



# Historic Context for the DuPont Highway U.S. Route 113

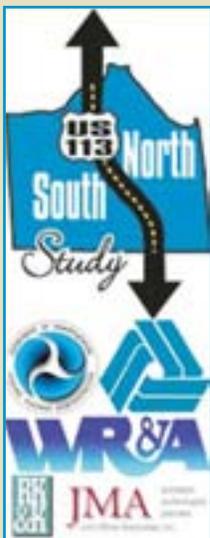
Kent and Sussex County, Delaware

prepared for  
Delaware Department of Transportation  
Dover, Delaware

by  
John Milner Associates, Inc.

in association with  
Whitman, Requardt, Inc.  
Baltimore, Maryland

and  
Rummel, Klepper & Kahl, LLP.  
Baltimore, MD 21217



July 2005

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by

**John Milner Associates, Inc.**

Douglas C. McVarish  
Courtney L. Clark  
Wade P. Catts, RPA

in association with

**Whitman, Requardt, Inc.**  
Baltimore, MD

and

**Rummel, Klepper & Kahl, LLP**  
Baltimore, MD

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## 1.0 INTRODUCTION

This document presents the Historic Context for the DuPont Highway, U.S. Route 113 situated in Kent and Sussex Counties, Delaware. The Federal Highway Administration (FHWA) and Delaware Department of Transportation (The Department) have committed to undertaking in-depth study and analysis associated with the planned upgrading of U.S. Route 113 from Milford south to the Maryland state line. Rummel, Klepper & Kahl (RK&K) has been retained by prime consultant Whitman Requardt & Associates (WRA) to prepare all necessary environmental documents for the project, and John Milner Associates, Inc. (JMA) was retained by RK&K to prepare the cultural resources documentation as part of the environmental documentation process. Tasks associated with this documentation include historic context development, documentation of existing cultural resources within the study areas, identification of potential historic properties, and sensitivity modeling for potential archeological resources.

U.S. Route 113 is a four-lane divided arterial highway that extends from Dover, Delaware to Pocomoke City, Maryland. Within the study area US 113 connects six municipalities (from north to south): Milford, Georgetown, Millsboro, Frankford, Dagsboro, and Selbyville. US 113 is part of the National Highway System designed to carry long-distance traffic safely at relatively high speeds (WRA & RKK 2004). Two distinct project areas are encompassed within the study area; 1) the Milford Study Area, and 2) the Georgetown South Study Area.

The Milford Study Area encompasses approximately 41.94 square miles. The northern limit of the study area is situated in Kent County at the intersection of Milford Neck Road (Road 120) with US 113, and the southern limit is at the intersection of US 113 with Staytonville Road (Road 224). In the Milford area US 113 is a four-lane divided arterial with numerous at-grade intersections. In the incorporated area of Milford US 113 provides access to adjacent residential and commercial uses and serves the larger transportation needs of the larger rural community. The Georgetown South Study Area encompasses approximately 76.99 square miles. The study area begins at Wilson Road (Road 244) north of Georgetown and then extends southward centered on US Route 113 to the Maryland state line. The Study Area includes the communities of Georgetown, Millsboro, Dagsboro, Frankford, and Selbyville. In the study area US 113 is a four-lane divided arterial with numerous at-grade intersections. Current land use patterns within the two study areas are a mix of rural, suburban, and urban. There are residential, commercial, and industrial properties along the major transportation routes. Agricultural lands and uses still predominate, including lumber extraction and poultry production. Some of the land is being converted to suburban development.

The period of the DuPont Highway context extends from 1908 when T. Coleman duPont first proposed the construction of a highway the length of the state to the present. For the U.S. Route 113 North/South Study, The Department consulted with the State Historic Preservation Office (SHPO) and determined that properties erected prior to 1963 along the portion of the highway within the two designated study areas—the Milford Area and the Georgetown South Area—will be evaluated for National Register eligibility.

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## 2.0 METHODS

This historic context considers two interrelated subjects: 1) the DuPont Highway; and 2) post-World War-II residential construction in the study area. Property types associated with the DuPont Highway include commercial roadside architecture; the roadway and associated components; agricultural properties; industrial, recreational, governmental and institutional properties; and residences. As a major transportation spine of southern Delaware, U.S. Route 113 and its environs was the site of substantial residential development in the post-World War II period. This development, due in part, to road improvements, is described in the residential architecture portion of this context.

This context builds upon the U.S. Route 113 Roadside Commercial Architecture Context originally developed over a decade ago by architectural historians with Louis Berger & Associates, Inc. (LBA) while working for the Delaware Department of Transportation on a section of the highway near Ellendale (LBA 1992). The intent of the present context is to extend the period of study to the period after World War II, and to address the context of the roadway itself. The present context also benefited from more recent historic contexts prepared in association with the Department's projects, most notably the historic context for Baltimore Hundred developed by McCormick Taylor Associates, Inc. This context utilized data from the post-War period, and has some applicability to the U.S. Route 113 study.

In researching the construction and evolution of the DuPont Highway, several major archival collections were searched. These included the T. Coleman duPont scrapbooks of the Hagley Library, Wilmington; photographic collections of the Delaware Public Archives; and the as-built drawings of the roadway, provided to John Milner Associates, Inc. (JMA) in digital format by the Department. A major source of secondary information was the clippings files of the local history collection of the Wilmington Public Library. Delaware Department of Highways reports were reviewed at the University of Delaware Library. In addition, previous survey documentation on the Highway was reviewed at the Delaware State Historic Preservation Office.

In researching post-World War II residential architecture, JMA initially sought to determine whether any applicable contexts had already been developed. To do this, State Historic Preservation Offices in New Jersey, Pennsylvania, Virginia, Maryland, South Carolina, and Utah were contacted, as were state department of transportation offices in New Jersey, Pennsylvania, Virginia, and Maryland. Staff members at these agencies suggested the following documents as containing useful information on post-War residences:

- *Suburbanization Historic Context and Survey Methodology. I-495.I-95 Capital Beltway Corridor Transportation Study.* Montgomery and Prince George's County, Maryland (KCI Technologies 1999).
- *Atlanta Housing, 1944 to 1965.* Case Studies in Historic Preservation (Georgia State University 2001).
- Corey Jensen. Post War Typology and Stylistic Designations for Residential Architecture. *The Alliance Review.* January-February 2004.

In addition, inquiries were made to cultural resource professionals through individual contact and a listserv inquiry. An inquiry to another CRM firm yielded a copy of a sourcebook used in a class on mid-twentieth century architecture:

- Massey, James C. and Shirley Maxwell, compilers. *Identification and Evaluation of Mid-20<sup>th</sup> Century Buildings* (National Preservation Institute 2003).

In addition, JMA undertook research in Sussex County newspapers of the 1950s and 1960s to identify builders and sources of residences. This search, described in detail later in this document, indicated the presence of several suppliers of prefabricated residences in the Sussex-Kent counties area. All of these sources contributed in the overall development of this context.

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## 3.0 HISTORIC OVERVIEW

### 3.1 BEFORE THE DUPONT HIGHWAY

During the Colonial period, the major north-south road in Sussex County was one of several King's Highways, established by the courts in the last quarter of the seventeenth century (LCE 2000:3), but probably less developed in actuality on the ground. For most of the eighteenth century, the county remained heavily wooded, transected by drainages and overland passage was difficult. In 1752 a system of King's Highways was established by statute and reiterated a decade later. The latter statute of 1762 declared that "straight roads are a credit and ornament to a country as well as an ease and advantage to travelers"(quoted in Eckman et al. 1938:75).

The north-south King's Highway was established well east of the present-day Route 113 extending along the line of the head of tidal navigation. The road linked the small landing communities that developed at these strategic points. The road ran northwards from Lewes to Cedar Creek and St. Matthews Anglican Church (built in 1707), and from there to Dover and up country to Wilmington. From Lewes roads ran southwest through St. Georges Chapel to Warwick and the ferry crossing on the Indian River, and from Lewes southeast down the Atlantic Coast towards the Inlet. A side road extended down Angola Neck at St. Georges Chapel (built in 1719) (Munroe and Dann 1985). The roads were described as "very commodious for traveling, the land being level and generally sandy, so that the people usually come to Church Winter and Summer some 7 or 8 miles, and others 12 or 14 miles..."(Hancock 1962:140). The inland sections of the County were apparently not well served by major roads, although by the last quarter of the eighteenth century iron processing sites in the interior would have been linked by overland routes.

The construction of major north-south roadways in Sussex County began in the late eighteenth century. As Judith Quinn noted in her study of Delaware roads during the Federal period, during the eighteenth century the state was traversed by a small and rudimentary road network. This network was unevenly distributed. The north, which received the most traffic, contained the most extensive and established roadway and ferry system. The area south of Dover was more sparsely settled and roads were fewer as a result. The major existing road was the stage road from Dagsboro and Dover. Extensive travel in southern Sussex County was deterred by the Cedar Swamp and surrounding swamplands (Quinn 1988:40, 49).

By the late eighteenth century, a post road extended along the Delmarva peninsula from Horn Town in Virginia, through Snow Hill, Maryland, thence to Dagsborough, Milford, Dover, and Wilmington, Delaware to Marcus Hook, Chester, and Philadelphia, Pennsylvania (Munroe 1954:137). The first substantial road development in the study area vicinity occurred in the 1790s. Following the establishment of Georgetown as the county seat of Sussex County, a road was constructed from Milford and Georgetown south into Maryland. In 1796, an act was passed, establishing several state roads in Sussex County, consisting of a forty foot right-of-way with thirty feet cleared:

....the following roads in the said County of Sussex shall be laid out and straightened, to wit: a road to begin at Milford Bridge, and to run thence through Georgetown and Dagsborough, until it intersects the west line that divides the said county of Sussex from the State of Maryland; a road to begin at Lewistown, and to run thence through Georgetown until it intersects the north line that

divides the county aforesaid from Maryland; and a road to begin at Georgetown, and to run thence to the west line that divides the hundred of Little Creek in the said County from Maryland (Scharf 1888:416).

Although all of these roads were by definition state highways, the term “County Road” was apparently applied to the two roads extending east-west, while the term “State Road” was applied to the north-south road (LBA 1992:20). This nomenclature begins to appear in the Sussex County road petitions and returns by the early nineteenth century (for example, see SCRP 1801, 1808). The direct predecessor of the DuPont Highway was the north-south State Road established in 1796. Portions of this north-south road still exist and are generally located east of the DuPont Highway along alignment of present S.R. 213. Sussex County road petitions and returns in the collections of the Delaware Public Archives provide some hints concerning periods of development after the road’s initial establishment. Two 1841 road papers refers to the State Road leading from Dagsborough to Snow Hill in Maryland, while an 1842 return depicts the State Road near Georgetown, and an 1845 road paper refers to the State Road between Georgetown and Milford (SCRP 1841a, 1841b, 1842, 1845). At least a portion of this road may have followed the alignment of the eighteenth century post road mentioned above. In any event, the road is depicted and identified as the State Road on Beers’ *Atlas of Delaware* (1868). The DuPont Highway was envisioned as an improvement on the State Road, eliminating the curves and passages through towns and villages that slowed traffic on the earlier road.

### 3.2 1880-1940S URBANIZATION AND EARLY SUBURBANIZATION

The campaign for good roads predated the emergence of the automobile as a principal means of transportation. Proponents of improved farm transportation and increasing numbers of bicycle enthusiasts initiated the Good Roads Movement in the 1890s. As the automobile began to gain widespread acceptance, the cause was taken up by automobile clubs and motor vehicle dealers and attracted the support of national leaders such as William Jennings Bryan and President Theodore Roosevelt. Policy planks of supporters included state and federal aid for road and highway maintenance and construction (LCE 2000:8). In 1911, Charles Henry Davis, president of the American Road Machine Company, established the National Highways Association (NHA), whose slogan was “good roads everywhere.” The chairman of the association’s Board of Councilors was T. Coleman duPont of Delaware (Weingroff 2004). At the turn-of-the-century, the NHA’s vision was of “a paved United States of America in our day” (quoted in Lewis 1997:99). The NHA, along with the American Automobile Association and the Society of American Military Engineers, were proponents of a network of highways connecting, and thus perpetuating and preserving, the nation (Lewis 1997:99).

The Delaware General Assembly responded to the Good Road Movement by enacting vehicle registration acts in 1903 and 1905. By 1910, nearly 1,000 vehicles were registered in the state. In addition, a 1903 State Aid Road Law appropriated \$30,000 for roads in matching funds divided equally among the three counties (LCE 2000:8). Franklin Clarkin, quoted in the *Sunday Morning Star*, attributed the idea of the DuPont Highway in part to an article about philanthropy published in the Appleton (Wisconsin) *Times*. This article, of which Coleman duPont had a copy, envisioned the possibility of a fortune, such as Andrew Carnegie’s, used to fund a road (Clarkin 1913).

The DuPont Highway, a roadway that extends the length of the state (present U.S. 13 between Wilmington and Dover and U.S. 113 between Dover and the Maryland state line), was the

brainchild of Thomas Coleman duPont (1863-1930), businessman, industrialist, and early highway advocate (Figure 1). T. Coleman duPont, a native of Louisville, Kentucky who attended Urbana University (Ohio) and Massachusetts Institute of Technology, began his career in coal mining, later branching out to mining engineering, steel production, and the operation of street railroads. In 1883, he entered the employ of the Central Coal and Iron Company, rising to the position of vice-president by the time he left in 1893. Relocating to Johnstown, Pennsylvania, he joined the Johnson Company, producers of equipment for street railways. During his six years there, he assumed management positions at street railways and a variety of company subsidiaries. In 1902, he assumed the presidency of the DuPont de Nemours Powder Company (later E.I. DuPont de Nemours & Company) after joining his cousins Alfred I. and Pierre S. duPont in taking over control of the company (Anonymous 1908; Bevan 1929:448-452; IV: Delaware Department of State 2005).

DuPont had become well-acquainted with the substandard roads and the poor economic conditions of the southern part of the state while traveling to and from Wilmington to his estate on the lower Eastern Shore of Maryland (Carter 2001:160-1). In a 1917 letter to the State Highway Department, duPont wrote of the inspiration for his vision:

With the advent of the automobile, I realized the wonderful development of which our little State is susceptible and that the first essential for this development is a well laid out system of highways traversing all the sections of the State. It was obvious from the beginning that the backbone of such a system must be a main North and South highway.

Familiarity with the great boulevards of Europe and those that have in recent years been constructed in this country was the foundation for the conception of a great longitudinal boulevard as the backbone of a highway system for our State, wide enough to carry a road for vehicular travel and, when the development that is bound to follow demands them, two roads, one for travel in each direction and also wide enough to carry the public utilities which must come with the development and increase in population (AR 1920:42).

DuPont also discussed the road in philanthropic terms:

Assuming that I have been more fortunate than some people in the matter of finances, why should not I let others benefit thereby? What better public improvement could I make than a modern highway and boulevard? I first thought of building a normal training school for boys, or endowing a large hospital, or erecting a fountain, but considered the farmer and all citizens would benefit more by a roadway the length of the state (Clarkin 1913).

DuPont's chief engineer cited the usefulness of the road in similar terms, describing it as:

...the gift which...so far as practical results are concerned, will be of much more benefit to the whole people of the State, than would be gifts of Universities, Art Galleries or Libraries, as it will go far toward making possible a development of the latent agricultural wealth of this portion of the Delmarva Peninsula (Williams n.d.:659).

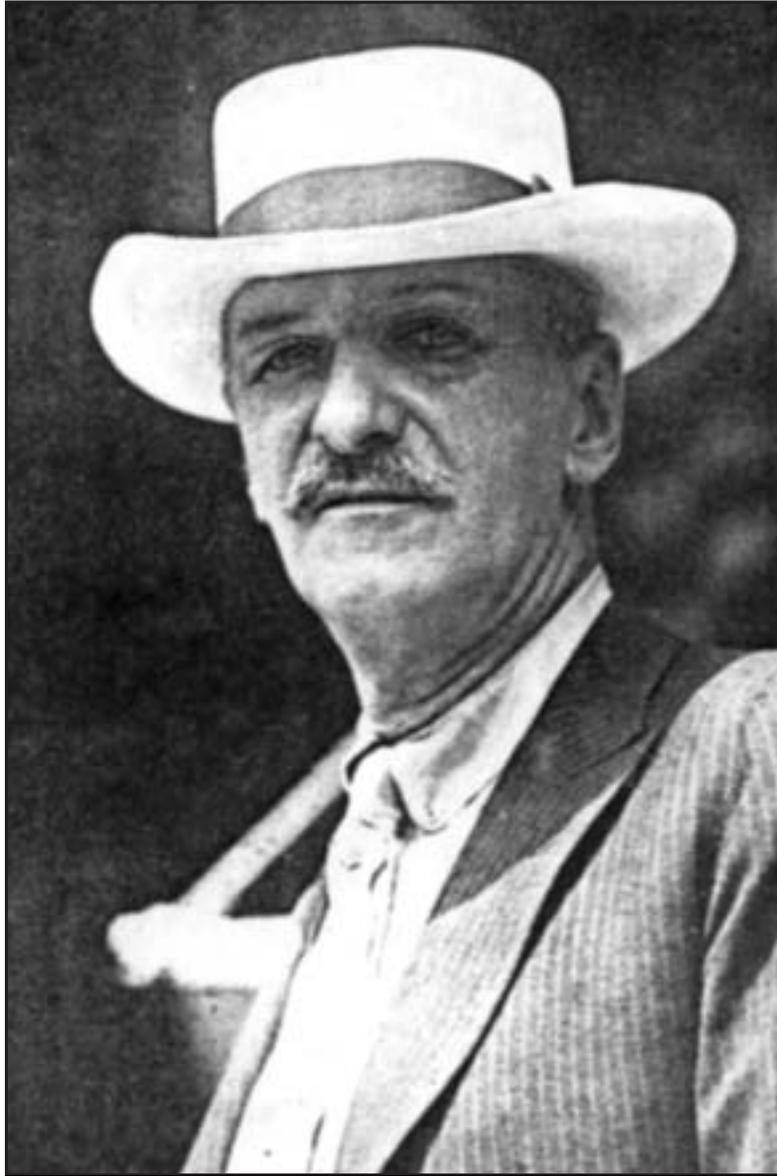


Figure 1. T. Coleman du Pont (AR 1920).

In 1908, duPont offered to construct the state's first superhighway without cost to the public. At the time, only about eight percent of Delaware's highways were rated as improved. In bad weather, Kent and Sussex counties were virtually isolated from the outside world (Rae 1975:172). DuPont proposed the establishment of a corporation to be authorized by the State of Delaware to acquire a 200 foot wide right-of-way. Contained within this right-of-way (Figure 2) would be a center 40 foot strip for high-speed automotive traffic; north and south trolley tracks on either side of the roadway would be incorporated in 15 foot wide strips. To either side of the tracks would be roadways for heavy motor vehicle traffic. These roadways would be constructed within 30-foot strips. Outside these roadways would be unpaved roadways for horses, 15 feet wide. Utility lines would be laid beneath these unpaved strips. Finally, sidewalks would be constructed at the outer edges of the right-of-way. DuPont also envisioned the establishment of several agricultural experiment stations along the right-of-way to be supported by road revenues, and the placement of monuments 1,000 feet apart on the length of the road to serve as "base points" for future state surveys (Rae 1975:171-2; Anonymous 1912a). DuPont wrote of construction techniques to be used on the road in an article published in *Scientific American* in 1912:

The...road will be constructed of water bound macadam or concrete base, on top of which will be laid asphalt and stone mixed, or a surface composed of water bound macadam with a half-inch covering of asphalt and trap rock to make it dust and water proof (duPont 1912).

As soon as the road was completed or any section of at least ten miles in length was finished, the roadway was to be conveyed to the State, free of cost. The State would then assume responsibility for road maintenance (Rae 1975:173). An important guiding principal in duPont's road planning was that "a straight line is the shortest distance between two points" (duPont 1917:2). He envisioned his highway as providing the shortest direct route the length of the state eliminating the "twists and sinuosity" of the existing State Road (Anonymous 1912b).

By September 1912, duPont had backed away from his definite opinions of the arrangement of the 200-foot right-of-way. He indicated that the portion of the right-of-way unneeded for the highway might be occupied by a trolley or pipe line or other utility. Details would emerge as the project and the surrounding communities developed. DuPont also indicated that even were the remainder of the right-of-way not immediately developed, the land purchase would permit eventual roadway widening without the need to acquire additional land (Anonymous 1912e).

The width of the road was proposed to vary based on projected traffic volumes. The narrowest portion of the road would be 20 feet, 13 feet of which would be "metal." Flanking the road surface would be loose stone shoulders. Curves would be limited to five degrees and these used only in New Castle County (duPont 1912).

DuPont also envisioned his boulevard as pioneering a scheme for funding road construction and maintenance. He wrote:

My object in building the road is not only to provide a good highway where it is badly needed, but also to work out in a practical way a problem that will, if successful, revolutionize the building of roads in the United States. The problem is how can a free country road be built to make it pay its original cost, cost of maintenance and a fair return on the money invested? (duPont 1912)

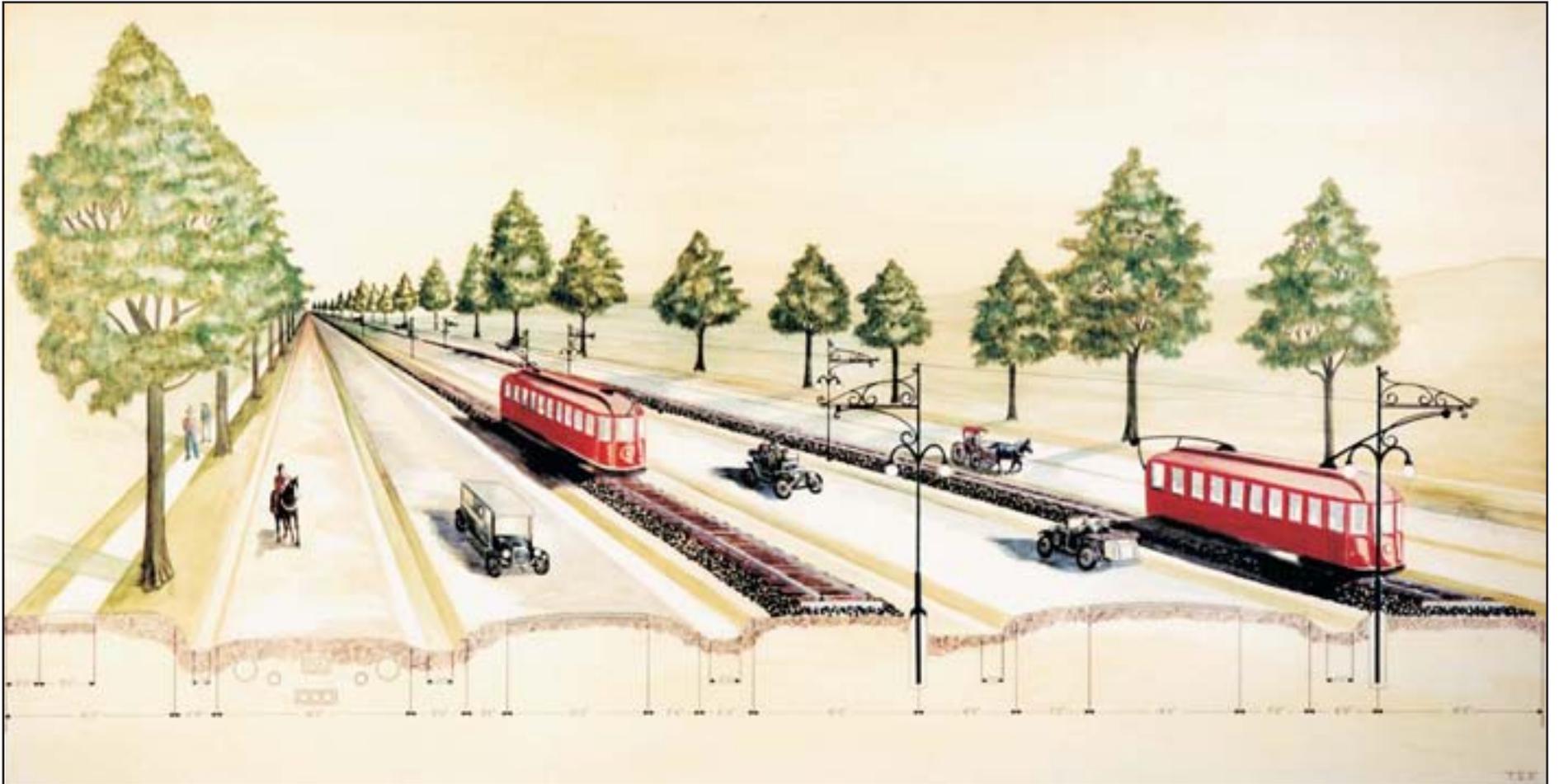


Figure 2. View of planned 200-foot width of DuPont Highway (du Pont 1912).

DuPont's solution was a situation of graduated assessment, arranged so that all who received direct benefit from the road bore their share of expense at the outset. These same parties would be recompensed by rentals of the unused portions of the right-of-way. Revenues from the road would be derived from trolley franchises, from water, telephone, telegraph and sewer right of way rentals, and from the rental of that part of the twenty-six acres per mile not actually used for road construction (Anonymous 1912a).

Under the provisions of an enabling act passed by the Delaware Legislature in 1911, T. Coleman duPont organized the "Coleman DuPont Road, Inc.," to construct a highway the length of the state and began construction in that same year (Delaware State Highway Department 1948:26). The road would be nearly 100 miles in length (Figure 3). As duPont described it: "I will build a monument a hundred miles high and lay it on the ground" (quoted in Lewis 1997:100). Beginning at the state line at Selbyville, he attempted to acquire a 200-foot wide strip of land the length of Sussex County. Property owners donated 80 percent of this land (Ostroski 2000a:6).

At the time of initial planning, much of the highway corridor in Sussex County and the Milford vicinity was lightly developed. The 1911 maps of the portion between Selbyville and Georgetown depicted about five dwellings and four farms along the stretch of road. Between Georgetown and Milford, most of the land was in agricultural use. Ten orchards, either apple or peach, were shown, as were seven general farms, four poultry farms, and one mill (Coleman DuPont Road, Inc. 1911).

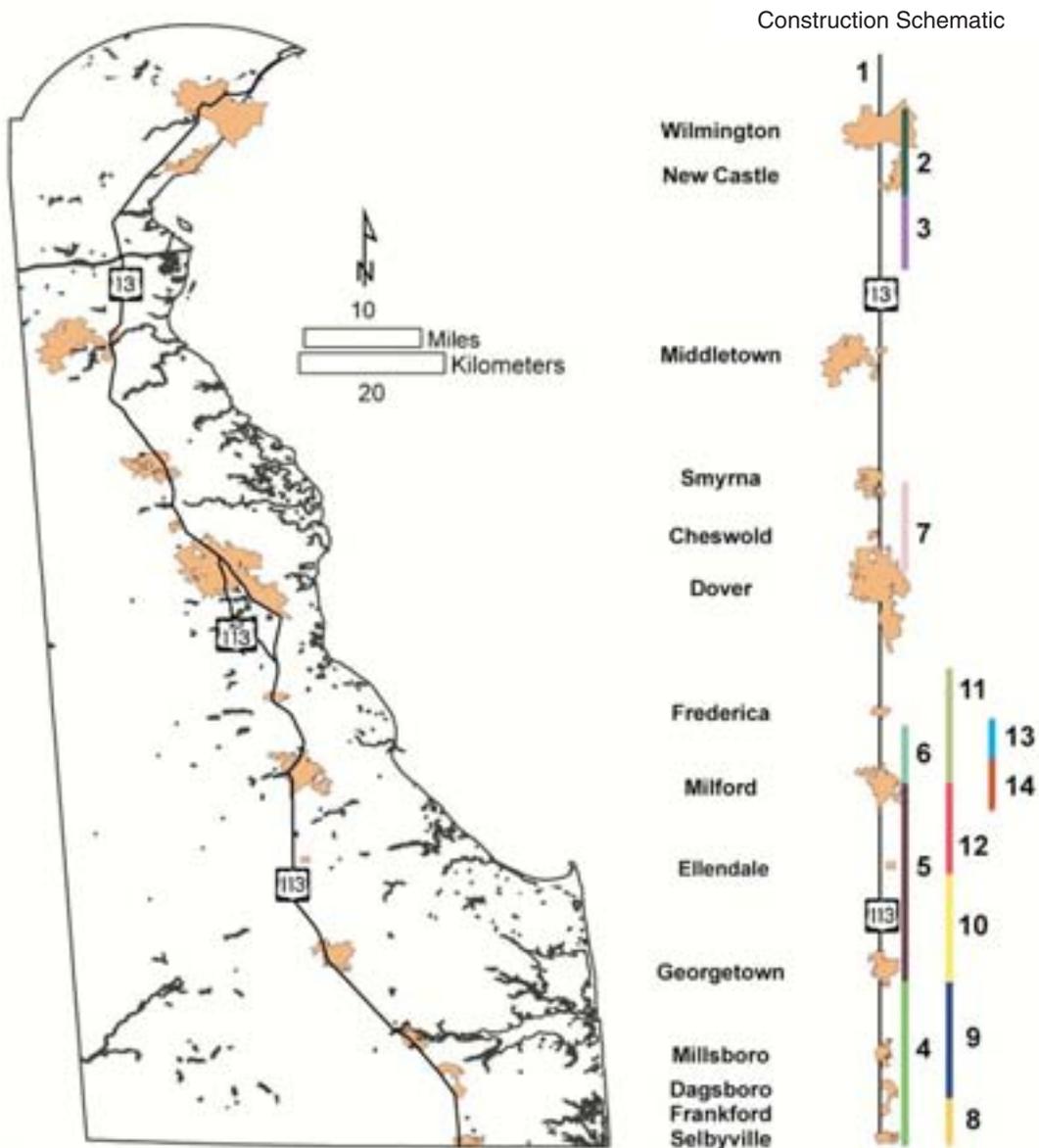
Opposition to the road rose from the Chesapeake and Delaware Canal Company. An amendment to the road company enabling legislation required the canal company to erect and maintain a bridge across the canal at the place where the roadway met the canal.

