3.0 RESULTS

The Bridge 146 Retaining Wall project background research, geomorphological investigations, and standing structure assessment were initiated in April and completed in May 2003.

3.1 Geomorphology

According to the predictive model accomplished by Custer (n.d.) for precontact period archaeological resources in Delaware, the project APE is contained within a moderate to high probability area, but within a high probability area for past and future development impacts to those archaeological resources (Custer 1989:67). More specifically, Custer (1986:185,1989:64) indicates that the probability for finding significant sites within the riverine areas of the Atlantic Coastal region, of which the Bridge 146 Retaining Wall project APE is a part, varies from low for Paleo-Indian sites to high for Woodland I and II precontact period site types, while the existing data quality is mainly poor.

Review of the Delaware archaeological site files did not yield any previously recorded precontact archaeological sites within or adjacent to the project APE. Reviews of several previously completed cultural resource management reports pertinent to the general area also indicate that no precontact period archaeological sites have been identified within the vicinity of the Bridge 146 Retaining Wall project APE. However, several previously recorded archaeological sites have been located within 3.2 km (2.0 mi) of the project area. A summary of their data is included in Table 1.

Table 1.
Previously Recorded Archaeological Sites Within 3.2 Km (2.0 Mi) of the Bridge 146 Retaining Wall Project APE

Site	Associated Cultural Period	Artifacts Recovered	Soil	Distance and Direction from Project APE
7S-B-79	Undetermined historic	glass, whiteware, sponge spatter, stoneware	SaA	2.14 km (1.33 mi) west
7S-B-80	Undetermined historic	pressed glass, glass button, porcelain, bottle and jar glass, creamware	SaA	1.98 km (1.23 mi) west

Table 1.
Previously Recorded Archaeological Sites Within 3.2 Km (2.0 Mi) of the Bridge 146 Retaining Wall Project APE
(Continued)

Site	Associated Cultural Period	Artifacts Recovered	Soil	Distance and Direction from Project APE
7S-E-17	Woodland I (processing)	projectile points, crushed stone tempered cord marked and net impressed ceramic sherds	EvB	3.04 km (1.89 mi) southeast
7S-E-28	Woodland I (microbase)	N/A	SaA	1.07 km (0.67 mi) west
7S-E-152	Undetermined historic	brick, sewer pipe, glass, coal	Wo	1.83 km (1.14 mi) southwest
7S-E-153	Undetermined historic; Wolfe Neck prehistoric	brick, glass, metal porcelain, redware, ironstone, flakes, bifaces, Wolfe Neck ceramics	SaA SaB	1.98 km (1.23 mi) west-southwest

The results of the expedient auger borings indicate that there is no potential for intact soils of appropriate age to contain precontact period archaeological deposits within the Bridge 146 Retaining Wall project APE. Four somewhat distinct but discontinuous fill layers were found within the stratigraphic profiles of the project APE. Fill Layer 1 is a 10YR 3/3 dark brown loamy sand with modern debris and an accumulation of organic matter (darkening the soil) from exposure at the present ground surface. Fill Layer 2 is a 7.5YR 4/4 brown sand mixed with 10YR 6/1 gray sand with brick and cinder fragments. Fill Layer 3 is a 10YR 6/1 gray sand mixed with 7.5YR 4/4 brown sand and ash fragments. Fill Layer 4 is an N 2/0 black sand with ash and brick fragments. These fill layers appear to be mixed, not directly deposited, and subsequently buried and preserved. Mixing of the fill may be the result of a combination of factors, including flooding, animal burrows, subsequent fill placement, and excavations for utility lines and poles, as well as the construction of stream erosion control structures such as the existing retaining wall. The presence of at least two large pilings set into the yard midway between the existing retaining wall and the house(S-4387) seem to confirm that filling of the site, in conjunction with maintenance of some sort of retaining wall, was a continual effort at this lot (Photographs 5 and 6). Therefore, the majority of the side yard, south of the house (S-4387), has been constructed with fill subsequent to the construction of the second retaining wall. In addition, to the southwest of the house (S-4387), a hole containing PVC

Photograph 5. View of one of two pilings located in the south yard of the house (S-4387), facing east.

