then acquired by the Rothwell family. The Richard Griffith Site Area B probably represents the later, nineteenth century occupation of the Rothwells. The portion of the Griffith Site Area B contained within the pipeline right-of-way was disturbed by recent highway construction, compromising the integrity of the western portion of the site. The undisturbed portion of the Griffith Site Area B was located outside the pipeline right-of-way. The Appleton Site was an owner-occupied farmstead from the mid-nineteenth to early twentieth centuries. The Appleton dwelling is extant and presently serves as office space for Summit Airport. The Appleton dwelling and outbuilding are situated well outside the pipeline right-of-way and will not be impacted by construction of the pipeline. Archaeological resources were found within the pipeline right-of-way but were not considered significant to the whole site. The whole site was not tested and cannot be evaluated in this report.

Phase II testing at the Andrew Eliason Site and the Richard Griffith Site determined that both sites are likely to yield additional data capable of addressing current research questions in Delaware historical archaeology. More specifically, these two sites could be used to study the four primary research domains as identified by the **Historic Archaeological Resource Management Plan for Delaware** (De Cunzo and Catts 1990) and the **Delaware Comprehensive Historic Preservation Plan** (Ames et al. 1989). These four domains are (1) Domestic Economy, (2) Manufacturing and Trade, (3) Landscape, and (4) Social Group Identity.

Two research domains, Domestic Economy and Landscape, would be most applicable to the Andrew Eliason and the Richard Griffith sites. These two research themes seek to reconstruct the past social, demographic, and economic landscape of Delaware. Specifically, these two sites are agriculturally-related and can be used to trace the critical social and economic changes that occurred in northern Delaware over the late-eighteenth, nineteenth and early twentieth centuries. Two related research themes, changes in agriculture and settlement patterns, can be followed through additional research at the Andrew Eliason and Richard Griffith Area A Sites. Three critical changes in Delaware history took place in the 1830-1880 and 1880-1940 periods: 1) transportation developments, 2) economic and agricultural change with the development of large-scale fruit, truck produce, legume, and grain industries that took advantage of improved transportation and expanding regional urban markets, and 3) changing agricultural labor and tenancy patterns. Elements of these key changes can be studied in both the Eliason and Griffith Area A sites.

TABLE 10

Major Time Periods in Delaware History

1).	1630-1730 +/-	Exploration and Frontier Settlement
2).	1730-1770 +/-	Intensified and Durable Occupation
3).	1770-1830 +/-	Transformation from Colony to State
4).	1830-1880 +/-	Industrialization and Capitalization
5).	1880-1940 +/-	Urbanization and Suburbanization

The broad social and economic changes that occurred over time in northern Delaware helped to define the major time periods of Delaware History as outlined in the Delaware State Plan (De Cunzo and Catts 1990; Table 10). The Griffith Site Area A was first occupied during the second period of Delaware history, Intensified and Durable Occupation, 1730-1770 (Table 10). Richard Griffith referred to his property as a plantation and wanted to retain the valuable wooded portions of his land. The 305-acre Griffith farm continued to flourish under the ownership of Richard Griffith, Jr. throughout the late-eighteenth to early-nineteenth centuries during the period of Transformation from Colony to State (1770-1830; Table 10). The nearby Eliason farm was established during this period.

The development of strong regional urban markets induced tremendous social and economic changes that marked the beginning of the Industrialization and Capitalization period in Delaware history (1830-1880). The establishment of improved transportation routes such as the Chesapeake and Delaware Canal in 1829 and the New Castle and French Town Railroad in 1832 (Delaware's first railroad) brought new commercial opportunities to expanding urban markets. Located in the Upper Peninsula grain region, Pencader and St. George's farmers benefited from the proximity of the improved transportation routes. The farms in the area were large, cultivating an average of three times more acreage per farm than other regions of the state (Herman et al. 1989:31). It was during this period that Andrew Eliason amassed considerable amounts of land and constructed a mansion near his humble first home, which then became tenant-occupied. It is the remains of his first home that were identified within the Andrew Eliason Site limits. The Rothwell occupation of the Griffith Area A Site began within this period of industrialization and capitalization. Further research at the Eliason and Griffith Area A sites may provide insights into the tremendous social, economic, and agricultural reform taking place in the region within this time period.

