

3.0 RESEARCH DESIGN

One of the goals of the current projects was to determine through field examination, research, and evaluation which properties containing historic-period buildings appear eligible for listing in the National Register. Properties were evaluated for significance using contexts developed for U.S. 113 (McVarish et al. 2005). The associated property types for the DuPont Highway include commercial properties; institutional, recreational and governmental buildings and sites; agricultural properties; industrial facilities; the roadway and associated buildings and structures; and residential properties. Only some of these property types are represented in the Ellendale study area.

3.1 COMMERCIAL ROADSIDE ARCHITECTURE

A context for commercial roadside architecture was included in the *Cultural Resource Survey of U.S. Route 113, Milford-Georgetown, Sussex County, Delaware* (LeeDecker et al. 1992). This context included the following property types: auto support facilities, eating establishments, lodging, and “other” (roadside stands, miniature golf courses, and drive-in movie theaters). Because the LeeDecker et al. (1992) context has been accepted by both The Department and DelSHPO, its property types and registration requirements are employed in the current investigation, but only those that are found within the Ellendale study area. Several additional property types have been added to those identified in the LeeDecker et al. (1992) study.

3.1.1 Independent Garages

During the early decades of the automotive era, motorists relied upon the filling station to provide gas and oil. When their auto required repairs, car owners generally turned either to the repair facilities being built by major automotive companies such as Packard for service on the cars they produced or to a host of blacksmith shops and independent garages. By the 1920s, the combined filling station and garage began to be widespread although independent repair garages remained and continued to be built (Liebs 1985:102).

Most independent garages were simple buildings, rectangular in plan, built on a concrete slab with recesses for hydraulic lifts. For fire safety, most garages were constructed of concrete block. An office and parts room generally occupied one side of the building, while the remainder contained service bays. Vehicular access to the service bays was provided by roll-down doors in the front wall.

Once a common property type along U.S. 113, examples are becoming rarer as automotive service has changed to an extent from independent garages to chain auto parts and repair stores and discount store-associated garages.

Registration Requirements: Independent garages may be eligible for the National Register under Criterion A for historic themes related to the automotive era. For eligibility under Criterion B, the garage should be associated with a particular individual who was significantly involved with development of roadside architecture or commerce. A garage may also be eligible under Criterion C as a derivative to service stations. In order to be considered eligible, a service station must exhibit four or more of the following aspects of integrity: location, design, feeling, association, workmanship, materials, and setting. Garages may possibly be, though rarely are, eligible for the

National Register under Criterion D for information potential if their physical fabric has the potential to yield significant information about construction practices. Repair garages were located in both rural and more urbanized areas. Some are located far from service stations, and others adjacent to small service stations. To retain integrity of design, a garage should retain most or all of its original massing and fenestration. At least a portion of the components that convey the property's historic purpose, including roll-down bay doors, hydraulic vehicle lifts, and a small, generally corner, office need to be present. Some of these elements may have been replaced, but to retain integrity, the replacements must be similar in character and location to the original. If a service bay addition has been made to the garage, this addition should either be clearly subsidiary to the main block or must meet the 50-year age consideration of the National Register. If a garage has been significantly altered, it still may be eligible if it has remained in continuous use as a repair facility for at least 50 years.

3.1.2 Bars and Taverns

One tavern is located within the Ellendale study corridor. Formerly known as Teddy's Tavern, it is currently listed in the National Register of Historic Places.

3.1.3 Roadside Stands

As noted by LeeDecker et al. (1992) in their commercial roadside architecture context, roadside stands were among the earliest and most prevalent features of the automobile era, as local farmers set up small stands along the side of the road to sell goods to passing motorists. Roadside stands were generally simple, wood-framed sheds erected along the side of the road, perhaps including a few off-street parking spaces. Some stands were more elaborate and rested on concrete foundations and had window and door openings.

Merchandise available at the stands varied. Many were limited to excess produce that a farmer or gardener could not consume and did not wish to sell at market. Other stands sold cold drinks, as well as ice cream or sandwiches, while some stands sold post cards and souvenirs. Some stands evolved. A farm stand originally selling only produce might begin to carry cold drinks and later add sandwiches. Soon seating was added and in some cases: gas pumps were erected as well (LeeDecker et al. 1992:301). Due to changing food-buying habits of travelers and changing agricultural use of southern Sussex County farmland, few roadside stands are in active use and few pre-1960 stands remain. Therefore, remaining examples may possess significance as exemplifying a chapter in the area's agricultural commerce.

Registration Requirements: Most pre-1963 roadside stands are small buildings of simple, straightforward construction, often built by the stand's owner. A stand may be eligible under Criterion A if it possesses significance in local history as one of the earliest fruit and vegetable stands in a particular area or, possibly, as a well-known stopping point for travelers. A stand may be eligible under Criterion C if it retains the historic fabric of a pre-1963 stand, and its historic function can be clearly discerned. Its significance is heightened if associated agricultural buildings and structures and an associated house are present. Eligibility under Criterion B or Criterion D is less likely. Eligibility under Criterion B is dependent on association with a particular individual significantly involved in the development of roadside architecture or commerce. Eligibility under Criterion D would require the physical fabric of the building to have the potential to yield significant information about construction practices.

To retain integrity, a roadside stand must be identifiable as a product of its time of construction with only minor later alterations. Although it may no longer be used for roadside commerce, its former role as a roadside stand must be clear from its present appearance. The building must also sit on or close to its original site.

3.1.4 Country Stores

Once common sites on rural highways, country stores have largely fallen victim to changing shopping habits and improved transportation. Now some of the function of older country stores, as a shopping place outside of the village or town center, has been taken over by gas marts and convenience stores such as Royal Farms, Wawa, and 7-11. Another country store function, as a place where a wide variety of goods could be purchased, has been taken over by big box department stores such as WalMart. Few country stores in rural southern Delaware have survived the competition.

Remaining country stores within the study area and its vicinity are usually located close to the edge of roads and highways with the façade facing the highway. Gravel parking areas were typically placed to the front and sides of the building with gasoline pumps often in front of the store on a pump island. Such stores were commonly of wood-framed construction, one or one-and-one-half stories in height. A common element was a shed-roofed front porch or arcade. The open porch provided sheltered access to one or more front doors and often contained one or more benches to accommodate customers.

Registration Requirements: Most pre-1963 general stores are small buildings of simple, straightforward, additive construction, often built by the store's owner and frequently on the same parcel as the owner's house. A general store may be eligible under Criterion A if it possesses significance in local history as one of the roadside commercial businesses in a particular area, as a documented local gathering place, or, possibly, as a well-known stopping point for travelers. A general store may be eligible under Criterion C if it retains the historic fabric of a pre-1963 country store, and its historic function can be clearly discerned. Its significance is heightened if an associated house is present. Eligibility under Criterion B or Criterion D is less likely. Eligibility under Criterion B is dependent on association with a particular individual significantly involved in the development of roadside architecture or commerce. Eligibility under Criterion D would require the physical fabric of the building to have the potential to yield significant information about construction practices.

To retain integrity, a general store must be identifiable as a product of its time of construction with only minor later alterations. Although it may no longer be used for roadside commerce, its former role as a store must be clear from its present appearance. The building must also sit on or close to its original site.

3.2 FORESTRY/RECREATION

Approximately one-quarter of the Ellendale study area is composed of Redden State Forest land, more than 10,000 acres consolidated in 1995 from separate tracts and forests acquired by the state since the late 1920s. The Delaware Forest Service manages its state forest holdings for a variety of objectives including timber production, wildlife habitat enhancement, forest management demonstration, and outdoor recreation (Delaware Forest Service 2005). Because of its

developmental complexity, a detailed historical context—too long to be included herein—was developed for the forest system. The entire context is reproduced as Appendix E.

The appropriate analytical units for each of Delaware’s state forests need to be established through historical research to determine how the modern configuration of the forest developed and whether or not the forest should be looked at as a whole or in smaller pieces. What is now the Redden State Forest combines five historically distinct units clearly illustrated in the 1939 and 1957 Delaware State Forester’s annual reports. The units are: 1) the original nursery at Hudson Pond; 2) the Appenzellar Tract; 3) the Owens Tract; 4) the Ellendale State Forest (now the Ellendale Tract); and 5) the tracts of the Redden State Forest (including, at minimum, Jester, Headquarters, and Bailey) established before the consolidation in 1995. JMA recommends that each of these five units be evaluated for National Register eligibility separately.

R. Brian Page, then preservation planner for Sussex County, partially addressed the Redden State Forest in his 2000 National Register nomination of Civilian Conservation Corps Camp S-53 (Page 2000). Page recommended the resource eligible under Criterion A for its association with “the conservation of natural resources in Delaware, and the popular New Deal program the Civilian Conservation Corps,” with a period of significance of 1929-1939. He recommended that all of the original land acquired for the Jester Tract (1,133 acres in 1934) and the Headquarters Tract (744 acres in 1936) be included in the listing, and he identified nine contributing elements. At forest headquarters, on the Headquarters Tract, he included the buildings and structures recorded as CRS #S-00824 by DelSHPO, a resource already listed on the National Register (on 25 November 1980).² Page included the forester’s house (.001), stable (.002), and forester’s lodge (.003) built before the land became a state forest, as well as a workshop (.005, demolished in 2005) and a latrine (.006) that had been moved from the ECW Camp S-53 site to headquarters. He did not include the nursery house (.004) that had been moved onto the property from the Hudson Pond nursery. On the Jester Tract, Page included as contributors the buildings at the CCC-built picnic area on Gravelly Branch: two pavilions, a bathroom, and a stone oven. In drawing the National Register boundary around the entirety of the original forest tracts, he argued that “the considerable area of open space and managed forest are integral to understanding the camp area and understanding the development of forestry in Delaware.” The document is in draft form, and the property is not currently listed on the National Register.

Page did not address the other Redden State Forest tracts in his nomination, largely because his thematic approach precluded anything added to the forest after 1939, when the CCC program at Redden State Forest was discontinued.

