PHASE I ARCHAEOLOGICAL SURVEY
0F WYOMING MILL REALIGNMENT
CITY OF DOVER, KENT COUNTY DELAWARE
CONTRACT NO. 30 042 02;
FEDERAL ID NO. ESTP-ERRA-K-195(3)

Prepared for:

Delaware Department of Transportation
P. O. Box 778 Dover, Delaware 19903

Prepared by:

Barbara C. H. Silber
McCormick Taylor, Inc.
200 Continental Drive, Suite 305
Newark, Delaware 19713

May 2010

DRAFT

Delaware Division of Historical and Cultural Affairs
State Historic Preservation Office
21 The Green
Dover, DE 19901
302-736-7400
302-739-5660 (fax)

Archaeological Survey Report Form

(For use when NO archaeological sites were identified; see *Guidelines and Instructions*.)

1. **Report title:** Phase I Archaeological Survey of Wyoming Mill Road Realignment; City of Dover, Kent County, Delaware; State Contract No. 30 042 02; Federal ID No. ESTP-ERRA – K 195 (3)

2. **Date:** 4/29/2010

3. **Author(s):** Barbara Silber

4. **Consulting firm name and address:** McCormick Taylor, Inc., 200 Continential Drive, Suite 305, Newark DE, 19713

5. **Client agency:** Delaware Department of Transportation

LOCATION

6. **County (check as many as apply):** ☐ **New Castle** ☒ **Kent** ☐ **Sussex**

7. **Nearest town(s):** Dover

8. **Physiographic and geographic zone(s):** Upper Coastal Plain: Mid-Penninsula Drainage Divide

PROJECT DESCRIPTION

9. **Dates of fieldwork:** 4/15/10, 4/16/10, and 4/21/10

10. **Size of area covered:** **unit used:** ☐ **acres** ☒ **hectares**
project area: 5.90 (14.58 ac.) **surveyed area**: 3.72 (9.20 ac.)

11. **Project description (describe location and nature of project):** This project proposes to relocate a section of Wyoming Mill Road, which is located in the City of Dover in Kent County, Delaware. The portion of Wyoming Mill Road to be realigned would begin

approximately 1,400 feet south of the existing intersection with Hazlettville Road, and extend approximately 1,700 feet in a north-westerly direction to form a new four-way, signalized intersection along Hazlettville Road at Westover Drive. The new intersection would be located approximately 1,000 feet west of the existing intersection. The existing section of Wyoming Mill Road will be abandoned and removed. The purpose and need of the project is:

- to realign and consolidate the off-set Wyoming Mill Road/Hazlettville Road, and Westover Drive/Hazlettville Road intersections;
- to improve drainage along Wyoming Mill Road and Hazlettville Road; and
- to utilize the excess land area between the existing and relocated Wyoming Mill Road as possible future extension of Schutte Park.

The proposed relocation of Wyoming Mill Road would realign an approximate 1,700 foot section of roadway. The realigned portion of Wyoming Mill Road would form a new four-way intersection with Westover Drive at Hazlettville Road. The relocated portion of roadway is proposed to traverse an open field, which is currently in private ownership. The owner of this land has an agreement in place with the City of Dover to dedicate the required land for the roadway relocation. The old and unused portion of Wyoming Mill Road will be abandoned and removed. The area where the old road is removed could be converted to future parkland, to form a contiguous tract of Schutte Park.

Wyoming Mill Road. Currently, the portion of Wyoming Mill Road located within the study area consists of two 12-foot lanes with 8-foot shoulders and open drainage. The proposed relocated section of Wyoming Mill Road will extend for approximately 1,700 feet, and will match the existing cross section, with the exception of the intersection with Hazlettville Road. At this intersection, Wyoming Mill Road will consist of one 12-foot through lane in each direction, 12-foot dedicated left and right turn lanes, as well as a 5-foot bicycle lane. Additionally, due to right of way restrictions at the Nottingham Meadows Community, curb and a closed drainage system on the southwest leg of the intersection is proposed.

Hazlettville Road. The portion of Hazlettville Road within the study area consists of two 12-foot lanes, with 8-foot shoulders and open drainage. At the proposed new intersection with Wyoming Mill Road, Hazlettville Road will consist of one 8-foot through lane in each direction, 12-foot dedicated left and right turn lanes, as well as a 5-foot bicycle lane. Additionally, due to right of way restrictions at the Nottingham Meadows Community, curb and a closed drainage system on the southwest leg of the intersection is proposed.