Downstate Delawareans also viewed the proposal with suspicion (Figure 4). Though railroads took advantage of their monopoly by overcharging Kent and Sussex County farmers and manufacturers, there were few automobiles in the southern part of the state to take advantage of the road. Sussex County historian Richard Carter also attributes part of the suspicion to the state of philanthropy in Delaware. The first great American philanthropic foundations were in their infancy, and in Delaware, the only sizable philanthropic endeavor prior to that time had been the wealthy Bancroft family's role in establishing the Wilmington public library and parks system. Philanthropy had not yet touched the southern portions of the state (Carter 2001:159-160).

Sussex County businessman John G. Townsend, Jr., was among the greatest advocates of the road and convinced duPont to begin his road at the state line in Selbyville. He also helped with right-of-way acquisition through his partnership in the Peninsula Real Estate Company, Inc. As thanks for his efforts, duPont proposed him as a candidate for governor, and he won the office in 1916 (Carter 2000:16, 2001:170; Williams 1985).

In a compromise with road opponents, duPont offered several concessions: the acceptance of a 100-foot right-of-way instead of the 200 feet originally envisioned, the awarding of five times the assessed valuation of a farm five years after the road was finished to anyone whose farmland the road passed through, and the proposal of a public commission to establish rentals for the use of the boulevard by utility companies. He also offered to turn over to the state all profits from the land not used for travel after development and maintenance expenses had been paid. DuPont did not receive a reply (Rae 1975:176).

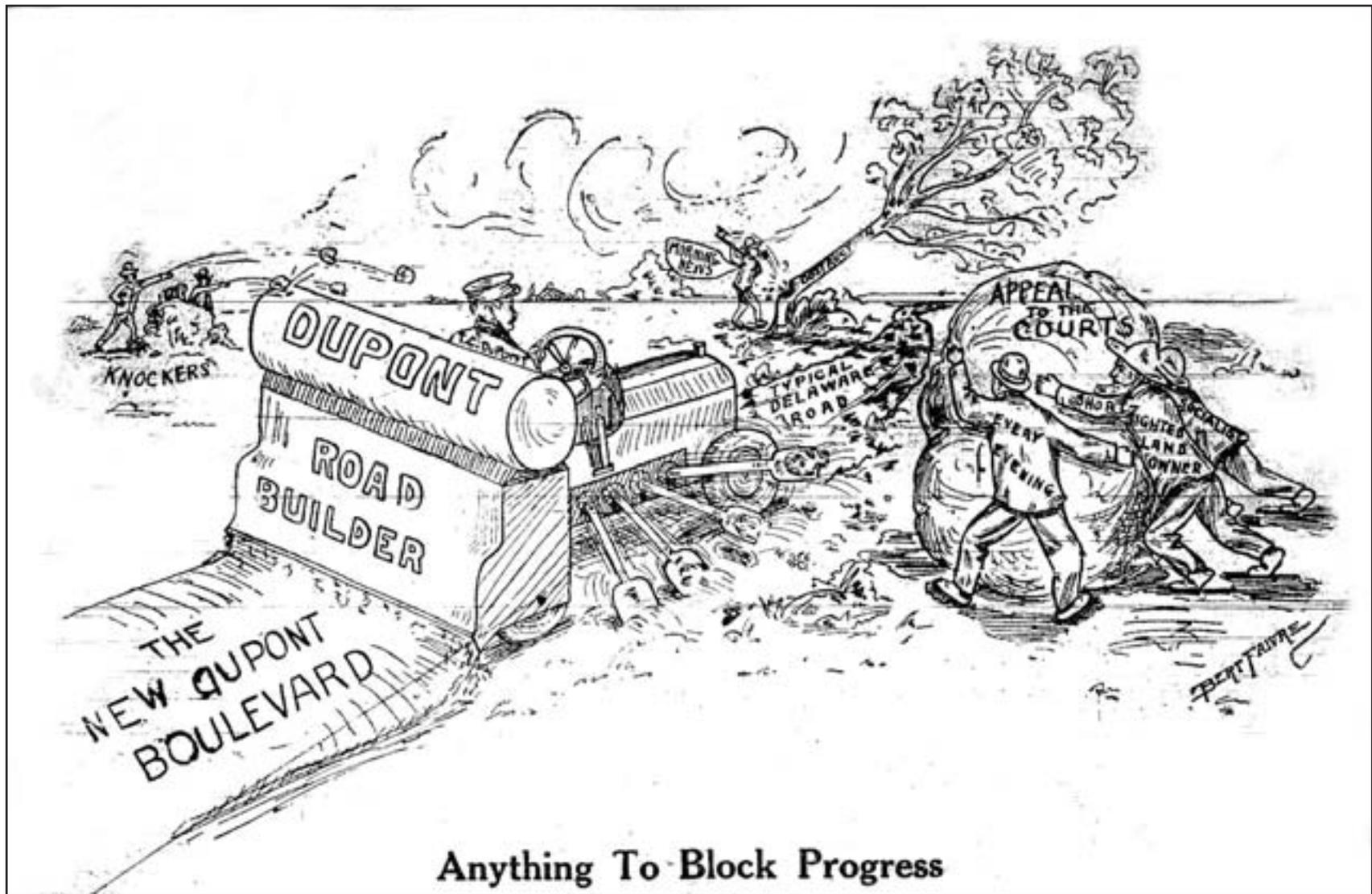
# DuPont Highway- Construction History



## Chronology

1911	1	Initial construction of US 113. Begun in 1911 and completed in 1923	1947	8	Widening: Dagsboro to Selbyville Contract #844
1927	2	Widening: Wilmington to State Rd. Contract # Unknown	1947	9	Widening: Dagsboro to Georgetown Contract #845
1929	3	Dualization: State Rd. to St. Georges Contract #114	1947	10	Widening: Georgetown to Ellendale Contract #857
1930	4	Widening: Georgetown to Selbyville Contract #145	1947	11	Widening: Milford to Little Heaven Contract #919
1931	5	Widening: Georgetown to Milford Contract #173	1949	12	Major Improvements: Ellendale to Milford Contract #935
1933	6	Widening: Milford to Frederica Contract #328	1958	13	Resurfacing: Milford to Frederica Contract #920
1934	7	Dualization: Dover to Smyrna Contract # Unknown	1962	14	Milford Bypass Contract #1740

Figure 3. Chronology of the construction of U.S. 113 (DuPont Highway).



**Anything To Block Progress**

Figure 4. Editorial cartoon concerning the DuPont Boulevard. From the *Sunday Star* (Wilmington, DE). March 24, 1912.

Progress was delayed by legal actions challenging both the constitutionality of the enabling legislation and offers of land for the right-of-way. An April 1912 *Evening Journal* article indicated that construction had ceased pending a court opinion. DuPont, expressing his frustration, noted: "...today I really don't know whether the people of Delaware want the road or not, but [I] know if they don't want it, I certainly don't want to spend the money necessary to give it to them" (Anonymous 1912c).

In July 1912, the State Supreme Court ruled that the law establishing the boulevard company was constitutional and that a 200-foot strip of land could be taken for the right-of-way provided the land was devoted to a public highway and operation of public utilities and that the land be used within a "reasonable time" (Anonymous 1912d). Opponents immediately appealed the ruling to the United States Supreme Court.

The pros and cons of the road were a source of lively debate among Delaware editorial writers and informed citizens. The Wilmington newspapers split in their opinion. The *Sunday Morning Star* was a major booster, while the *Evening Journal* was a prominent opponent. An undated, unsourced article in the T. Coleman duPont scrapbooks discussed some of the objections to the road raised by Sussex County property owners. One farmer objected to the construction of a road cutting across his property indicating that it would not improve it. He proposed that the boulevard company acquire the entirety of his farm. Others objected to acquisition of a 200-foot right-of-way when only a narrow highway was initially planned. The article noted that one of the initial sections of the road, near Georgetown, was fourteen feet wide, built with a concrete foundation, and paved with a composition "similar to the material used on city streets." On either side of the roadway was ordinary earth with ditches on the sides. The surface between the ditches was less than 30 feet wide in many places (Anonymous n.d.).

DuPont's frustration over the litigation became public in 1913. In an unsourced article published in January 1913, he was quoted as saying:

The people of Delaware have made the Boulevard cost me a half a million dollars more than it ought, and I shall not contribute a dollar to any public purpose, no matter how worthy, until this half million has been made up by withholding donations to that amount (Anonymous 1913a).

Later the same month, duPont asked the Legislature to either repeal the law authorizing the construction of the boulevard and return the \$50,000 deposited with the state by the Coleman DuPont Road, Inc., or signal their support of the road by failing to repeal the legislation (Anonymous 1913b). The legislature did not repeal the legislation and construction planning proceeded.

Initially Coleman duPont served as his own chief engineer but soon turned that responsibility over to Frank M. Williams, former chief engineer of the New York State Highway Department. Two European highway engineers were brought in as consultants: Ernest Storms from Brussels, Belgium, and Thomas Aitken from Cupar, Fife, Scotland. Both visited the project and made suggestions as to methods of construction and materials. They also studied subsoil conditions and monitored sections of experimental road. To undertake construction of the road, duPont hired a sizable staff. The engineering department consisted of a chief engineer, an assistant engineer, and a division engineer for each county, a chief draftsman, a testing engineer, fourteen assistant engineers and a full complement of instrument men, rodmen, chainmen, axemen, and draftsmen. DuPont's engineering staff included Charles M. Upham, who later became chief engineer of the

Delaware Highway Department, and C. Douglas Buck, future duPont son-in-law and future Delaware governor (1929-1937) and senator (Catts and Jessup 1999:6; Rae 1975:175-176; Williams n.d.:659-660).

The large field force was necessary because of the uncertainties of the routing in Sussex County. The road was planned to be where the greatest numbers of residents wanted it. It had, therefore, been necessary to run numerous preliminary lines of potential alignments. The remainder of the organization consisted of a construction department, a financial department, and a right-of-way department (Williams n.d.:660).

By 1917, the Coleman DuPont Road, Inc., had completed the DuPont Boulevard from the southern Delaware border to a point near the Appenzellar farm, five miles south of Milford (Figure 5). DuPont made an offer to the state to dissolve the company and to finance the construction of the highway north to Wilmington at a cost not to exceed \$44,000 per mile. The proposition made by duPont and accepted by the State required:

1. Completion of the road between the Appenzellar Farm and Milford along the lines as surveyed and laid down by the DuPont Boulevard Corporation.
2. Completion of the road North of Milford along lines laid down and selected by the State Highway Department.
3. The entire cost of construction to be paid for personally by duPont including the cost of all new rights of way that it may be necessary to acquire, but excluding the cost of a new bridge, across the Delaware and Chesapeake Canal. This stipulation was included because under its charter, the Canal Company was required to build such a bridge.

Agreement was officially reached with the State Highway Department on July 20, 1918. State Highway Department engineers noted that the existing portion of the highway between Selbyville and Milford served as a trunk line for nearby communities to its east and recommended that the same type of alignment be continued further north:

In many instances it is better to have the trunk roads laid out near the towns rather than through the towns. This would be more convenient for the through traffic and less dangerous for the residents of the towns. This seems to be the latest approved method of dealing with the increasing trunk line traffic (AR 1920: 19-20, 23).

While duPont's original scheme called for a 200-foot right-of-way, highway engineers advocated a 60-foot right-of-way as sufficient for the needs of a single highway. When ultimately completed, this would be made up of a 32-foot-wide roadway with shoulders and ditches extending to the 60-foot limits (AR 1920:24). In 1917, a portion of the highway near Selbyville became the first American highway to employ a white center line (Frank 1965:19).

The portion of the highway north of Milford was reduced to a conventional two-lane concrete highway, a roadway still superior to most of the road mileage of the United States. The planning, location and construction of this segment was done entirely by the Delaware State Highway Department (Rae 1975:178).

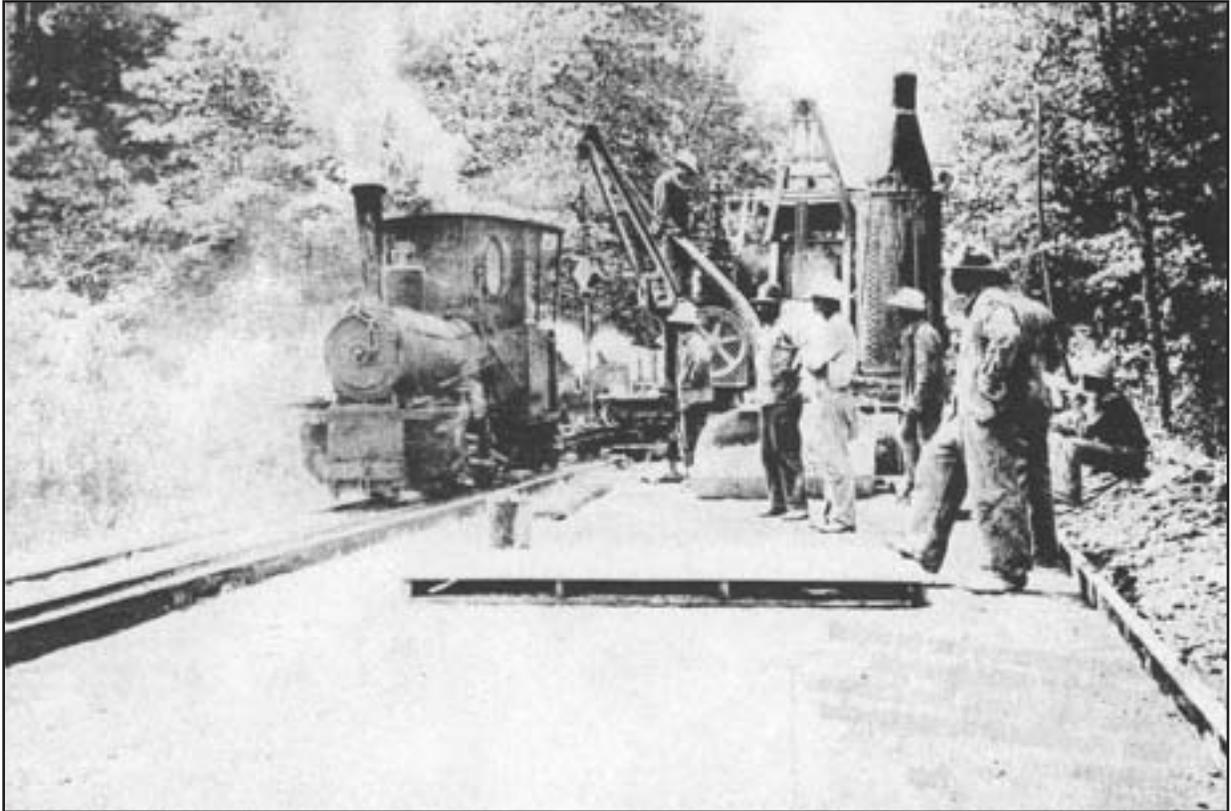


Figure 5. DuPont Highway construction near Ellendale, 1918. Note narrow gauge railroad engine.  
Delaware Public Archives. RG 1540. Box 11, Folder 4. Photograph 1081pn.

The last foot of the original concrete highway was poured in 1923 (Figures 6, 7, 8 and 9). The total cost of the 98.1306 mile long road was \$4,856,098.20. One of the last portions to be completed was 1,300 feet at Drawyers Creek north of Odessa whose completion was delayed due to unstable foundations. The highway was completed the following year and was formally celebrated in a ceremony in Dover on July 2<sup>nd</sup> attended by duPont, Governor William D. Denney, Judge Gray of Wilmington and Chief Justice James Pennswill (Figures 10, 11, and 12) (Anonymous 1924). DuPont was presented with a silver and gold plaque (now on exhibit at the Delaware Public Archives) honoring his contributions to the state. In 1925, the DuPont Highway was officially added to the United States highway system as U.S. 13 and U.S. 113 (AR 1925:17; AR 1948:26).

In the view of a writer for the *New York Times*, Coleman duPont and his cousin Pierre Samuel duPont were largely responsible for moving a state, “still associated with whipping posts, indentured children, bad roads, poor schools and other evidence of backwardness” to its place among the “best company.” The article noted that until the road was completed southern and central Delaware were served only by dirt highways and branch lines of the railroad and that population and property values in Kent and Sussex counties had remained stationary or declined (Duffus 1924: 8:4).

By the end of 1925, a total of over 40,000 vehicles were registered in the state of Delaware. Of these, almost 44 percent were registered in Kent or Sussex counties (AR 1925:26). In response to the unexpected rate of traffic growth on the northern portion of the highway (Figure 13) the chief engineer recommended that all sections of the boulevard between Wilmington and Dover built with a pavement width of less than 18 feet be widened to 20 feet. A portion of the traffic growth was attributed to summer and holiday traffic en route to the Delaware shore and additional traffic generated by the New Castle-New Jersey ferry and new through roads to Pennsylvania and Maryland (AR 1925:22-23).

The first widening, between Wilmington and State Road, where present U.S. Routes 13 and 40 separate, occurred as early as 1927 (Figure 14).<sup>1</sup> This section of the road was widened from 18 to 38 feet. In widening the highway, the old slab was used wherever possible, and it was widened to conform to contemporary standards of two-lane width. Where super elevation on curves was deemed necessary and where the old alignment was considered too dangerous, new concrete was built (Anonymous 1941:3; Rae 1975:179).

By the late 1920s, capacity on the northern portion of the DuPont Highway was increased with the completion of a divided highway on a 7.67 mile stretch between State Road and St. Georges (Figure 3). A 20-foot-wide concrete pavement was built parallel to and fifty feet east of the original highway (Figure 14). The land between the two roadways was planned to be a landscaped median. The dualization (Contract #114), undertaken by Old Line Construction Company of Chestertown, Maryland, cost approximately \$360,000 (AR 1929:19-20).

In a 1929 report Warren W. Mack, chief engineer of the Highway Department, commented on the southernmost part of the highway, the portion from Milford to Selbyville. He noted that the road, though paved, was only 14 feet in width, making it the only through highway in the state less than 16 feet wide. The narrowness of the road posed a problem particularly due to heavy truck traffic. Mack concluded:

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<sup>1</sup> Delaware State Highway Department annual reports were consulted to verify the sequence of construction. Table 1 lists construction contracts associated with the portion of the highway studied.

Table 1. Construction contracts for the Du Pont Highway. Information taken from Delaware Department of Highways Annual Reports (1912-1975). Blank items are not indicated in the construction contract data tables in the annual reports.

<b>Contract #</b>	<b>Location</b>	<b>Mileage of Improvement</b>	<b>Date</b>	<b>Construction Cost</b>	<b>Contractor</b>	<b>Description</b>
8-48C (selected)	Length of DuPont Highway	98.1306	1917-1920	\$3,846,519.13	Coleman DuPont Road, Inc.	Original portions of DuPont Highway
49	Ellendale	1.010	10/15/24 (opening)	\$32,523.20	Highway Engineering & Const. (Selbyville)	DuPont Road, 16 foot pl. st. con.
CS 40	Lincoln City	1.09	4/22/25 (opening)	\$34,693.75	Old Line Const. Co. (Chestertown, MD)	DuPont Road, Lincoln City. 16 foot pl. st. con.
CS 44	Stockley	1.10	8/19/25 (opening)	\$29,809.25	Old Line Const. Co.	DuPont Road, Stockley, 14 pl. slag con.
114	St. Georges-State Road	7.66	1929	\$359,854.50	Old Line Const. Co.	Dual 20 foot concrete
117	Milford-Ellendale	6.01	1929	\$136,798.50	Highway Engineering & Const. (Selbyville)	Widening and repaving, 15 foot concrete
145	Selbyville-Georgetown	18.9	1930	\$241,131.40	Highway Engineering & Const.	16.4 miles: 4 ft. concrete shoulders; 2.4 miles, 4 ft. shoulders and 14' and 16' Amiesite
173	Georgetown-Milford	16.34	3/9/31 (awarded)	\$133,875 (bid)	Old Line Const. Co.	4 foot concrete widening
328	Milford-Frederica	7.387	9/15/33 (awarded)	\$47,135.75	W.W. Truitt (Lincoln City)	4 foot concrete widening
329	Frederica-Dover	10.09	9/15/33 (awarded)	\$71,775.50 (bid)	George & Lynch (Dover)	4 foot concrete widening
285	Smyrna dualization	1.7	4/5/34 (awarded)	\$161,269.50 (bid)	W.W. Truitt (Lincoln City)	46 to 65 feet concrete
732	Frederica-Little Heaven	2.472	4/10/41 (awarded)	\$45,028 (bid)	Amiesite Construction Co. (Mt. Vernon, NY)	23 foot bit. concrete (widening and reconstruct.)
857	Georgetown-Ellendale (federal aid)	9.137	4-14-47 (awarded)	\$368,069.40 (bid)	Standard Bitulithic Co. (NY)	Concrete resurfacing

Table 1. (Continued)

919	Milford-Little Heaven (federal aid)	9.772	4/29/47 (awarded)	\$353,209 (bid)	George & Lynch (Wilmington)	Bit. conc. resurfacing
845	Dagsboro-Georgetown	10.245	1/19/48 (awarded)	\$468,046.60 (bid)	George & Lynch	C.C. widening and hot asphalt resurface
935	Ellendale-Milford	7.206	5/26/48 (awarded)	\$355,336 (bid)	George & Lynch	C.C. widening and hot mix resurface
920 (Fed. F-116 (6))	Milford-Frederica	5.8 (approx.)	1960-1961	\$777,778 (award) Federal: \$425K		
1740	Milford Bypass to Walnut Street extension	3.867	Begun 1961-2	\$770,503 (award)		
66-03-008	US 113 intersection improvements-Sussex County	various				
	US 113 from Maryland line to Rd. 432	14.7 (approx.)	Completed 1967-1968			
65-07-012	US 113 from Georgetown to Rd. 432	4.1 (approx.)	Completed 1969-1970	\$1,474,794.80	Henry C. Eastburn	
67-08-008	Milford Bypass	3.9 (approx.)	Completed 1973-1974	\$5,738,706.30		
71-05-004	Frederica-Little Heaven	2.5 (approx.)	Completed FY 1975	\$1,669,381.51		



Figure 6. DuPont Highway near Georgetown. 1920. Note narrow width of original road. Delaware Public Archives. RG 1540. Box 11, Folder 7. Photograph 685p.



Figure 7. DuPont Highway at Shawnee Road intersection. September 1923. Buildings of North American chicken laying contest at left. Note Texaco station at right. Delaware Public Archives RG 1540. Box 12, Folder 4. Photograph 741p.



Figure 8. DuPont Highway between Georgetown and Milford. Looking North. September 24, 1923. Delaware Public Archives. RG 1380.006. Agricultural glass negatives. Negative #92.



Figure 9. DuPont Highway, Sussex County. Updated photograph showing concrete used to construct shoulders on highway. Delaware Public Archives RG 1540. Box 11, Folder 7. Photograph 894p.



Figure 10. Coleman duPont and family, State House steps. July 2, 1924. Delaware Public Archives. RG 1380.006. Agricultural glass negatives. Negative #182.



Figure 11. Old powder wagon in parade, Coleman duPont Road celebration, Dover. July 2, 1924. Delaware Public Archives. RG 1380.006. Agricultural glass negatives. Negative #189.



Figure 12. Shovel used in dedication of Coleman duPont Road. July 2, 1924. Delaware Public Archives. RG 1380.006. Agricultural glass negatives. Negative #193.

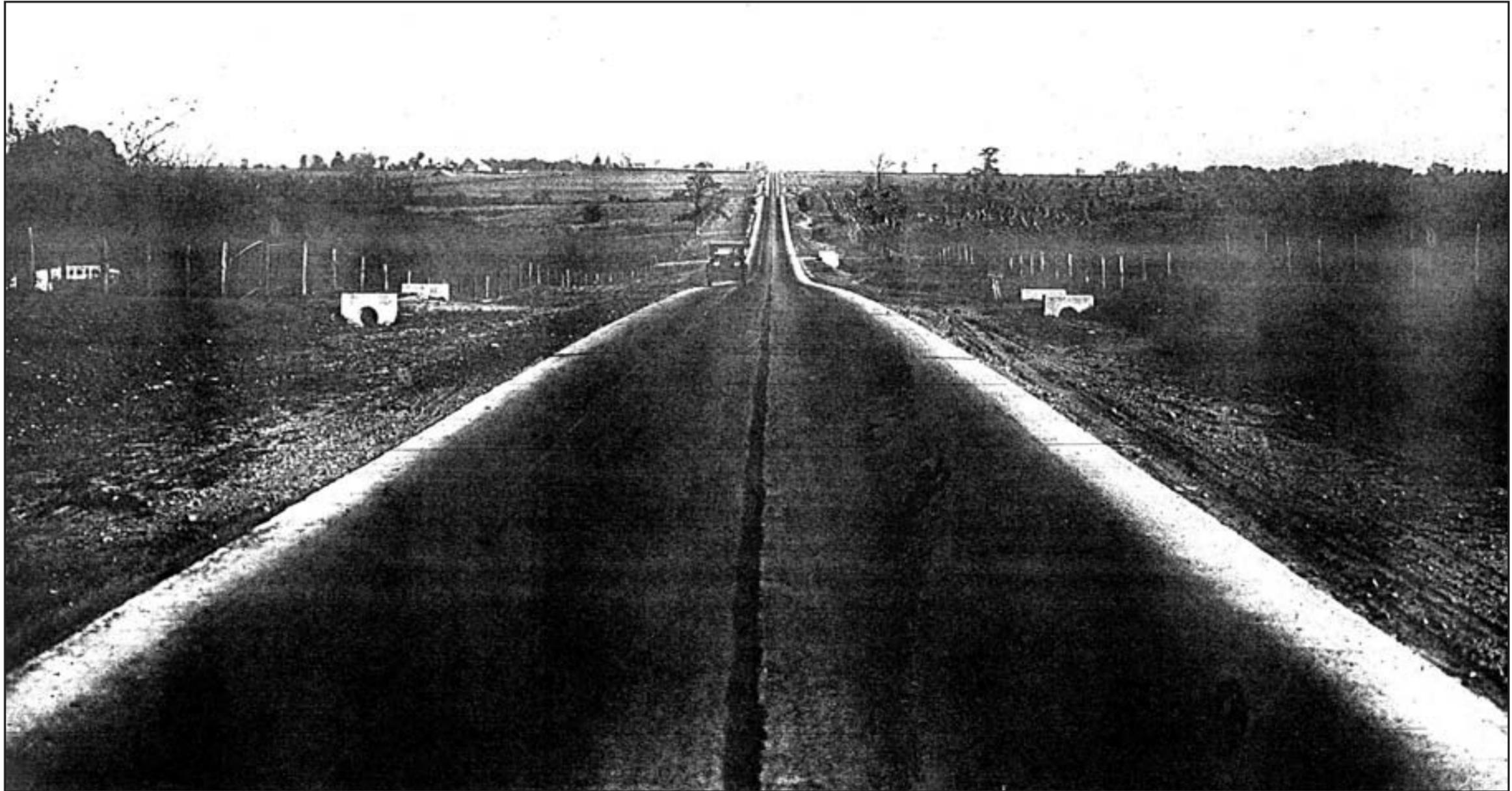


Figure 13. DuPont Highway near Wilmington, New Castle County.  
November 9, 1925. Delaware Public Archives. Agricultural  
glass negatives. RG 1380.006. Image 381.



Figure 14. Dual highway near Wilmington, New Castle County.  
November 3, 1931. Delaware Public Archives.  
Agricultural glass negatives. RG 1380.006. Image 1315.

This road, some of which was constructed in 1912, is of lighter section than is now standard. While there is no evidence of failure, which is striking evidence of the quality of the original construction, it is certain that it is stressed nearly to the limit with the constantly increasing loads to which it is subjected. I would, therefore, recommend that this road be widened its entire length as soon as possible (AR 1929:29).