Registration Requirements. State forests may be eligible for the National Register of Historic Places under any of the four criteria. Under Criterion A, a forest may be eligible for its association with an important event or chapter in the history of forestry in the state. For example, the earliest state forests may be eligible if they retain substantial amounts of historic fabric including tree stands; roads, paths and trails; buildings or structures and signage

Many state forests were the site of CCC work camps. Because of the important role of the CCC in shaping the appearance of twentieth-century American parks and forests, a forest that served as a camp site or a work site for the CCC may possess historical significance. To convey this

² In both the 1980 National Register nomination and in Page’s 2000 nomination, the resource is referenced as CRS #S-00825.

significance, the forest must possess physical remnants evocative of this role including such elements as bridges, stairs, dams, culverts, waysides, and buildings.

Under Criterion B, a forest may be eligible if it conveys strong associations with an individual significant in the development of forestry in the state. To convey this association, the forest must possess elements that can be conclusively tied to the influence or work of that individual.

Under Criterion C, a forest may be eligible as a designed landscape or because of its standing buildings and structures. Eligibility as a designed landscape is dependent upon either an association with a noted landscape designer or incorporation of an aesthetically significant design. The standing buildings and structures may possess evocative architectural characteristics, such as rustic log architecture or may be associated with Civil Conservation Corps construction.

A forest may possess significance under Criterion D, most likely for the potential of its current plantings to yield information about historic forestry practices. Archeological sites associated specifically with the history and development of the forest itself (e.g., CCC camp sites) may also have the potential to yield significant information that could render at least portions of the forest eligible under Criterion D. Archeological sites that fall within the boundaries of a forest, but are historically unrelated to the forest (e.g., a Native American site or a homestead that predates the establishment of the forest) would have no bearing on the eligibility of the forest itself, regardless of their individual significance.

To be eligible for the National Register, a forest must be an outstanding example under one or more of these four criteria. In the northeastern states alone, there are hundreds of publicly owned forest tracts ranging from the municipal forests of some New England states, state forests and, in Massachusetts, state reservations, to national forests, such as Vermont's Green Mountain National Forest. Most or all contain hiking and walking trails, most have jeep roads, most have tree stands managed using standard forestry principles, and many have historic buildings and structures. Many of these forests also have elements constructed by the CCC.

What sort of elements would endow a forest with the level of significance necessary for National Register eligibility? Three examples illustrate areas of significance.

1. *The Breakheart Reservation, Massachusetts.* The Breakheart Reservation was, as the Gun Club Tract, a retreat for wealthy businessmen. It, too, became the site of CCC improvements during the Depression. These improvements were designed by nationally prominent landscape architect Arthur Shurcliff and included road alignments, trails, a ski slope, land topography, a dam, and buildings and structures. Because of the extent of CCC involvement in the landscape design, because of the association with Shurcliff, and because it was a notable example of a designed landscape, the Breakheart Reservation was recommended eligible under National Register Criteria A, B, and C.
2. *The Adirondack Preserve.* The Adirondack Preserve was the first forest to be listed in the National Register. This resource, huge in scale, was deemed significant because of the totality of its cultural landscape including towns, resorts, the great camps, the road network, and other elements that continue to attract visitors.
3. A third, hypothetical example would be a forest recognized in the professional forestry literature and among forestry professionals for innovative forestry practices. Such practices might include harvesting techniques, development of new varieties of forest trees, or innovative planting techniques.

3.3 INSTITUTIONAL, GOVERNMENTAL, AND CORPORATE PROPERTIES

In the pre-automobile era, institutional, governmental, and industrial property location was governed by several factors: accessibility to roads, accessibility to power, and accessibility to points of shipment. For example, gristmills were frequently located adjacent to rivers and streams that could be dammed to provide power for operation. Proximity to a roadway was also important to facilitate transportation of the flour and meal to consumption or sales points. Governmental facilities were placed in a central location in the jurisdiction, often at a major crossroads to facilitate travel to them. The desire for a centrally located county seat led to the establishment of Georgetown and the relocation of the Sussex county seat from Lewes. Church and schools were placed along roads in a position centrally located to the community they served. With the development of water transportation, factories were often located along navigable waterways, both to provide steam for machinery and an adjacent corridor for shipment.

In more recent years institutional and governmental buildings have been constructed along major highways to permit ease of access and alternatively to promote growth and development. Institutional and governmental property types represented within the Ellendale study area include a church (with an associated cemetery), and an independent cemetery.

3.3.1 Religious Properties

Although no historic or architectural context has been assembled for Delaware churches, a review of Frank Zebley's photographs of churches of the state indicates that several forms predominate, including gabled front, L-plan, megachurches, and camp meetings. A single church is located in the Ellendale study area, and it is an example of a gabled front.

In its simplest form, the gabled front church is a wood-framed building, similar to, and often built in close proximity to, a one-room schoolhouse. Some examples have paired front doors in the gable end, originally intended for separation of women and men or separation of white and African American parishioners. Other examples were elaborated with a gabled front vestibule containing the main entry. In most cases the interior features a central aisle extending from the front door to the chancel, with seating to either side. In simple examples, the chancel is simply the far end of the space, while in more elaborate examples, the chancel is emphasized by a polygonal apse, often with a stained glass window.

A more elaborate version of the gabled front church, often executed in stone or brick, is the gabled front with central entry/belltower. This design, often employing Gothic Revival decoration, frequently features a tower topped with crenellation.

Yet another variety is two stories in height with an entry in the lower level and an upper level sanctuary reached by one or two flights of stairs.

St. Martins in the Field Episcopal Church in Selbyville and the Antioch Methodist Church near Frankford are examples of gabled front churches.

The typical interior plan of such churches consists of a lecture-floor plan with a central aisle, usually on axis with the front door. The pulpit is located in the chancel at the front of the church and the choir is often seated to the rear or to one side of the chancel.

Under Criterion A, a religious property can possess significance for any of three reasons: 1) It is significant under a theme in the history of religion having secular scholarly recognition, such as a documented role in the Great Awakening or the scene of a denominational schism; 2) it is significant under another historical theme, such as exploration, settlement, social philanthropy or education; or 3) it is significantly associated with traditional cultural values (U.S. Department of the Interior 1991:26).

Under Criterion B, a religious property can be eligible for association with a person important in religious history, if that significance has scholarly, secular recognition, or is important in other historic contexts. Properties associated with individuals important only within the context of a single congregation and lacking importance in any other historic context would not be eligible under Criterion B.

Under Criterion C, a religious property may be eligible for the National Register for its architectural design or type or period of construction. An example of a type of construction is a camp meeting, while a vernacular church may be eligible if it is a well-preserved example of a historic church type or design (U.S. Department of the Interior 1991:27-28).

Under Criterion D, a religious property may be eligible if it has the potential to yield important historical information. In the case of a building, information potential is most frequently conveyed in a building of early construction date or in a building incorporating unusual construction techniques.

To be eligible for the National Register, a religious property must reflect the appearance of its period of significance. Depending on its area of significance, its setting may or may not be important. Survival of the original historic fabric is important, particularly original windows and doors. If these are replaced, the replacement must be close in appearance to the originals. Additions, such as fellowship halls and educational buildings are common in the evolution of a religious property and do not preclude eligibility provided they do not overwhelm the original portions of the building.

3.3.2 Cemeteries

Sussex County cemeteries within the project area and vicinity are representative of a variety of types:

- Church cemeteries, such as that associated with McColley's Chapel (S-00150) at the corner of McColley's Chapel and Redden Roads.
- Organizational cemeteries.
- Community cemeteries.
- Governmental cemeteries.
- Commercial cemeteries.
- Family cemeteries or extended family cemeteries such as the Abbott-Compton-Lake Cemetery (S-11477) at the southwest corner of Old State and Robbins Roads.

Typically, these cemeteries consist of stone markers designating graves, aligned in parallel rows. Markers are typically made of either granite or marble with lesser numbers of sandstone markers.

Markers take a variety of forms. Older stones are most commonly slabs with lesser numbers of obelisks or columns, urns on pedestals, and other shapes. More recent grave markers are often either low slabs, sometimes triangular in cross section, or flush ground plaques. In some cemeteries, family groupings are designated by delineated plots, often fenced with metal pipe railings. Typically, graves are arranged in parallel rows, although some early cemeteries appear to be more randomly arranged.

Registration Requirements: A cemetery may be eligible under any one or more of the National Register Criteria. Under Criterion A, a cemetery may be eligible if it is closely associated with a significant historical event. For example, a cemetery that contains large numbers of Civil War soldiers may be eligible due to its association with that conflict. Under Criterion B, a cemetery may be eligible if it is the only remaining historic property associated with a person significant in local history. Under Criterion C, a cemetery may be eligible if it is a notable example of landscape design or its stones represent notable examples of the stonecutters' art. Under Criterion D, a cemetery may be eligible if it has the potential to yield important information about funerary practices.

Specific criteria which cemeteries must meet to be National Register eligible are specified in Criteria Consideration D:

A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events.

Currently no Delaware cemetery is individually listed in the National Register though cemeteries are included as components of a complex or as a resource in a historic district.

3.4 ROADWAYS

A heavily traveled highway is an almost continual work in progress (Marriott 1998). This has been a fact seen and felt with almost all of the United States' highways. Widening and repaving occur, new intersections are created and existing intersections removed, and bypasses are built. The property types representative of the DuPont Highway itself include road surfaces, signs, culverts and bridges, and waysides, rest areas and landscaping.

3.4.1 Road Surfaces

As an evolving transportation route whose earliest sections were laid nearly 90 years ago, the DuPont Highway (present Routes 13 and 113) is expected to have few, if any, portions of original road surfaces. Those sections that may exist are presumably bypassed portions of the road. As-built drawings and other primary source documents including highway contracts provide information concerning original specifications for assistance in identifying any remaining early road sections.

As indicated in the historic overview, the highway underwent a series of large-scale widening and dualization prior to 1963. Remaining highway fabric from these improvements may possess significance as representative of the historic evolution of the road. Again, these sections may be able to be identified by reference to as-builts and construction contracts.