Westover Drive. Currently, Westover Drive is a two lane roadway that serves as access/egress to the Westover Woods Community. Each lane of Westover Drive is currently 25 feet wide. As part of the proposed improvements associated with Wyoming Mill relocation project, the entrance lane will remain 25 feet wide; however, the exit lane be restriped as two 12-foot lanes, one through lane and one left turn lane.

In addition to the approximately 1,700 foot section of Wyoming Mill Road to be relocated as part of this project, a new four-way intersection with Westover Drive at Hazlettville Road will be constructed. This new intersection will serve all necessary through and turn

moves required for Wyoming Mill Road, Westover Drive and Hazlettville Road. The current Wyoming Mill Road/Hazlettville Road intersection will no longer exist.

RESEARCH DESIGN

12. **Survey objectives:** The goal of the Phase I archaeological survey was to locate and identify any archaeological resources within the project's anticipated Area of Potential Effect (APE). The APE was identified as encompassing lands that may be subjected to subsurface disturbance by the proposed project. The project's horizontal and vertical limits of disturbance were regarded as the bounds of the APE. The horizontal bounds of the APE (from edge of pavement) coincides with the collective perimeter formed by the project's limits of construction (LOC); proposed right-of-way; easements (temporary and permanent); and clear zone.

13. **Survey methods (describe both field and background research methods):** The Phase I archaeological survey entailed background research, subsurface archaeological testing, and laboratory/data analysis.

    In addition to in-house materials, primary documentary materials that were subjected to review included files and databases maintained by the Delaware State Historic Preservation Office (DE SHPO), Kent County, Delaware Public Archives, DelDOT, and the National Park Service (NPS). Tax parcel mapping and inventories; historical and environmental mapping; cultural resource management surveys; and technical journals were also examined. The DE SHPO CHRIS database was regarded as a primary reference for previously documented cultural resources.

    A preliminary archaeological sensitivity analysis was also conducted to assess the archaeological potential of the project APE. This analysis involved a review of environmental characteristics (e.g., distance to water, topography, soil permeability), the APE's proximity to known archaeological and historic architectural sites, past landscape use within the APE, and regional human settlement patterns. Historic mapping was also examined to determine if the proposed APE coincides with the location of any no longer extant structures. The assessment included an archaeological disturbance analysis. The purpose of the disturbance analysis was to target areas within the project APE that warranted archaeological testing. This analysis focused on identifying areas that had the best likelihood for containing relatively intact subsurface stratigraphic profiles.

    In consultation with DelDOT, it was determined that the approximate 1,000-foot long segment of Wyoming Mill Road Relocated between Sta. 310+00 and Sta. 320+00 warranted controlled-interval subsurface archaeological testing. This segment of the project APE, which spans the distance between the north edge of the existing Nottingham Meadows stormwater management basin and the proposed Wyoming Mill Road/Hazlettville Road intersection, traverses a fallow agricultural field. Compared to other portions of the project APE, this field was concluded to have the best chance for yielding archaeological resources since subsurface disturbances therein have been limited to historic plowing. The general subsurface archaeological testing program

entailed the hand-excavation of shovel test pits (STPs) at 15-meter intervals. On occasion, the 15-meter test interval was adjusted to avoid physical obstacles (e.g. standing water, soil stockpiles), to minimize redundant testing of severely disturbed soils, and/or to better examine unusual soil deposits. All excavated soil was dry-screened through 1/4" mesh. All STPs were excavated in natural levels and extended into at least 20 cm of culturally sterile subsoil. The base of all STPs were a minimum of 40 cm in diameter.

14. **Expected site types for this area (cite earlier surveys & known nearby resources, information from historic maps or research):** The results of background research revealed that to date, no archaeological sites have been previously documented within the archaeological project APE itself. The only known sites (i.e. previously recorded) that are located within a 2,500 radius of the project APE are 7K-C-83, 7K-C-108, and 7K-C-109. All three sites are precontact sites that are located south of Nethermere Lane along minor tributaries of Puncheon Run.

    Site 7K-C-83 (K-467) was originally recorded with the DE SHPO in 1976. This site is situated on the east side of Wyoming Mill Road in a wooded lot that flanks the west side of an unnamed tributary of Puncheon Run. To date, physical examination of 7K-C-83 has been limited to surface collection and the excavation of two test units. Sites 7K-C-108 (K-5471) and 7K-C-109 (K-5472) are two lithic scatters that were recorded with the DE SHPO in 1983 (Custer and Galasso 1983). Both sites are located on the west side of Wyoming Mill Road and were identified during a surface survey of two agricultural fields that flank the north side of an unnamed tributary of Puncheon Run. Neither 7K-C-108 nor 7K-C-109 has been subjected to subsurface testing.