Mack recommended that the widening be started in 1930 on the 18.891 mile section south of Georgetown (AR 1929:29). The widening took place in 1930 with construction of 4-foot concrete strips on either side the road (Figure 9). At the same time, the existing 14-foot-wide pavement was reshaped to a new cross-section and was surfaced with a 2-inch course of amiesite. Six-foot-wide dirt shoulders were constructed to either side of the paved surface. The project (Contract #145), completed at a cost of \$241,131.40, was undertaken by the Highway Engineering and Construction Company of Selbyville (AR 1930:18).

In 1931, plans were approved for the widening of the 16.340 mile stretch of the highway between Georgetown and Milford (Contract #173). The contract, totaling \$133,875, was awarded to the Old Line Construction Company of Chestertown, Maryland. This widening took the same form as that approved under Contract #145 (Figure 3). Widening of the portion of the highway between Dover and Milford was completed in 1933 (AR 1933:36).

The success of the DuPont Highway in uniting southern and northern Delaware led to the growth of the state highway network under the auspices of the State Highway Department. By the late 1930s, the state could boast a greater ratio of concrete road mileage to population than any other state. Improved roads totaled 1,068 miles at the end of 1933, over 27% of the state's mileage of rural highways. Of these highways, 780 miles were paved in concrete (Reed 1939:103-104).

By 1934, the portion of the boulevard between Dover and Smyrna was dualized with a wide median planted in grass and frequent crossovers. This 1.7-mile dualization project was undertaken by W.W. Truitt of Lincoln City at a cost of \$161,269.50 (AR 1934) (Figure 15). This segment completed the divided highway between Wilmington and Dover, a total of 48 miles (Figure 3). The final segment of the dualization set a construction speed record with an average of 1,600 linear feet laid per 10 hour day. This section was built by Vincent Schiavi of Buffalo, New York (AR 1948:30). The new road was laid in three parallel concrete sections of 10, 11 and 10 feet, respectively (Anonymous 1933).

### **3.3 1940-1960S SUBURBANIZATION AND EARLY EXURBANIZATION**

In 1947, plans were approved for resurfacing and widening an 8.579 mile segment of the highway between the Maryland state line and Dagsboro (Figure 3). This project included a four-foot widening of the concrete roadway on its west side (Contract #844). In the same year, plans were approved for improvements to the 10.245 mile stretch between Dagsboro and Georgetown. These plans included resurfacing of the existing roadway and construction of a four-foot concrete widening on its west side (Contract #845). The \$468,046.60 contract was awarded to George & Lynch of Wilmington. Resurfacing and widening of the 9.135 mile stretch of highway between Georgetown and Ellendale was included in Contract #857 approved in 1946. This \$368,069.40

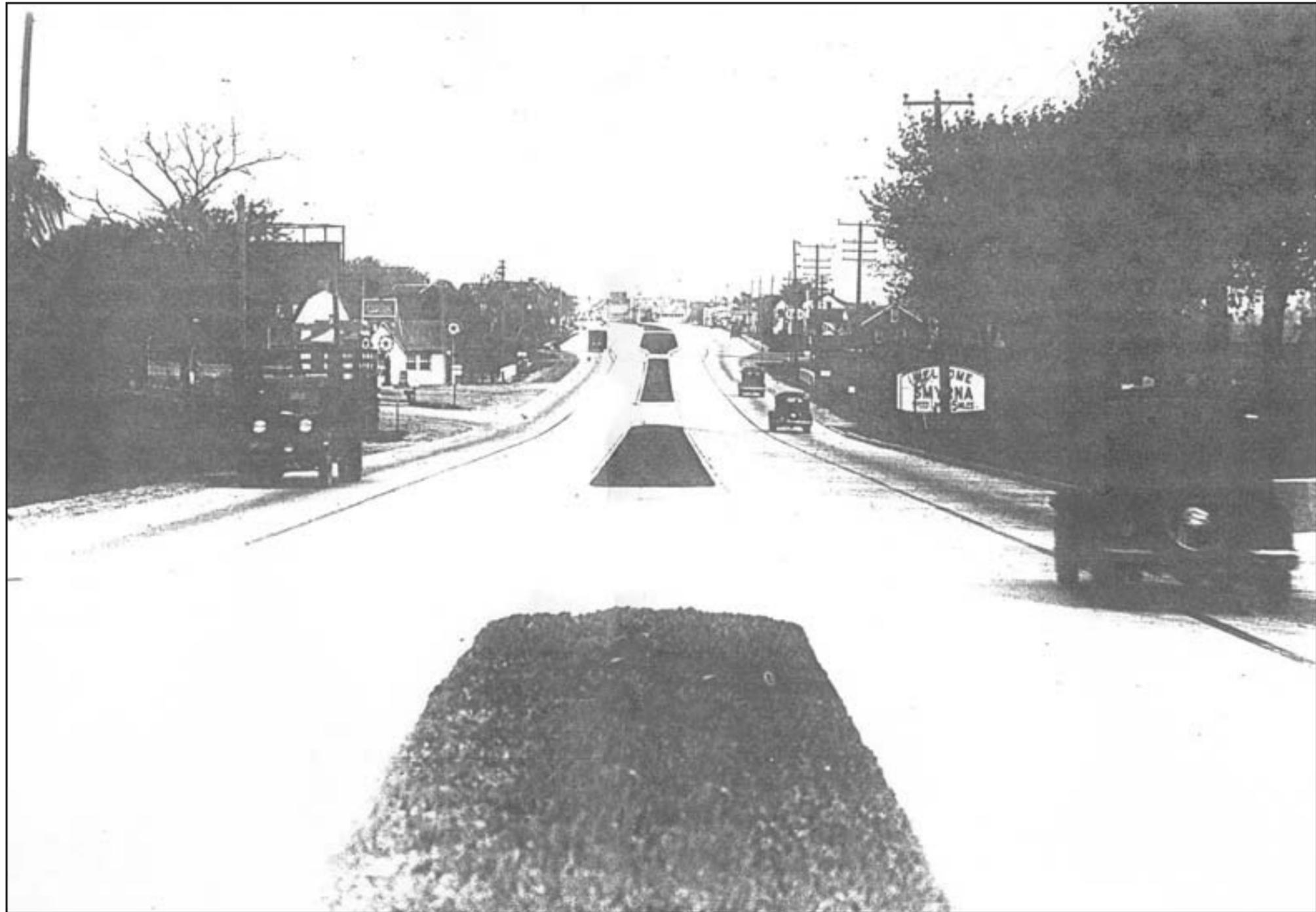


Figure 15. Dual highway through Smyrna, Kent County.  
April 21, 1936. Delaware Public Archives.  
Agricultural glass negatives. RG 1380.006.  
Image 1829.

contract was awarded to Standard Bitulithic Company of New York. Resurfacing and widening of the 9.772 mile section between Milford and Little Heaven was included in Contract #919 approved in 1947. This \$353,209 contract was awarded to George & Lynch of Wilmington.

In 1949, plans (Contract #935) were developed for the improvement of the 7.206 mile stretch of highway between Ellendale and Milford (Figure 3). Included in these improvements was the widening of the 18-foot-wide pavement with four-foot-wide concrete slabs on either side of the existing pavement. On the outside of the new pavement, land was to be filled to provide 10-foot-wide shoulders on either side of the road. The entire road was to be paved in four inch thick, compacted, hot mix, asphaltic concrete. In addition, culverts were to be constructed at selected points to facilitate drainage. This \$355,336 contract was awarded to George & Lynch of Wilmington (AR 1949).

The Sussex County portion of the DuPont Highway helped spur the region's economic development. The broiler chicken industry required a good highway to move the chickens to market, and the DuPont Highway was that road (Ostroski 2000b:6). Native son and Delaware governor John G. Townsend, Jr., spoke of the highway's impact on Sussex County:

...no one thing since the building of the railroad has done so much for the development of this section of our commonwealth as the construction of this road. It is no idle boast that Sussex County has the greatest road in the U.S. (as cited in Ostroski 2000b:6).

In a 1941 article, the Coleman DuPont Highway was called "Delaware's No. 1 Farm-to-Market Road." In a single year, over a million crates of poultry, approximately 20 million birds, were transported on the road. Other produce carried on the road included more than 213,000 bushels of peaches, more than 1,120,000 crates of cantaloupes, 950,000 crates of strawberries, and 2 million bushels of potatoes. The maximum traffic on the highway was in the vicinity of New Castle County's State Road where daily volumes averaging 37,000 vehicles were recorded (Anonymous 1941:4).

The highway also opened formerly remote portions of the state to visitors. An anonymous *Sunday Star* writer mentioned Sussex County's Ellendale Swamp "...formerly one of the worse spots in the State for the traveler, where during the winter months, horses and men and automobiles became so deeply mired that they were continually having to be rescued." In a bit of hyperbole, the writer noted that the swamp had become one of the "beauty spots of the East" compared by tourists to portions of Yellowstone National Park (Anonymous 1934:7).

Delaware is centrally located in what was known as the "Middle Atlantic Trucking Region," a region extending from the coast of Maine to South Carolina. Averaging 50 miles in width, this truck farming corridor owed its existence to three primary factors: the existence of a string of large cities and towns along the East Coast that were a ready market for crops, soil ideally suited for the cultivation of fruits and vegetables, and a "mild, semi-marine climate" (Doerrfeld, et al. 1993:11). Delaware truck farming was greatly facilitated by the DuPont Highway.

The importance of the DuPont Highway as a transportation route increased as Delaware's railroad network decreased in importance. During World War II, the railroads had been the only form of transportation capable of handling the tremendous demand for passenger and freight traffic. At the end of the war, with the end of rationing passenger traffic dropped precipitously as people

returned to their automobiles. Local passenger train service ceased entirely in the 1960s (Hayman 1979:139-142).

Freight service on the Pennsylvania Railroad's Delmarva lines was reputed to be profitable until the 1930s. Perishable agricultural commodities that had once filled thousands of freight cars represented cargo most vulnerable to competition from trucks. With improvements in the highway system, much of the agricultural shipment was switched to motor carriers, vehicles that could carry products from door to door (Hayman 1979:137, 142).

In 1960, Frank V. duPont gave the state the stock of the Coleman DuPont Road, Inc. With this gift, Delaware acquired title to approximately 542 acres of land representing right-of-way along Route 113 from Milford south to the Delaware-Maryland border. The 35-mile ribbon of land varied in width from 160 feet at the northern end to 70 feet in places further south. Included in the transfer were rentals and franchise agreements on portions of the land. The land transferred was west of the Route 113 roadway from south of the Milford town limits to about 11.5 miles south of Ellendale Forest (Lieberman 1960:3).

In 1962, construction contract #1740 was approved for a 3.867 mile section of the highway including the Milford bypass (Figure 3). This project, designed by the Baltimore engineering firm of Rummel, Klepper & Kahl, included construction of a new roadway west of the former road. The bypass began north of Milford. The road varied in width from 34 feet to 48 feet. The latter configuration also included a four-foot concrete median. This initial contract was awarded for a bid of \$777,778 with an additional \$425,000 in funds appropriated. The Milford Bypass project was completed during the 1973-1974 fiscal year at a total cost of \$5,738,760.30 (AR 1974).

Other sections of Route 113 were also improved during the 1960s. The southern end, from the Maryland state line to Road 432 was upgraded in a project completed during the 1967-1968 fiscal year. Improvements to the section between Georgetown and Road 432 were completed during the 1969-1970 fiscal year at a cost of \$1,474,794.80. The contractor for the latter project was Henry C. Eastburn (AR 1968, 1970).

In recent years, the highway's role has changed somewhat. With the construction of Delaware Route 1, through traffic from north of Milford to Interstate 95 has largely shifted to that limited access highway. The DuPont Highway in that area is largely used for local traffic and access to roadside businesses. But the remainder of the historic highway, from Milford to the Maryland state line, continues to function as Delaware's major inland north-south route.

## 4.0 ASSOCIATED PROPERTY TYPES

The Associated Property Types for the DuPont Highway include commercial properties; institutional, recreational and governmental buildings and sites; agricultural properties; the roadway and associated buildings and structures; and residential properties.

As mentioned earlier, the historic architectural investigation evaluated all properties located within the two study areas for the U.S. Route 113 North/South study that were visually dated or documented to date to before 1963. The National Register Criteria considerations permit nominations of properties less than 50 years of age if they are of exceptional importance to a community, a state, a region of the nation (Sherfy and Luce 1998). Because of the number of properties of the post-World War II period in the study area and their general lack of architectural distinction and historic importance, it is doubtful whether any properties from the 1956-1962 time period will be found to possess the exceptional importance necessary for National Register eligibility under Criterion Consideration G.

### 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* (LBA 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). Relevant property types included in this document are referenced in this study. Because this context has been accepted by both the Department and the Delaware SHPO, its property types and registration requirements are employed in this investigation. Most or all of the property types identified in this context are found at some point along the DuPont Highway between Wilmington and the Maryland state line. Not all of the following property types are found adjacent to the highway, but nonetheless exist in the study area. Several additional property types were added to those identified in the LBA study based on preliminary field reconnaissance of the study corridor.

## 4.1 AUTOMOBILE FACILITIES

The LBA study included three types of auto support facilities: service stations and auto parts stores, auto showrooms, and bus stations. Of these, only service stations are located in the current study areas. An additional property type, the independent garage, is also found in the study areas.

### 4.1.1 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 (Figure 16). For fire safety, most garages were constructed of

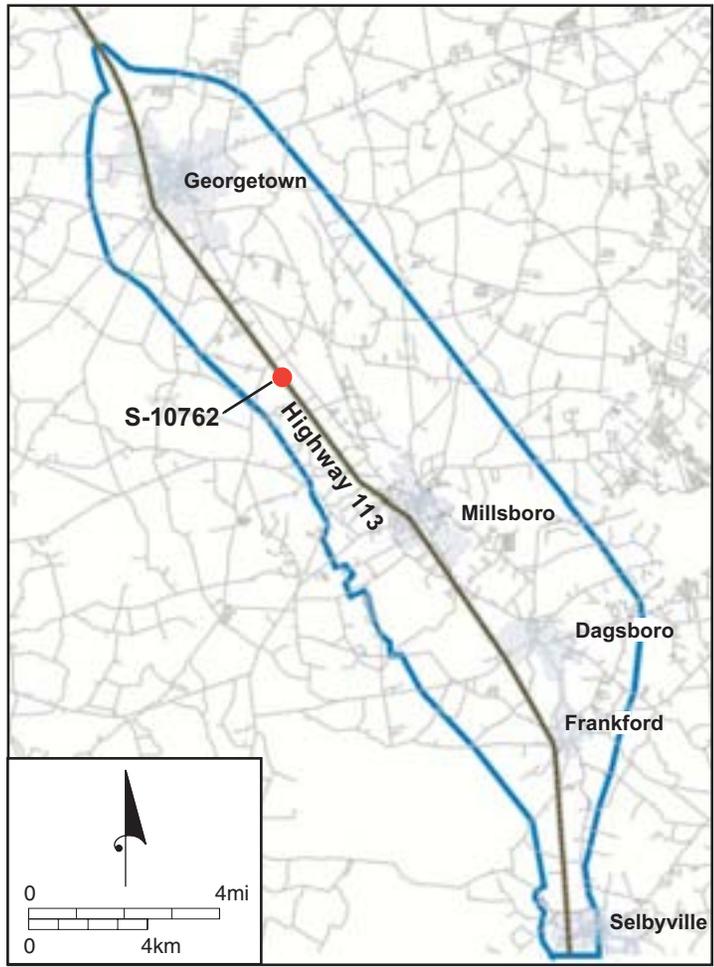


Figure 16. Example of automotive service garage in the Route 113 corridor (S-10762).

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.

As-built plans of the highway corridor from 1931 depicted five garages in the corridor between Georgetown and Milford, while 1947 as-builts showed two garages between Milford and Little Heaven.

#### 4.1.2 AUTO SALVAGE

With the growth in the number of automobiles, a particular type of commercial enterprise emerged in response to the automobile as a perishable commodity. Salvage yards offered a means by which unwanted vehicles could be discarded and portions be dismantled for reuse. Such salvage yards generally consist of sturdy, functional buildings surrounded by ample yards on which automobiles and automobile parts can be stored awaiting a purchaser.

Automobile salvage firms obtain unwanted vehicles from automobile dealers, insurance companies, consumers or municipal pounds; sell usable parts from these automobiles; keep an adequate inventory of parts through substantial hulk accumulation; and remove outdated hulks to processing facilities. In 1968, an estimated 15,600 companies in the United States were engaged in auto salvage. Seventeen percent of these were one person operations, and 53 percent employed from two to five people (EPA 1972:31-32).

The single automobile salvage yard in the study portion of the corridor, Fitzgerald's Auto Salvage was founded in 1935 by John T. Fitzgerald on family property south of Milford (S-03941). The southern section of the main building was erected at this time (LBA 1992:50-51).

#### 4.1.3 SERVICE STATIONS

In the commercial roadside architecture context, the LBA study defines the prototypical service stations as a small brick building with a paved yard and four gas pumps on a city lot. Prefabricated and standardized gas station designs soon became more common. While oil companies often promoted the use of distinguished signage and color schemes, the form of the property type was essentially a "decorated shed" notable for the lack of ornamentation. Early service stations were often small, hipped roof, brick or wood-framed buildings with a front porte-cochere that sheltered the pump island. A detailed typology and history of the service station in the United States is contained in Jakle and Sculle's *The Gas Station in America* (1994).

The two earliest service stations in the corridor are both examples of Jakle and Sculle's "house with canopy" type (Figure 17). In their discussion of this type, the authors wrote:

The addition of a canopy integrated into the roof of the small house or cottage produced another distinctive type of gasoline station....Standard Oil of Ohio pioneered a prefabricated prototype in 1916. The station was fifteen feet square with the canopy supported in front by a single post covering a similar area (Jakle and Sculle 1994:141).

As-built plans of the highway between Selbyville and North Georgetown, drafted in 1930, show 11 service stations along the corridor, most located at intersections. As-builts of the portion of the

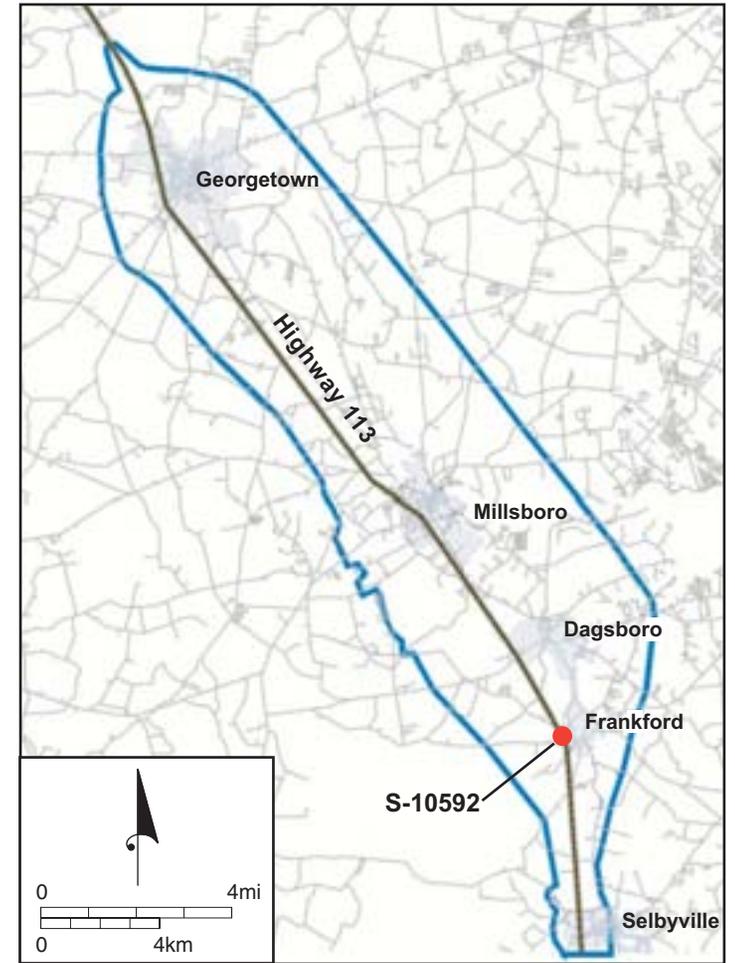


Figure 17. Example of early gasoline station in the Route 113 corridor (S-10592).

corridor between Georgetown and Ellendale, prepared in 1946, show seven filling stations, while six filling stations are shown in the portion of the corridor between Ellendale and Milford on 1948 as-built plans.

## 4.2 RESTAURANTS

The LBA study included the following types of eating establishments: tearooms, diners, fast food chains, and drive-in restaurants. Only diners are represented by pre-1961 buildings within the current study areas. In addition, a bar or tavern is found on Route 113 between the Milford and Germantown-south study areas.

### 4.2.1 DINERS

Although diners eventually became a roadside staple, the roots of the diner were in an urban context. The earliest diners, established at the turn of the century, were located near factory gates to serve quick, hot, home-cooked meals to factory workers. Diners, set up along roadsides, provided the same service to motorists that were offered to urban workers.

By the 1940s, the original diner market was in trouble. Restaurants located in inner city industrial districts of cities such as Wilmington, Baltimore, and Philadelphia suffered the loss of customers as manufacturers relocated to suburban areas where land was cheap and abundant. Worse for the restaurant owners, many of these new plants included their own cafeterias (Hurley 2001:41).

The diner industry changed in response to changing demographics and land use patterns. The new site was often on a major highway in the outskirts of a town or city where the diner could “play host to everyone.” In addition to serving hungry laborers, these new diners often served executives on their way to work, office workers on lunch breaks, and couples on their way to or from evening entertainment (Hurley 2001:42-43).

The name and form of the diner was derived from the railroad dining car. Like its predecessor, the original diner was portable and could be erected on any suitable lot (LBA 1992:294-295). The classic diner, with its stainless steel exterior and interior, prefabricated by a series of manufacturers, was often the first building on a lot. As a diner grew in popularity, this building was sometimes replaced by a larger, more permanent restaurant, an addition was attached to the original block, or the original diner was encapsulated in later construction.

Through the 1940s, many diners placed their units flush against the sidewalk, anticipating that most customers would arrive by foot. By the 1950s, the diners made accommodations to better serve automobile-bound patrons, often resembling islands set within seas of concrete. Early hand-painted signs were replaced by huge signs raised on pylons that could be read from afar and at high speeds.

Diner designs in the 1950s reflected the spirit of the times. Exterior floodlights illuminated stainless-steel siding, angled metallic canopies, and large plate glass windows. The small counter area was subordinated to the spacious dining area as diners grew larger to accommodate more tables and booths (Hurley 2001:56, 66-67).

#### 4.2.2 FAST FOOD RESTAURANTS

In his book *Main Street to Miracle Mile*, Chester Liebs traces the beginnings of the fast food restaurant to about 1939 when two ex-New Englanders, Maurice and Richard McDonald, opened a drive-in restaurant in San Bernardino, California. To increase profits, the brothers pared down service and menu to an absolute minimum. By 1952, the brothers were producing an estimated one million of their fifteen-cent hamburgers and 160 tons of ten-cent portions of French fries per year in their 192-square foot food factory. Improvements in assembly-line techniques and rigid standardization permitted this high output.

By the early 1950s, the brothers began to open a small number of other McDonald's in Arizona and California. Soon after, Ray Kroc, a former Lily Cup salesman convinced the brothers to allow him to franchise their concept nationwide. Kroc commissioned a standard building design from architect Stanley Meston. Assisted by staff architect Charles W. Fish and in close collaboration with the McDonald brothers, Meston developed one of the mid-twentieth century's most recognizable architectural icons: a building with an overhanging slanted roof, visual front, wall panels decorated with red-and-white striped tile and the flanking golden arches. By 1960, 200 McDonald's restaurants had been erected around the country (Liebs 1985:212-213).

While McDonald's was the earliest major national fast food chain, others soon followed suit. Kentucky Fried Chicken, begun by Harland Sanders at Corbin, Kentucky, grew to 200 licensed restaurants by 1960 and 600 by 1963 (Jakle and Sculle 1999:219-220). Burger King, established in the 1950s by Matthew Burns of Long Beach, California, and his stepson, Keith G. Cramer of Daytona, Florida, had grown to 274 units by 1967 (Jakle and Sculle 1999:117). Hardee's, begun in 1960 by Greenville, North Carolina restaurant owner and fry cook Wilber Hardee, grew to 300 restaurants by 1972. Wendy's, established by New Jersey native R. David Thomas, grew to 407 units by 1976 (Jakle and Sculle 1999:123, 127-128).

These chains typically located their restaurants on heavily traveled regional thoroughfares on the outskirts of downtowns. The building and sign were the trademarks of each fast food chain, making the particular restaurant instantly recognizable to the highway traveler.

#### 4.2.3 BARS OR TAVERNS

The field reconnaissance revealed that there are no pre-1963 resources of this type within the two study areas. However, there is a bar/tavern on Route 113 in the corridor preservation area between the assigned Milford and Georgetown-South study areas. This historic building, Teddy's Tavern, is listed in the National Register.

Generally single story buildings of functional construction, twentieth century bars and taverns often feature a neon sign advertising a featured brand of beer. The buildings are often located close to the roadside and feature adjacent parking. In more densely settled areas, some of the buildings are the product of residential conversions.

Teddy's Tavern is a well-preserved example of a World War II-era roadhouse, a tavern located on a heavily traveled automotive route.

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## 4.3 LODGING

The LBA study included the following lodging property types: tourist camps, tourist cabins and cabin courts, and motels. Tourist cabins and cabin courts and motels are found in the study areas.

### 4.3.1 *TOURIST CABINS AND CABIN COURTS*

Initially, automobile travelers often had to rely upon campgrounds for overnight accommodations in rural areas. Around 1920, some campground owners began to build cabins for travelers who desired more comfortable and private accommodations. As the idea caught on, cabin operators provided beds and linens for travelers. Facilities were expanded and upgraded further during the Depression as former hotel patrons turned to lower-cost cabin camps for their lodging. A one-stop facility grew in popularity containing cabins, gas station and restaurant. The office, manager's quarters, and restaurant were typically located in a single building at the center of the parcel. By 1934, an estimated 32,000 camps serving 30 million travelers had been erected around the country (LBA 1992:297-298).

### 4.3.2 *MOTELS*

The motel evolved when lodging providers began to erect a single U-shaped building instead of individual cabins. This method allowed construction of more units at reduced cost and construction time. Motels generally offered the same accommodations and amenities as cabin courts and often included an on-premises restaurant and/or filling station. The largest boom in motel construction occurred following World War II. In 1939, there were about 13,000 motels nationwide. By 1948, that number had doubled, and the number of motels reached 41,000 by 1952 (LBA 1992:299).

Heather Lynn Yost includes an evolutionary typology of motels or motor courts in her study of motels on U.S. 40 in New Castle County, Delaware and Cecil County, Maryland. The immediate forerunners of the motel were downtown hotels of cities and small towns which flourished during the late nineteenth and early twentieth centuries; auto camps and tourist homes, which became popular during the 1910s and 1920s; cabin camps which flourished during the 1920s to 1940s; and cottage courts, popular during the period from the 1930s to the late 1940s. By the 1950s, the motor inn emerged, primarily in metropolitan areas. This new lodging form was substantially larger and more luxurious than the motor court or motel. It has been largely superseded by the highway hotel, a multistory boxes with interior corridors and public spaces concentrated on the first floor (Yost 2003:34-48).

In his study of motels, Michael Karl Witzel describes the characteristics of a "motor court" or first generation motel:

These were long, low, one-story buildings that shared a common air-conditioning plant, plumbing system, and foundation (slashing the total construction costs). The individual garages of the old cottage days were dropped in this design, since the square footage they added resulted in extra costs in material and construction. In the long run, it was much cheaper to pave a large parking lot and direct visitors to park in front of their rooms.

To give overnighters the illusion they were still renting out an individual room and not just a tiny chamber in a rabbit warren, architects added new styling details. One of the most widely used visual tricks was the addition of an overhead portico at each entry door. A miniature recreation of a pitched roof, it highlighted each room as being separate, conjuring up a homey feel. Later, this feature was simplified even further when the pitched roof aspect was dropped. Designers created the same effect by attaching a small, flat overhang above the door (Witzel 2000:85, 87).

A typical motor court was arranged in a U-shaped plan with the office and owner's apartment at one end, a courtyard in the interior of the U and parking spaces at the rear of each unit (Jakle, Sculle and Rogers 1996:46). The courtyards functioned as informal outdoor lobbies and were often the location of an in-ground swimming pool (Yost 2003:44). Other motor courts were arranged with linear or L-shaped room arrangements. Rooms became increasingly standardized with furnishings purchased from supply houses specializing in hotel and motel outfitters (Jakle, Sculle and Rogers 1996:47). Jakle, Sculle and Rogers developed a graphic typology of motel construction in their book on the subject (Figure 18).

## **4.4 OTHER**

The LBA study included the following other property types: roadside stands, miniature golf courses, and drive-in movie theaters. Of these, roadside stands are found in the current study areas.

### *4.4.1 ROADSIDE STANDS*

As noted by LBA (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 (LBA 1992:301).