3.4.2 Signs

Due to changing highway sign standards, no early road signs are expected to remain along the former DuPont Highway. Signs from the highway may exist in public and private collections. Because of their removal from their historic locations, it is doubtful whether such signs would contribute to the National Register eligibility of any portion of the road.

Older signs that may exist are most likely associated with older commercial establishments in the corridors. These signs are more appropriately considered under the roadside commercial context.

3.4.3 Bridges and Culverts

Because of the many rivers, streams, ponds, and swampy areas crossed by the highway and the poor drainage of portions of the road, the original road included many bridges and culverts. Most of the bridges in the study area are concrete girder or slab spans used to pass over streams and brooks. A culvert, a structure smaller than a bridge and generally in the form of a concrete or steel tube or pipe, allows water, often water drained from the road, to safely pass beneath the road surface. Few, if any, original structures are expected to remain. Remaining pre-1963 bridges and culverts are expected to exist primarily on bypassed portions of the highway where traffic volumes are lighter. The initial source for identification of bridges should be the Delaware historic bridge survey conducted by A.G. Lichtenstein and Company for The Department and DelSHPO (Lichtenstein Consulting Engineers, Inc. 2000). This study did not include culverts.³ Pre-1963 culverts should be identified using as-builts and in consultation with the engineering staff of the Department.

3.4.4 Street Trees

Within the study areas are few if any examples of trees planted intentionally to form allées defined by the highway. The State Highway Department undertook an intentional highway “beautification” program in the years between 1920 and 1930. In 1929 alone, it was reported that the Department planted 5,000 trees and that “practically all” the highways where planting was practicable were completed (Delaware State Highway Department 1929:35). A year later it was noted that tree planting, along with roses and shrubbery, had been ongoing for a decade, but was not seriously considered until “the principal highways were hard-surfaced” (Delaware State Highway Department 1930:39). The landscaping efforts of the State Highway Department at this time were part of a larger national trend at highway beautification, a movement endorsed by the American Association of State Highway Officials in 1930 (Delaware State Highway Department 1930:39).

As-built plans of the highway prepared in the 1930s and 1940s depict several tree allées lining Route 113 within the study area. Portions of lines of sycamores planted to create such allées remain along portions of Route 13 in New Castle County and also along Route 9 in Sussex County, east of Georgetown. Other plantings may also survive elsewhere in the state.

Registration Requirements: As documented in the historic overview, the DuPont Highway played an important role in the twentieth-century transportation history of Delaware. The highway itself

³ According to the 2004 National Bridge Inventory for Delaware, of the 896 structures indicated as bridges, 202 are culverts (National Bridge Inventory 2004).

should be evaluated as a potential historic district. A historic district is defined in National Register guidelines as a “significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development” (U.S. Department of the Interior 1991:15). Most roadways listed in or eligible for the National Register are considered a district with contributing resources including not only the road and associated structures but abutting properties dating from its period(s) of significance. It has the greatest potential to be eligible for the National Register under Criterion A for its critical role in the development of the Delaware road network. It also may be eligible under Criterion B for its association with the productive life of philanthropist and industrialist T. Coleman du Pont. To be eligible under Criterion C, the road must possess significance in design or technology. In assessing Criterion C eligibility, investigation should be conducted to determine whether the road, as it was originally built or later altered, incorporated any technical innovations of importance to the development of highway construction or if it represented a notable designed landscape. To be eligible under Criterion D, the portions of the present highway must have the potential to yield information about road construction technology.

Few historic roads exist unchanged and unaltered since they were first conceived and constructed. Many historic roads have experienced nearly continual evolution and change that resents the modern observer with an array of layers, alignments, materials, alterations, accommodations, and losses. The key to assessing the integrity of the road rests on assessing the effects of these changes on the historic character of the highway.⁴

For example, realignment of the road may be as simple as shifting travel lanes to eliminate a sharp curve or as destructive as constructing several miles of new road on a new alignment. Replacement of road and roadside features can substantially alter the context and integrity of a historic road. To assess the integrity of the DuPont Highway, several questions must be asked: 1) What portion of the current roadway retains its original or historic alignment? It is recognized that the highway underwent dualization along a portion of its length. Since the initial dualization projects occurred greater than 50 years ago, dualized sections may possess integrity. 2) Is the highway, or portions of it, still discernable as a discrete transportation corridor? 3) Does the highway retain any historic features such as road surfaces, signs, bridges and culverts, waysides and rest areas, and street trees? 4) Does the highway possess a greater or lesser amount of historic character than do other historically important transportation routes in Delaware? 5) Was any aspect of its construction innovative or was any portion of the highway notable as a designed landscape?

In assessing National Register eligibility of the highway, comparison should be made with other road corridors that have either been rendered eligible or ineligible for the National Register of Historic Places. Among possible sources of information are regional state historic preservation offices and departments of transportation, the Federal Highway Administration, and the Historic Roads (n.d.) website.

3.5 RESIDENCES

Soon after the completion of the highway, portions of largely agricultural properties adjoining the highway in Sussex counties began to be subdivided into residential lots. Houses were erected on

⁴ The discussion of integrity is informed by text on the Historic Roads (n.d.) website and by Marriott (1998).

these lots and faced the highway. Generally, this development first occurred in the vicinity of existing towns, especially Milford and Georgetown. Later, string residential development extended west from existing downtowns along major thoroughfares leading from downtown to the DuPont Highway. These residences reflect common architectural styles and plans of the twentieth-century United States.

Styles and plans of houses reflect the lifestyles and economic levels of the residents, as well as the influence of the media including architectural and general interest periodicals and plan books. Other influences include the predilections of local builders and the availability of pre-cut houses manufactured by companies such as Sears Roebuck and Aladdin.

Post-World War II residential construction in the study areas, as elsewhere, reflected the influence of widespread economic and cultural trends. Economic trends that resulted in housing construction included public and private financial assistance; increased mobility due to improved roads and increased ownership of automobiles; general post-war economic prosperity; relocation of jobs away from city and town cores; and economic transition away from agriculture and toward manufacturing and service jobs.

Cultural trends that resulted in residential development included an increased desire to own land; increased dissemination of a suburban ideal of independent ownership of a single-family home; changing living patterns; availability of new materials for home construction; and economic and racial segregation.

Several trends characterize the adaptations of post-World War II housing in Delaware. High style residences are not as common as simpler, small versions. Among the reasons for this trend are economic conditions resulting in the need for rapidly built affordable housing. Within the study areas, traditional suburban developments appear later than in the more urbanized areas of Dover and north. This may be due to the prevailing rural character of Sussex County and due to the erection of houses along linear corridors and narrow, subdivided portions of farm tracts.

Residences built along the DuPont Highway and intersecting thoroughfares represent many of the common house types chronicled in architectural guidebooks and in specialized guides such as Jakle et al.'s *Common Houses in America's Small Towns: The Atlantic Seaboard to the Mississippi Valley* (1989).

Among the house types and forms present in the study area are bungalows, Colonial Revival residences, Cape Cod cottages, World War II-Era cottages, standard ranch houses, and minimal ranch houses. These designed houses were generally erected using existing plans disseminated through periodicals, plan books, as well as plans obtained by builders and, in some cases, distributed through lumber yards or financial institutions. These designs received regional or national distribution. Thus, some of these house designs were as frequently seen in Alabama and Oregon, for example, as in Delaware.

All of the house styles/types and forms in the study corridor represent common nineteenth- and twentieth-century designs. For this reason, most examples, even those that retain a high degree of integrity, do not possess the requisite level of significance to be eligible for their architecture. The following registration requirements define characteristics that must be present to convey significance.

Because of the number and pervasiveness of recent house styles, such as the ranch or minimal ranch, only those examples unchanged from their original design are considered to retain integrity. For older residences, some degree of alteration is to be expected. In these house types, integrity is dependent on the presence of diagnostic features and the conveying of strong associations with the original period of construction.

3.5.1 Bungalows (1910s-1930s)

According to architectural historian Anthony King, the bungalow is America's first "distinctively national type" of house. It was one of the first common house ideas in the United States to break regional boundaries and gain acceptance almost everywhere. Based upon Arts and Craft ideas, it enabled an inexpensive house to be built with open flowing spaces that appealed to Americans of modest means.

The bungalow grew in popularity as a result of prefabricated houses and the national media. The prefabricated houses, offered by Sears, Roebuck and Company, departed substantially from Arts and Crafts idea. While William Morris and Gustav Stickley and others encouraged hand craftsmanship, the bungalow became the epitome of machine-made housing. The national media, including such magazines as *The American Architect*, *Good Housekeeping*, *Architectural Record*, *Country Life*, and *Ladies Home Journal* provided both photographs and floor plans of bungalow designs (Jakle et al. 1989:172-173). While bungalows are not as common along the corridor as they are in some suburban neighborhoods, the scattered examples indicate that rural homeowners were also comfortable with this style.

Bungalows began to be built in the United States at about the turn of the twentieth century, became popular during the 1910s and remained popular through the 1930s (Noble 1984:146-147). Characterized by low silhouettes and low pitched overhanging roofs with inset front porches, bungalows were constructed both in the suburbs of the northern portion of the state and in more rural areas of Kent and Sussex counties. Single bungalows are common throughout the state. Bungalows were viewed as economic dwellings with easily built designs that appealed to both urban and rural residents. It was not uncommon for some if not all the building materials to come from local mills (Mulchahey et al. 1990).

Bungalows in Delaware are typically three-bay, one- or one-and-one-half story houses of wood-framed, brick, stone or concrete block construction or a combination of these materials. Wood-framed bungalows are often shingled, although clapboards are also frequently used as exterior cladding. A common feature of the bungalow is its low-pitched shallow roof with deep overhanging eaves supported by substantial brackets. The roof may be oriented with its ridge line either parallel or perpendicular to the street. Exposed structural members, such as rafter ends are also typical. A deep porch with flared base nearly always extends across the façade and is supported by corner pillars. Pillars are often battered and may be constructed either of the same material as the dwelling or of a contrasting material, such as stucco or concrete. The porch roof may be cross-gabled or pyramidal but is most typically shed (Lanier and Herman 1997:179-180).