    Although the exact temporal and functional use of 7K-C-83, 7K-C-108, and 7K-C-109 are unknown, all three sites are believed to represent the remains of procurement sites. Of the three sites, 7K-C-109 is the closest site to the project APE. This site is located near the southern terminus of the project APE approximately 100 feet off of the Wyoming Mill Road edge of pavement.

    The past discoveries of 7K-C-83, 7K-C-108, and 7K-C-109 is not unusual. From a regional perspective, the project APE is located in a portion of the St. Jones River watershed that is regarded as having considerable potential for containing precontact sites (Custer and Galasso 1983; Liebknecht et al. 1997; Custer 1984, 1986, 1989, 1994). Given its relatively close proximity to Puncheon Run and several of its associated waterways, the general vicinity of the project APE would have contained an assortment of wetland settings that would have supported a diversity of floral and faunal species. Well-drained areas adjacent to these resource-rich settings would have been considered attractive short- or long-term habitation locales by past human groups. The aforementioned sites, as well as others that have been documented elsewhere along Puncheon Run such as 7K-C-51 and 7K-C-12 (Liebknecht et al. 1997), clearly demonstrate that the general region was frequented by past Native American groups. Based on current models of archaeological research, existing site inventories, and previous studies, precontact site type expectancies for the project APE ranged from small procurement/processing locales to small base camp sites. Of the temporal contexts developed for Delaware, it was concluded that the project APE would be most apt to

contain occupations ranging from the Woodland I through Woodland II Periods (Custer 1984, 1986, 1989, 1994; Custer and Galasso 1983).

While no postcontact sites have been documented within a 2,500-foot radius of the archaeological APE, postcontact archaeological sites have been found by previous studies in the general Dover-Wyoming Mills area. Two such sites are the Nixon Mill Site (7K-C-414) and the Dawson House Site (7K-C-413), which are located east of the project APE along Puncheon Run (Liebknecht et al. 1997). The depictions of various farmsteads on historic mapping (e.g., Byles 1859, Beers 1876) and the presence of extant historic architectural resources (e.g., K-1027 and K-1029) along Hazlettville and Wyoming Mill Roads also imply that both roadway corridors have a potential for yielding postcontact archaeological sites. Given the postcontact settlement history of Dover's outskirts, the lands along these roads would be most apt to yield sites relevant to the *Archaeology of Agriculture and Rural Life* (1830-1940) historic context of New Castle and Kent Counties (De Cunzo and Garcia 1992) as well as those associated with the state-wide *Industrial and Capitalization* (1830-1880) and *Urbanization and Suburbanization* (1880-1940) historic contexts (De Cunzo and Catts 1990; De Cunzo 2004; Ames et al. 1989) Site expectancy types for Dover's outskirts are domestic sites such as farmsteads; community sites such as churches and schools, as well as small commerical sites (e.g. mills, shops, and taverns) that would have serviced local inhabitants.

While historic mapping and archival aerial photography do not provide any evidence to suggest that the project APE itself coincides with the location of any former structures, it was determined that the general project APE would be most apt to contain archaeological materials associated with the 19th century agricultural past of the properties that flank Wyoming Mill and Hazlettville Roads. These materials could include those associated with the historic occupation of Brittingham Farm (K-1027).

Although the general region of the project APE is located in a portion of Kent County that is regarded as having a medium to high probability for pre-and postcontact archaeological sites due to its past environmental setting and historic land use, the archaeological potential of the project APE itself is somewhat less. For example, while precontact populations may have once occupied the general region, the extent of modern suburbanization must be taken into consideration when assessing the likelihood of discovering intact archaeological remains in the project APE. The results of the archaeological disturbance analysis revealed that most of the land within the project APE has experienced extensive modern subsurface disturbance, which has no doubt disturbed, if not destroyed, the subsurface integrity of any archaeological deposits contained therein. In addition to construction and maintenance of existing roadways, past large-scale earthmoving activities include the construction of modern residences (Nottingham Meadows and Village of Westover) and Schutte Park, as well as the installation of subsurface utilities, and drainage management features.