### *4.4.2 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, grist mills were generally 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

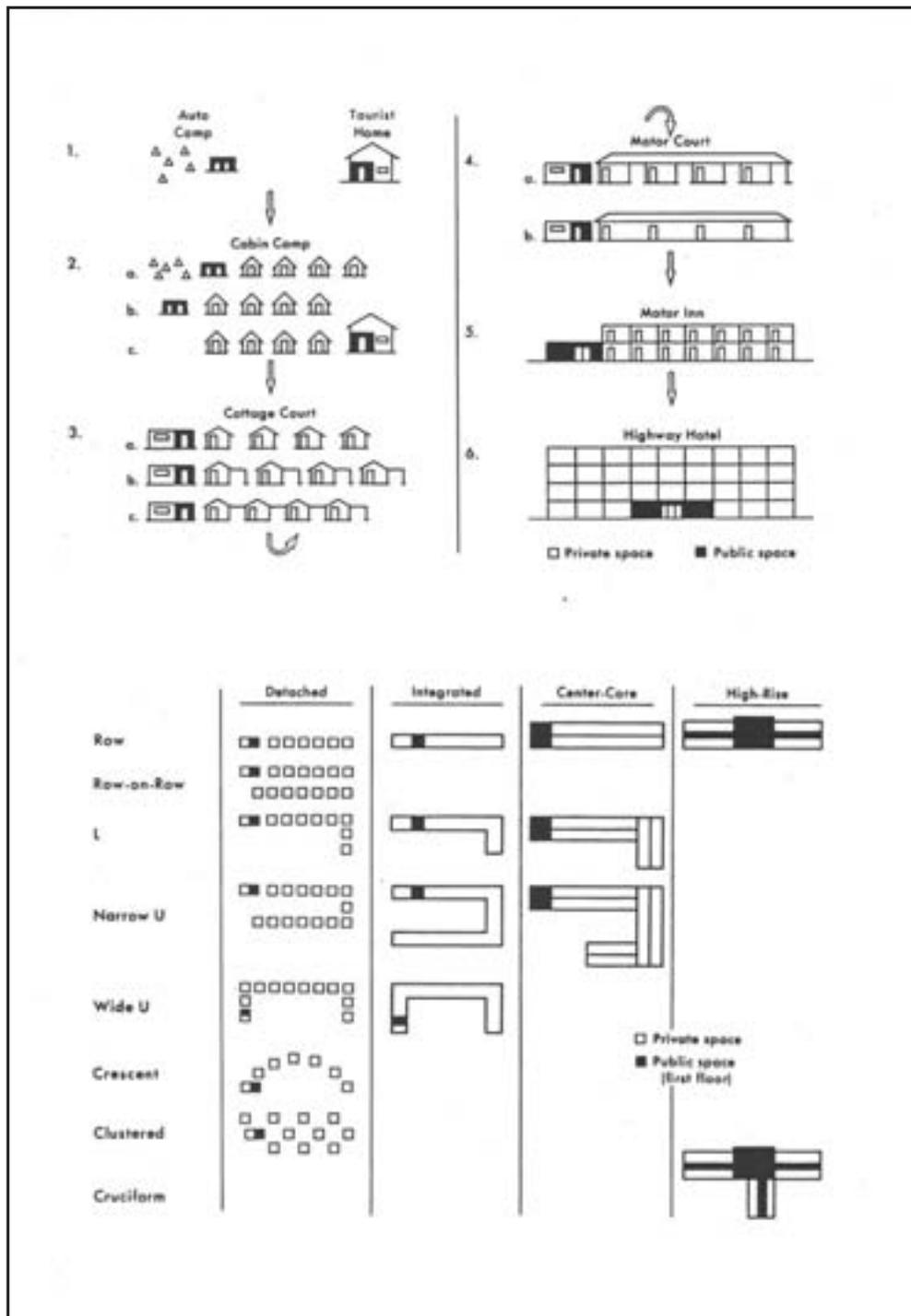


Figure 18. Evolution of and variations in spatial organization of motels (Jakle, Sculle and Rogers 1996).

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 along portions of the length of the highway include governmental buildings, churches, some with associated cemeteries, and independent cemeteries.

Governmental facilities located within the current study areas include a DelDOT district office (Georgetown), a State Police barracks (Georgetown) and a prison (Georgetown). The prison contains components that pre-date 1963.

Two major institutional properties are found in the study areas: the Stockley Center and the Sussex Correctional Institution. The Stockley Center, original known as the Delaware Colony, was established in 1921 on a 1,000-acre tract as the state institution for the developmentally disabled. In 1938, it had about 400 residents, mostly children, and its plant included administrative offices, training shops, a laundry, an infirmary, and a truck and dairy farm. The Stockley Center is now the state's only facility licensed as an intermediate care facility for people with mental retardation. In 2002, its resident population was 179. Most of the buildings visible from Route 113 are residences built of rusticated concrete block in the bungalow style (Delaware Health and Social Services 2002:4; Eckman et al. 1938:385).

The Sussex Correction Institution (S-00210), a maximum, medium, and minimum security prison for men with associated boot camp was established in Georgetown in 1931. For much of its history, it was one of two farms in the Delaware correctional system with a total of 250 acres in agricultural use.

Among the products of the farm were truck crops, grain, milk and pork products. Some original or historic exterior fabric is visible from Route 113. Its present appearance largely reflects a major expansion undertaken between April 1997 and April 2000 that raised prison capacity to 1,206 (Department of Correction 2004; State Board of Corrections 1963:43-44).

Several churches are located in the current study areas. None of these churches appears to have been constructed prior to 1963. Several cemeteries are also present in the study areas. These cemeteries are of two types, religiously or fraternally-affiliated cemeteries and independent cemeteries. An example of the former is the Odd Fellows Cemetery located in Milford. This cemetery, located on a flat parcel of land on the east side of Route 113 consists primarily of linearly arranged, recently erected markers. An example of a small independent cemetery is located on the east side of Route 113 south of Milford. This cemetery, established in the nineteenth century, consists of irregularly arranged markers of various erection dates.

#### 4.4.3 RECREATION

Several recreational facilities are located within the study areas. Two, the Milford Lanes bowling alley and Seacoast Speedway in Stockley, were probably erected to take advantage of Route 113

frontage. The third, two units of Redden State Forest, extend to either side of Route 113 between the Milford and Georgetown South study areas.

In the years following World War II, increasing numbers of Americans began to bowl as a leisure activity. One reason for the increased popularity of the sport was the introduction of the automatic pinsetting machine during the 1950s. No longer were patrons at the mercy of often rude pin boys, and games could progress more quickly. By 1961, the number of bowling alleys in the United States had grown to over 10,000. Bowling establishments of the 1950s were promoted as centers of family fun where the entire family could gather outside the home (Berk and Simple n.d.; Hurley 2001:139, 159). The Milford Lanes (K-07544) was typical of such post-World War II lanes erected to provide family entertainment for residents of the local area.

Seacoast Speedway (S-11019) is located behind a board fence on the east side of Route 113 south of Woods Branch Road (231). It presently consists of ½- and ¼-mile semi-banked clay ovals. Originally known as Georgetown Speedway, it has been the site of both stockcar races and drag races. Part of the National Dirt Racing Association circuit, races were last held at the track in 2000. It was most recently used for a short-lived outdoor concert series. The original ½-mile dirt oval was opened in March 1950 and was used periodically until 2000. Built by Melvin Joseph Construction, it was originally designed to become part of the NASCAR circuit. When that idea fell through, it was used as a track for local racers. The ¼-mile dirt oval was added in 1971 and was also used periodically until 2000. A ¼-mile paved dragstrip was used in 1956 and 1957 when the facility was known as Delaware Speedway, and a 1/8-mile paved dragstrip was used in 1962 and 1963 when the facility was known as Stockley Speedway (New Jersey Dirt Racing 2004).

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).

The State Forestry Commission began the acquisition of property along the DuPont Highway south of Milford in the 1920s. In the spring of 1928, the Commission purchased a three-acre plot and leased an additional acre five miles south of Milford and adjacent to Hudson Pond as a nursery site. The land was cleared and seeds were sown for a variety of forest trees, chiefly loblolly pine, red pine and white pine (State Forestry Commission 1930:9-10). This land remained the State Forest Tree Nursery supplying tree seedlings to both public entities and private landowners until the late 1960s when widening of Route 113 resulted in the taking of a portion of the nursery. It was then relocated to the nearby Appenzellar Tract (State Forestry Commission 1968:9).

The corridor protection zone between Milford and Georgetown adjoins two units of the Redden State Forest, the 194.2 acre Appenzellar Tract and the 1494.25 acre Ellendale Tract (Figures 19 and 20) of Redden State Forest. The initial portion of the former tract, measuring 45 acres and lying on both sides of the DuPont Highway about a mile south of the State Forest Tree Nursery, was purchased by the State Forestry Commission for \$100 on December 29, 1927. A portion of the area was thinned and pruned the following August and September (State Forestry Commission 1930:12).

The second tract, once known as Ellendale State Forest, had its genesis in a 40-acre tract in the heart of Ellendale Swamp transferred by the State Highway Department to the State Forestry Department in 1932. The Forestry Department's original plans for the land included planting

Redden State Forest  
Appenzellar Tract  
194.2 Acres

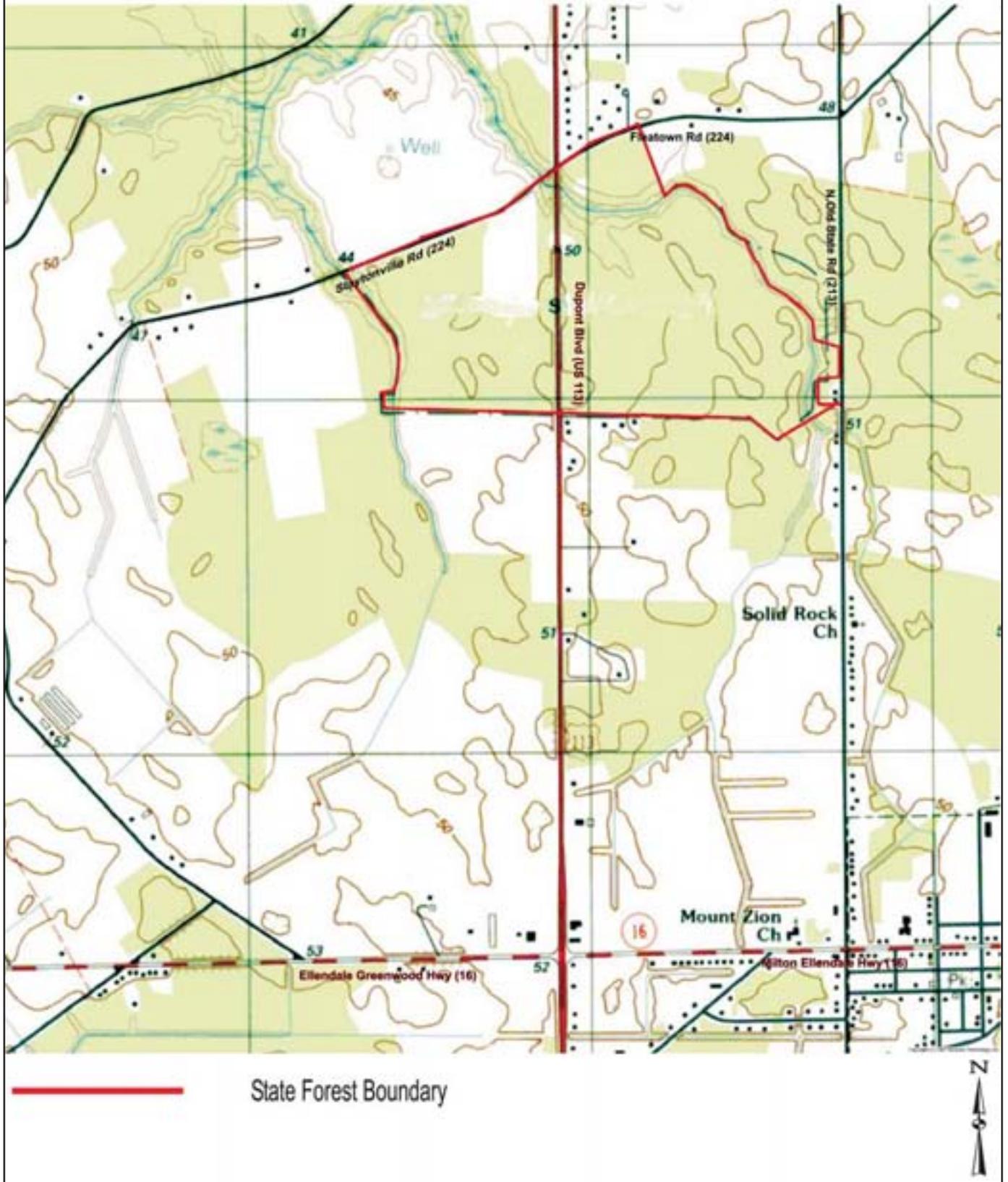


Figure 19. Redden State Forest. Appenzellar Tract.

**Redden State Forest  
Ellendale Tract  
1494.25 Acres**

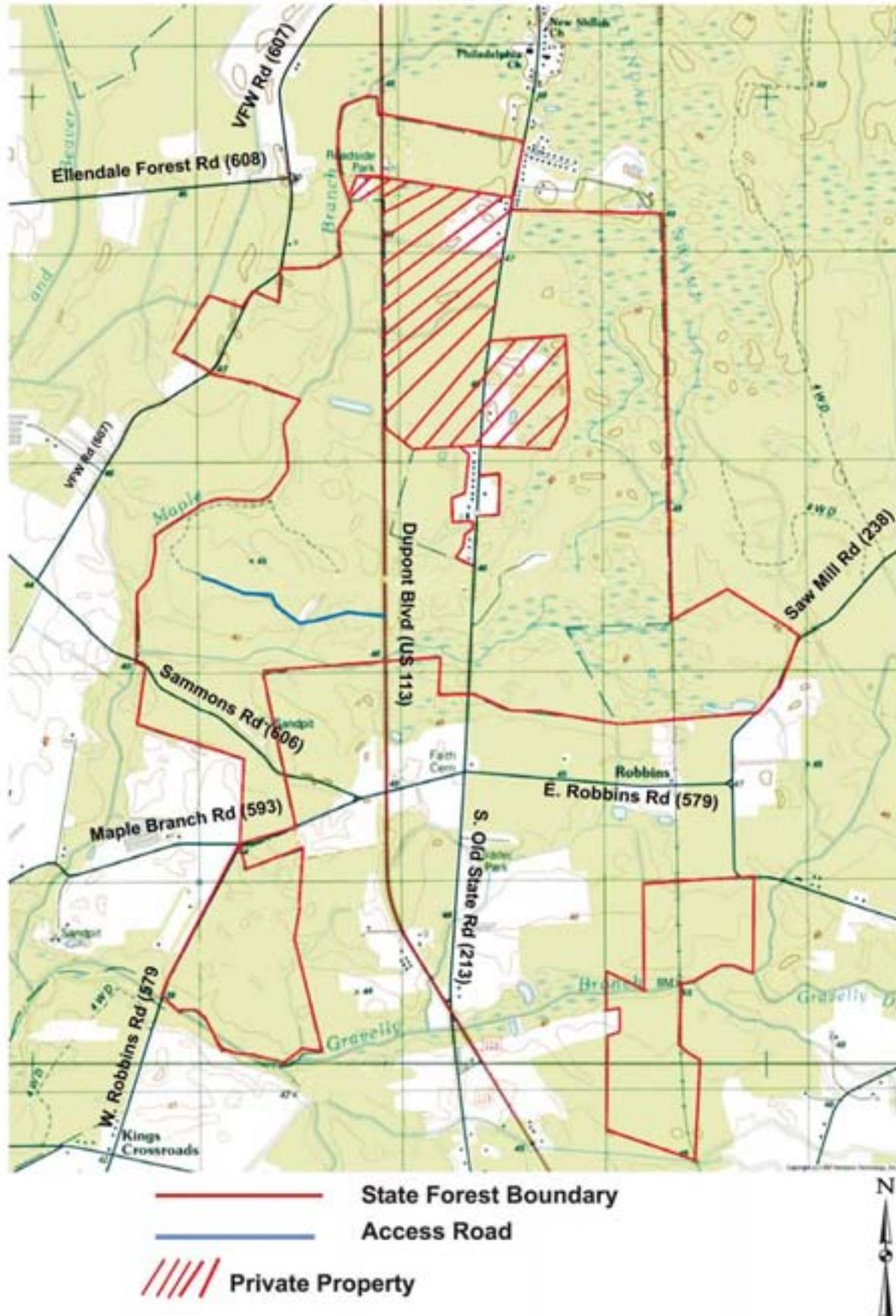


Figure 20. Redden State Forest. Ellendale Tract.

vacant areas of abandoned farmland the following year, brushing out existing roads and trails, and erection of campsite facilities on that portion fronting the DuPont Highway (State Forestry Commission 1932:15). By the following year, the Department had completed a Class B public campsite by grading and cleaning up the land, erection of two latrines and roofed picnic tables, installation of drinking water facilities, and construction of a stone and concrete fireplace (State Forestry Commission 1933:19).

During subsequent years, both tracts were managed as forests, trails were added to facilitate public access, and additional parcels were added to each tract. In 1938, the Forestry Department purchased three tracts, of 302, 94  $\frac{3}{4}$ , and 6  $\frac{3}{4}$  acres of the Ellendale Swamp on the west side of the DuPont Highway for incorporation into Ellendale State Forest (State Forestry Department 1938:10). In the following year, the Ellendale Forest again grew with the acquisition of the 79.83 acre Burton Tract to its south. With these acquisitions, the forest totaled 450 acres. Also in 1939, the roadside picnic area (listed in the National Register) was improved by addition of a rustic picnic shelter and stone incinerator (State Forestry Department 1939:13). By 1947, Ellendale had grown further to encompass a total of 752 acres, 620 acres owned by the Forestry Department and the remainder owned by the State Highway Department. Work in the forest during the year included about 1  $\frac{1}{2}$  miles of trail construction and roughing out of an additional half mile lateral trail (State Forestry Department 1947:13).

Additional changes to the forest occurred in the 1950s. In 1950, the latrines in the picnic area were declared unsatisfactory and were removed. In 1952, two tracts of 240 acres were added to the forest. In the same year, wood stock pumps were replaced by cast iron pumps in an attempt to eliminate contamination (State Forestry Department 1950:9, 1952:8.). In 1953, a trail was extended and a creosoted timber bridge was built to provide access to the newly acquired parcels. A new well was drilled at the picnic area to reduce contamination (State Forestry Department 1953:12-13). In 1956, a second picnic site had been established in the forest, and three new picnic tables were added at the original site (State Forestry Department 1956:9). In 1963, two tracts were added to the forest, the first of 20 acres adjoining other lands, and the other of 134 acres northwest of the forest. With these acquisitions, the forest totaled 1223 acres. A new trail was built to provide access to the larger of the two newly acquired tracts (State Forestry Department 1963:6, 8).

The Appenzellar Tract grew more slowly. In 1965, 83 acres of cutover woodland and abandoned farmland was added to the north and east sides of the tract by land purchased from Carey D. Sapp of Georgetown. Plans were for this land to be converted from low value hardwoods to pines. During 1968, two additional tracts were added. The first, the 58-acre Harry Frankel property, was located west of the tract boundary. Twenty additional acres were added in December 1968 (State Forestry Department 1968:7).

#### *4.4.4 RESIDENTIAL-COMMERCIAL CONVERSIONS*

A typical evolutionary pattern on major transportation routes involves the initial construction of residences on lots in proximity to existing towns and cities. As traffic increases and roads are widened and improved, the house site becomes viewed as less suitable for residential use. The zoning of the property is changed. The former residence is converted to commercial use.

Some residences, converted to office use, undergo a relatively modest level of alterations, often only the replacement of doors and windows. The former front yard may be partially or totally paved and converted to parking. Other residences, converted to retail or light industrial use,

undergo more substantial alterations including the erection of a new block equal to or exceeding the size of the residence.

In many areas, residential-commercial conversion represents an intermediate land use stage. A subsequent stage consists of the assembly of a number of smaller parcels, several of which may have been the site of residential-commercial conversions. The existing buildings are then demolished and replaced with a more intensive use such as a strip shopping center, big box store, office building, or apartment complex.

#### 4.4.5 INDUSTRY

Because of dependence on motor freight transportation, many industrial facilities choose to locate on or in proximity to major highways. Several types of industrial facilities were historically or are currently located within the study areas.

#### 4.4.6 LUMBERING

The extensive forests of inland southern Delaware represented an important resource first harvested by settlers to the region in the eighteenth century. Early on vast stands of cypress in the Great Cypress Swamp near Millsboro were harvested for hand-hewn shingles. During the century from 1750 to 1850, large volumes of white oak were logged in Delaware for local shipbuilding, much of it in Milford, or for export to Holland, Sweden, and England (NFES 1959:1).

From 1869 until the 1950s, Delaware's lumber production averaged 25 million board-feet per year (Edmonson 1978). In the 1890s, two large lumber mills began operation in Millsboro. Members of the locally prominent farming family, the Houstons, were principals in each mill. The company that eventually prevailed was the Houston-White Company whose managing partner was William J.P. White. The company continued as Millsboro's largest industry until the 1950s (Carter n.d.; NFES 1959:3).

By the early twentieth century, the leading forest species of southern Delaware were the loblolly (*Pinus taeda*) and scrub (*Pinus virginiana*) pines. A large proportion of these trees were grown in woodlots on farms rather than in designated tree plantations. Loblolly pines, a fast growing member of the yellow pine family, obtains a height of 60 to 70 feet and a diameter of three feet. Its wood was principally used for lumber, piling, mine props and fuel. Scrub pines typically reach a height of 40 to 50 feet and a diameter of 18 inches. Its wood was principally used for mine props, piling lumber, paper pulp and fuel. (CCFD 1927:8-9, 18-19, 27-30).

In the late 1950s, a total of approximately 400,000 forested acres were found within the state. A majority of this land, 252,000 acres, was located in Sussex County. In 1956, sixty percent of the forest products taken from Delaware forests was used for lumber. Seventy percent of this total was softwood—almost all of it pine. While most of the sawmills in northern Delaware were stationary, most of those in the southern portion of the state were portable, moved frequently from location to location as stands were harvested (NFES 1959:4).

The remaining major forest products included pulpwood (13% of the total), wood pilings (9 percent of the total), and basket veneer (5 percent of the total). The final 13 percent was divided among fuel wood, fence posts, mine props, and other small scale uses. Because Delaware had no pulpwood mills, the southern yellow pine harvested for this purpose was shipped out of state,

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most to tidewater Virginia and western Maryland. Three basket-veneer mills operated in Delaware (Edmonson 1978; NFES 1959:4-7).

No remnants of the formerly important Sussex County lumbering industry remain in the study areas.

#### 4.4.7 CANNING

Prior to the invention of modern refrigerators and freezers, preserving food for substantial periods of time proved difficult. The process of canning fruits and vegetables was first developed in France in the early nineteenth century. By the mid-1800s, canning had become a popular method of preserving food in much of the United States.

Delaware's first cannery opened in 1846 when Read Gordon of Port Penn, New Castle County, began canning peaches. In the 1870s, Delaware canneries began processing vegetables, as well as fruits. By the 1870s and 1880s, the development of new technology such as large pressure cookers, as well as the mechanized harvest of crops, led to a boom in the industry. In 1890, almost 6,000 acres of land in Sussex County was devoted to the cultivating of tomatoes. Much of this crop was canned (Doerrfeld, et al. 1993:11).

In the early twentieth century, vegetable canning was an important component of the economy of southern Delaware. By 1910, the canning industry in Delaware included 300 processing plants employing one-quarter of the state's labor force. Delaware's canneries flourished until the 1940s when new methods of food preservation, such as freezing, and competition from California and other warm weather states, caused a decline in the state's canning industry.

Among the leading crops canned in Sussex County was the tomato. By 1910, even small villages in the Delmarva had canneries. Because these canneries operated for only about four weeks during the year, temporary gangs of laborers were often brought in from beyond the Delmarva peninsula to operate the plants (Williams 1998:4).

Though some canneries were little more than a shed, the typical cannery was a two-story building. Within the building, specific areas were designated for making cans and processing food. Canneries were often located near railroads so that goods could be placed in wooden crates and shipped quickly to market (Delaware Agricultural Museum n.d.)

Early in the history of the canning industry in Delaware, much of the product shipment was done by water. By the mid-twentieth century, shipment of canned goods in the state was by trucks and by rail. In his study of the industry in Delaware, McCauley cited Draper Food Products, Inc., of Milford, a canned goods sales office that used its own trucks for transportation of half its canned products. In the 1950s, railroads carried less than 10 percent of the total yearly output of canned goods in the state. The remainder was by truck, and much of that shipped from southern Delaware was carried along the DuPont Highway (McCauley 1961:68-69).

As one Delaware researcher has concluded "canneries dominated Delaware's economy before World War II" (Heite 1990:115). Through time, many canneries underwent alterations and renovations in order to remain current and competitive. The significance of canneries within the study areas is clear from the number of canneries that were present from the last quarter of the nineteenth century to the middle of the twentieth century. At least 32 canneries were located in Sussex County, with the largest number at Georgetown (7), followed by Milford (5), Selbyville

(4), Lincoln (4), Staytonville (3), Dagsboro (2), Ellendale (2), Frankford (2), Millsboro (2), and Stockley (1) (Heite 1990:134-137).

Fires were a common occurrence at canneries (Heite 1990:48). While the majority of canneries are no longer standing cultural resources, data recovery investigations at the Collins, Geddes Cannery site near Lebanon, Delaware has demonstrated the archeological potential of cannery sites (Heite 1990).

No buildings historically associated with the canning industry remain in the study areas, although Vlastic pickles are still canned in Millsboro.

#### 4.4.8 HOLLY PRODUCTION

The holly wreath industry flourished in Sussex from the 1880s until the 1960s, and many farmers supplemented their incomes during the months of November and December in the holly business. It was an especially significant industry during the Depression, and in 1936 over 2 million wreaths were shipped from the towns of Bridgeville, Milton, Millsboro, and Selbyville. At its peak, nearly 10,000 Delawareans were employed making wreaths, and the wreaths contributed a million dollars annually to the state's economy. In recognition of the industry's importance in 1939 the American holly was formally designated as Delaware's state tree. The industry declined quickly after World War II with the development of plastic Christmas wreaths (Eckman et al. 1938: 385; Hancock 1976:102).

The holly used for wreaths was American holly (*Ilex opaca*) indigenous to the United States. Holly branches were generally cut from trees with a height of 15 to 30 feet and a diameter of 3 to 8 inches. Only the female trees bear berries. Holly trees are found throughout the state but were most abundant in the deep woods, swamps and moist depressions in southern Kent and Sussex counties. In the 1920s, holly products were valued at about \$400,000 and included about 1.5 million wreaths and 600 cases of loose sprays and branches (Commission 1927:15-16). Overcutting and poor forest management decimated the wild holly in the eastern United States (Gradishar 1975:1).

Because of the decentralized nature of the industry, few buildings were built exclusively for wreath production. Instead, wreathmaking generally took place in household settings, in outbuildings such as garages, or small open, wood-framed warehouse buildings equipped with tables.<sup>2</sup> No buildings historically associated with the holly industry remain in the study areas.

## 4.5 ROADWAYS

A heavily traveled highway is an almost continual work in progress (Marriott 1998). This has been a proven 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.

<sup>2</sup> The latter are pictured in photographs of wreathmaking in the collection of the Delaware Public Archives.

#### 4.5.1 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.

#### 4.5.2 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.

#### 4.5.3 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 DelDOT and the Delaware SHPO (LCE 2000). This study did not include culverts.<sup>3</sup> Pre-1963 culverts should be identified using as-builts and in consultation with the engineering staff of the Department.

#### 4.5.4 WAYSIDES AND REST AREAS

Many early to mid-twentieth century highways, especially those catering to long-distance and tourist traffic, incorporated waysides and rest areas. In their simplest form these resting points were simply widenings of the road shoulder providing parking spaces for one or more automobiles. These waysides were often equipped with picnic tables located in the shade of a tree. More elaborate waysides may have permanent picnic shelters, sometimes equipped with an

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

outdoor grill. Most elaborate are rest areas, a complex with its own internal road system and containing restroom buildings and larger parking areas.

One wayside has been previously listed in the National Register: the Ellendale State Forest CCC Picnic Facility (listed July 22, 1991). This resource is located on Route 113 between the Milford and Georgetown-South study areas.

#### 4.5.5 *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 (AR 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” (AR 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 (AR 1930:39).

As-built plans of the highway prepared in the 1930s and 1940s depict several tree allées lining Route 113 within both study areas. Portion 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.

## 4.6 RESIDENCES

Soon after the completion of the highway, portions of largely agricultural properties adjoining the highway in southern Kent and Sussex counties began to be subdivided into residential lots. Houses were erected on 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 prefabricated 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 southern Kent and 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, Bastian and Meyer'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, four-square plan houses, Cape Cod Cottages, English Cottages (Tudor), World War II Era-Cottages, Standard Ranch Houses, Minimal Ranch Houses, and Split-Levels. 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.