Bungalow plans often included fireplaces with rustic hearths. Plans also frequently included such built-in furniture as cupboards, buffets, bookcases, and window seats. Mulchahey, et al., in their study of Delaware bungalows reported that a sampling of house plans published between 1910 and 1924 indicated that the average bungalow had five or six rooms including living rooms, dining room, kitchen, two or three bedrooms plus bath. Half had built-in buffets while about a third had built-in window seats or bookcases (Mulchahey et al. 1990:8-8).

Most bungalows constructed in rural settings were designed to appear part of a suburb. They were constructed on small lots along the roadway, often with sidewalks leading to the front doors and hedges marking property boundaries. Builders often treated rural roads as if they were streets and constructed an architectural form that followed a suburban, rather than a rural, pattern in size, orientation, and use of space. There was a clear contrast with neighboring farm houses which were generally set back further from the road and surrounded by domestic and agricultural outbuildings (Mulchahey et al. 1990).

Registration Requirements: To possess significance under Criterion A, the bungalow must be representative of an important historical trend. A development of bungalows that represents the first suburban neighborhood in an area or region may be eligible. Individual eligibility requires innovative building technology present on the exterior or interior, or important achievements of architecture/ engineering. Eligibility under Criterion B requires association with the productive life of a historically significant individual. To be eligible under National Register Criterion C, a house must be a notable example of the architecture of its time, often an architect-designed example of this house type, possessing diagnostic elements of the Craftsman style such as squat, often battered porch posts, contrasting materials, exposed rafter ends, eaves brackets, and multi-light-over-one windows. Ideally, the bungalow interior should contain original elements such as built-in bookcases, cabinetry or inglenooks and/or decorative woodwork, if these were part of the original design. Since interiors were rarely, if ever, accessed for this study, however, their integrity was not considered as part of the eligibility assessment. Eligibility under Criterion D requires that the property possess information potential in the existing building fabric.

A bungalow must be a one- or one-and-one-half story house with a shallow-pitched roof, overhanging eaves, and a wide porch extending across the façade. The significance of the dwelling is enhanced if the eaves are supported by brackets and if its design includes a bay window. Covering of original siding materials with historic replacement siding, such as clapboards or cement-asbestos shingles, may be acceptable if the building maintains its original design, materials, workmanship, and massing. Open or enclosed front and rear porches are integral components of a bungalow. To be eligible, a bungalow should retain its original porch(es). Replacement windows may have been installed. However, the original fenestration pattern should remain. Bungalows should retain the original door placement if not the door(s) itself/themselves. The interior plan of a bungalow is characterized by a compact, informal arrangement of adjacent rooms with spaces that flow together (Lanier and Herman 1992:48). Bungalows often included fireplaces with rustic hearths, as well as built-in furniture such as cupboards, buffets, bookcases and window seats (Mulchahey et al. 1990:8-8). The interior plan and interior furnishings of an eligible bungalow will be basically unchanged. Changes in use do not automatically disqualify a bungalow from eligibility. However, to be eligible, a bungalow must still retain integrity and distinctive exterior stylistic elements.

3.5.2 Colonial Revival (1890s-1940)

The genesis of the Colonial Revival style in the United States has been traced back to Philadelphia's Centennial Exposition. Shortly after the exposition awakened interest in Colonial architecture, prominent architects traveled around New England to study buildings of the Colonial era. The result was grand mansions for the wealthy, not historically correct copies, but free interpretations with details inspired by colonial precedents.

During the first decades of the twentieth century, the Colonial Revival became a more common style for middle class houses as publications such as the *White Pine Series of Architectural Monographs* and local studies such as George Fletcher Bennett's *Early Architecture of Delaware*. Later examples of Colonial Revival houses, such as those in the study area, are generally simpler than earlier examples, incorporating design influences rather than copying architectural elements of Colonial prototypes (McAlester and McAlester 1992:326). In some areas, Colonial Revival dwellings became the predominant middle class house design following the eclipse of the bungalow.

Two types of Colonial Revival residences are present in the study areas. The first is the Dutch Colonial. This house style, introduced in the United States between 1895 and 1915 as front-gabled dwellings, was built during the 1920s and 1930s with the gables to the sides. In the side-gable form, the one-and-one-half story dwelling is generally defined by a long gambrel roof with a continuous shed dormer across the entire width of the dwelling. Fenestration is usually symmetrical with the centrally-placed entry door sheltered by a hood roof over the stoop. In its most typical version, the building is wood-framed with clapboards painted white (Chase et al. 1992:46, 48). Often enclosed porches project from one or both gable ends.

The second form is a side-gabled, typically three or five bay dwelling often with a one-story porch or wing on one or both gable ends. This form often has dormers projecting from the front roof slope. Two or two-and-one-half stories in height, the house is constructed of wood-framed, brick, stucco or stone or of a combination of materials. Fenestration is nearly always symmetrical with the front door often emphasized by a decorative pediment and pilasters or by an entry-door porch whose flat or gabled roof is supported by classical pillars. The door may be further ornamented with a fanlight and/or sidelights (Chase et al. 1992:46).

Registration Requirements: A Colonial Revival house should present a symmetrical organization. It should be a two or two-and-one-half story, three, five or seven bay, side-gabled dwelling generally with symmetrical fenestration. Although materials may vary, a Colonial Revival dwelling's significance will be enhanced if it includes decorative details such as a pilastered entry with sidelights and fanlight or transom and windows ornamented with shutters. A dentilled cornice is sometimes present on more elaborate examples.

To possess significance under Criterion A, the house must exemplify an important historic trend or event. The historic associations must be convincingly conveyed by the appearance of the present building. Eligibility under Criterion B requires association with the productive life of an individual important in the history of a community or area. Eligibility under Criterion C requires architectural distinction. An eligible Colonial Revival house will be more elaborately detailed and better preserved than the average Colonial Revival house in a particular area. Stylistic elements present in an eligible Colonial Revival house may include elaborate door surrounds, often with transom, fanlights or sidelights, original windows, often multi-light-over-one, original open end porches, boxes cornices ornamented with dentils or modillion blocks, and pedimented gabled dormers. Eligibility under Criterion D requires that the property possess information potential in the existing building fabric.

Eligible Colonial Revival houses should retain at least four measures of integrity and should not have significant unsympathetic additions to any elevation that obscure the original form and function of the dwelling. Porches may be screened in, but infilled porches that were originally open generally preclude eligibility. Dwellings should retain their original window and door

location and window sash arrangements even if they do not retain their original windows or doors.

3.5.3 Cape Cod (1930-1950s)

In basic form, the Cape Cod is a simple, side-gabled cottage with diagnostic attic dormers. It represented a more affordable version of Colonial Revival architecture than did the Dutch Colonial or side gable Colonial Revival house. In this way, it represented a successor of the bungalow and appealed to the same demographic group, providing a small, economical, yet old-fashioned house. The Cape Cod received national publicity through books such as *Houses for Homemakers* by Boston architect Royal Barry Wills.

The Cape Cod house came to its greatest popularity in the 1940s and 1950s as GIs returning home sought to buy houses for their families. Plans for Cape Cod homes by Wills and other architects were circulated nationally through the “House of the Month” scheme, which distributed plans and models to banks and savings and loans all over the country. In addition, planned developments such as Levittown, New York featured Cape Cod houses (National Association of Realtors n.d.)

This one-and-one-half story dwelling is typically three bays wide with a steep side-gabled roof. A distinctive feature is the presence of two or sometimes three, gabled dormers that pierce the front roof slope. The Cape Cod is most frequently of wood-framed construction with a clapboard exterior, although brick and stucco is also used. The dwelling is usually symmetrical with a central entry flanked by a pair of windows on either side. The entry is frequently ornamented with a pediment and pilasters and occasionally transom and sidelights (Chase et al. 1992:50). In less elaborate examples, the main entry is sheltered by a gabled hood. Another Colonial Revival detail present on some examples is a dentilled cornice.

Registration Requirements A Cape Cod must be characterized by a side-gable orientation with a steeply pitched roof pierced by two or three gabled dormers. The eligibility of a house of an example of this style under Criterion C is strengthened if the dwelling is symmetrical in design, has traditional classical decoration around the door, and has ornamental shutters at the windows (Chase et al. 1992:63).

To possess significance under Criterion A, the house must exemplify an important historic trend or event. The historic associations must be convincingly conveyed by the appearance of the present building. Eligibility under Criterion B requires association with the productive life of an individual important in the history of a community or area. Eligibility under Criterion C requires architectural distinction. An eligible Cape Cod will be better preserved than the average Cape Cod in a particular area and will exhibit the diagnostic elements of its building type. These elements include elaborated entrances, often with pilasters and a patterned transom, symmetrical fenestration with multi-light, double hung sash windows, ornamental shutters, and symmetrical, often pedimented, front dormers. Eligibility under Criterion D requires that the property possess information potential in the existing building fabric.

To be eligible for the National Register, a Cape Code must possess at least four measures of integrity. All of the original diagnostic elements of the type must be present and unaltered including ornamental shutters. Re-siding generally precludes eligibility unless the new sheathing maintains the character of the original sheathing. Additions, if present, must not have been made

to the primary elevations of the house. Any addition must be substantially smaller in scale than the main house block.

3.5.4 World War II-Era Cottages (1940-1950)

This house type, defined by Cory Jensen of the Utah State Historic Preservation Office, represents a small circa 1940-1950 house found throughout much of the United States. Jensen notes that, primarily due to war-time economics and housing demand, the narrow deep house form of the bungalow and period cottage were transformed in these cottages to a square, boxy plan with small rooms situated around a core. These houses, small in scale, and inexpensive in cost, were affordable to many first-time homebuyers. Returning GIs often purchased these houses as the first step in climbing the ladder of the middle class.