Photograph 6. Close view of one of the two pilings located in the south yard of the house (S-4387), facing south.

piping was noted (Photograph 7). This appears to be a buried sewage/drainage pipe coming from the house (S-4387) to the stream.

In the late nineteenth and early twentieth century, a brick manufacturing plant was operating within the area located across the creek and to the south of the project APE. The 1912 Sanborn maps of Bridgeville show F.L. Willey's brickyard located there (Sanborn Map Company 1912:Sheet 1). The brickyard produced bricks between 1897 and 1914 (Kurtze 1993a:4). It appears from the amount of brick fragments and coal and ash within the auger boring profiles that waste materials from the brick manufacturing process were used as fill throughout the area. This material, particularly when deposited across a floodplain landform, would have been eroded by naturally occurring floodwaters and lateral migrations of the creek. Placement of this manufacturing waste close to the creek bed would have resulted in flow restrictions within the channel bed and floodwater chutes, increasing the amount of scouring and redeposition of fill or sediment along banks and/or across the floodplain. This sequence is confirmed in the stream's southern cut banks where the stream bank profile can be seen (where the retaining wall is not located) (Photograph 8).

A C horizon of N 8/0 white coarse sand was found underlying all borings that were not refused at shallow depths. The coarse white sand underlying the fill is the natural sediment deposited by the stream bed during lateral migration, and can be seen in the present channel in prominent sand bars. This material directly overlies more coarse channel bed materials and would, under natural conditions, lie below finer overbank sediment subsequently deposited by floodwaters after lateral stream migration. It exhibits no pedogenic (genetic soil horizons) development, as it has never been exposed as a stable floodplain surface, nor weathered as part of an intact soil profile.

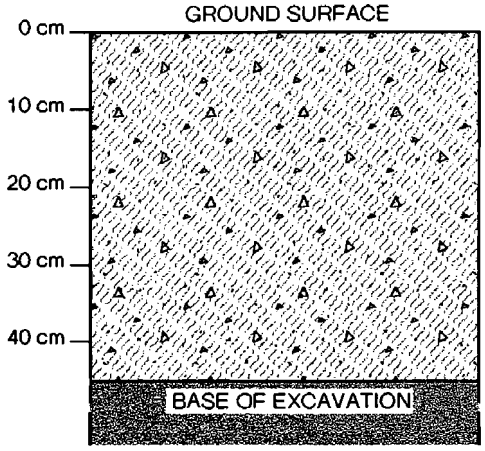
Specific descriptions of typical auger borings follow and are also presented in tabular format in Appendix B. Auger Boring 1 was taken east of the existing house (S-4387), within the front yard. This boring exhibits sandy fill mixed with ash, brick, and coal fragments, a combination of Fill Layers 1 and 2 (Figure 4). Auger refusal was encountered at a depth of 45.0 cm (17.7 in) below the modern ground surface. Additional borings within the front yard of the house (S-4387) were refused at this same depth or shallower, indicating fill across the area.

Auger Boring 2 was taken northwest of the house (S-4387), within the backyard. This auger boring exhibits Fill Layers 1, 2, and 4, underlain by the coarse white sand of the C horizon (Figure 4). Taken from a location southwest of the house (S-4387) and also in the backyard, Auger Boring 3 contained all four of the fill layers, and was also underlain by the white sand of the C horizon

Photograph 7. View of the hole containing PVC piping located southwest of the house (S-4387), facing southwest.

Photograph 8. View of the south stream cut bank located southeast of the project APE, facing north.