The Richard Griffith and Andrew Eliason sites can be placed in the local and regional context of other contemporaneous sites in Delaware. The farm layout of the first occupation of the Griffith Site Area A can be compared to that of the Strickland Plantation which was an owner-occupied plantation from ca. 1726-1764 near Smyrna (Catts et al. 1994). The Strickland Plantation represents one of the few documented early owner-occupied farmsteads in Delaware.

The nineteenth century occupations of the Eliason Site and the Rothwell occupation of the Richard Griffith Site Areas A and B are contemporaneous. Located less than one-half mile from each other, local farm layouts and practices should be similar. Even similarities between the farm owners, Andrew Eliason and Samuel Rothwell, can be studied. Both men purchased many acres of land in the surrounding area and both men abandoned their first homes to build and live in grander homes nearby and enjoyed similar high socio-economic status. Further archival and archaeological information from these two sites can be used to compare and contrast not only these two local farms, but other holdings of the rural elite in Pencader, St. George's, and Red Lion hundreds. Recent excavations at the Cazier Tenancy Site indicated that wealthy landowners, such as Henry and Jacob Cazier, visibly displayed

their high social status through their grand homes and farm layouts, as well as their tenant holdings (Hoseth, Catts, and Tinsman 1994). The Pennington occupation of the recently excavated Woodville Site can also be used to compare the farm layouts of wealthy landowners (Scholl et al. n.d.). The penchant of naming their home farms is also a sign of wealth and status. Pennington's "Woodville Farm", Cazier's "Mount Vernon Place", and Eliason's "Hermetage" are only a few examples of the durable houses of the rural elite. Architectural studies of these durable dwellings can also be used to compare farm layouts, building dimensions, and the number and function of outbuildings. Several extant dwellings of the rural elite in the region have been examined and documented and can provide comparable information (Herman et al. 1989).

Data from the mid-to-late nineteenth century tenant-occupations of the Griffith Site Area A and the Andrew Eliason Site can be compared to each other, as well as other contemporaneous tenant-occupied sites in the region - the A. Temple Tenant Site (Hoseth et al. 1990), the Jacob B. Cazier Tenancy Site (Hoseth, Catts, and Tinsman 1994), and the mid-nineteenth century tenant-occupation of the Darrach Store Site (De Cunzo et al. 1992). Comparisons with earlier occupied tenant farmsteads such as the Whitten Road Site (Shaffer et al. 1988) can show changes in land use and farm layout through time.

Historical predictive models for the periods prior to 1730 and 1730 to 1770 developed by Kellogg (1993a) proved to be good indicators for the presence/absence of historical sites within the Route 896 Transmission Pipeline project area. The absence of historical sites dating prior to 1730 within the project area substantiated Kellogg's (1993a) predictive model of a low probability of locating a historical site within the project area. The Richard Griffith Site Area A was established during the period from 1730 to 1770 and is located in a medium probability zone predicted by Kellogg (1993a).

This survey's methods met the goals of the project. No changes in DESHPO guidelines, planning goals, or research guidelines are necessitated by the results of this survey. Slight biases within the historical documents were detected between the landholding and the tenant population. Information was readily available for Andrew Eliason, due in part to his election to the Delaware House of Representatives, Richard Griffith and Samuel Rothwell. Scharf (1888) mentions their names as part of his discussion of St. George's and Pencader hundreds. Landowners names were depicted on maps, and listed in wills, deeds, censuses, and tax assessments. No indication of tenant names were discovered during the background research for Eliason or Rothwell. More detailed archival research can be undertaken if these sites are subjected to additional archaeological investigations and may fill information gaps and eliminate biases.

In conclusion, data generated from further research on the two National Register eligible sites identified within the Route 896 ESNG Transmission Pipeline project area, the Richard Griffith Site Areas A and B and the Andrew Eliason Site can yield data significant to current research questions in historical archaeology and the history of Delaware and the surrounding region.