Characteristics of this type include typically square or slightly rectangular footprint, although porch or front window area may project slightly; hipped or side-gabled roofs; gabled projections over the front entrance and larger windows; often side (driveway) entrances; often attached garages; windows that are either wood or metal double hung, wood or metal casements, or large front picture windows with multiple panes sometimes in horizontal bands; exterior stairwell access to basements; exterior sheathing including brick, asbestos or Masonite shingles, and wood or aluminum siding (Jensen 2004:18).

Registration Requirements: Hundreds of thousands of World War II-era cottages were constructed throughout the United States between 1940 and 1950. Many were built in large developments such as the Levittowns of Pennsylvania, New Jersey and New York. Others, such as those within the study area, are isolated examples or short rows built along major thoroughfares, while still others were erected on subdivided farmland.

To possess significance under Criterion A, the residence must be representative of an important historical trend. A development of houses that represents the first suburban neighborhood in an area or region may be eligible. Eligibility as a district under Criterion A requires that most or all house be basically unchanged from their original appearance. Individual eligibility requires innovative building technology present on the exterior and/ or interior, or important achievements of architecture/ engineering. Eligibility under Criterion B requires association with a historically significant individual. To be eligible under National Register Criterion C, a house must be a notable example of the architecture of its time, often an elaborate, architect-designed example of this house type. However, the nature of this resource, as a simple, rapidly built, inexpensive dwelling, precludes this. Eligibility under Criterion D requires that the building fabric possesses information potential. Because of the number of remaining properties of this type, individual examples are generally not eligible for the National Register.

To possess the requisite integrity to be National Register-eligible, most or all original exterior details must be present. If windows have been replaced, the original fenestration and sash patterns must have been maintained. If doors have been replaced, the replacement must retain the original character. Concrete-asbestos or aluminum siding may represent original sheathing materials, while vinyl siding does not. Re-siding generally precludes eligibility unless the new sheathing maintains the character of the original sheathing. Because of the commonness of this house type, recent additions to any portion of the house would preclude eligibility.

3.5.5 Minimal Ranch House (1950-present)

The minimal ranch was brought to popularity by post-war developers such as William Levitt, who sought to build good, low-cost housing for the millions of people who sought their own first house in the postwar economic boom period. The minimal ranch is a stripped down version of the bungalow and other vernacular cottage houses. Wide overhanging eaves were scaled back, and the houses were given an eaves front orientation to look bigger. The attic was reduced to little more than a crawl space. The big front porch was reduced to a small stoop. A big picture window was added to show off newly purchased furniture, but the size of other windows was reduced to preserve the illusion of privacy. In many areas, these nondescript “ranchettes” followed one another in an endless stretch of nearly identical houses (Split Level.net 2004).

Like the standard ranch, the minimal ranch is a simple, single story, rectangular house. Unlike the standard ranch, garages are not attached or integrated, but are self-standing structures when they exist. A small dwelling of five rooms or less, the minimal ranch resembles an elongated double-pile cottage. Window treatment, especially the use of picture windows or horizontal bands of double-hung windows, conveys the ranch allusion. The minimal ranch has a side-gabled roof and little or no overhanging eave (McAlester and McAlester 1992:478; Jakle et al. 1989:187).

Registration Requirements: The World War II-era cottages became outsized and obsolete as marriages and the size of families increased. The economic depression of the 1930s compromised the size and style of domestic living. Construction of this period became more eclectic, with little to no decorative detailing to the exteriors of the homes. These dwellings would become known as the early ranch. Such houses were often erected on subdivisions of former farmland.

To possess significance under Criterion A, the residence must be representative of an important historical trend. A development of houses that represents the first suburban neighborhood in an area or region may be eligible. Individual eligibility requires innovative building technology present on the exterior and/ or interior, or important achievements of architecture/ engineering. Eligibility under Criterion B requires association with a historically significant individual. To be eligible under National Register Criterion C, a house must be a notable example of the architecture of its time, often an elaborate, architect-designed example of this house type. However, the nature of this resource, as a simple, rapidly built, inexpensive dwelling, precludes this. Eligibility under Criterion D requires that the building fabric possesses information potential. Because of the number of remaining properties of this type, individual examples are generally not eligible for the National Register under any of the four criteria.

To possess the requisite integrity to be National Register-eligible, all original exterior details must be present. The form of the house is typically rectangular, slightly more elongated than the World War II-era cottage. The one-story houses can have hipped or side-gabled roofs. The windows should be similar to those of the previous style. Original fenestration and sash patterns of all bay openings must be maintained and retain their original character. To retain integrity, no additions may have been made to the house.

3.5.6 Hall and Parlor Houses (mid-19th-early 20th centuries)

The hall and parlor house is a rural vernacular house type related to the I-house and the single story hall and parlor cottage. In early examples, unequal room sizes, indicated by the asymmetrical facades, reflect Old World origins. With the advent of balloon framing and standardized materials and building components, the house plan remained popular in rural areas

until the end of the nineteenth century. By the end of this period, symmetry was introduced with equal sized rooms and balanced window treatment. The typical occupants of a hall and parlor house was a middle class farm family, sufficiently prosperous to be able to afford a two-story dwelling but lacking the means to afford the larger I-house.

The hall and parlor house, a side-gabled dwelling, two full stories in height features two rooms side by side without a separating central hallway. L and T rear appendages are common as with other single-pile dwelling types. Early hall and parlor houses feature asymmetrical facades reflecting unequal room sizes, while later examples feature symmetrical facades often two or three bays wide (Jakle et al. 1989:114).

Registration Requirements: The traditional definition of a hall-and-parlor house is a single-story folk dwelling with two unequal sized rooms and often a central chimney. Such houses were among the earliest forms constructed in many areas of European settlement in North America. No such houses have been identified in the study area. Instead, the hall-and-parlor house in the study area is a two-story dwelling form as defined in Jakle et al. (1989). It is a side-gabled dwelling, two full stories in height, featuring two rooms side-by-side without a separating central hallway. “L” and “T” rear appendages are common as with other single-pile dwelling types. Early hall-and-parlor houses feature asymmetrical façades reflecting unequal room sizes, while later examples feature symmetrical facades often two or three bays wide (Jakle et al. 1989:114).

To possess significance under Criterion A, the residence must exemplify an important historic trend or event. The historic association must be convincingly conveyed by the present building appearance. Eligibility under Criterion B requires association with the productive life of a historically significant individual. Eligibility under Criterion C requires that the house be a notable example of a type or period of construction. Elements contributing to significance under Criterion C include retention of original, often end, chimneys and retention of original exterior fabric. Elaborate interior woodwork would also contribute to eligibility, but since interiors were rarely, if ever, accessed for this study, they were not considered as part of the eligibility assessment. Eligibility under Criterion D requires that the building fabric possesses information potential.

To possess integrity as a hall-and-parlor house, the house must retain its original configuration of facade openings diagnostic of this house form. Integrity is also dependent upon retention of a preponderance of the original or historic exterior fabric such as siding, fenestration, roof profile and structure, chimney(s), and porches, if any.

3.5.7 I-House (early 19th-early 20th centuries)

As Jakle et al. (1989) indicate, during the nineteenth century, the I-house symbolized affluence born of the land. The strength of the form as a status symbol was maximized when the façade faced the public road projecting an impressive front elevation. This association of the house with prosperity and respectability was common among farmers and businessmen and professionals in villages and towns. Much of the rural affluence could be attributed to the rise of commercial agriculture associated with the development of regional railroad networks and regional markets (Jakle et al. 1989:121).

The central hall I-house is one of the more noticeable traditional house forms in the rural eastern United States (McAlester and McAlester 1992:96; Noble 1984:52-55). In form, it is essentially a hall and parlor house with an added central hallway serving a centrally positioned front door. The

form is one room deep with single rooms on either side of the hall. It is two full stories high with a gable roof. Fenestration is characteristically symmetrical with three, four and five bay patterns common. Many I-houses have additional space in a perpendicular, two-story rear ell (Jakle et al. 1989:120-121; Wyatt n.d.:33). In some cases, including in the larger study areas, the façade is elaborated with a central cross gable. This design is commonly found in c. 1900 vernacular houses of the Milford-Lincoln areas.

Registration Requirements: The I-house must be two stories in height and with three or five front façade bays. The main core of the dwelling typically measures two rooms wide by one-room deep. The roof should be of average pitch and the lineation hipped or side-gabled. Porches across the front and ells to the rear are not uncommon. The entry door should be centralized leading to a central passage and chimneys generally placed on either or both gable end wall(s).

The construction date of the house is important in assessing its eligibility. Due to rarity, an eighteenth- or early nineteenth-century I-house may be eligible under Criterion A as exemplifying the early settlement history of the area or an early example of this house form in the area. In general, to possess significance under Criterion A, the residence must exemplify an important historic trend or event. The historic association must be conveyed by the present building's appearance. Eligibility under Criterion B requires association with the productive life of a historically significant individual. Eligibility under Criterion C requires that the house be a notable example of a type or period of construction possessing its original diagnostic façade arrangement and interior plan and retaining a large proportion of original or historic exterior fabric. Eligibility under Criterion D requires that the building fabric possesses information potential. Few of the houses of this form in the study area are expected to meet any of these eligibility criteria.

To possess integrity, the house must retain a preponderance of original or historic fabric including siding, windows and doors, roof profile and structure, chimney(s), and porch components. Re-siding in aluminum or vinyl generally precludes eligibility unless the new sheathing maintains the character of the original sheathing. Additions, especially to the rear of the dwelling, may not compromise the integrity, providing these additions are in keeping with the massing of the original block. Eligible I-houses may or may not have exterior front or side porches and/or rear or side ell additions, depending on their original form and function and evolving usage. Screened-in porches do not compromise integrity, but infilled porches that date from after the period of significance usually render the property ineligible.

3.5.8 Double-Pile Cottage (early to mid-20th century)

The double-pile cottage is among the simplest and least expensive housing forms. It was marketed in builders' catalogs between 1915 and 1925 (Edwards et al. 2004:3-4). Due to small size and simplicity of construction, these dwellings were affordable to people of modest means. Often such houses are found in the vicinity of farms and factories providing housing for farm and factory workers rather than owners and managers.