#### 4.6.1 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 (figures 21 and 22). 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 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).

#### *4.6.2 FOUR-SQUARES (1900-1920s)*

The four-square, also known as the American Foursquare, emerged as comfortable, space-efficient housing for middle class families. During the Victorian era, it was fashionable to built complex, highly ornamented dwellings with complicated floor plans with many small rooms, hallways, and stairways. By the turn of the century, many homebuilders were seeking easier to erect, more economical forms for America's middle class.

The four-square dominated suburban neighborhoods through the first decades of the twentieth century. The square form made the houses especially practical for narrow city and suburban lots. Its plan, generally consisting of four square rooms above three square rooms and an entrance hall eliminated the need for long hallways and made efficient use of interior space. In addition, the simple symmetrical four-square was less costly to build than complicated Victorians, Mail order companies also favored four-squares for pre-cut "kit" homes (Pollock n.d., Craven 2004).

Along with the bungalow, the four-square is the most common early twentieth-century house type in Delaware and much of the remainder of the eastern United States. Four-square dwellings are generally two stories in height, constructed in a cubic shape and crowned by a hipped or pyramidal hipped roof (Figure 23). Some four-squares have four dormer windows, one projecting from each roof slope, while others feature a single dormer projecting from the front roof slope.

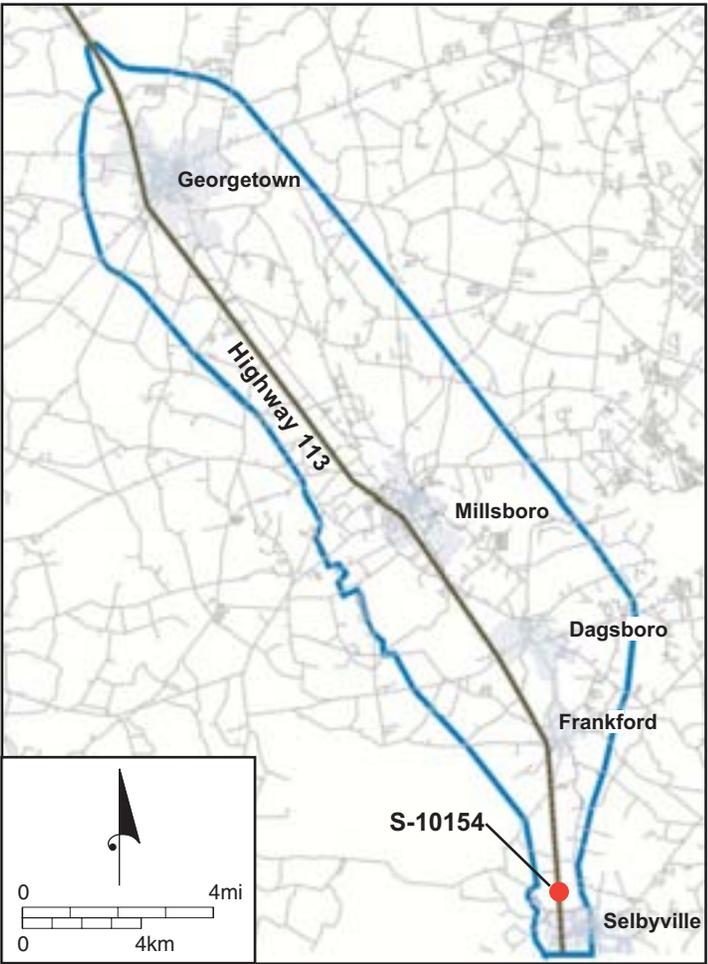
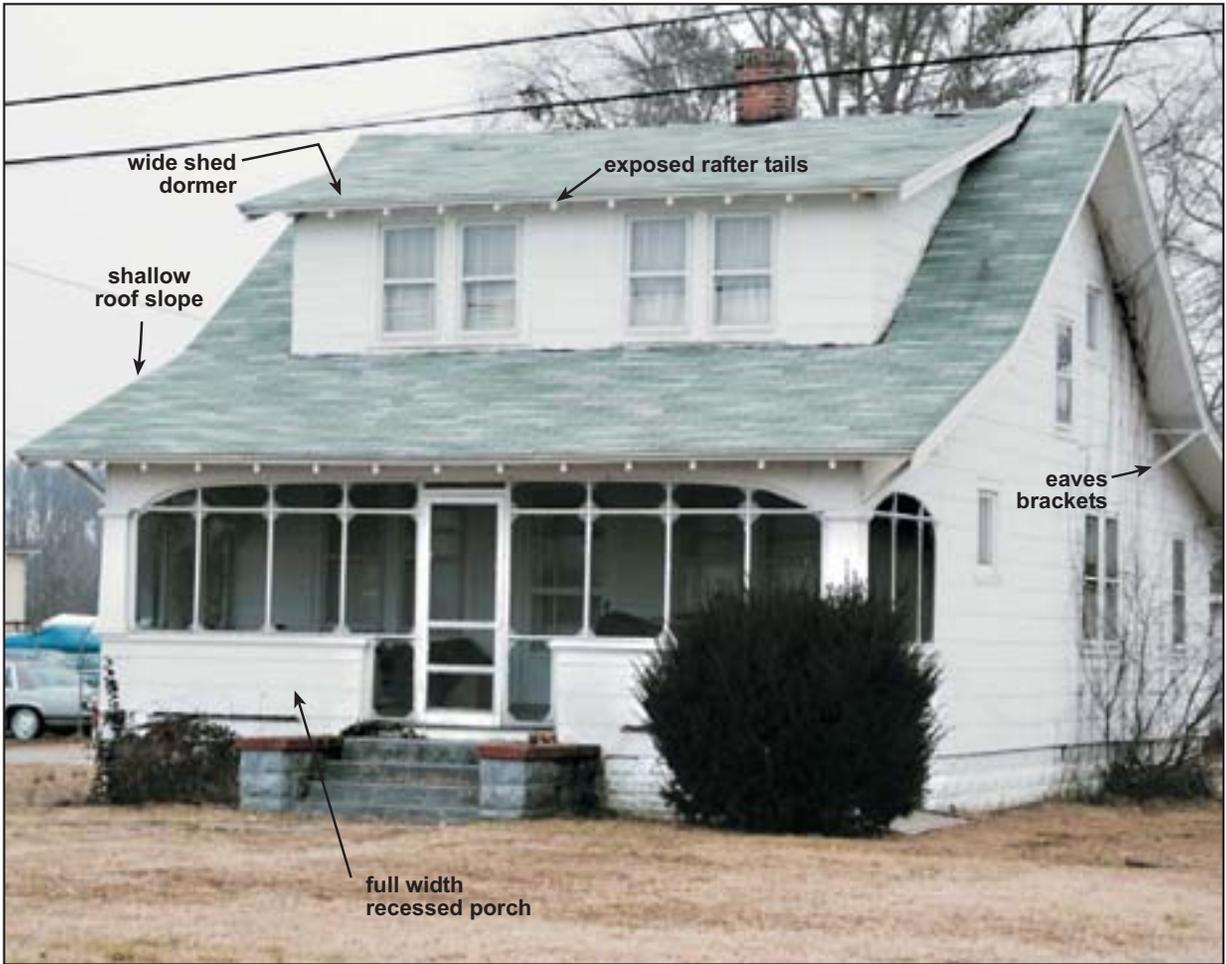


Figure 21. Example of side-gabled bungalow in the Route 113 corridor (S-10154).

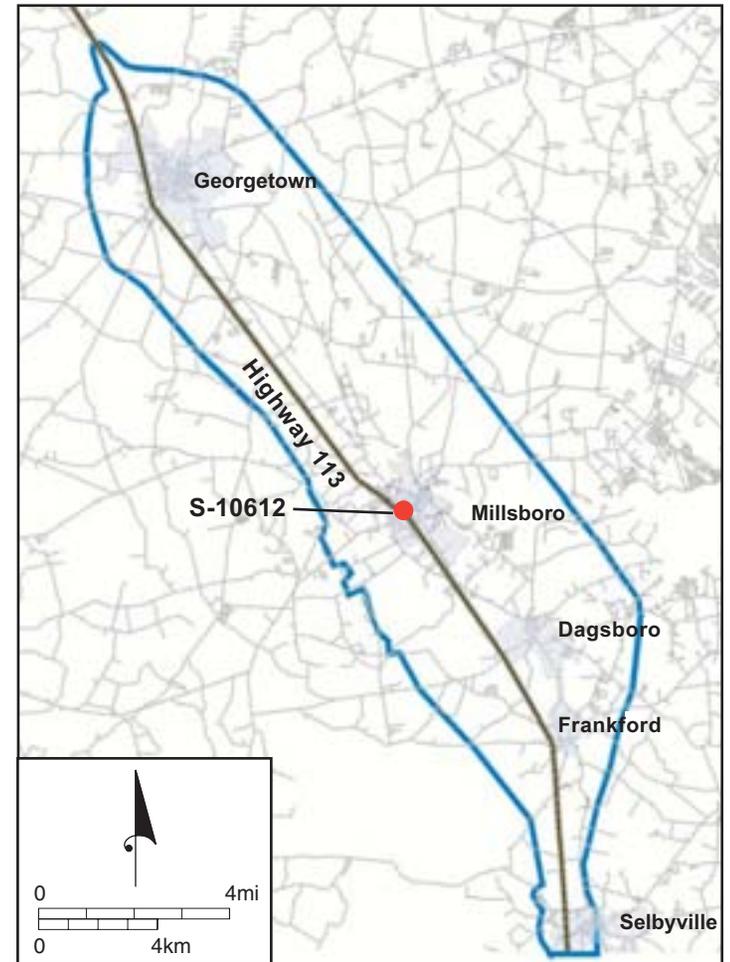
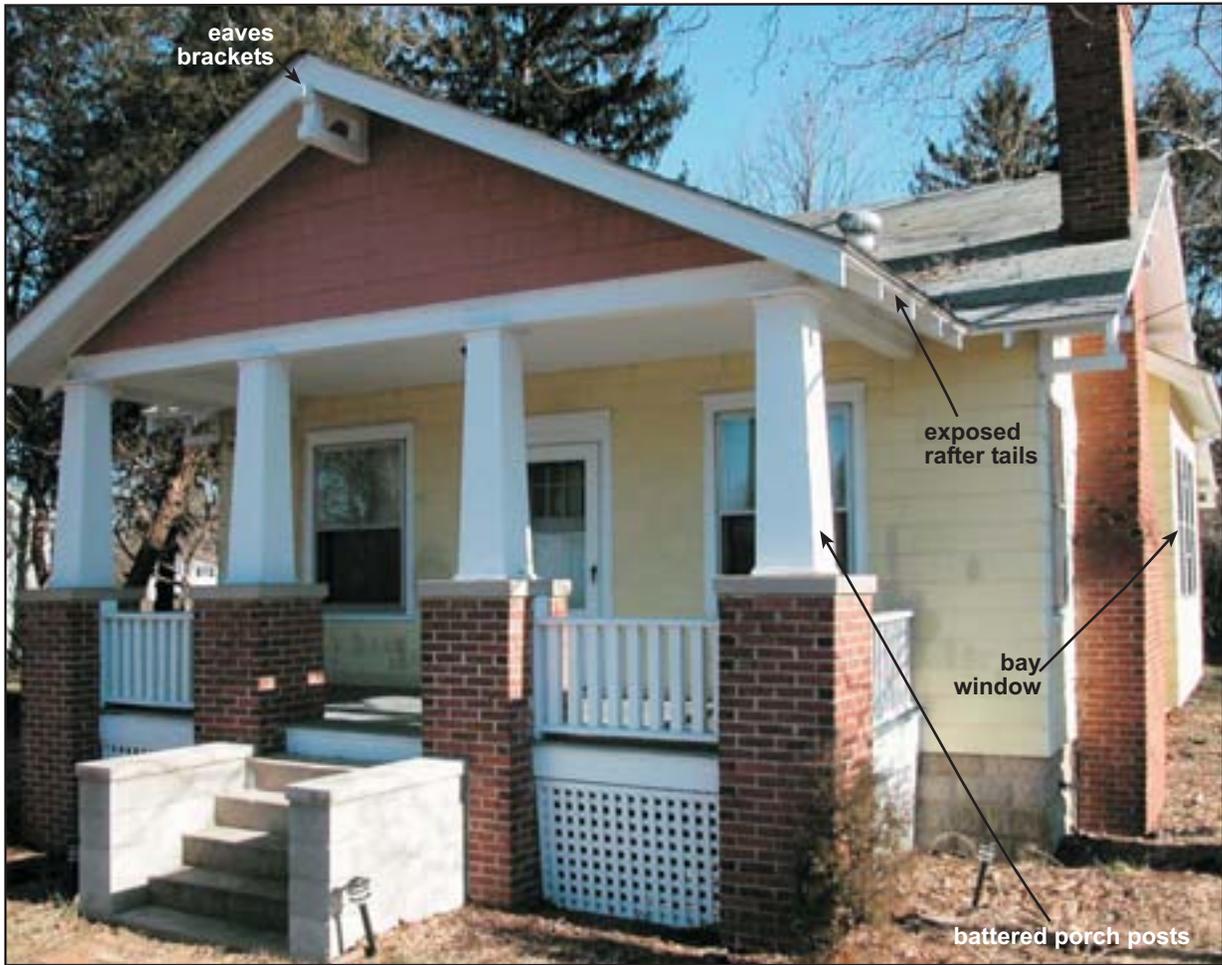


Figure 22. Example of front-gabled bungalow in the Route 113 corridor (S-10612).

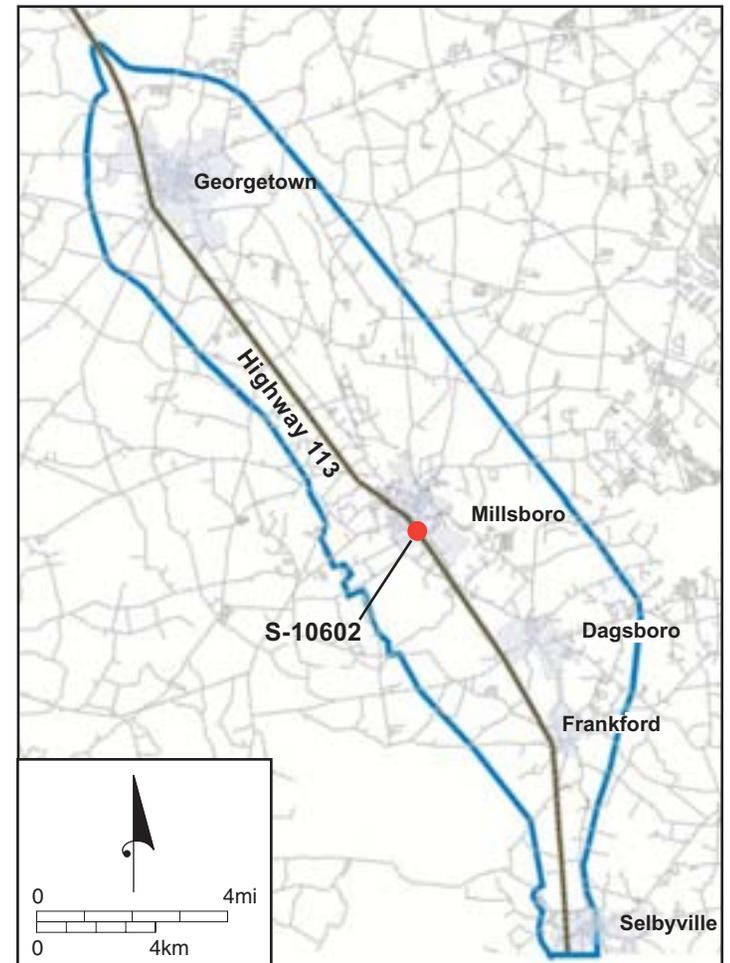


Figure 23. Example of four-square house in the Route 113 corridor (S-10602).

Dormers are typically hipped in shape. Other common exterior features include a single-story porch with substantial columns or posts extending the width of the front elevation, a window designed to provide light for the stairway located midway between the first and second floors on an exterior side wall, and side bay windows (Lanier and Herman 1997:182). Some four-squares lack exterior ornamentation, while others may be stylistically associated with the Colonial Revival, Craftsman, or Prairie styles (Wyatt n.d.:30). Four-squares are most commonly built using wood-framed construction, but are also built of brick and sheathed in stucco. Sears Roebuck & Company sold a cement block making machine that could manufacture blocks on site for its four-square designs.

#### 4.6.3 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 more common is the Dutch Colonial (Figure 24). 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, less common 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 (Figure 25). 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).

#### 4.6.4 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

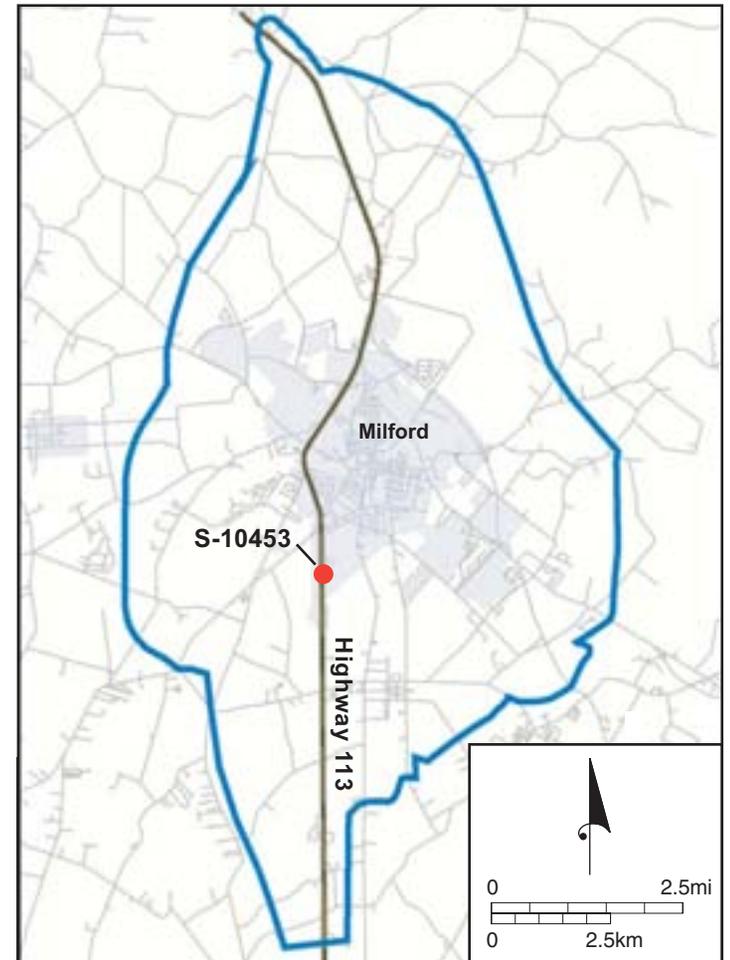


Figure 24. Example of Dutch Colonial dwelling in the Route 113 corridor (S-10453).

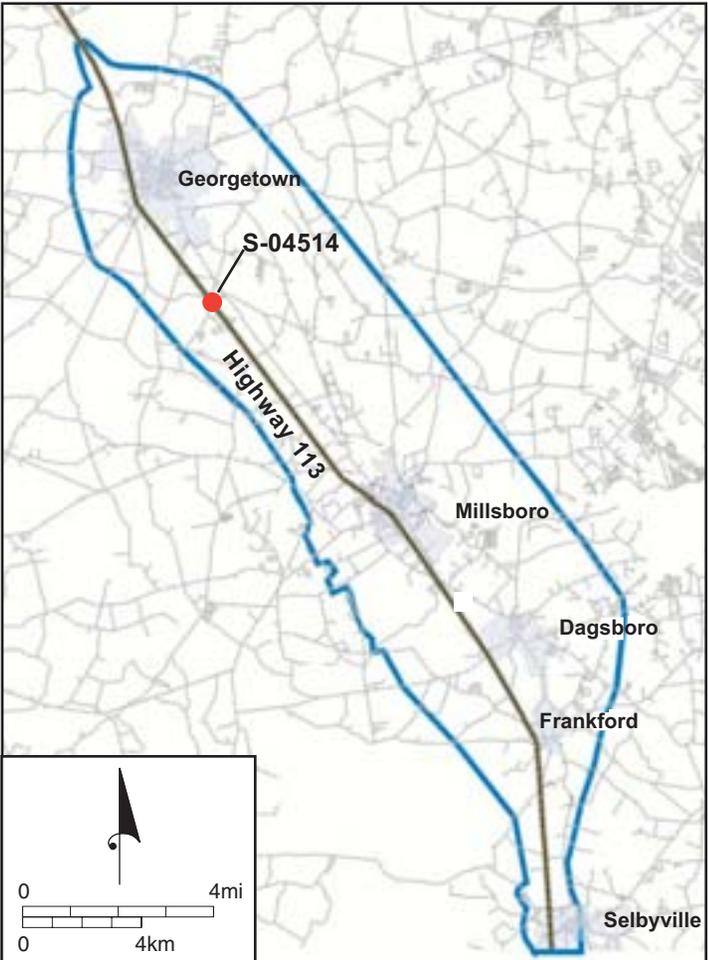


Figure 25. Example of symmetrical Colonial Revival dwelling in the Route 113 corridor (S-04514).

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 (Figure 26). 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.

#### 4.6.4 ENGLISH COTTAGE (TUDOR) (C. 1925-1940)

The English Cottage traces its lineage back to architect-designed Tudor landmarks of the late nineteenth century. These earlier houses are often termed “Jacobethan” by architectural historians as they incorporate detailing from English Elizabethan and Jacobean precedents. In the early twentieth century, these landmarks were joined by less pretentious examples featuring superimposed steep and half-timbering on otherwise symmetrical facades. Still relatively uncommon before World War I, the style greatly increased in popularity in the 1920s and 1930s as masonry veneering techniques allowed even the most modest examples to mimic the brick and stone exterior of English prototypes (McAlester and McAlester 1992:358).

More commonly a suburban than a rural house type, examples in the Route 113 corridor may have been built using published house plans for middle or upper middle class homeowners.

The English Cottage, a small twentieth century house type, features a steeply pitched roof and is usually side gabled (and less frequently front gabled) with a facade dominated by one or more prominent cross gables (Figure 27). Windows are often tall and narrow, usually in multiple groups with multi-pane glazing. Overlapping gables with eave lines of varying heights are common. Doorways are frequently placed in round-arch surrounds (McAlester and McAlester 1992:360, 368).

#### 4.6.6 WORLD WAR II-ERA COTTAGES (1940-1950)

This house type, defined by Cory Jensen of the Utah State Historic Preservation Office (SHPO), 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

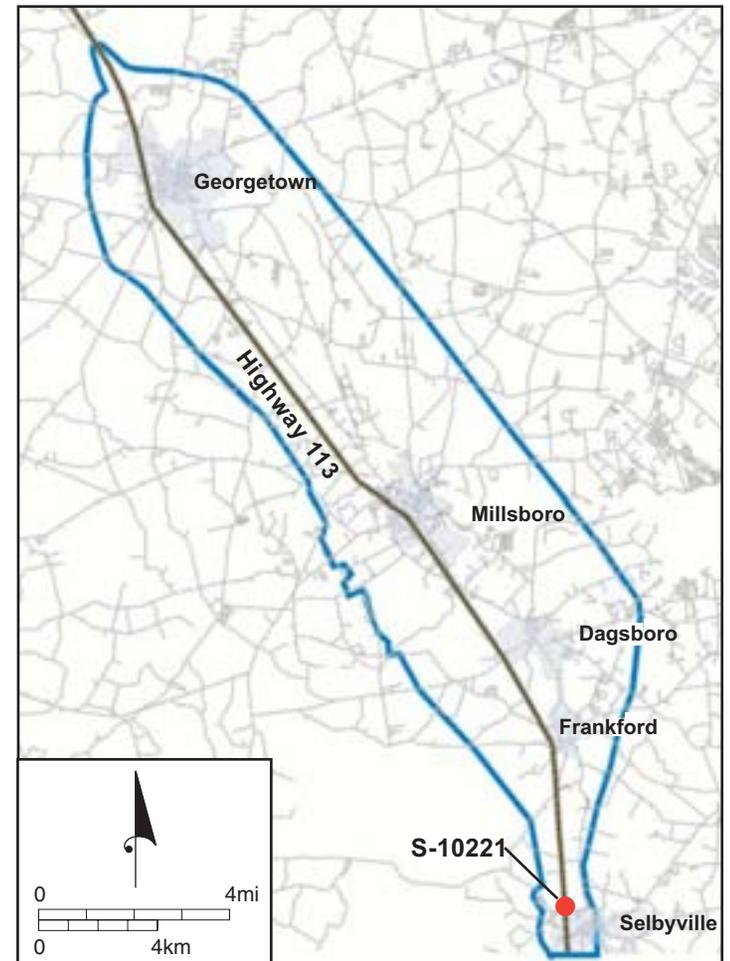


Figure 26. Example of Cape Cod dwelling in the Route 113 corridor (S-10221).

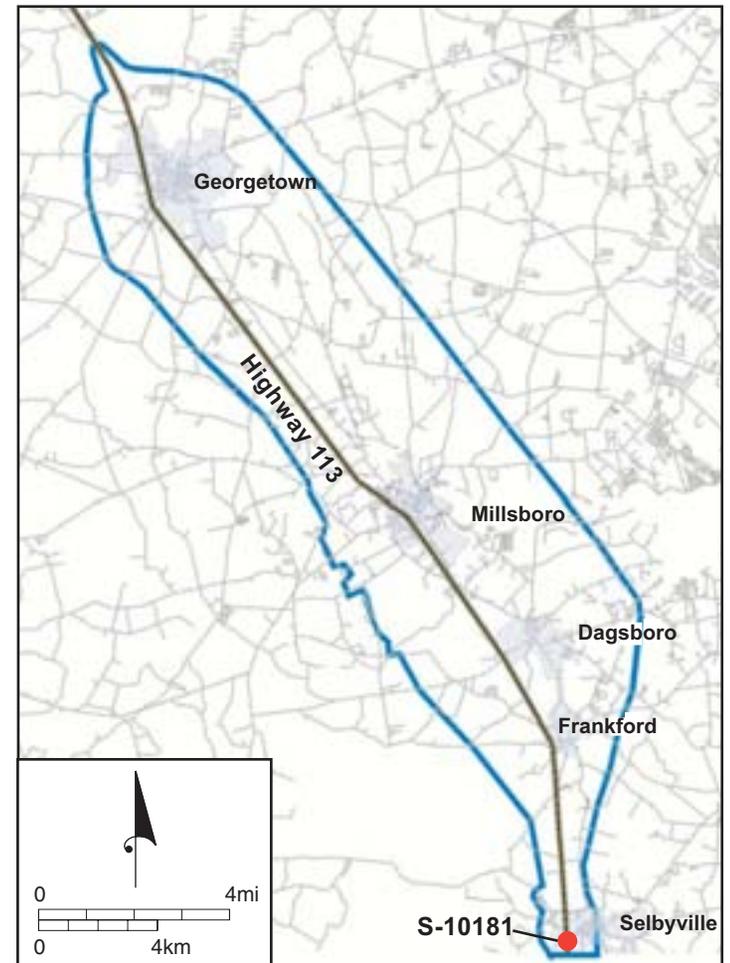


Figure 27. Example of English cottage/Tudor dwelling in the Route 113 corridor (S-10181).

plan with small rooms situated around a core (Figure 28). 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).

#### *4.6.7 STANDARD RANCH HOUSE (1950-PRESENT)*

The ranch house supplanted popular pre-World War II house designs such as the Cape Cod, Colonial Revival or Tudor Revival. With its often integral garage and single floor plan, it was designed for efficiency, lacking the stairs of earlier popular styles. As noted by MacAlester and MacAlester, ranch houses were made possible by the country's increasing dependence on the automobile. As the automobile replaced streetcars and buses as the principal means of personal transportation, relatively compact houses forms on small lots were replaced by sprawling house designs on much larger lots. The rambling form of the ranch house emphasizes these larger lots by maximizing façade width (McAlester and McAlester 1992:479). The standard ranch house became a popular design for members of the middle class able to afford land costs and construction costs greater than those of the minimal ranch or World War II cottage.

The standard ranch house is a box-like, one story building with a very shallow pitched gabled, cross-gabled, or hipped roof (Edwards et al. 2004:3-6) (Figure 29). Its perimeter outline is a strict rectangle. A garage is usually attached or integrated as part of the overall plan. Set off the street by a wide lawn and broad driveway, the standard ranch clearly presents a "suburban" image (Jakle et al. 1989:186).

In his recently published typology of post-World War II houses, Cory Jensen divides ranch houses into two types, the early ranch, viewed as an enlarged version of the World War II-era cottage, and the ranch. Details that Jensen indicates define the early ranch include a slightly more elongated form than the World War II-era cottage; the frequent inclusion of attached garages; windows, siding, and architectural details similar to those of World War II-era cottages; projecting cross gables often allow for additional interior space; and siding materials including striated brick, asbestos shingles, and aluminum siding (Jensen 2004:19).