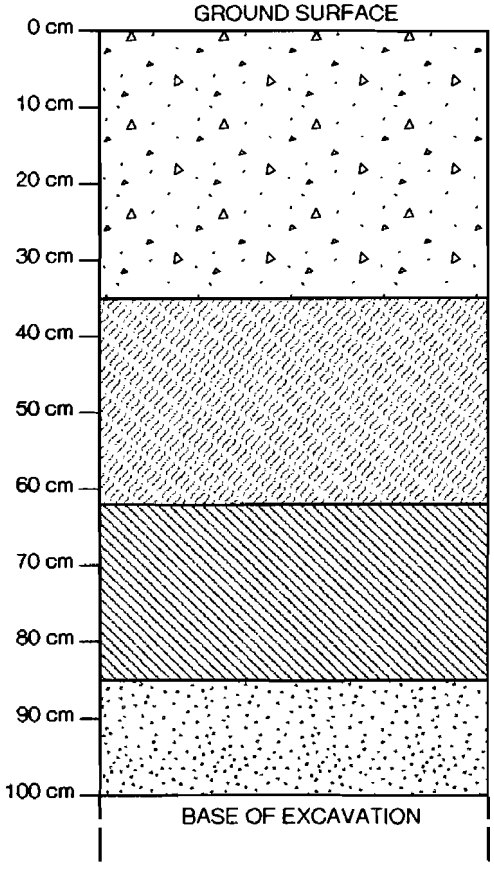
SOIL PROFILE
AUGER BORING 1



Mixed Fill Layers 1 & 2 — 10YR 4/3 Brown and 7.5YR 4/4 Brown mixed sandy fill, with ash, brick, and coal fragments.

Auger refusal: coarse fill.

SOIL PROFILE
AUGER BORING 2



Fill 1 — 10YR 3/3 Dark brown loamy sand, with fine glass and plastic fragments.

Fill 2 — 7.5YR 4/4 Brown sand, mixed with 10YR 6/1 Gray sand and brick and cinder fragments.

Fill 4 — N 2/0 Black sand with ash and brick fragments.

C — N 8/0 White coarse sand.

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BRIDGE 146 RETAINING WALL BRIDGEVILLE SUSSEX COUNTY
SOIL PROFILES AUGER BORINGS 1 AND 2
FIGURE - 4 / SKELLY AND LOY, INC. CONSULTANTS IN ENVIRONMENT - ENERGY ENGINEERING - PLANNING

(Figure 5). Auger Boring 4, taken in the front yard southeast of the house (S-4387), exhibits Fill Layers 1and 2, underlain by the white sand (Figure 6).

None of the auger borings taken within the project APE yielded evidence of developed soils of appropriate age to contain precontact archaeological resources. Therefore, the probability of intact precontact archaeological resources within the APE is very low to non-existent. If precontact archaeological artifacts are present in the project APE, they are likely redeposited from other locations due to stream flooding and/or filling episodes, and would not relate accurate information about the use of the project APE.