The double-pile cottage is a one or one-and-one-half story dwelling with either gable or hipped roof, the ridge line running parallel to the façade. The roof is usually of average pitch, and the façade is generally three bays wide. While most gabled roof examples have traditional gabled roofs several examples in the study areas have clipped or jerkinhead gables. In twentieth-century examples, there is often no hall and the front door opens directly into the front room. Cottages with steeply pitched roofs resemble a Cape Cod without its characteristic gabled dormers.

Interior plans of these houses vary. In some examples, the center hall remains, a remnant of early folk housing types, while other examples reduce or eliminate the center hall and frequently employ a front door that opens into the living room (Jakle et al. 1989:213).

Registration Requirements: A double-pile cottage must be one- or one-and-one-half stories in height and with two or three façade bays. It should be oriented with its roofline perpendicular to the street and the gable forming the front elevation of the building. The roof should be of average pitch and may be pierced with a modest cross-gable dormer. The entry door should be sheltered by a gabled shed, or hipped roofed front porch.

To possess significance under Criterion A, the residence must exemplify an important historic trend or event. The historic association must be convincingly conveyed by the present building appearance. Eligibility under Criterion B requires association with the productive life of a historically significant individual. Eligibility under Criterion C requires that the house be a notable example of a type or period of construction. As a common house design, found in great numbers throughout the United States, double-pile cottages usually lack the architectural elaboration and distinction necessary for eligibility under Criterion C. A particularly early example that conveys an unusual amount of architectural elaboration may be eligible under Criterion C. Eligibility under Criterion D requires that the building fabric possesses information potential. Generally dwellings of standardized construction, these houses typically do not illustrate historically notable building construction techniques.

Integrity of these houses are dependent upon survival of a preponderance of original or historic exterior architectural fabric including siding, windows and doors, roof profile and structure, chimney(s), if any, and porch or stoop.

3.5.9 L-Shaped Cottages and Houses (early to mid 20th centuries)

L-shaped cottages and houses were promoted in house catalogs of the early twentieth century. Often built as housing for working and lower middle class individuals and families, their popularity reflected the predilections of individual builders who widely replicated selected plan types in their communities.

In the L-shaped cottage and house, a single, multiple-gable roof covers the entire dwelling. Unlike the similar folk house, the gable front or upright and wing, the L-shaped cottage or house lacks multiple roof levels. Ranging from one to two stories in height, the L-shaped dwelling often has a hipped or shed-roof porch extending from the side wall of the gabled front block across the entirety of the eaves front portion of the facade. In floor plan, the L-shaped dwelling comprises a single, integrated whole (Jakle et al. 1989:161-3).

Registration Requirements: The L-shaped cottage or house is a one-to-two story dwelling with a main block whose roof ridge is parallel to the street and a cross-gabled front block projecting from the side of the façade wall with a roof ridge that extends from the main roof ridge. This house type often features a porch that extends the width of the exposed façade wall, and the entry is often placed at the junction of the two blocks.

To possess significance under Criterion A, the residence must exemplify an important historic trend or event. The historic association must be convincingly conveyed by the present building appearance. Eligibility under Criterion B requires association with the productive life of a

historically significant individual. Eligibility under Criterion C requires that the house be a notable example of a type or period of construction. As a modern vernacular house type, L-shaped cottages and houses rarely meet eligibility requirements of Criterion C. Eligibility under Criterion D requires that the building fabric possesses information potential.

Integrity of these houses are dependent upon survival of a preponderance of original or historic exterior architectural fabric including siding, windows and doors, roof profile and structure, chimney(s), if any, and porch or stoop.

3.5.10 Prefabricated and Standard Design Houses (initial examples: early 20th centuries; later examples: mid-20th century-present)

The earliest use of standard design homes dates back to nineteenth-century architectural pattern books (Smeins 1999). By the early twentieth century, prefabricated houses, made by companies such as Sears Roebuck and Aladdin, and shipped in pieces to the site became popular in some areas of the country. Prefabricated and standard design homes regained popularity due to the increased demand for housing in the mid-20th century. Research undertaken in issues of local papers from the 1950s and 1960s including the *Delmarva News* and the *Milford Chronicle* revealed that several suppliers of prefabricated homes offered their products to Sussex and Kent County residents. From the mid-1950s to at least the early 1960s, the *Delmarva News* of Selbyville included regular ads from the Houston-White Company of Millsboro. The Houston-White Company was originally founded in the late nineteenth century as a lumber milling operation and was, for many years, the largest business in the town. The company pictured a series of houses with designs from the Small House Planning Bureau and advertised “Order a Home by Telephone? It is Almost That Easy!” Houston-White offered house plans including rectangular cottages, rectangular and L-shaped ranches and split-levels and could construct these houses, as well.

Other suppliers that advertised in local papers included Nelson T. Swain of Georgetown, a Main Line Homes dealer, who offered, in 1962, a three bedroom ranch style house with full basement for \$8420 or \$62.24 per month (Swain 1962). Dover’s Institute for Essential Housing offered its “Low-Cost Homes for the Working Man:” “Cranapple Crest,” “Blueberry Hill,” and “Plum Hill” (Institute for Essential Housing 1962). Each was a ranch design.

Registration Requirements: As noted, in style or form, these dwellings are representative of popular house designs of the 1950s and 1960s. An unsystematic review of local newspaper advertisements revealed that ranch houses and minimal ranch houses tended to be the predominant designs offered by local prefabricated home suppliers.

If a house can be conclusively documented as an example of 1950s or early 1960s prefabricated or standard design house, its significance should be evaluated under Criterion A. Such documentation may be obtained through comparison of the house to published plans and/or interviews with homeowners. Does it represent an early or unusual example of a prefabricated or standard design house in the local area? Is it part of an early development of similar or identical standard design or prefabricated houses? If so, the house may be locally significant under Criterion A. For eligibility under Criterion B, a house or group of houses should be conclusively associated with the productive life of an individual, a builder or house designer, who had an important role in the postwar residential development of the area. The eligibility assessment of these houses under National Register Criterion C for their architecture should involve

consideration using the criteria of the particular design or form. Eligibility under Criterion D requires that the building fabric possesses information potential.

To possess integrity, a prefabricated or standard design house should exhibit no additions or renovations.

3.6 AGRICULTURAL DWELLINGS AND SUPPORTING OPERATIONS

Agricultural properties located within the study areas include farmsteads, termed “agricultural complexes” by DeCunzo and Garcia (1993), and housing associated with the poultry industry.

3.6.1 Agricultural Complexes

The term “agricultural complex” is derived from the historic context developed to aid in the examination of the archeology of agricultural properties in Sussex County (DeCunzo and Garcia 1993). Although the report specifically contains a typology of archeological sites, some identified types are applicable to standing structures, as well. The agricultural complex is one such applicable type.

De Cunzo and Garcia define the type as consisting of

standing buildings—dwelling(s) and domestic and agricultural outbuildings—and/or archaeological evidence associated with them....The dwelling(s) may have housed the farm’s owners, tenant farmers, farm managers, other relatives, and/or farm hands. Quarters, kitchens, smokehouses, milk houses, spring houses, wood sheds, ice houses, and other food and supply storage buildings number among the expected domestic outbuildings; agricultural outbuildings would include barns of different types, stables, cart sheds, granaries, hay barracks, hog houses, sheep houses, chicken/broiler houses, and potato/root houses. In addition, the Complex encompasses the utilitarian and nonutilitarian spaces and features directly associated with these buildings—landscaped lawns, yards, and gardens; kitchen gardens; work yards; animal pens; wells and other water sources; drives, lanes and paths; and trash and other waste disposal areas and features. (De Cunzo and Garcia 1993:250)

Agricultural fields, woodlots, marshes, ditches, streams and orchards are important natural features of agricultural complexes that contribute to the setting and feeling of the property (De Cunzo and Garcia 1993:235), though the fields do not necessarily need to be under cultivation at the time of the evaluation.

Registration Requirements: To achieve significance under National Register Criterion A, an agricultural complex must have the ability to convey information or exhibit trends concerning Delaware’s agricultural development. Most agricultural complexes within the study corridor should be evaluated for significance in relation to the broiler chicken industry and/or the canning industry. The complex needs to convey significant information to the historic context of agricultural development in Kent or Sussex County or the State of Delaware or nationally. To achieve significance under Criterion C for architecture, the original fenestration and massing of the farmhouse must remain, the positioning of agricultural buildings and structures in relation to

the farmhouse should be intact, the surrounding land should continue to be used for cultivation. The farmstead should be compared with others of the same period in the area and should represent an outstanding example of its type. Agricultural complexes are less frequently eligible under Criteria B or D. Eligibility under Criterion B requires a demonstrated association with the productive life of an individual important to the agricultural history of southern Delaware or the state, while eligibility under Criterion D requires that the buildings have the potential for yielding information significant in building technology.

Agricultural complexes are primarily defined from the function and activities that took place or continue to take place there; the style or integrity of the dwellings and supporting domestic and agricultural outbuildings play a lesser role in assessing the eligibility of an agricultural complex. If an agricultural complex is a rare surviving example of its type, a greater degree of alterations is acceptable provided enough of the property survives for it to be a significant resource. Associative characteristics such as primary source historical documentation are needed to substantiate the significance of an agricultural complex (McCormick Taylor Associates 2004:22-23).

To retain integrity, the principal historic components of the complex, the dwelling(s), domestic outbuildings, agricultural outbuildings, and utilitarian and non-utilitarian landscapes must convey strong associations with the farm's period of significance. Changes to active farms are expected and will not preclude National Register eligibility. However, the major buildings, including dwelling(s) and barn(s) should retain much or all of their historic exterior fabric. In addition, to remain eligible, new construction must not dominate the old. Specifically, the buildings of an agricultural complex should retain integrity of materials, design, feeling and workmanship and should display their original building form, despite modern additions or alterations. In instances where the integrity of the agricultural complex has been compromised due to demolition, infill or development, individual components of the complex, such as the main farm house, may be eligible for individual listing in the National Register of Historic Places under Criterion C if the building embodies distinctive characteristics of a type, period or method of construction (McCormick Taylor Associates 2004:23).