Details characteristic of the ranch include long and low single level basic mass with gabled, hipped or, less commonly, flat roofs; attached carports or garages; frequent rear patios; and smaller windows in the front and larger ones at the rear as emphasis is placed on the backyard, although large picture windows are common in the living room (Jensen 2004:20).

#### *4.6.8 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

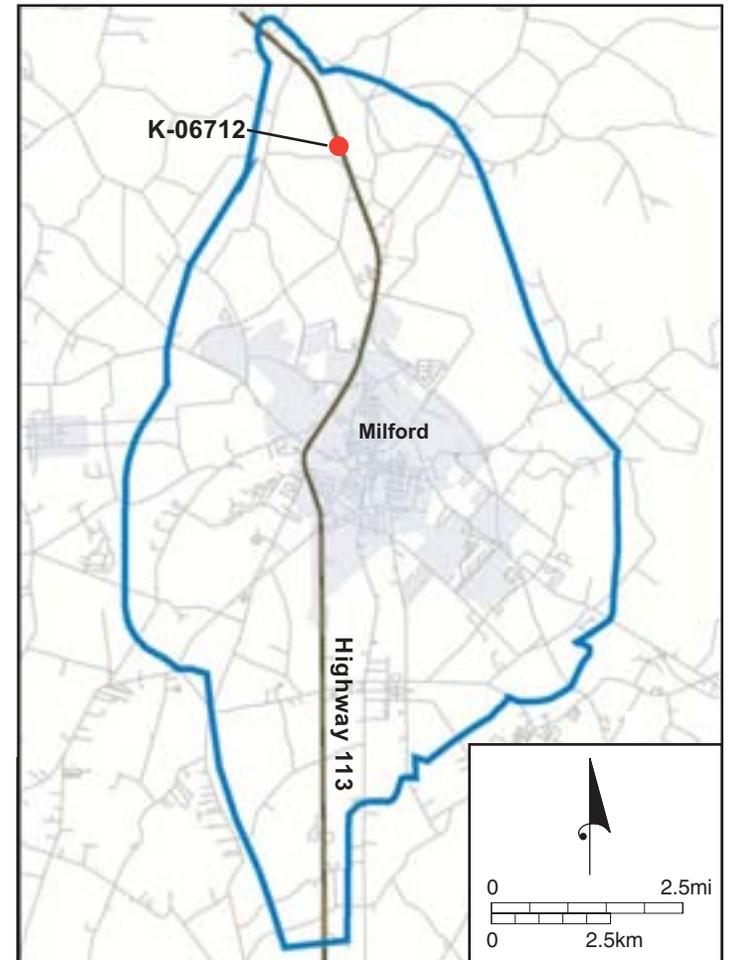


Figure 28. Example of World War II era cottage in the Route 113 corridor (K-06712).

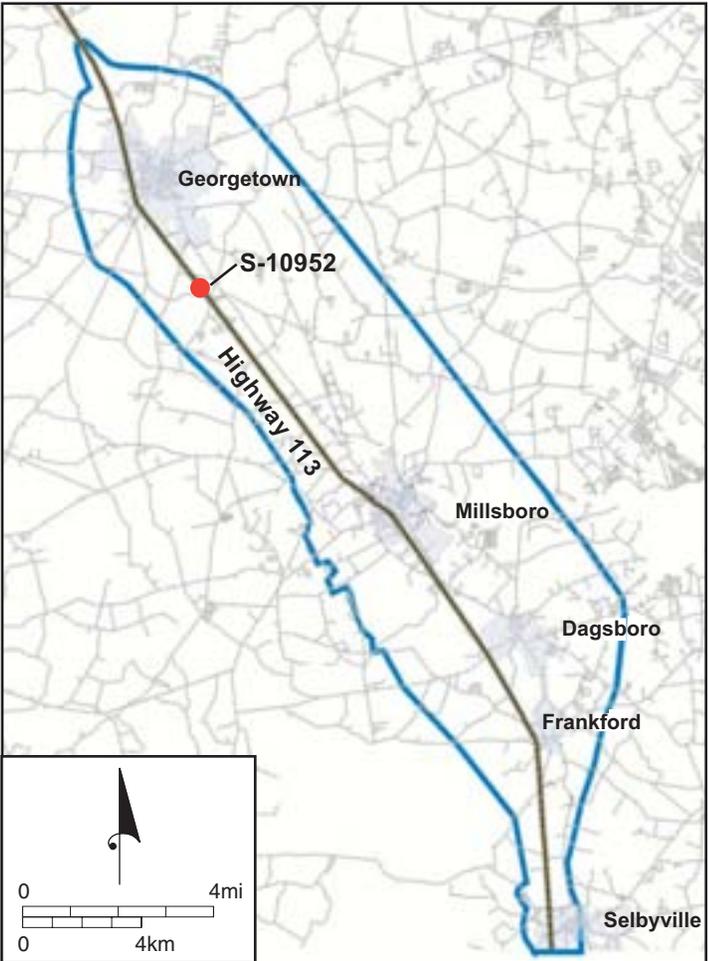


Figure 29. Example of standard ranch house in the Route 113 corridor (S-10952).

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 (Figure 30). 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).

#### 4.6.9 SPLIT-LEVEL HOUSES (1950s-1960s)

For many families whose first house was a ranch house or minimal ranch house, the split level of the 1950s and 1960s was a natural next step up the housing ladder. While the little ranch house had been a good “starter home,” it lacked specialized spaces, the den, the playroom, and the TV room, as well as the additional bedrooms needed to accommodate the growing family.

Developers and builders answered these needs with the original split-level or three-level home. The ranch house was split close to the middle. One half of the house, garage and bedrooms above was raised a bit. The other half, entry, living room, kitchen, and dining room was dropped a bit. In many cases, the living room/kitchen had a basement underneath, making a design with four levels.

Typically, the entry area with its large living room, kitchen and dining room attached was the wife’s domain. A few steps up led to bedrooms and bath, a few down led to the family den and garage, typically the father’s zone. The kid’s zone was often the playroom in the basement beneath the living room. The basic design was the mainstay of the mid-level housing market through much of the 1950s and the 1960s, the childhood home of millions of baby boomers (Split Level.net 2004).

Split-levels were typically built in one of two basic designs. In one design, the lower block and the raised block are both oriented with eaves facing the street (Figure 31). In the other design, the lower block has an eaves front orientation, while the second block has a gable front orientation. The greatest number of such houses are of wood-framed construction sheathed with clapboards. Lesser numbers are of masonry or masonry veneer construction. In some houses, the garage is oriented toward the street in the lower front wall of the raised block, while in other houses, especially those with an eaves front raised block, the garage is placed in the gable end wall of the raised block.

Other houses located within the study area are more appropriately characterized by form or plan rather than architectural style. These include: hall and parlor houses, I-houses, double-pile cottages, double-pile cottages with front extensions, gable-front double-pile cottages, gable-front double-pile houses, L-shaped cottages and houses, and cross plan cottages and houses. Such

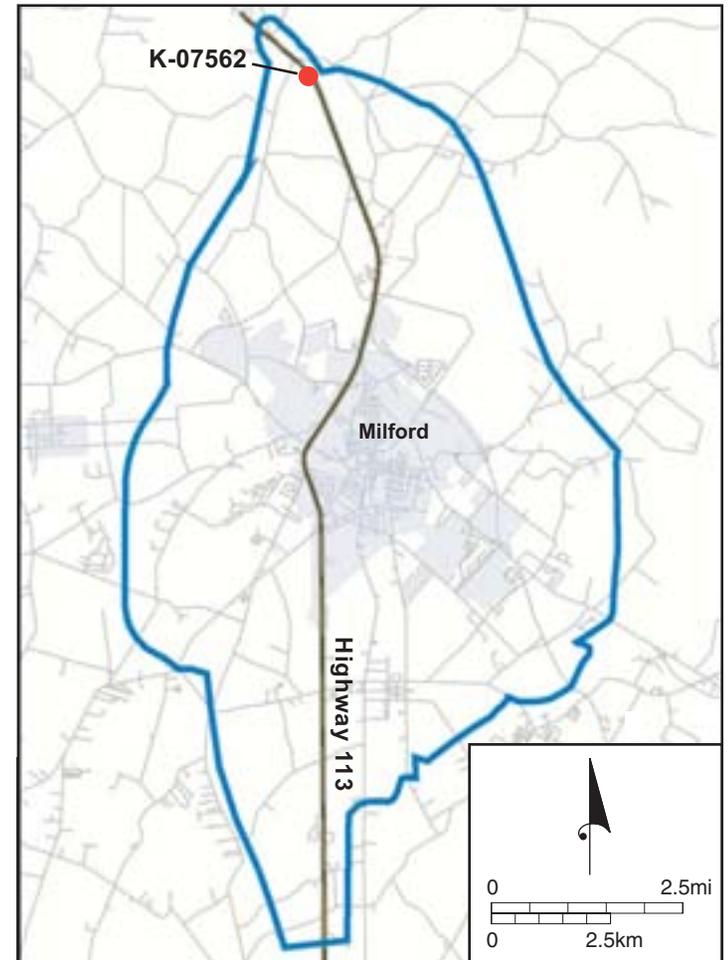


Figure 30. Example of minimal ranch house in the Route 113 corridor (K-07562).

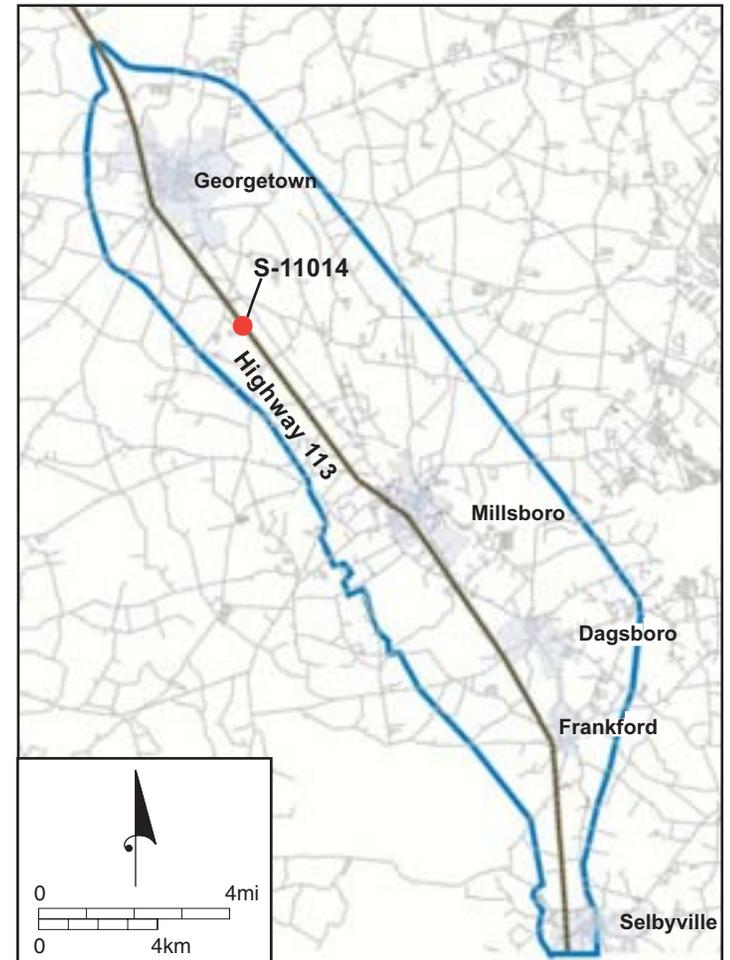


Figure 31. Example of split-level house in the Route 113 corridor (S-11014).

house plans are of two types. The first type is the “vernacular” house, such as the hall and parlor and I-house, a form whose ultimate origin may have been European and was adapted to local conditions, economics and household needs. The second type, including the L-plan and cross plan cottage or house, may have originally been developed as a “folk” or “vernacular” house type, but by the time they reached the peak of popularity were generally built by builders using existing standard plans or plan books.

#### *4.6.10 HALL AND PARLOR HOUSES (MID-19<sup>TH</sup>-EARLY 20<sup>TH</sup> 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 (Figure 32). 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).

#### *4.6.11 I-HOUSE (EARLY 19<sup>TH</sup>-EARLY 20<sup>TH</sup> CENTURIES)*

As Jakle, et al. indicate (1989), 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 (Figure 33). 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.

#### *4.6.12 DOUBLE-PILE COTTAGE (EARLY TO MID-20<sup>TH</sup> 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

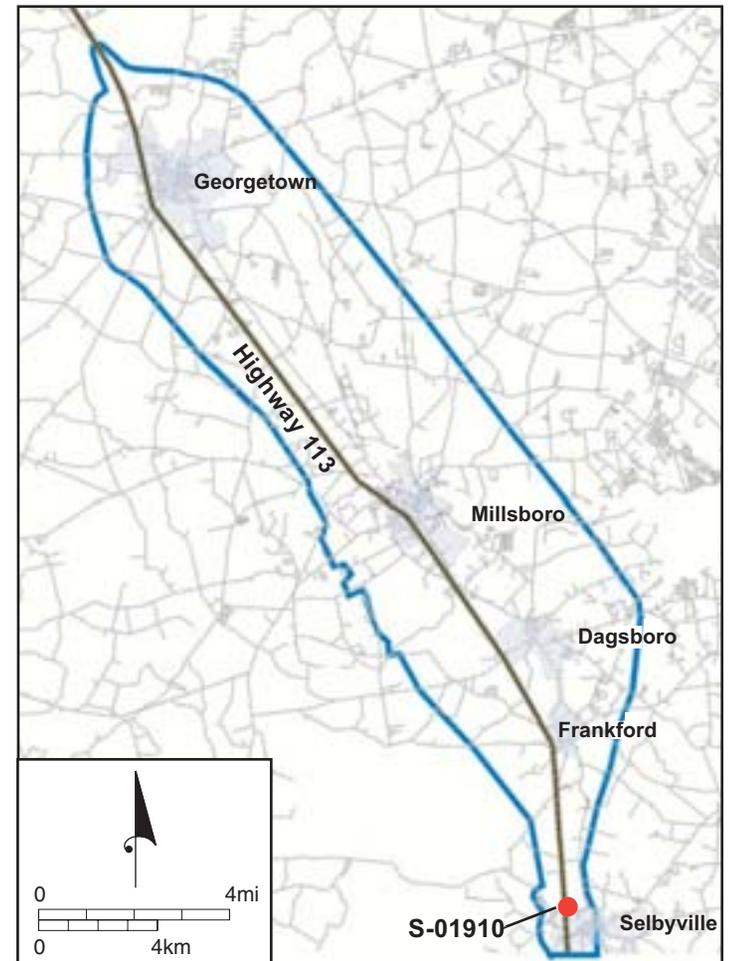


Figure 32. Example of hall-and-parlor house in the Route 113 corridor (S-01910).

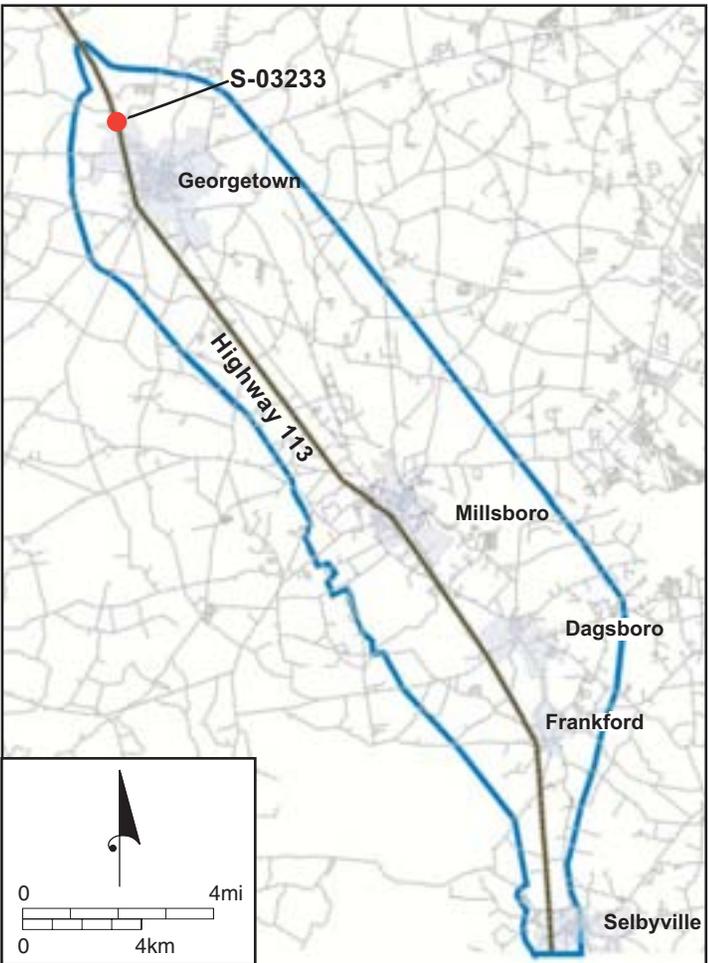
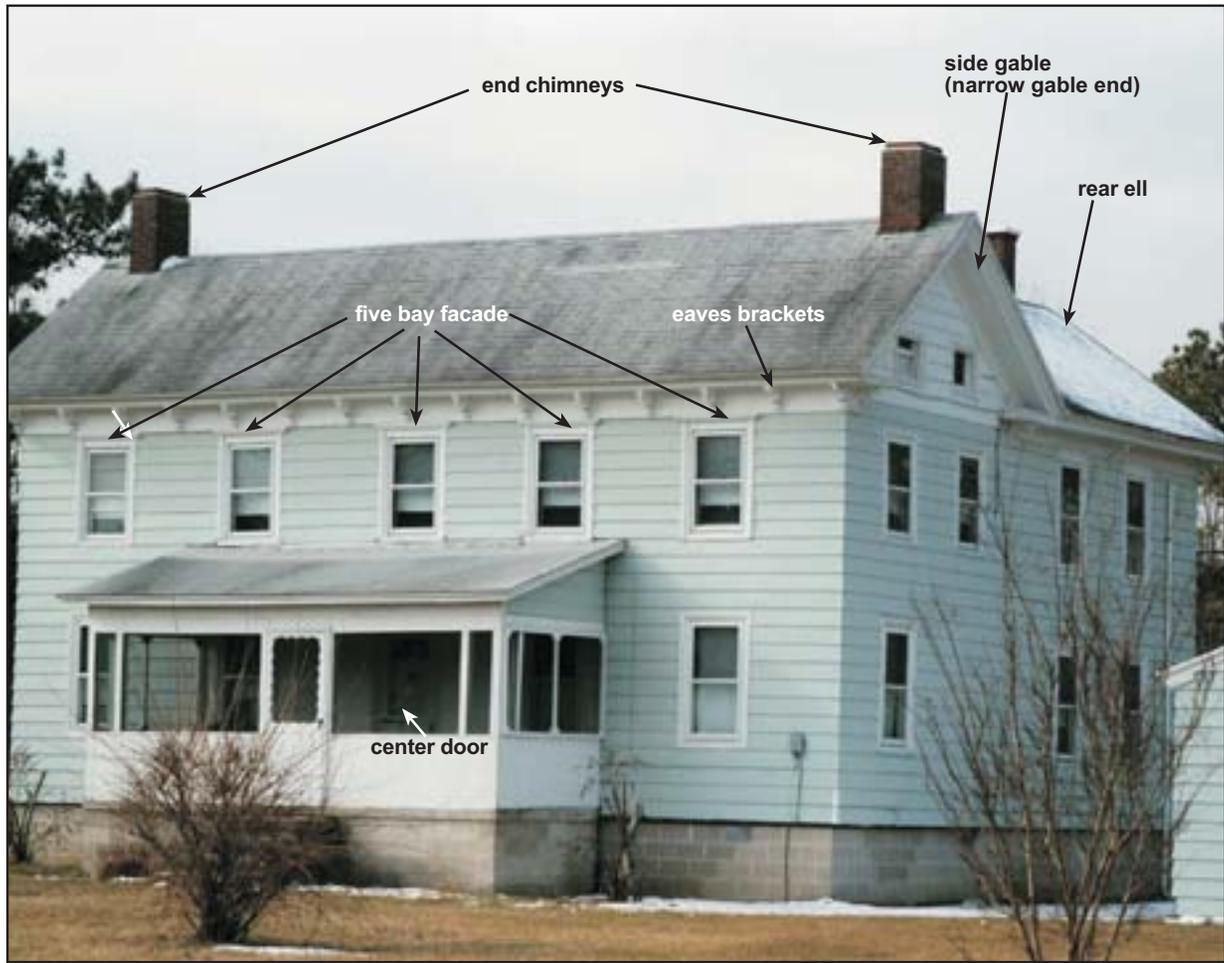


Figure 33. Example of I-house in the Route 113 corridor (S-03233).

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 (Figure 34). The roof is 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.

#### *4.6.13 DOUBLE-PILE COTTAGE WITH FRONT EXTENSION (EARLY TO MID-20<sup>TH</sup> CENTURY)*

The double-pile cottage with front extension represents a small step up from the double-pile cottage. Jakle, et al. attribute the popularity of this form to builder proclivities to “excite and serve a modest-priced market for middle class housing.” Although only slightly larger than the double-pile cottage, this house probably appealed to buyers who wanted a dwelling that conveyed a slightly more impressive appearance than the humble double pile cottage (Jakle et al. 1989:136).

This double pile cottage has a gabled roof with ridge parallel to the façade. A perpendicular extension extends off the front wall either to the left or to the right and is covered by a small gable that intersects the main roof at or below the ridge line (Figure 35). The extension contains, in most instances, an enlarged living room and sometimes contains the front door (Jakle et al. 1989:136).

#### *4.6.14 GABLE-FRONT DOUBLE-PILE COTTAGES (EARLY 20<sup>TH</sup> CENTURY)*

The gable-front, double-pile cottage is closely associated with the bungalow. In some suburban communities, such houses are interspersed with the side-gabled bungalow and represent a smaller and less expensive variation. Many such houses incorporate bungalow-craftsman decorative elements such as eaves brackets; three over one, double hung, sash windows; and full width front porches with battered posts. It is probable that many of these houses originated as scaled-down imitations of bungalows affordable to those of relatively modest means.

In this house type, the gable faces forward and contains the front entrance, the axis of the dwelling being perpendicular to the street (Figure 36). These one and one-and-one-half story dwellings are two rooms wide and two or more rooms deep. Most are three bays wide, often with a central entry bay. Most also have full-width porches, generally hipped or shed-roofed in form (Jakle et al. 1989:141). While most have traditional gables, some, including several in the study areas have jerkinhead or clipped gables.

#### *4.6.14 GABLE-FRONT DOUBLE-PILE HOUSES (LATE 19<sup>TH</sup> AND EARLY 20<sup>TH</sup> CENTURIES)*

Late nineteenth and early twentieth century gable-front houses are commonly seen in cities where they were particularly well-suited for the narrow lots of the urban northeast. This house form is less commonly found in small towns and rural areas. By the early twentieth century, the gable-front house was widely available as both a stock builder form and a prefabricated catalog house.

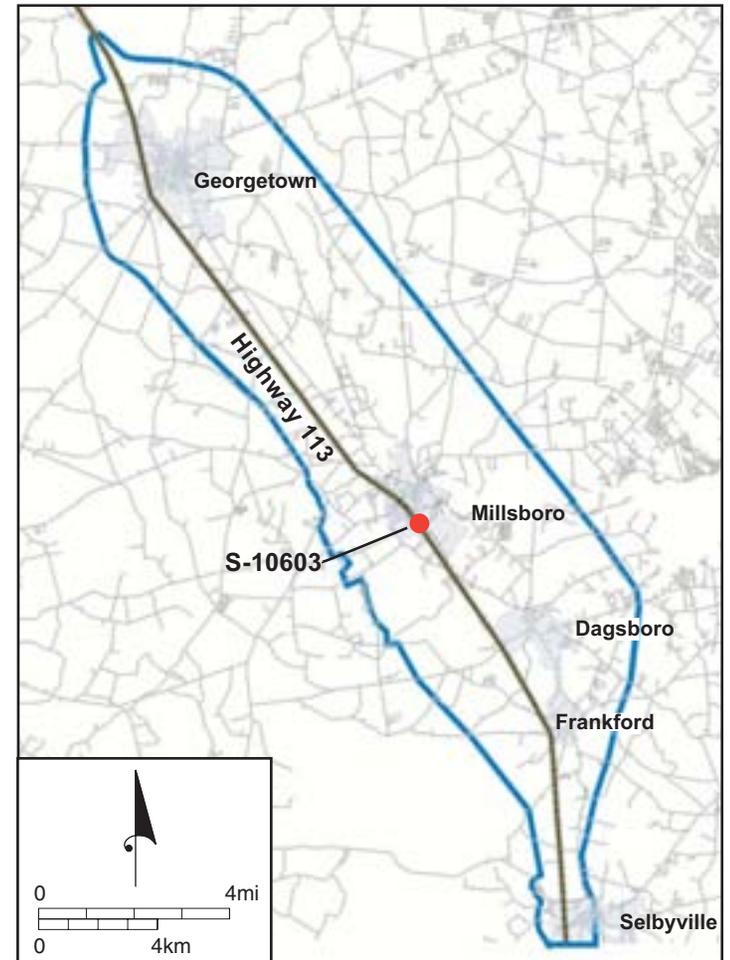


Figure 34. Example of double-pile cottage in the Route 113 corridor (S-10603).

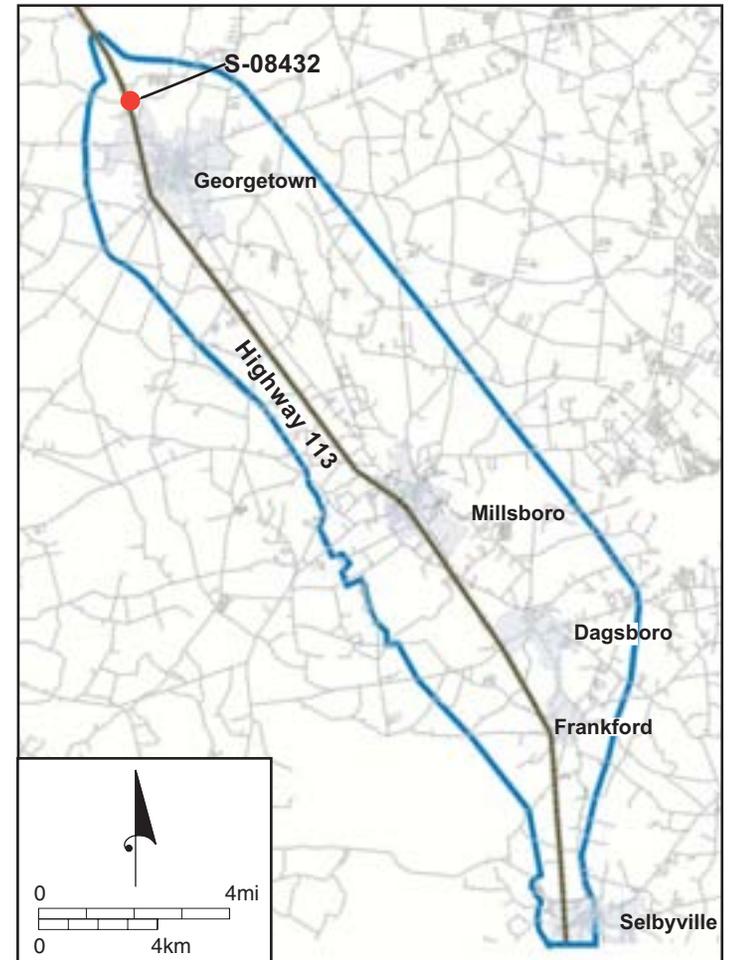


Figure 35. Example of double-pile cottage with front extension in the Route 113 corridor (S-08432).

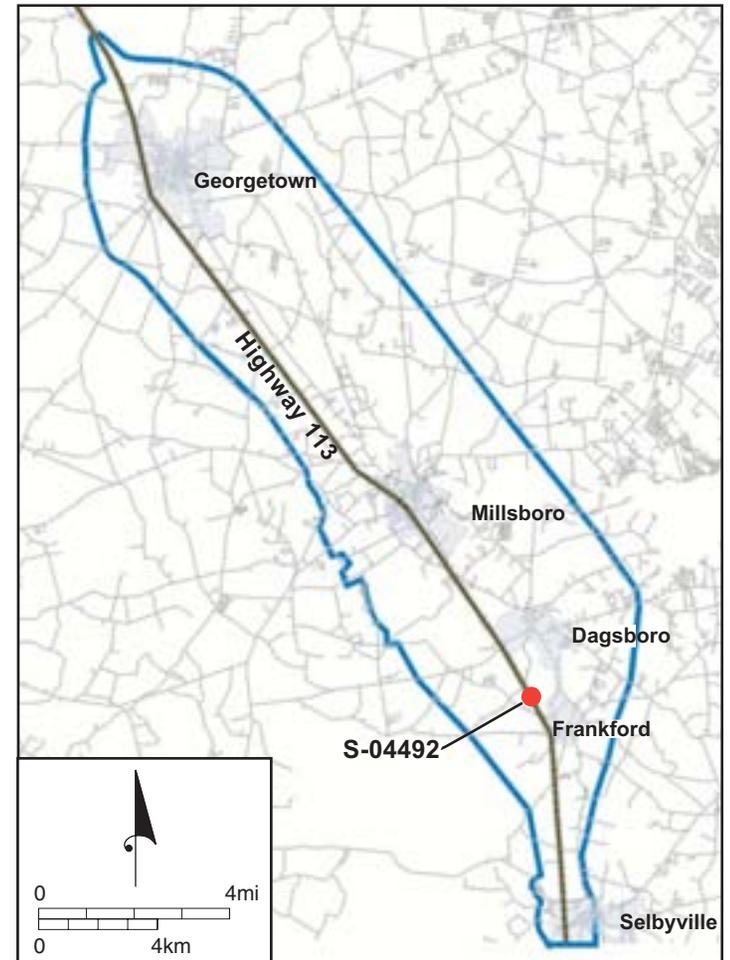


Figure 36. Example of gable-front, double pile cottage in the Route 113 corridor (S-04492).