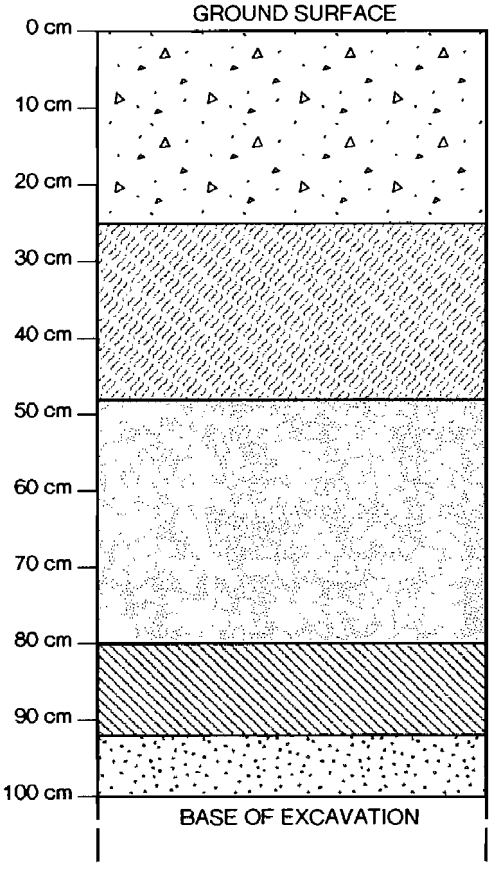
3.2 Standing Structure Assessment

The two-story, gable roof, frame, vernacular house (S-4387) located at 118 North Main Street in Bridgeville represents a common building type found in southern Delaware. Due to alterations, the building has lost its architectural integrity and no longer conveys historic aspects of design, workmanship, feeling, materials, association, and setting. The original fenestration has been removed and replaced with double-hung, vinyl replacement windows. The original siding materials have been obscured by the application of vinyl siding. The front porch has been rebuilt with modern building materials. The foundation consists of concrete block with brick in discrete locations of repair work. In addition, the house (S-4387) may have been moved to its present lot in the early twentieth century.

During a period of rebuilding and architectural revival in Bridgeville, numerous buildings were rearranged on the landscape in order to make room for pretentious homes of the elite. Particularly along Delaware Avenue, numerous vernacular residences were removed from their original location and replaced with Colonial Revival style residences beginning in the early 1900s. The vernacular buildings were relocated at various sites within Bridgeville (Kurtze 1993a:6-7). Although this information is anecdotal, it provides a plausible context for the history of this house (S-4387). Lacking architectural distinction and association with a master and having been architecturally modified and possibly moved, the house (S-4387) is not individually eligible for listing in the NRHP under Criterion C.

Background research indicates that the portion of Bridgeville where the project APE is located (at the Bridge 146 crossing of Bridge Branch) was the town's historic center and original point of development. Early land warrants granted by Lord Baltimore to European settlers in

SOIL PROFILE
AUGER BORING 3



Fill 1	10YR 3/3 Dark brown loamy sand, with fine glass and plastic fragments.
Fill 2	7.5YR 4/4 Brown sand, mixed with 10YR 6/1 Gray sand and brick and cinder fragments.
Fill 3	10YR 6/1 Gray sand, mixed with 7.5YR 4/4 Brown sand and ash fragments.
Fill 4	N 2/0 Black sand with ash and brick fragments.
C	N 8/0 White coarse sand.

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BRIDGE 146 RETAINING WALL
BRIDGEVILLE
SUSSEX COUNTY

SOIL PROFILE
AUGER BORING 3

FIGURE - 5

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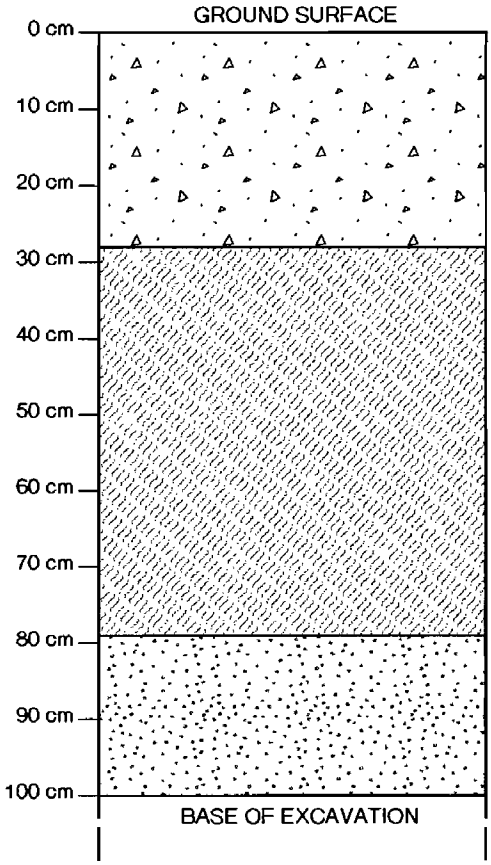
SOIL PROFILE
AUGER BORING 4



Fill 1	10YR 3/3 Dark brown loamy sand, with fine glass and plastic fragments.
Fill 2	7.5YR 4/4 Brown sand, mixed with 10YR 6/1 Gray sand and brick and cinder fragments.
C	N 8/0 White coarse sand.