That noted, it was determined that while most of the project APE has virtually no potential for containing intact, significant archaeological resources with good subsurface integrity, controlled archaeological testing was warranted in the fallow agricultural field through which Wyoming Mill Road would be realigned. It was concluded that this field had the best chance for yielding archaeological resources with some level of subsurface integrity

since subsurface disturbances therein have been generally limited to historic plowing. It was also concluded that this field has a medium potential for containing archaeological resources.

RESULTS and RECOMMENDATIONS

15. **Fieldwork (describe survey; add maps as needed):** A total of 46 shovel test pits (STPs) were excavated between Sta. 314+00 and Sta. 320+00. Eighteen of these STPs were excavated at 15-meter intervals along a single transect laid along the centerline of the propose Wyoming Mill Road Realigned right-of-way. Sixteen STPs were excavated along eastbound Hazlettville Road EB between the proposed Wyoming Mill Road/Hazlettville Road intersection and the existing Wyoming Mill/Hazlettville Road intersection. These STPs, which were located at the north end of the fallow agricultural field, were excavated along a single transect 15 meters off of the edge of pavement. The remaining twelve STPs were excavated within 15-meter grid pattern in the portion of the field that may be subjected to use for drainage management or construction staging activities.

    In most of the STPs, researchers encountered a uniform subsurface soil stratigraphy composed of former plow zone soils (Ap Horizon) underlain with culturally sterile subsoil (B Horizon). The plow zone, which is characterized as a dark brown silty loam (10YR4/3-10YR4/4), was observed to range between 28 and 38 cm in thickness. Immediately beneath the plow zone, the underlying subsoil consists of a medium yellow-brown to orange brown (10YR5/6 -10YR5/8), silt loam, which is common for the region. The subsoil becomes notably more orange with depth and grades into either a sandy or slightly clayey loam.

    Although much of the field possesses a relatively uniform subsurface stratigraphy, researchers also discovered that some portions of the field have also incurred severe subsurface disturbances associated with modern construction activities. Evidence of extensive mechanical grading, scouring, and filling was encountered in the field around the existing Nottingham Manor drainage basin (near Sta. 310+00) and around the current Wyoming Mill Road/Hazlettville Road intersection. In these disturbed areas, the observed profiles tended to consist of thick deposits of severely-disturbed, secondarily deposited fills atop truncated sterile subsoil.

    No intact artifact-bearing soil horizons or subsurface cultural features were encountered in the agricultural field.

16. **Artifacts (describe any found; identify location; explain why determined not to be a site):** Little cultural material was recovered from the agricultural field. Most of the recovered cultural material consists of obvious examples of modern roadway debris however, the collection of these items were also limited to an occasional piece of machine-manufactured bottle glass, bottle cap, or fragments of unidentifiable plastic. In addition to a few pieces of brick and coal, the only artifacts in the recovered assemblage that are of some archaeological interest were one unidentifiable nail fragment (STP 12),

one unidentifiable fragment of olive bottle glass (STP 16), one piece of aqua curved glass (STP 17), one oyster shell fragment (STP 23), and one piece of aqua window glass (STP 23). In addition to being small, heavily-weathered, and not particularly diagnostic, all of the aforementioned artifacts were recovered from either the plow zone horizon or secondarily-deposited fill overburden horizons. Based on the low artifact density, and lack of any quantitative or qualitative artifact patterning, it has been concluded that these artifacts represent random historic field scatter. It has been concluded that these artifacts do not represent an archaeological resource, and that the project APE does not contain any significant archaeological sites.

17. Recommendations: Based on the Phase I archaeological survey results, it has been concluded that the project APE does not contain any archaeological resources. No further archaeological investigations are recommended. It is also the opnion of the authors that the artifacts not be curated.

ATTACHMENTS

18. Attachments checklist:

- **a.** ☒ **bibliography**
- **b.** ☒ **location map (USGS or equivalent)**
- **c.** ☒ **detailed map(s) (project plans and/or field survey map)**
- **d.** ☒ **historic map(s) (list)** Byles (1859); Beers)1868); Historic USGS Topographic Mapping (1931); Historic Aerial Photographs (1937, 1954, 1961, and 1968)
- **e.** ☒ **photographs of general project/surveyed area**
- **f.** ☒ **table of collection units and/or excavated tests**
- **g.** ☒ **soils map(s)**

Others (list, if any):

h. Table of Previously Documented Cultural Resources within 2,500 feet of the Project APE