3.6.2 Poultry Industry Facilities

The poultry industry, a major income and employment source in Sussex and southern Kent counties, is represented by numerous building and structure types including hen houses, broiler houses, grain elevators, hatcheries, and processing plants. Of these property types, hen houses and broiler houses are found within the study area.

Hen Houses and Broiler Houses

As noted, chicken houses are diagnostic of Sussex County poultry-related agricultural complexes. The earliest such houses were used for egg production, while the more recent ones were used to house chickens for the region's dominant broiler industry.

In his book on poultry production, Ralston Hanna cited primary needs in houses for laying chickens (Hanna 1923). The birds must have sufficient room, at least four square feet of floor space per bird. The house must have ample ventilation and must be dry at all times. Ventilation is generally provided by having sufficient openings in the front wall of the house, some containing windows, and others kept open nearly all the time and closed, when necessary, with muslin curtains.

Hanna included plans for a laying house of the type recommended by the New Jersey Agricultural Experiment Station and suitable for use in other states with similar conditions. The wood-framed house had a shed roof and measured 20 feet square. It was designed to form an expandable unit, each unit to accommodate 100 birds. The height of the house was eight feet in front and five feet in the rear with a concrete floor and concrete foundation. Fresh air was provided by two large openings, each four feet by five feet and two glass windows, each 21/2 by 51/2 feet. Additional ventilation could be provided by having a hinged top board on the rear elevation (Hanna 1923:27-29).

Other roof types for laying houses indicated by Hanna included the two-thirds span (gable with catslide), the even span (gable), the gable roof with center monitor, the half monitor, and the gambrel roof (Hanna 1923:33).

Later laying houses were generally larger than those described by Hanna. In a 1951 publication on poultry husbandry, Morley Jull recommended a house depth of 24 to 36 feet and indicated that lengths of up to 200 feet were common. He pictured an open-front, 30 by 180 foot laying house in southern Delaware with a 20-foot feed section at one end (Jull 1951:229, 234).

Broiler chicken houses underwent rapid evolution as the Sussex County broiler industry boomed. The earliest such houses, typified by Mrs. Wilmer Steele's houses,⁵ were small, square, wood-framed buildings, measuring 14 to 16 feet on a side, with single pitch, shed roofs. A coal stove provided heat. Because many early broiler growers had previously operated commercial egg farms, their new broiler houses resembled those built to accommodate young layers. To increase capacity, a grower simply erected new houses. When young broilers reached six weeks or so in age, they might be removed to a larger but now abandoned egg-laying house, formerly used for mature layers.

The first long houses were erected in 1928. These early long broiler houses were generally 16 to 18 feet wide and varied according to the size of the operation. By 1940, most Delmarva broilers were raised in shed-roofed, wood-framed buildings as much as 1,000 feet long but more commonly half that length. These buildings typically had dirt floors covered by a litter of sawdust, wood shavings or ground corncobs. These later broiler houses were generally 20 or 24 feet wide and averaged 320 feet long. These houses were often divided into ten rooms, each 30 feet by 20 feet with a 20 foot square feed room in the center. Each room had two stoves. Figuring 500 chickens per stove, the average house had a capacity of 10,000 broilers. Due to in large part to increase in house size, the average grower increased his annual production from about 2,000 broilers in 1927 to about 8,000 in 1935, and approximately 17,000 in 1943 (Hoffman and Johnson 1946:42; Tomhave 1951:133; Williams 1998:21).

A shed-roofed house was deemed easiest and most economical to build and easiest to ventilate. A combination roof or "two-thirds span" had also been a popular broiler house type. In this configuration, the rear span is usually twice as long as the front span (Hoffman and Johnson 1946:46).

Early long houses were heated by hot water, piped from a central heater. This system was soon dropped in favor of separate brooder stoves designed to provide uniform heat the length of the

⁵ One of Mrs. Steele's broiler houses is currently used as an exhibit at the Delaware Agricultural Museum in Dover.

house. During the late 1940s, improved central heating units were introduced with excellent results (Tomhave 1951:133).

In his book on poultry husbandry, Morley Jull described the typical broiler house built in 1950:

Most of the commercial-broiler houses are of simple design. The shed-roof and gable-roof types of house predominate. Most of them are about 20 feet deep and their length depends on the number of chickens to be brooded under one roof. Where continuous brooding is practiced, the homes are up to 50 ft. deep. Many houses are about 80 to 400 feet long and are divided into pens, each 20 by 20 ft., or 20 by 30 ft., a brooder being used in each pen. In other houses, there are no partitions, although a few partitions are advisable to break drafts and avoid chicks piling up in corners.

Dirt floors predominate, although concrete floors are much more sanitary and are used to some extent.

The fronts of the houses are relatively open, windows or burlap being used to cover the opening in cold weather or in the case of driving rain. Most of the houses have windows in the rear to provide for adequate ventilation in warm weather [Jull 1951:214-216].

In an article in the 1950 *Delaware Poultry Handbook*, W.A. Calvert described a new look in poultry houses. These newly constructed houses were 44 to 48 feet wide and 200 to 400 feet long with a lower silhouette than earlier houses. Studs were covered with asbestos-cement board or exterior fiberboard. The foundation consisted of footings extended a minimum of 24 inches below ground level. The houses were roofed in sheet metal. Because of the increased width of these new houses, windows were not adequate for ventilation and had to be supplemented or supplanted by manual or automatic commercial ventilators. The earlier heating stoves were replaced by hot water or hot air heat, and efficiency was increased through use of automatic feeders (Calvert 1950:26-28).

By the end of World War II, mechanical improvements had been made to broiler houses to improve feed-handling efficiency. Most growers had installed feed carriers mounted with rollers on tracks attached to the ceilings. A grower or hired hand would load feed onto the carrier in the storeroom and then push the carrier along the track down the length of the chicken house. Feed was taken from the carrier in scoops or buckets and poured into the troughs. By the late 1950s, automatic feeding systems began to be introduced. At the same time, improvements were made in water delivery systems. Much of the equipment used in these improved delivery systems was fabricated by Mumford Sheet Metal works of Selbyville (Williams 1998:85-89).

The primary type of broiler house construction in the 1950s was the pole-type house. According to author Byron Bondurant, pole-type houses cost from \$.75 to \$1.50 per square foot, less than the cost of other construction. In pole-type houses, the poles are of sufficient strength to support the roof and sidewalls and are imbedded four to five feet in the ground. Framing is attached to the poles and braces to support loads due to snow, wind, and weight of materials without aid of roofing or siding (Bondurant 1954:26)

Chicken house design in the Delmarva Peninsula underwent dramatic change as a result of the effects of Hurricane Hazel in 1954. Since many of the early chicken houses were not designed as

permanent structures and were built of lesser quality materials, the wind and rain of the storm destroyed many of these houses. Author William E. Larson attributed much of the damage to the lack of proper anchoring. He advocated construction with a foundation concrete footing 8 inches thick and 16 inches wide constructed of poured concrete or concrete blocks. Sills should be constructed of two 2 by 6s. If platform type construction is used, metal straps should be used to tie rafters to studs (Larson 1955:8). Many farmers decided to modernize poultry operations and to use new chicken house plans sent by local extension agents and the University of Delaware's Agricultural Experiment Station. One such plan was the clear span broiler house, a gabled roof design with the roof supported by trusses without intervening columns.

Other articles published during the 1950s discussed the issue of poultry house ventilation. Ventilation of the houses had two major functions, to remove moisture and to remove heat. Two general techniques were used: gravity or fans. In gravity ventilation, openings were placed near the roof to expel warm air. Fans, generally deemed more satisfactory, were used to move air through the building (Larson 1956:36-38).

By the late 1950s, longer poultry houses were being built than the 44 by 400 foot houses common earlier in the decade. Ray Lloyd indicated that Elwood Workman and Son of built a shed-roofed house near Georgetown that measured 24 feet wide by 1,230 feet long. Partitions were placed every 60 feet and a feed track extended down the center of the house. Four doors were placed in back and three doors in front of each 60-foot section. Ventilation was provided by sliding front windows of glass substitute and drop boards on the rear wall (Lloyd 1958:82).

Articles in the *Delaware Poultry Handbook* in the 1960s defined contemporary thinking concerning appropriate characteristics of broiler houses. In an article concerning the best length, width, and depth of poultry houses, author T.R.C. Rokeby advocated a 40-foot width, a length of 400 feet long, and a sidewall height of six to seven feet. He indicated that a 40-foot width is better adapted to the use of continuous chain-type automatic feeders than narrower houses. Small houses resulted in an unnecessary duplication of equipment, while longer than 400 feet requires a second service area (Rokeby 1963:44-49). In another article in the same edition, A.D. Longhouse examined the need for windows in a broiler house and concluded that windows cost more to build per square foot than wall, windows cost more to maintain than walls, and windows are poor insulators, and concluded that the windowless house was preferable (Longhouse 1963:78-80).

By 1980, poultry houses generally were built with one of the following structural frames: 1) open web rigid steel frames; 2) wood trusses on wood poles with no interior supports; 3) pole framed structures with interior posts; 4) steel trusses on steel posts; and 5) open web steel rafters on wood posts. The most common house type was probably the pole-framed house with two interior rows of posts (Driggers 1980:544-545).

According to a 1981 article in *Poultry Digest*, the basic broiler house was stronger and tighter than previously, largely due to improvements in trusses and the recognition of the desirability of insulation. Evidence indicated that the most popular truss in modern broiler houses was the arched unit that provided clear span and allowed a laminated material to be attached over which insulation was installed. Most houses are curtain type. Summer cooling was done with different configurations of fans and air inlets. Heating, formerly supplied by wood-burning or coal-fired brooders had generally been replaced by gas-fired brooders (*Poultry Digest* 1981:467-468).