DELAWARE DEPARTMENT OF TRANSPORTATION

BRIDGE 146 RETAINING WALL
BRIDGEVILLE
SUSSEX COUNTY

SOIL PROFILE
AUGER BORING 4

FIGURE - 6

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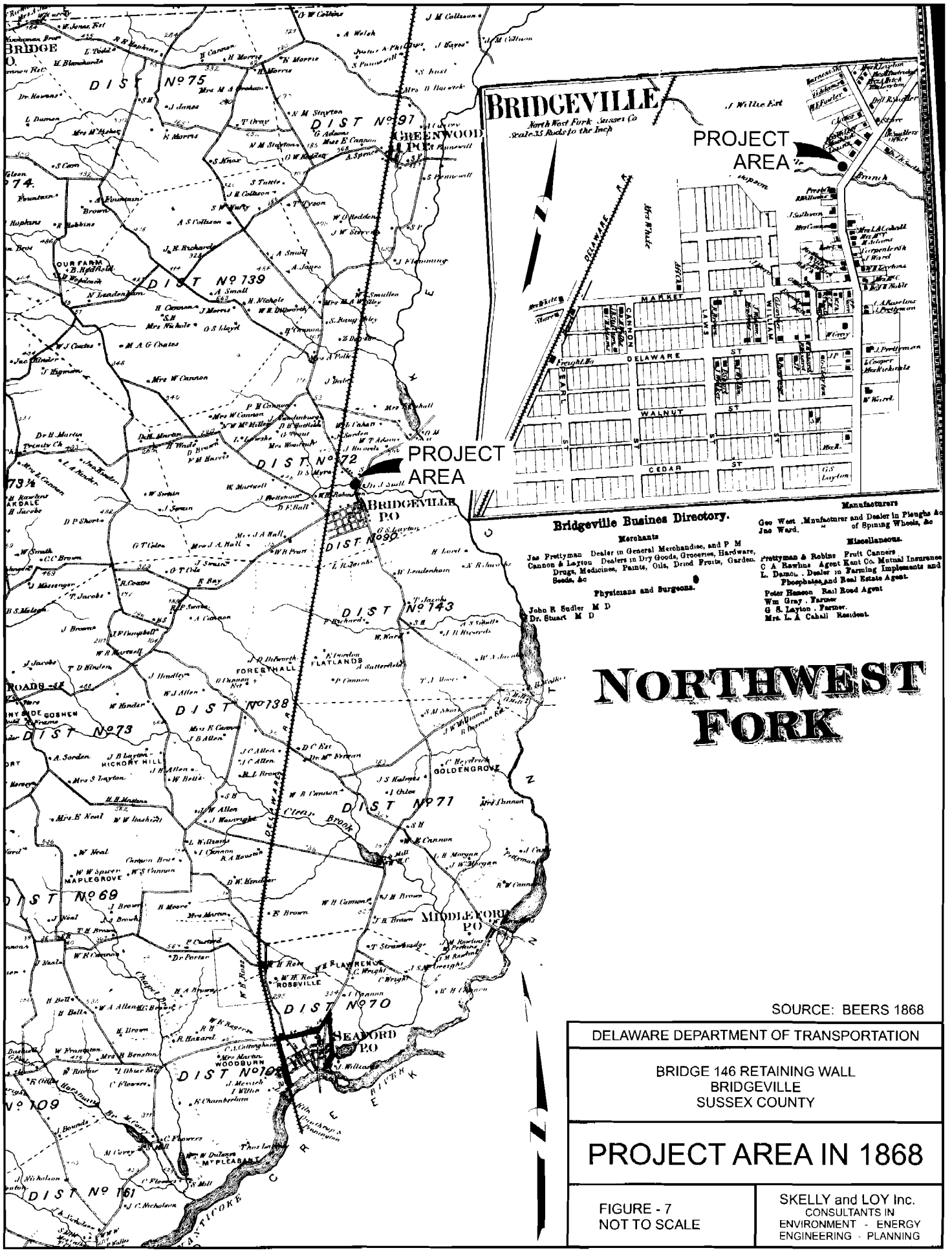
ENGINEERING - PLANNING

Northwest Fork Hundred date to the second half of theseventeenth century. In 1730, Bridgeville originated as a settlement located on land owned by the Nutter family at a bridge over Bridge Branch. The cluster of buildings built at the bridge included two taverns, which are no longer standing and the Sudler House (S-199), which remains standing. The locations of the two taverns were not mapped in an 1868 atlas (Beers 1868:70). Their most likely locations would have occurred above the floodplain along Main Street south or north of the Bridgeville Branch and beyond the project APE.