While typical urban houses have a narrow, tall, façade the few examples in the study area are wider than these urban examples, allowing more interior space (McAlester and McAlester 1992:90). Because of the larger size than most other house types of the period, these houses were probably erected for relatively prosperous early twentieth century Delawareans.

In this house type, the gable faces the street and the building rises to a height of two- or two-and-one-half stories (Figure 37). It is two rooms wide and two or more rooms deep. Nineteenth-century versions of this form usually feature a side hall serving a front door set to one side of the gable. Gable front twentieth-century houses have irregular bungalow-like room arrangements (Jakle et al. 1989:143).

#### *4.6.16 L-SHAPED COTTAGES AND HOUSES (EARLY TO MID 20<sup>TH</sup> 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 (Figure 38). 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).

#### *4.6.17 CROSS PLAN COTTAGES AND HOUSES (EARLY TO MID 20<sup>TH</sup> CENTURIES)*

Cross plan houses are well-represented in the plan books and house catalogs of the late nineteenth and early twentieth centuries. As with the gable front house, this plan is more common in cities and towns as builders attempted to fit irregular massing on the narrow urban lots typical of most towns and cities. The few found in the study area may possibly represent versions of published house plans built for middle class residents.

In a cross plan dwelling, the principal axis of the building is perpendicular to the street with one or two cross gables midway back from the street (Figure 39). Frequently a hipped or shed-roofed front porch extends the width of the front gable wall. The positioning of the front door varies. In many cross plan dwellings, it is located in one of the cross gables and is approached along a side porch. In other dwellings, it is located in the façade wall (Jakle et al. 1989:163-4).

#### *4.6.18 PREFABRICATED AND STANDARD DESIGN HOUSES (INITIAL EXAMPLES: EARLY 20<sup>TH</sup> CENTURIES; LATER EXAMPLES: MID-20<sup>TH</sup> CENTURY-PRESENT)*

The earliest use of standard design homes dates back to nineteenth century architectural pattern books.<sup>4</sup> 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. No examples of early standard design homes or prefabricated homes have been identified within the study areas.

<sup>4</sup> See *Building an American Identity: Pattern Book Homes & Communities* (Smeins 1999).

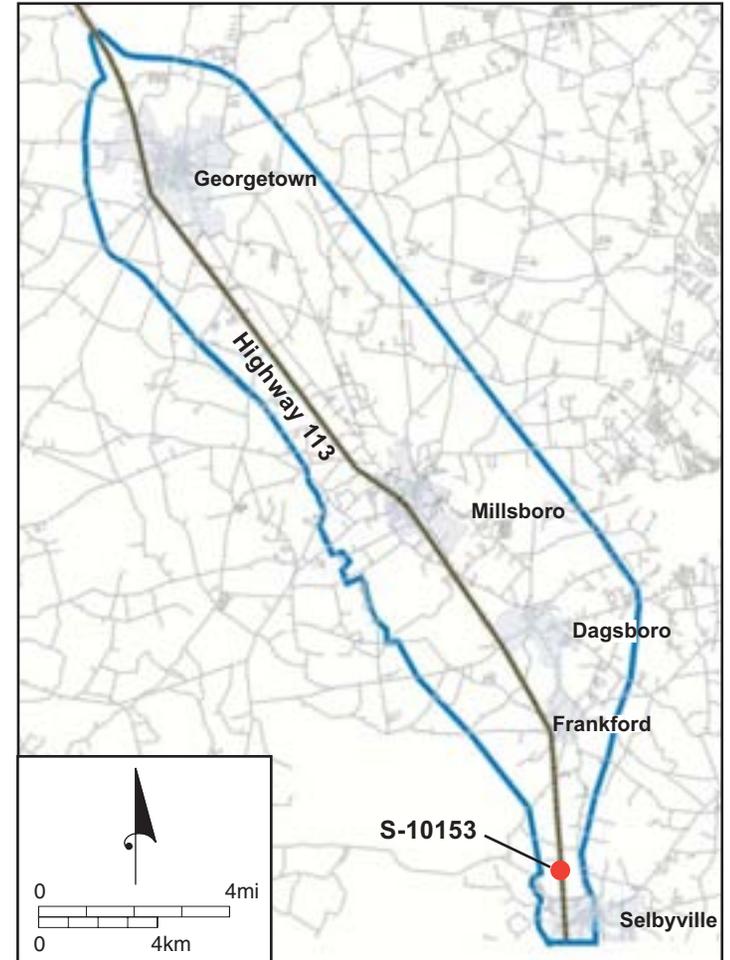


Figure 37. Example of gable-front, double pile house in the Route 113 corridor (S-10153).

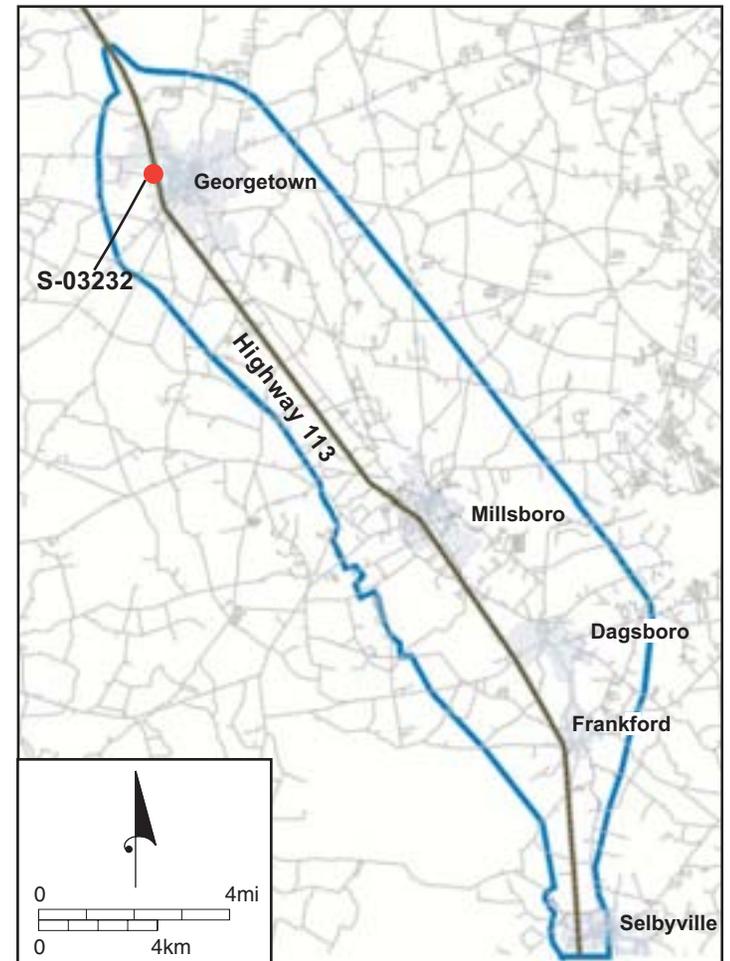


Figure 38. Example of L-shaped house in the Route 113 corridor (S-03232).

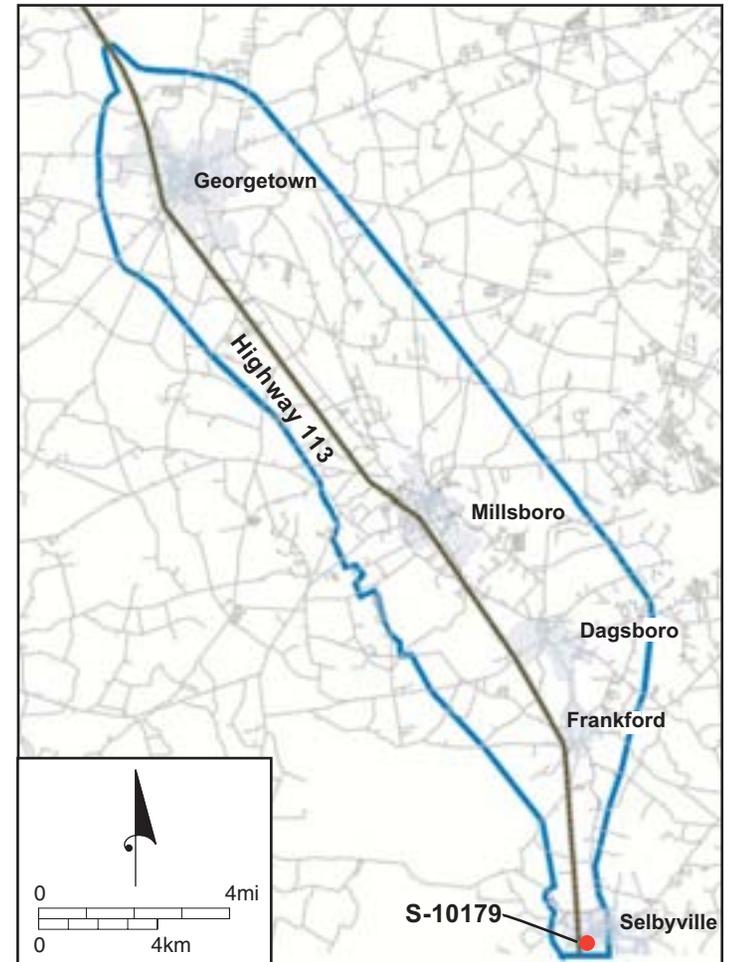


Figure 39. Example of cross plan house in the Route 113 corridor (S-10179).

Prefabricated and standard design homes regained popularity due to the increased demand for housing in the mid-20<sup>th</sup> 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 (Figures 40 and 41) 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” (IEH 1962). Each was a ranch design.

It is presently unknown whether any house within the study area was provided by any of these sources. This information may be able to be obtained by interviewing owners of houses of the period.

## 4.7 AGRICULTURAL DWELLINGS AND SUPPORTING OPERATIONS

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

### 4.7.1 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;

# Spring Is Just Around The Corner - It's Time to Bring Your Dream House Down To Earth!

**Let Us Have Your Home Ideas!**

We'll Put Them Into Plans For You . . . Or Perhaps This Or One Of Our 1,001 Other House Plans Will Be Just What You Want!  
**COME IN AND LOOK THEM OVER!**

**We Can Not Only Build Yours From The Ground Up, BUT We Can Help You To Arrange Your Financing!**



A SMALL HOUSE PLANNING BUREAU DESIGN NO. C-447



DESIGN C-447. An extra large vestibule is the key point in this design. The sleeping area has three bedrooms with wardrobe type closets and bathrooms. French doors connect the dining room to a screen porch which, along with the large picture window in the living room, takes full advantage of a pleasant yard.

The kitchen features a built-in oven, counter top range and ample space for informal dining.

A lavatory, coat closet and access to the garage are desirable features of the rear entry.

The exterior is highlighted by the use of natural stone and a pleasing combination of vertical and horizontal siding. Floor area is 1443 square feet (excluding garage).

For further information about DESIGN C-447, write us or phone us at Millsboro 2311.

**We Specialize In -  
Farm-Commercial & Industrial Buildings**

*Supplies for the Largest or Smallest Jobs*

**HOUSTON-WHITE CO.**

Millsboro, Delaware

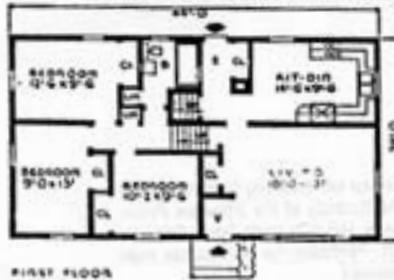
Telephone 2311

Figure 40. "Spring is Just Around the Corner-It's Time to Bring Your Dream House Down to Earth." Houston-White Company advertisement, *Delmarva News* (Selbyville, DE), January 8, 1959.

*Stop Dreaming! See Us -  
And Bring Your Dreams Down  
To Earth*



A SMALL HOUSE PLANNING BUREAU DESIGN NO. C-430-8



FIRST FLOOR



GROUND FLOOR

DESIGN C-430-7

Hundreds Of Home  
Plans To Choose  
From  
COME IN & SEE

**Design C-430-8**

Consists of four levels.

The top level has three bedrooms and bath.

The ground level has living room, vestibule, entry and a combination kitchen-dinette.

The lowest level (under living room and kitchen) is used for heater room and hobby or work room.

The next lowest level shows laundry, bathroom and recreation room. All rooms have wardrobe closets, in addition to coat rooms, linen and towel cabinets.

Exterior finish includes asphalt shingles, hip roof, wide eaves, picture window and wide siding. Floor area is 1056 sq. ft., with cube of 20,240 cu.ft.

For further information about DESIGN C-430-8, come in and see us in Millsboro, or phone 2311.

**We Can Assist You In Arranging The  
Necessary Financing**

**Farm Buildings - - - Commercial Buildings  
Come In & See Our Many New Home Plans**

*Supplies for the Largest or Smallest Jobs*

**HOUSTON-WHITE CO.**

Millsboro, Delaware

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Figure 41. "Stop Dreaming! See Us-And Bring Your Dreams Down To Earth." Houston-White Company advertisement, *Delmarva News* (Selbyville, DE), July 21, 1960.

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).

#### 4.7.2 *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, broiler houses, and a feed mill are present within the study areas.

##### 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; Figures 42 and 43).

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; Figure 44).

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).

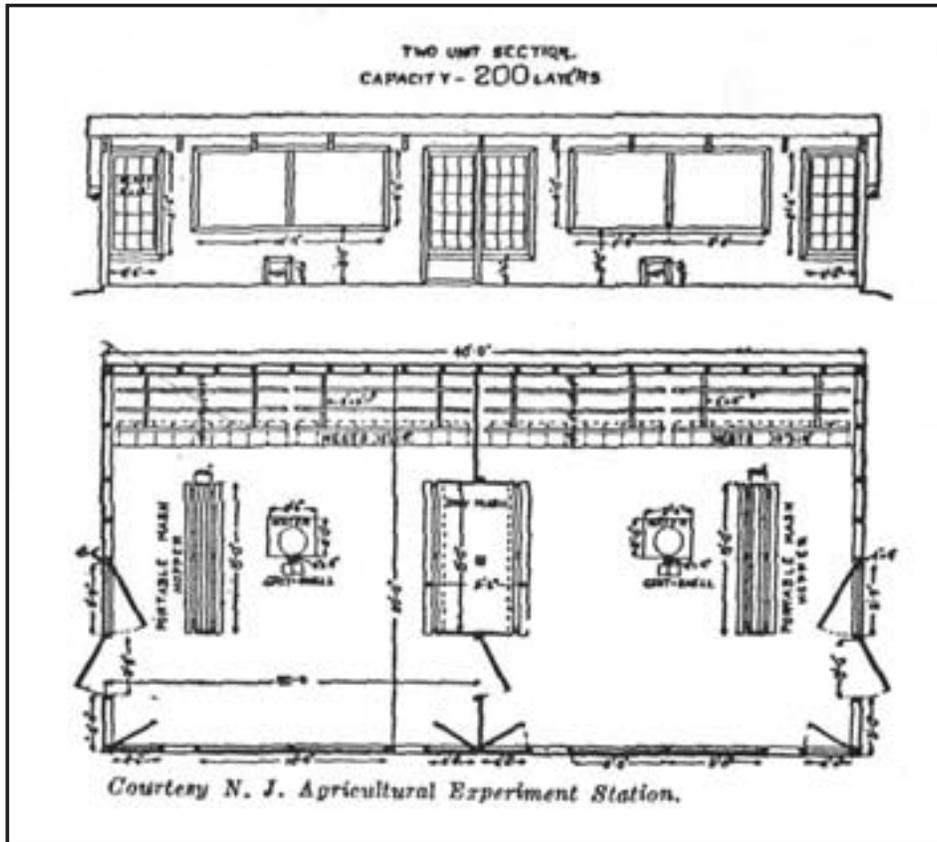


Figure 42. Facade and floor plan of a double unit 20 by 40 foot laying house (Hanna 1923).

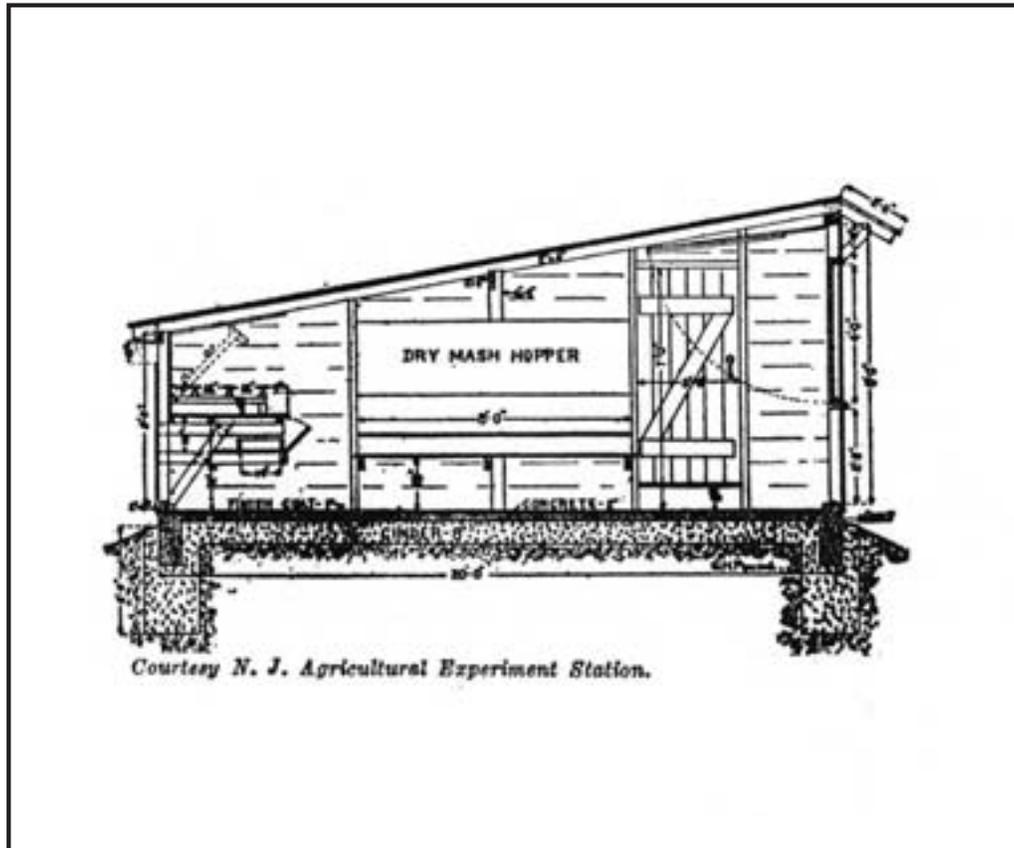


Figure 43. Cross-section of a double unit laying house (Hanna 1923).

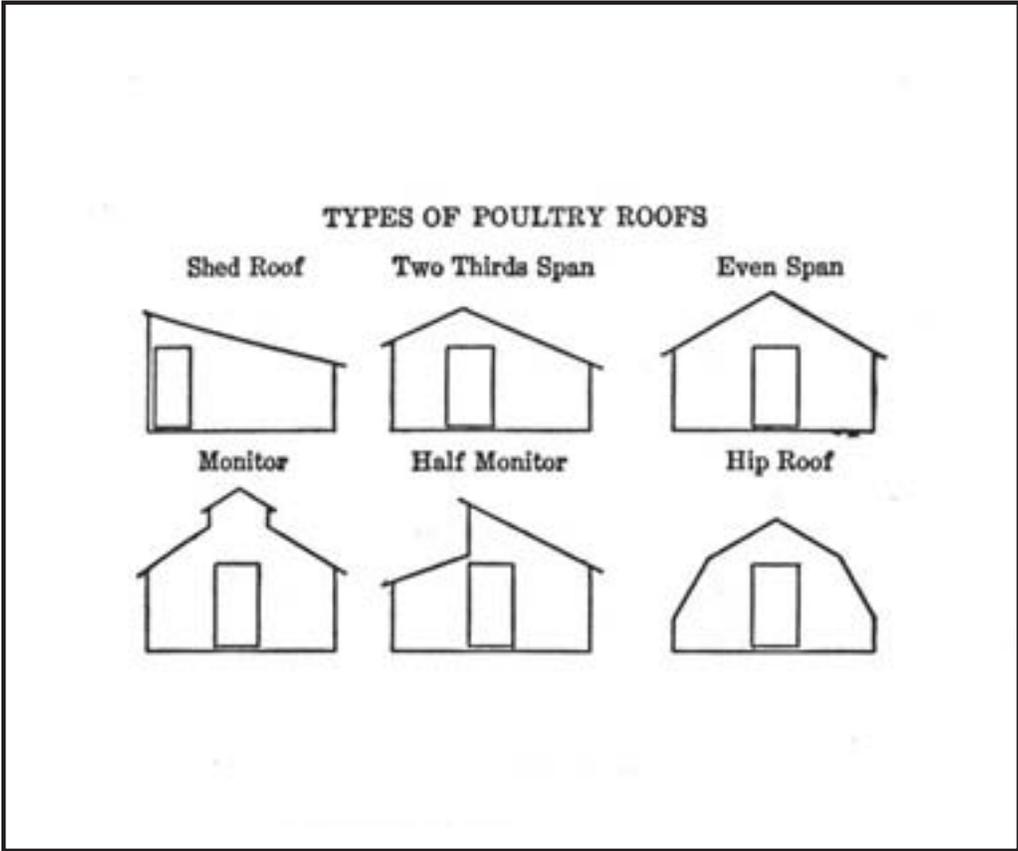


Figure 44. Types of poultry house roofs (Hanna 1923).

Broiler chicken houses underwent rapid evolution as the Sussex County broiler industry boomed. The earliest such houses, typified by Mrs. Wilmer Steele's houses<sup>5</sup>, 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 (Williams 1998:21; Hoffman and Johnson 1946:42; Tomhave 1951:133).

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) (see Figure 44).

Growers lived in close proximity to their chicken houses in order to keep constant watch over their flock. In some cases, the hired hands and their families lived above the central feed storage room in second-story living quarters called chicken-house apartments (Williams 1998:21). Typically gabled roof and weatherboarded on the exterior, the first floor of the center portion of these buildings was used to store feed, while the second floor housed a resident caretaker. The first floor feed room was ventilated with windows and had doors permitting access to either side of the chicken house. An exterior stairway provided access to the second story apartment, usually consisting of three rooms: a living room, kitchen and bedroom. Often a bathroom was included, as well. These chicken houses, which generally ranged between 400 to 500 feet long and 16 to 20 feet wide, could hold between 5,000 and 15,000 birds. Many such houses were located in Sussex County towns such as Dagsboro and Selbyville and were often owned by companies such as Townsend Poultry, Inc., and Allen Family Foods. Both these companies remain in operation in Sussex County, although their holdings have changed in recent years. These once common buildings are now rare and even fewer remain in use (Lanier and Herman 1997:239-241).

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 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:

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

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 (Anonymous 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 26,500 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).

### Feed Mills

The availability of food was critical to the growth and survival of Delaware’s poultry industry. The large-scale poultry feed industry began in the years following World War II. Though corn and soybeans, the key ingredients in chicken feed, could be stored for long periods, storage facilities were expensive to build. No feed dealer could afford a large inventory that was not moving. Feed companies began buying chicks from hatcheries and selling them to farmers in attempts to increase their markets (Williams 1998:50-51).

From 1941 to 1961, locally owned companies captured an increasing share of the Delmarva chicken feed market. Their prosperity was aided by low shipping costs. Local mills turned to local farmers for corn and soybeans. A 1955 study of lower Delaware noted that “most of the broiler feed in the area is manufactured locally” (Williams 1998:48).

During the late 1940s and early 1950s, regional and national giants such as Pillsbury, Ralston Purina, and Southern States, and additional smaller, locally owned feed companies, attached themselves to a large number of chicken farmers through a contract system. Credit was provided to the grower for the purchase of feed with the understanding that upon sale, the grower would reimburse the feed company for the cost of feed (Williams 1998:49-50). By the late 1950s, Delmarva companies were moving toward vertical integration with the independent feed mill becoming a fixture of the past (Williams 1998:54).

To manufacture poultry feed for distribution to contract poultry growers, the leading Delmarva poultry producers established their own feed mills. One feed mill is located in the Georgetown-South study area in Frankford. Established by Townsends, Inc., it was acquired by Mountaire Farms of Delaware in 2000. In addition to the feed mill, the property contains a granary with 6.2 million bushels of grain storage. This grain mill serves local farmers (Mountaire Farms n.d.).

Feed mills are located throughout the Delmarva region. In 1998, Allen Family Foods operated a feed mill in Delmar, Delaware; Mountaire operated one in Frankford, Delaware; Perdue operated one in Bridgeville, Delaware, and four in Maryland; and Tyson Foods, Inc., operated two in Maryland (Williams 1998:113-114).

Feed mills typically consist of a series of attached buildings and structures with a detached office. This detached office may have originally been built as a residence and was enlarged to accommodate its present use. Feed mills contain several primary components: a grain elevator or storage silos are used to house the corn or soybeans to be converted to poultry feed; grinding machinery processes the grain, preparing it to be mixed with other feed components; the mixers

combine the components used in the feed; pellet machines use heat and metal dies to form the feed into pellets; and the pellets are then cooled in a cooler and are then ready for shipment by truck (Dozier 2002).

#### 4.7.3 SEASONAL LABOR OR TENANT HOUSING

In an article in the May 1957 issue of *American Child*, Mrs. Thomas Herlihy, Jr. described the migrant labor situation in the state:

Migrant labor is an integral part of Delaware's farm economy. Harvesting and canning the state's crops depend on a supply of temporary nonresident farm workers to supplement the number of local farm workers. Starting in May and ending in late fall, migrant workers are in demand with as many as four or five thousand being employed during some weeks in August (Herlihy 1957:3).

In the 1920s, the seasonal agricultural work force in Delaware was principally composed of white women. Over the next twenty years however, they were replaced by thousands of migrant farm laborers, both black and white, traveling north from Florida following the potato, vegetable, and berry harvests into Delaware (Miller et al. 1997; Taylor 1937). In addition to these migratory crews, local teenagers and African Americans who had "fallen out" of the migratory "stream," worked seasonally in Kent and Sussex counties (Miller et al. 1997).

Beginning in the post-World War II period, migrant workers became an important component of the southern Delaware farm labor force. In the mid-1950s, most seasonal workers were African Americans from Florida, the Carolinas, and Georgia. About five percent of the seasonal workers were Hispanics from Puerto Rico. Delaware had about 150 labor camps housing seasonal workers. Most such camps were located on farms where the laborers worked. The laborers were typically employed to pick truck crops or to work in canneries (Frank 1955).

A statistical study of the seasonal worker population in Delaware was published in 1967 by the State Department of Public Instruction. The report noted that from early summer to late fall, the migrant population was a significant part of the state's labor force. In 1967, approximately 4,301 temporary agricultural workers came to Delaware. Of these, 2,600 male workers came from Puerto Rico under a contract from the Puerto Rican government. Most non-Puerto Rican workers arrived in crews, generally ranging from 16 to 25 workers, accompanied by nonworking children, wives, and older people. Most members of the crews were African American men, and most came from Florida or Texas (Thomasson 1967:1-11).

Seasonal worker housing ranged from clean brick buildings to ramshackle wooden buildings. Typically accommodations included two rooms and were often part of an attached row of one-story, wood-framed quarters. Earlier seasonal labor housing often consisted of individual cabins, a single room measuring about eight by 10 feet shared by as many as seven people (Frank 1956).

Typical seasonal labor cabins from the World War II-era are depicted in photographs from the general collection of the Delaware Public Archives. These single pen, wood-framed dwellings were front-gabled in orientation. A single door was placed in the center of the gable. Small windows were placed in at least one side wall and were shaded by angled hoods supported by angled wood braces. The cabins were sheathed in board siding, and a metal stovepipe usually projected from the roof ridge. The roof itself was sheathed in asphalt roofing paper. The interior was of basic construction with wood floors, and walls formed by studs and the inner side of the

sheathing boards. Bedding was generally provided by a metal cot with thin mattress. Bathroom facilities were external to the cottage (see Figures 45 and 46).