In 1991, 161 new chicken houses were completed in Delmarva, 62 others were started, and financial approval was granted for the building of 13 additional houses. The average capacity of

these houses was 26,5000 birds and the average cost was \$100,000 (Williams 1998:91). Among the improvements in these modern houses was large fans placed at one end of the house to pull air through its entire length (Williams 1998:93). Replacement of earlier, less efficient broiler houses has been encouraged by the offering of “new-house” contracts by poultry grow-out companies to growers who construct new broiler houses according to company specifications (Palmer 1994:1).

Most of the houses built in the 1990s were 40 to 42 feet wide and 400 to 500 feet long. Construction generally incorporates truss rafters, eliminating the need for support posts inside the house. The typical sidewall is 6 feet high with an insulated knee wall and a plastic curtain above. The curtain may be adjusted up or down with a winch (Palmer 1994:3). Ventilation is provided by fans controlled by time clocks and overriding thermostats to control minimum air movement and additional fans to cool birds under summer conditions. Fans are usually located only on one side of the house. In recent years, gas space heaters have been increasingly used for house heating (Palmer 1994:4, 6).

Registration Requirements: As mentioned above, within the study areas the most common property type representative of the poultry industry is the broiler house. Although broilers were first raised during the 1920s and the first broiler houses (as opposed to converted laying houses) were erected at that time, very few or any of these early houses remain in Sussex County. Most have succumbed to age, weather, or were replaced to facilitate efficiency or to increase flock size.

Examples of the subsequent generation of broiler houses also rarely survive due to time, changing agricultural practices and weather. A surviving early, wood-framed, long house or a surviving apartment-type broiler house would be eligible for the National Register under Criterion A as exemplifying a phase of broiler production and under C as representative of a type of construction. Eligibility would be dependent upon retention of most or all of its original exterior architectural fabric. Any other pre-1963 broiler house that retains architectural integrity may be expected to be National Register eligible under the same two criteria. Eligibility under Criteria B or D is less likely. To be eligible under Criterion B, the broiler house would have to have been associated with the productive life of an individual who played an important role in the development of the broiler chicken industry in Delaware. To be eligible under Criterion D, the house would have to have the potential to yield significant information about broiler house construction practice.

The field survey indicated that a greater number of egg-laying houses survive due to their smaller size, continued or long-term use, and, in some cases, conversion to other uses. Egg-laying houses are generally an element of agricultural complexes and should be evaluated as a component of the larger agricultural complex. Individual eligibility under Criterion A would require the building to be convincingly connected to an important event or trend in the history of poultry production in the state. Eligibility under Criterion B would require the house to be associated with the productive life of an individual important in the development of the poultry industry in Delaware. Eligibility under Criterion C would require the house to be a little-altered and well-preserved example of a historic poultry house type as outlined above. To be eligible under Criterion D, the house would have to have the potential to yield significant information about poultry house construction practice.

An eligible broiler or egg-laying house should be free of later additions and exterior alterations, should be of wood-framed construction, generally with a dirt floor, and ideally should still be used for some form of its intended agricultural use.

3.7 DOMESTIC COMPLEXES

A domestic complex may be defined as a dwelling, associated historic outbuildings, and associated physical space including the yard, driveway, and domestic or ornamental garden. The associated outbuildings may be related to historic food preparation and storage, transportation and craftwork, or hygiene. In addition, outbuildings may be used for general storage or lawn or garden storage.

Outbuildings related to food preparation and storage include kitchens, smokehouses, milkhouses and springhouses, icehouses, and/or root cellars. Outbuildings related to transportation and craftwork include stables, carriage houses, and garages, as well as shops for craftsmen such as blacksmiths, coopers, weavers, wagon makers, and joiners. Outbuildings and structures related to hygiene include privies and wells. Storage buildings, most of twentieth-century vintage, include sheds and garden sheds. Less common twentieth-century outbuildings include generator sheds and dynamo sheds, both associated with the spread of electric power into rural areas of southern Delaware. In addition, some domestic properties include an additional residence or residences, either a tenant cottage or a residence for a member of the extended family. Typically, rural properties include more outbuildings than village house lots.

The earliest domestic complexes may date from the initial settlement of southern Delaware. In general, older domestic complexes contained greater numbers of outbuildings than those of recent construction. A house and associated garage does not constitute a domestic complex. A complex must include at least two more associated domestic outbuildings.

Registration Requirements: Domestic complexes may be eligible under any of the four National Register criteria. Under Criterion A, a complex may be eligible if it was historically associated with an important historical event or historic trend.

Under Criterion B, a complex may be eligible if it is the property most closely associated with the productive life of an individual important to the history of a community or era. To possess eligibility under this criterion, the property must be the location most closely associated with the individual's productive life and must retain the integrity necessary to convey associations with this period of significance.

Under Criterion C, a complex may be eligible if it embodies the distinctive characteristics of a type, period or method of construction. In addition, elements of a domestic complex may possess individual eligibility, particularly an outbuilding should it represent an early or particularly well-preserved example of a building type. If the house possesses sufficient architectural distinction to be eligible under Criterion C, it is likely that associated pre-1957 outbuildings would also be eligible.

3.8 PROPERTY LAYOUT CONFIGURATIONS

3.8.1 Minor Subdivisions or Strip Development

Beginning within a few years of completion of the DuPont Highway, land along the highway corridor became attractive for both residential and commercial use. A majority of this land in

Sussex and southern Kent County was used as either agricultural or timber land prior to construction of the road. Some of this land was a portion of the initial 200-foot right-of-way acquired by the Coleman DuPont Road, Inc.

As noted, the highway bypassed all of the towns along its route. Because the highway showed promise of rapidly becoming inland southern Delaware's main north-south highway, land on streets between the downtowns and the highway was rapidly subdivided into small, generally residential lots, and a "string" type development occurred along these roads. Generally the older buildings are located closer to downtown, while the newer buildings are located closer to the highway. By the 1920s, land along the highway began to be subdivided and the first generation of houses erected along highway portions in proximity to existing communities. An early example of such development is seen near Milford where bungalows were erected on the east side of present Route 113. The chronology of both residential and commercial strip development can be roughly determined by the component styles and forms of buildings.

A less frequent, though observable, development pattern in the Route 113 corridor is the minor subdivision. In form, these minor subdivisions typically consist of a road perpendicular to Route 113 and often terminate in a cul-de-sac. Land on either side of this road is divided into a series of lots, and often all of these lots are developed in quick succession. Several such post-World War II developments are found in the study area.

Registration Requirements: As noted, strip development, especially strip residential development, is frequently found along the portions of Route 113 in proximity to towns, part of the evolution of land use in a community. In a typical evolutionary pattern, initial residential development occurs within the town core. As the town grows, development moves outward, often along major arteries. With the construction of the DuPont Highway, subdivision and development occurred between the downtowns and the highways and soon spread to either side of the highway itself.

This land development pattern is not unique to the DuPont Highway corridor in southern Delaware. It is frequently found elsewhere in Delaware, as well as elsewhere in much of the remainder of the United States.

The second, related, trend is minor subdivision. Plots of land adjacent to the roadway have been divided into a small series of lots often accessed by a cul-de-sac off the highway. Of insufficient scale to be termed "suburban development," these minor subdivisions often contain a group of houses of identical or similar design. Again, this development pattern is one frequently seen in rural and small town areas of Delaware and elsewhere.

Both development processes have helped shaped the landscape of the study area, but individual examples of them are neither historically or architecturally significant. Groupings of dwellings that reflect these development trends may be looked at as historic districts. Eligibility under Criterion A for a district depends upon the ability to demonstrate an association with an important historical event or process. The first such neighborhood in a community might be considered significant, but only if strip development or minor subdivision contributed substantially to the character of the community. Under Criterion B, a historic district reflecting strip development or a minor subdivision might be eligible if it was designed by an important planner and was the best surviving example of his or her work. Eligibility under Criterion C rests on the aggregate architectural qualities of the development and would most likely apply if the buildings can be said to represent a definable entity with common or complementary architectural elements, ideally tied together by street fixtures such as sidewalks, lighting standards, or gateposts. Under Criterion D,

a strip development or minor subdivision would be eligible if it possessed information potential about community planning.

Because minor subdivisions and strip developments are a relatively recent addition to the landscape, and because they are nearly ubiquitous throughout the communities of southern Delaware, they must possess a high degree of integrity in order to be considered eligible. Alterations to the streetscape or to a preponderance of the contributing buildings would preclude eligibility.

3.8.2 Farmland Subdivision

A typical land development pattern in predominantly agricultural landscapes involves the subdivision of small parcels of land of a substantially larger farm along public perimeter roads. Some of this subdivision may be attributable to the desire of the farmer to provide land upon which family members can erect houses. This familial subdivision is often discernable by the presence of newer residences close to the road in proximity to a dwelling that appears to be the original farmhouse.

A second pattern of development involves the sale of lots fronting the road to individuals unrelated to the farmer. This type of development could be attributable to a downturn in the agricultural economy in which the land sale was used to provide funds to balance a losing agricultural year.

Clues as to the reason for subdivision may be discernible by researching the chain of titles for the properties, but identification of a definitive reason may require interview of property owners. Typically, the dwellings erected use designs popular during the period of land sale. Older farm subdivisions may include bungalows or foursquares, while more recent subdivisions may include Colonial revival, Cape Cod, minimal traditional, and ranch style dwellings, among others.

Registration Requirements: Farmland subdivision is a major land use trend in many agricultural areas of the eastern United States, a trend driven in part by family considerations and in part by agricultural economics. It is clearly seen on the landscape in a farm featuring its original nineteenth- or twentieth-century farmhouse with adjoining later dwellings on smaller lots. At times, these dwellings can be dated by stylistic evolution.

This development pattern is frequently found in present and former agricultural areas. Individual examples of this pattern generally lack the significance for National Register eligibility under Criterion A. Eligibility under Criterion C may result from evaluation of the agricultural complex and associated farmland subdivision as a district. Such properties will probably not be eligible under Criterion B for association with the productive life of a prominent individual or under Criterion D for information potential.