Supported by the labor of enslaved Africans, the agricultural pursuits of local farmers included the cultivation and marketing of grains, tobacco, and sugarcane throughout the eighteenth century. Agricultural activity and related businesses continued to characterize the town's nineteenth century development, with slavery and later tenant farming supporting this agricultural economy. With the arrival of railroad transportation in 1858, the subsequent residential development and commercial growth of Bridgeville was oriented to areas located west of the original village site and closer to the railroad alignment (Figure 7). Throughout the twentieth century, Bridgeville's history remained linked to activities related to agriculture and transportation (Scharf 1888:1276; Hancock 1985:13-17, 187, 216). As a residence, the house (S-4387) located in the project APE does not convey an association with Bridgeville"s economy of food production and produce shipping (e.g., canneries, packing houses, cultivated fields of berries). Although the house (S-4387) stands at the historic center of Bridgeville, it conveys no association to the town's early history and nineteenth century development, since its architectural style indicates that it was built in *ca.* 1900 after the early periods of Bridgeville's development, and also may have been moved to its present location.

In the first half of the twentieth century, the property was owned by Dr.William I. Messick. The Messick surname appears in the local history of Sussex County; however, Dr. William I. Messick made Baltimore, not Bridgeville, his primary residence. When he purchased the property in 1905, it was described as meadow and high ground (Sussex County Deeds 1905:Book 159, Page 221). A 1919 transfer of the property from Dr. William I. Messick to Samuel H. Messick also described the parcel as upland and meadow (Sussex County Deeds 1919:Book 221, Page 22). When the heirs of Dr. Messick (Charles H. Messick) transferredthe property to an owner outside of the family in 1945, the deed did not describe a building on the property (Sussex County Deeds 1945:Book 393, Page 32).

This property does not convey a sense of the Messick family's prominence in Sussex County's history, because the prominence of the Messick family is historically situated in Broad



SOURCE: BEERS 1868

DELAWARE DEPARTMENT OF TRANSPORTATION

BRIDGE 146 RETAINING WALL
BRIDGEVILLE
SUSSEX COUNTY

PROJECT AREA IN 1868

FIGURE - 7
NOT TO SCALE

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ENGINEERING - PLANNING

Creek Hundred, Sussex County (Jennings 1989:2.1-2.45), and the Messick family did not improve the land by the addition of any buildings. Subsequent owners of the project APE property, including Robert S. Short, Linford J. and Ann Isaacs, George E. and Florence Short, Charles W. and Louise C. Smith, and Carmen and Luisa Hernandez, are not prominent families in Bridgeville or the county; therefore, there does not appear to be an association of the property or house (S-4387) with the lives of persons significant in the past. Due to the lack of association with persons of historical importance, the house (S-4387) and the property on which it sits are not eligible for listing in the NRHP under Criterion B.

Sanborn maps of Bridgeville in 1912 indicate the location of a brick manufactory directly south of Bridge Branch and the project APE (Sanborn Map Company 1912:Sheet 1). Operated by F.L. Willey, the brickyard produced small rock-faced concrete bricks between 1897 and 1914 (Kurtze 1993a:4). The house (S-4387) stands on fill containing amounts of brick. The artificial brickyard is the most likely source of fill found beneath the house (S-4387). Certainly, the house (S-4387) does not predate the fill beneath it; therefore, the placement of the house (S-4387) on its present lot most likely dates to 1914 or later, based on the years of operation at the artificial brickyard. Furthermore, the documentary record does not mention a house (S-4387) on this lot until after 1945. Prior to 1945, deeds describe the property as meadow land. As discussed previously in the geomorphology sections of this document, the sediments at the property are redeposited fill that do not have the potential to contain *in situ* historic period archaeological remains associated with the house (S-4387). Therefore, the house (S-4387) is not considered eligible for listing in the NRHP under Criterion D.

Review of the SHPO records indicates that there are four previously identified historic period resources located in the vicinity of the project APE, but none of them include the project APE property. The four previously identified historic resources include the Bridgeville Historic District (S-8735.1-.392), the potential African-American Settlement Historic District (S-9818), the potential North Bridgeville Potential Historic District (no CRS number assigned), and the Sudler House (S-199). The Bridgeville Historic District was inventoried in 1993 (Kurtze 1993b) and listed in the NRHP in 1994.

The house (S-4387) does not serve as a contributing resource to any of these potential or established historic districts. The house (S-4387) lacks an association with the themes, contexts, and time periods of the Bridgeville Historic District. For instance, the Bridgeville Historic District includes architecture and community planning and development as its areas of significance and the

years *ca.* 1830-1945 as its period of significance. Although the house (S-4387) falls within the period of significance, it lacks architectural integrity and distinction and historical significance relative to the Bridgeville Historic District. The historic district emphasizes associations with William Cannon, who is not linked to ownership of the Bridge 146 Retaining Wall house (S-4387) or the development of the associated property. The historic district's boundary excludes properties north of the Bridgeville Branch, where the house (S-4387) is located (Kurtze 1993b).

In 1995, a preliminary evaluation of some of the buildings located to the northwest of the house (S-4387) suggested the presence of a potential historic district eligible for listing in the NRHP, because of its association with early African-American settlement in Bridgeville. This African-American Settlement Historic District (S-9818) has not yet been listed. The Bridge 146 Retaining Wall house (S-4387) and property does not convey an association with the plan of lots that are included as part of the potential African-American Settlement Historic District (S-9818), nor does it have an association with early African-American settlement or home ownership in Bridgeville. The property's ethnic association is linked to Euro-Americans in the recent past and Hispanic Americans currently. Furthermore, the transformation of this parcel of land into a house lot appears to be unrelated to the platting of land into building lots for the potential historic district for African-American settlement.

In 2001, a preliminary evaluation of the buildings located north and northeast of the house (S-4387) suggested the presence of a second potential historic district eligible for listing in the NRHP, designated the North Bridgeville Potential Historic District. This district has not yet been listed. This potential historic district may represent an African-American residential district associated with settlement patterns and demographic change in the Urbanization and Early Suburbanization, 1880-1940± chronological period of the Delaware Comprehensive Historic Preservation Plan previously cited. However, the house (S-4387) should be excluded from this district due to the building's ethnic associations with Euro- Americans in the recent past and Hispanic-Americans currently. Furthermore, the development of this parcel of land into a house lot appears to be unrelated to the development of the community represented by the North Bridgeville Potential Historic District.

The Sudler House (S-199), the only individual historic resource proximal to the Bridge 146 Retaining Wall project APE is located across the roadway to the northeast of the project APE. The Sudler House (S-199), built *ca.* 1750, is the oldest standing domestic dwelling in Bridgeville. Originally a two-story, single pile, side-gable, three-bay, hall and parlor, vernacular style building

built by John Jessop, the Sudler House (S-199) was enlarged in the nineteenth century to accommodate a central passage and additional rooms. The house bears the name of Dr. John Sudler, whose ownership began in 1833. The house interior features decorative woodwork. The Bridge 146 Retaining Wall house (S-4387) and property have never been a part of the Sudler property, most likely due to the roadway and stream forming natural property/dividing boundaries. Architecturally, the house (S-4387) dates to *ca.* 1900, which is much later than the period of significance associated with the Sudler House (S-199). Furthermore, the farmland associated with Sudler's interest in peach and strawberry production is located on parcels north and east of the Sudler House (S-199), away from the Bridge 146 Retaining Wall project APE.