## 4.8 PROPERTY LAYOUT CONFIGURATIONS

### 4.8.1 MOBILE OR MANUFACTURED HOME PARKS

The house trailer first became widely popular in the 1930s. Two main lines in the future development of the house trailer had emerged. The first, then dominant, line of development viewed the trailer as an automobile accessory, an alternative to motels, hotels, or tents when a family embarked on a motoring vacation. The second line of development viewed the trailer as an alternative form of year-round dwelling.

During the Depression and World War II, it was primarily single men, construction workers, defense laborers, military personnel, who converted tiny travel trailers to permanent homes. The popular image of the time was that of a rough, male-dominated space, and was often close to the mark (Hurley 2001:226).

By 1936, an article suggested that trailers could be made more acceptable to local officials if they were made “more homelike and less streamlined” and placed in “attractive settings in permanent villages” (Wallis 1989:29). In his study of the mobile home, Wallis cited the type of people initially attracted to trailer living:

For itinerant construction workers who would normally leave their families at home, the trailer provided a way to keep the household together. Other itinerants, including unskilled laborers, salesmen, and traveling evangelists, also found the trailer a convenient and economical alternative to boardinghouses, hotels, and motels (Wallis 1989:31).

In his study of house trailers in the United States, David Thornburg characterized early mobile home parks:

The pioneer models that survived the war, the little 1930s leatherette and plywood boxes, were gathered onto small, decrepit parks during the late forties and turned low-dollar rentals....These were the sad little parks of everyone’s memory, poorly lighted, poorly drained, never paved and seldom grassy, full of solitary elderly folk...brave, lonely souls without family or friends....Here too were the abandoned families....(Thornburg 1991:166).

The primary function of the house trailer shifted because of housing shortages in the World War II years. Before the war 75 to 90 percent of all commercially manufactured trailers had been used for vacations. Ninety percent of the trailers manufactured during the war and throughout the early 1950s were used for year-round housing. A majority of residents were military or construction families (Wallis 1989:34-35).

By the mid-1950s, the housing crisis had passed and a demographic shift had begun to appear among trailer buyers. At the time of the 1960 census, the average trailer household was younger,



Figure 45. Seasonal worker cabins, Sussex County, 1947. Delaware Public Archives, General Photograph Collection: Agriculture. Box 1, folder 13.

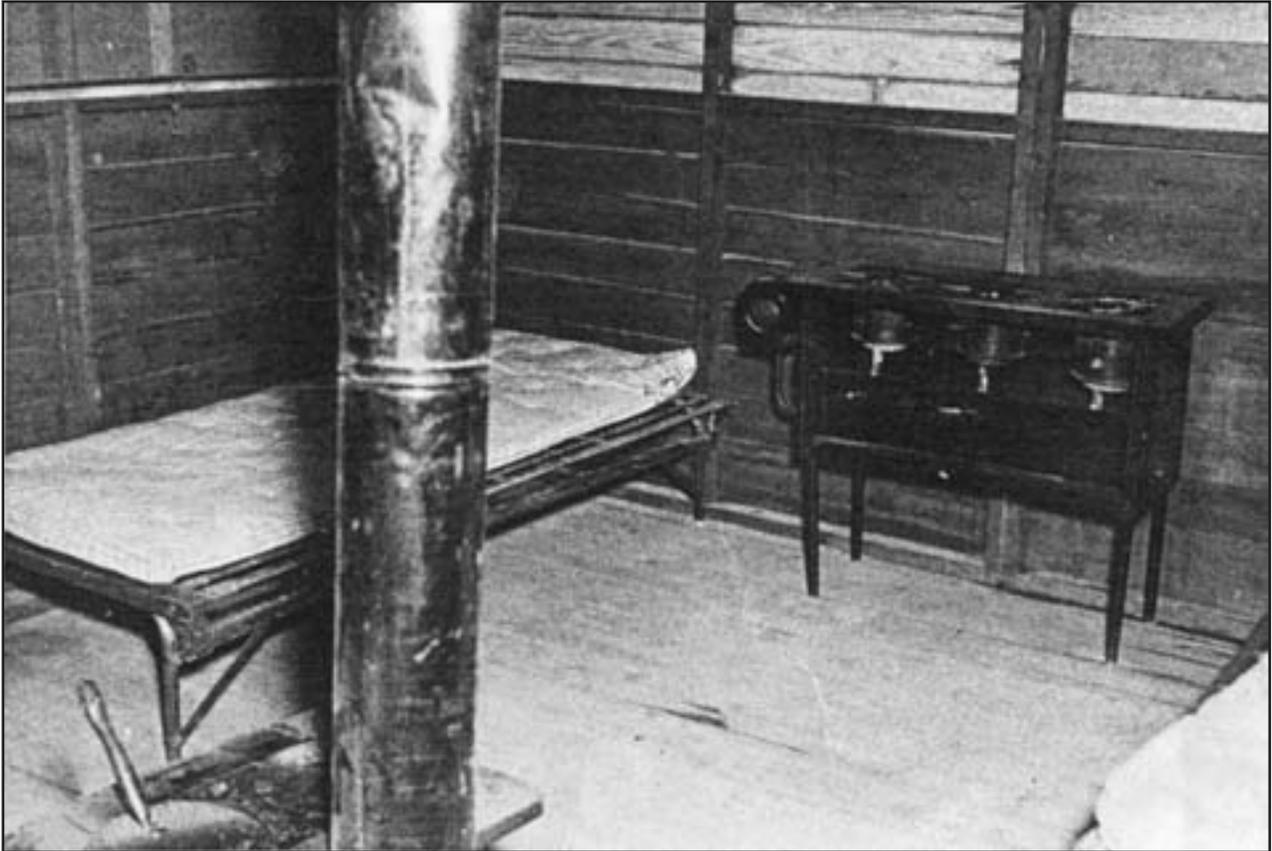


Figure 46. Interior of seasonal worker cabin, Sussex County. c. 1947. Delaware Public Archives, General Photograph Collection: Agriculture. Box 1, folder 13.

less educated, and less affluent than the general population. These households did not view the trailer as a dwelling to accommodate a transient lifestyle but as a means to enter the conventional housing market (Wallis 1989:37).

At the same time a less “mobile” market emerged, wider mobile homes, 10-foot wide models, were introduced. The added width allowed for a floor plan in which a corridor was able to reach the rear bedroom without passing through the middle bedroom and bathroom. By 1960, 90 percent of all trailers manufactured were ten feet wide (Wallis 1989:37). Thornburg described the evolution of the mobile home parks:

Parks remodeled, widening and deepening their lots to accommodate the new models, and raising their rents accordingly. Ten-wides, twelve-wides, then double-wides (two eights joined together to make a sixteen) each became, successively, the norm (Thornburg 1991:174).

In addition, most trailers had concrete patios on the side that could be enclosed with walls and covered with an aluminum awning, thus converting it to an extra room (Hurley 2001:234).

The majority of these mobile homes were placed in unincorporated areas. Beginning in the 1940s, the Mobile Home Manufacturers Association tried to promote the development of high quality parks. A typical park was oriented with units at right-angle to the street. Later parks introduced curvilinear streets, setback variations, and playgrounds. Municipalities typically tried to confine parks to nonresidential areas frequently zoning them into commercial or industrial strips along highways and railroad tracks (Wallis 1989:38). Many of these newer park enticed prospective tenants with idyllic names such as Tall Pines, Pine Oak, Oak Grove, Shady Grove, Shady Acres, Green Acres, Green Meadow, and Meadow Lark (Hurley 2001:243).

In his study of trailer parks, Andrew Hurley noted the social hierarchies that typically developed among their largely blue-collar residents. Not only were parks divided into family and pet sections, but sections for large and small trailers, as well. Hurley notes, “Social credit accrued to families who traded in their dilapidated coaches for larger models and relocated to the ‘neighborhoods’ reserved for supersize trailers.” In 1971, a magazine article characterized the average trailer dweller as “a notch below the widely publicized ‘Middle American.’” (Hurley 2001:170-171).

In 1970, Kent County contained over 4,100 mobile homes, 18 percent of all dwelling units in the county. Of these, 1,721 were in mobile home parks, while 2,398 were on individual sites. A total of 167 mobile homes were located in the Milford planning district. Of these, 16 were in parks, and the remainder on individual sites (KCRPC 1971:54-55). Similar data is not readily available for Sussex County.

#### *4.8.2 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 Milford study area.

#### *4.8.3 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 four-squares, while more recent subdivisions may include Colonial revival, Cape Cod, minimal traditional, and ranch style dwellings, among others.

## **4.9 TRADITIONAL CULTURAL PROPERTIES**

Traditional cultural properties may be defined as historic properties whose significance is derived from the role the property plays in a community's historically rooted beliefs, customs and practices. Examples of properties possessing such significance include:

- A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of its world;
- A rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents; or
- A location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity.

A traditional cultural property (TCP) may be eligible for the National Register because of its association with cultural practices or beliefs of a living community that are rooted in that community's history and are important in maintaining the continuing cultural identity of the community (Parker and King 1998:1).

The concept of TCPs is continually evolving as more communities and landscapes are surveyed and evaluated as TCPs. An important contribution to the study and evaluation of TCPs in Delaware is being made by University of Delaware graduate student Darrell Cook in his thesis. This thesis uses Coverdale Crossing, Sussex County, an African American community established by a white businessman by relocating houses from Seaford removed as part of urban renewal. Cook's study will provide additional guidance in identifying and evaluating the National Register eligibility of TCPs (Cook 2005). To identify possible TCPs in the study area, it would be useful to enlist community members who may know the stories of intentionally established ethnic or racial communities.

Among potential TCPs in Sussex County are properties associated with the Nanticoke, the Assateague, and the African American Antioch Camp Meeting near Frankford<sup>6</sup>. Examination of the original Coleman DuPont Road maps of the right-of-way between Selbyville and Milford give no evidence that the road was constructed through any established community. Instead, most of the land acquired was either part of larger farm properties or was forested. Therefore, no TCP is thought to exist along the existing Route 113.

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<sup>6</sup> The Antioch African American Methodist Episcopal Camp was the subject of a 2001 reconnaissance survey by Rodney M. Huff, an intern in the office of the Sussex County Preservation Planner. Mr. Huff indicated that the camp meets the definition of a TCP and recommended intensive evaluation to assess its NR eligibility.

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## 5.0 REGISTRATION REQUIREMENTS

Because of the anticipated duration of planning for proposed Route 113 improvements, the reconnaissance survey has included all properties visually identified as having construction dates prior to 1963. In assessing National Register eligibility for properties less than 50 years of age, Criterion Consideration G must be applied. This consideration requires that properties achieving significance within the past 50 years must be of *exceptional importance* to be eligible for the National Register. Because without exception, all of the surveyed properties dating from the 1956-1963 period are common types or designs, none is expected to meet the requirements of Criterion Consideration G.

### *National Register Criteria*

In evaluating the National Register eligibility of buildings, the architectural historian usually starts with Criterion C, eligibility as embodying the distinctive characteristics of a type, period of method of construction, or representing the work of a master. This criterion provides the eligibility for many American architectural landmarks notable as excellent representatives of an architectural style or key works of notable architects, as well as for well-preserved examples of more humble, but important building types or styles. However, Criterion C is but one of four National Register criteria and a property may be eligible for significance under any one or more of the criteria.

Criterion A recognizes significance attributable to association with events that have made significant contributions to the broad patterns of our history. To evaluate significance under Criterion A, it is necessary to identify important events in social, political, economic, agricultural, transportation, cultural and other facets of history within a study area and vicinity. The most obvious historic event associated with the study area is the construction of the highway and its relationship to the economic growth of Sussex and Kent County. However, many other facets of history are represented by properties in the corridor. For example, houses may be representative of periods of residential development in southern Delaware. Restaurants, bowling alleys and a racetrack may be representative of recreational gathering places in the area. The units of Redden State Forest are representative of the evolution of the state forest system in Delaware. Other contextual areas and representative resources may be identified in consultation with local historians and interested residents.

Criterion B recognizes significance associated with the productive life of an individual significant in our past. The consideration of Criterion B requires identification of individuals associated with a particular property and an analysis of the role of these individuals in local or regional history. Clearly, the individual most closely associated with the DuPont Highway is the industrialist, public servant and philanthropist T. Coleman du Pont. The entirety of the highway should be evaluated for significance under Criterion B for its association with du Pont.

Other properties may be significant for association with less prominent but still locally significant individuals. For example, a farm might be eligible under Criterion B for its association with a farmer who instituted important agricultural improvements or who played an important role in local agricultural organizations, while a building containing a historic business may be significant if the owner played an important role of the economic life of the community.

Criterion D recognizes significance in properties that have yielded or are likely to yield information important to history or prehistory. Criterion D is most generally applied to archeological sites, but it has a broader applicability. For example, seemingly humble vernacular buildings may have the potential to yield information about construction practices. Further discussion of the application of National Register criteria is contained in the appendix to this report.

### Commercial Roadside Architecture

The Historic Context for Evaluation of Commercial Roadside Architecture (LBA 1992) cites general eligibility characteristics for commercial roadside architecture, and these characteristics are applicable to the present study. The properties should illustrate commercial activity that occurred in direct response to automobile use and travel. Qualifying properties should feature site layouts that facilitate service to customers arriving by automobile such as drive courts or parking lots.

Specific guidance for each of the National Register criteria is also included in the LBA report:

Under Criterion A, eligible properties should be associated with patterns of settlement and development that occurred in response to the automobile. This includes the development of secondary commercial districts along newly constructed state highways, and eating and lodging facilities for tourists in areas not commonly associated with colonial or railroad area travel.

Under Criterion B, eligible properties should be associated with a particular individual who was significantly involved with the development of roadside architecture.

Under Criterion C, eligible properties should embody the architecture of the automobile era. This includes early, traditional designs for service stations, tourist cabins and motels, as well as later, streamlined designs, or buildings that exhibit identifiable traits of specific companies that developed or flourished during the automobile era. Properties that exhibit the use of modern construction techniques and materials such as enameled porcelain, stainless steel, aluminum, and glass blocks [from the 1940-1955 period], would also qualify under this Criterion.

Under Criterion D, building plans and data on construction technology are commonly available for twentieth century buildings and [few] properties will qualify [under this criterion] (LBA 1992).

The LBA report also addresses the issues of integrity of roadside architecture. Specifically, to be eligible for the NR, property types should maintain an association, location and setting consistent with historic use:

The association with the automobile as seen in a property's location and setting are intrinsically important to roadside architecture. The property should be located with direct access to an improved road in a setting that incorporates the automobile as evidenced by a drive court and/or on-premises parking. Since later twentieth-century, development often encroached on early examples of roadside

architecture, a setting originally rural or exurban in character may now be the center of a suburb or commercial strip. While this does reflect a change in the property's setting, it does not have a negative impact on the integrity of the property and perhaps even enhances it. Similarly, road alignments often were, and continue to be, altered over time. A property that was once sited on a principal thoroughfare may now be located a distance from the main flow of traffic or may have been moved to accommodate the road expansion.

The original design of a property should be visible in the plan and form of the building(s) and the property's original materials should be intact. This includes framing, exterior wall sheathing and the rhythm and size of openings, as well as the details and quality of workmanship that went into the original construction. Similarly, building interiors should retain original elements, including fixtures, tilework, and woodwork, and the original plan should be unaltered. The removal of original details and the application of new materials weaken the property's integrity of materials and workmanship. If the original elements remain intact below the new materials, the damage to the property's integrity is less severe. Likewise, structural additions and removals weaken a property's integrity of design. Only if alterations were made prior to 1940 can they be considered historic. Alterations to interior plans are acceptable if the changes are reversible and if the original lay out of the building can still be understood. The property's original function (restaurant, service station, auto show room, motel) should be identifiable, as should the company if the property belonged to an architecturally standardized chain (such as a Texaco or Gulf gas station or a Howard Johnson restaurant).

The historic feeling of a property is extremely subjective to characterize and more accurately reflects an amalgamation of the aforementioned characteristics in varying degrees. While a still functioning, 1940 service station may retain its setting and plan, it may have been significantly remodeled and expanded so that its original appearance (including the design, materials, and workmanship) is no longer discernible. On the other hand, the exterior sheathing of a court of tourist cabins may have been replaced, either to update the property's appearance or to transform the individual units into a "single building" of connected motel units....

A property's association with an important person or event would typically be derived from the overall building or site plan as well as any architectural details that are particularly unique to that individual or occurrence (LBA 1992:26).

This context, though originally prepared to address pre-1942 roadside architecture within a designated portion of the Route 113 corridor, remains largely applicable to the present investigation. This present investigation evaluates more recently constructed roadside architecture in two larger study areas.

Several changes to this context statement would make it more applicable to the present investigation. First, alterations made prior to 1963 can now be considered in evaluating the historic character of a building. Secondly, the stated "direct access to an improved road" includes access to any public thoroughfare, not necessarily Route 113. This access should be situated so that the property still "reads" as roadside architecture. It is also recognized that reconfiguration

and enlargement of parking areas is a typical element of the evolution of commercial properties. Unless this enlargement has resulted in modification to a pre-1963 building it would not lessen the property's integrity.

## **5.1 AUTOMOBILE FACILITIES**

### *5.1.1 INDEPENDENT GARAGES*

Independent garages may be eligible for the National Register of Historic Places (NR) 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 integrity of 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 or their property has documented archeological potential. 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 must retain its original massing and fenestration. Components that convey the property's historic purpose, including rolldown bay doors, hydraulic vehicle lifts, and a small, generally corner, office would need to be present. If a service bay addition has been made to the garage, this addition must meet the 50-year age consideration of the National Register. The garage must convey strong associations with its period of construction.

Because of the number of independent garages constructed throughout the United States in the first half of the twentieth century, individual examples are rarely eligible for the National Register. To be eligible, the garage must retain of much of its original or early fabric. Its significance is enhanced if the building remains in automotive use.

### *5.1.2 SERVICE STATIONS*

Service stations may be eligible for the NR under Criterion A for historic themes related to manufacturing, retailing, automobile transportation, and the development of commercial landscapes. For eligibility under Criterion B, the service station should be associated with a particular individual who was significantly involved with development of roadside architecture or commerce.. Service stations may also be eligible under Criterion C for their connection with the evolution of the service station. In order to be considered eligible, a service station must exhibit integrity of location, design, feeling, association, workmanship, materials and setting. Service stations 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 or their property has documented archeological potential.

A service station's sight lines, property boundaries, curb cuts, traffic circulation patterns and accessibility from the roadway all influence its integrity of setting. To retain integrity of design, a filling station must retain its original massing and fenestration. Pump islands may have been removed to improve functional design as long as the remaining components are sufficient to convey the property's historic purpose. The service station must convey strong associations with its period of construction and should be representative of an identified type of station construction

included in a standard source on service station architecture (e.g. Jakle and Sculle 1994). If a service bay addition has been made to the station, this addition must meet the 50-year age consideration of the National Register. To be eligible, a service station must be a well-preserved example of its type. Significance is heightened if the building is an example of an early type or the property also includes surviving early signage.

## **5.2 RESTAURANTS**

### *5.2.1 DINERS*

Diners may be eligible for the NR under Criterion A for historic themes related to urban context and roadside development. Diners initially serviced factory workers and motorists and later served a more varied clientele of local residents and travelers. For eligibility under Criterion B, the diner should be associated with a particular individual who was significantly involved with development of roadside architecture or commerce. In order to be considered eligible under Criterion C, a diner must be a well-preserved and recognizable example of a diner type of its period of construction. Diners may possibly be 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 or if their property has documented archeological potential.

To be NR eligible a diner must exhibit integrity of location, design, feeling, association, workmanship, materials and setting. Because diners as a property type have typically undergone a sequence of transformations over time, they should be evaluated by the presence or absence of date-specific features, such as metal cladding, streamlined detailing, signage, original roofline and original fenestration (Edwards et al. 2004:3-7). A diner's sight lines, property boundaries, curb cuts, traffic circulation patterns and accessibility from the roadway all influence its integrity of setting. To retain integrity of design, the original diner core must be visible from the roadway and still act as the major component of the facility. Attached additions are common to the design. If they postdate the diner's period of significance, they are considered noncontributing components.

### *5.2.2 FAST FOOD RESTAURANTS*

None predating 1963 in the study areas.

### *5.2.3 BARS AND TAVERNS*

None predating 1963 in the study areas. One tavern, Teddy's Tavern, which is listed in the National Register, is located within the Ellendale corridor preservation area not included in this study.

The lack of older bars and taverns along Route 113 may reflect a locational pattern for these resources. Generally older examples are located in cities and towns where they are within walking distance for some of their patrons.

## **5.3 LODGING**

### *5.3.1 TOURIST CABINS AND CABIN COURTS*

Tourist Cabins and Cabin Courts may be eligible for the NR under Criterion A for historic themes related to the automobile traveler. These properties may be eligible under Criterion B for association with an individual significantly involved in the development of roadside architecture or commerce. These cabin sites may be eligible under Criterion C for their connection with the evolution of the roadside accommodations. Tourist cabins and cabin courts may possibly be 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 or if their property has documented archeological potential.

In order to be considered eligible, a tourist cabin or cabin court complex must exhibit integrity of location, design, feeling, association, workmanship, materials and setting. A surviving contemporary office, manager's quarters, nearby restaurant, or service station, if present, would strengthen the resource's integrity of setting. All original components need to be extant to sufficiently convey the property's historic purpose. Alterations such as window and door replacement do not preclude integrity. Visible major additions do preclude integrity. The tourist cabins or cabin courts must be able to convey strong associations with its period of construction.

### *5.3.2 MOTELS*

Roadside motels may be eligible for the NR under Criterion A for historic themes related to the automobile traveler. These properties may be eligible under Criterion B for association with an individual significantly involved in the development of roadside architecture or commerce. Roadside motels may be eligible under Criterion C for their connection with the evolution of the roadside accommodations, and lodging for travelers. Motels were derivatives of and basically served the same purpose as cabins with facility arrangements that allowed for more privacy. Motels may possibly be 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 or if their property has documented archeological potential.

In order to be considered eligible, a roadside motel must exhibit integrity of location, design, feeling, association, workmanship, materials and setting. Accessibility from the roadway, layout of the individual buildings, parking location, and nearby restaurants or service stations would all influence the resources setting. Integrity of design would include the construction size, form and amenities of the individual buildings. If significant exterior additions and/or alterations have been made, the changes must have occurred during the period of significance of the property. The property's historic purpose would need to be appropriately conveyed. Period of construction should be representative with an identified type found within numerous publications on roadside motels.

## **5.4 OTHER**

### *5.4.1 ROADSIDE STANDS*

Most pre-1963 roadside stands are small buildings of simple, straightforward construction, often built by the stand's owner. Few, if any, possess architectural distinction. Although a roadside

stand may be eligible under any of the four National Register criteria, the highest probability is eligibility under Criterion A. 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 as a contributing resource of an associated farm complex. 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 or if the property has documented archeological potential.

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.

#### *5.4.2 INSTITUTIONAL, GOVERNMENTAL, AND CORPORATE PROPERTIES*

The Sussex Correctional Institution was previously included in a historic building survey but was not officially evaluated for National Register eligibility. The National Register eligibility of the Sussex Correctional Institution is dependent on the amount and condition of surviving pre-1963 fabric. An initial reconnaissance revealed that at least some agricultural buildings survive from this period, but these buildings appear to be substantially overshadowed by recent construction to house the facility's growing inmate population. The facility would be National Register-eligible only if sufficient early building fabric remains to convey close associations to its period of construction. In this case, these early buildings may be eligible under Criterion A for significance in the penal history of the state. Eligibility under Criterion B would require association with a particular individual who was significantly involved with the development of penal institutions in Delaware. Eligibility under Criterion C would require that its earlier buildings be representative of correctional architecture of their period. Eligibility under Criterion D would require either documented archeological potential or that the physical fabric of one or more buildings have the potential to yield significant information about construction practices.

Another major governmental institution in the study areas is the Stockley Center. An initial reconnaissance reveals that substantial pre-1963 fabric remains. In addition, a row of possibly associated residences line a short stretch of the east side of US 113 in Stockley. The center's important role in caring for the state's individuals with developmental disabilities has been well documented. The property may be eligible for the National Register under Criterion A for significance in the area of Health and Medicine. Additionally, the Stockley Center may also be typical of residential treatment centers of its period and may be eligible under Criterion C for its architectural significance. Eligibility under Criterion B for association with an individual important in the development of facilities for the developmentally disabled appears unlikely as does eligibility under Criterion D for information potential of the building fabric or associated archeological sites. Assessment of eligibility will be dependent upon the extent of surviving original or historic fabric. The extent of this survival can probably be assessed by review of records of the Center on file at the Delaware Public Archives.

No pre-1963 churches are located within the Route 113 study area. Several cemeteries are located in the study areas. As indicated in National Register Criteria Consideration D, "a cemetery is eligible if it derives primary significance from graves of persons of transcendent importance,

from age, from distinctive design features, or from association with historic events.” An initial reconnaissance of these cemeteries indicates that it is unlikely that any of these graveyards will meet any aspect of Criterion Consideration D.

### 5.4.3 RECREATION

As noted, there are three major pre-1963 recreational properties in the study area: the Milford Lanes bowling alley, the Seacoast Speedway, and the Ellendale State Forest.

Assessment of the eligibility of a bowling alley requires an evaluation of its historic fabric, an assessment of its historic role in the community, and a consideration of its significance. Because so many bowling alleys were built in the post-World War II era, they remain a common property type. To retain the necessary integrity for possible National Register eligibility, the building must convey the exterior appearance of its time of construction. To possess significance under Criterion A, a bowling alley must have played a notable role in the history of the sport or have played an important local role as a gathering place and recreational center. Eligibility under Criterion B is dependent on association with a particular individual significantly involved in the development of bowling in Delaware. Eligibility under Criterion C is for its architecture is largely dependent on retention of a substantial portion of the original interior equipment and furnishings, as well as retention of its original exterior signage. Eligibility under Criterion D, viewed as unlikely, would require either archeological potential or presence of building fabric with the potential of yielding information about construction technology. An eligible bowling alley will be a rare, well-preserved survivor of the period of its construction. Most bowling alleys of the 1960s are not individually eligible for the National Register.

As noted, the Seacoast Speedway was initially built in the early 1950s. To assess the integrity of the property, it will be necessary to determine how much of the original fabric of the course remains. Documentary research to date points to several major alterations, and these alterations may preclude eligibility. In addition, the Speedway must possess significance. Since it is doubtful whether the small track played an important role in the history of automobile racing in Delaware, eligibility could rest on its place as a surviving post-World War II small automotive racing track. In order to determine this, other tracks in the state would have to be dated and inventoried, and Seacoast Speedway would have to be evaluated against similar tracks to assess its integrity and its rarity.

A component of the Redden State Forest, Ellendale Tract, the CCC picnic area, is listed in the NR for its association with the Depression-era public works program. The eligibility of the remaining portion of this tract or the nearby Appenzellar Tract has not been assessed. To be eligible for the NR, the forest must possess both integrity and significance.

The integrity of a managed forest revolves around how well the tract retains its original character or continues to reflect its historic evolution. For example, though vegetative succession is expected, the tracts must retain a similar selection and placement of trees. Paths and roads recently cut through the tracts must retain the character of the historic roads and paths. As noted earlier, both tracts have grown substantially since the time of original purchase. Is the original core of either tract still identifiable? Have forestry management practices changed over time and, if so, have these practices resulted in substantial change to the appearance of either tract? Techniques for evaluating the significance and integrity of rural historic landscapes such as state forests are outlined in National Register Bulletin 30, *Guidelines for Evaluating and Documenting Rural Historic Landscapes* (McClelland et al.n.d.)

To assess significance, research must be conducted into the history of Delaware state forests. Was the establishment of the Ellendale and Appenzellar tracts a significant event in the history of the Forestry Bureau and, if so, why? Was any prominent individual associated with the establishment or operation of the tracts? Are other physical components of the forest significant for their architecture or their association with the CCC in addition to the picnic area? Does the forest possess potential information concerning the history of forestry practices or does the land possess documented archeological potential? If any of these questions can be answered affirmatively, the forest may be eligible for the NR.

#### *5.4.4 RESIDENTIAL-COMMERCIAL CONVERSION*

Within the study areas, residential-commercial conversion appears to be primarily a recent development. Most or all of the conversions have occurred less than 50 years ago. To be eligible for the National Register under Criterion Consideration G, such properties must be demonstrated to be of exceptional importance. It is very unlikely that any such property can be demonstrated to be of such exceptional importance in local history, architectural design, or building fabric or archeological potential.

#### *5.4.5 INDUSTRY*

As noted, among the prominent industries of Sussex and southern Kent counties were lumbering, canning, and holly wreath making. The preliminary reconnaissance of the study areas failed to identify any extant buildings or structures historically associated with these industries. At the time of the intensive field survey, inquiries should be made to knowledgeable residents to identify any buildings associated with these once important sectors of the economy of southern Delaware.

#### *5.4.6 ROADWAYS*

As documented in the historic overview, the DuPont Highway played an important role in the twentieth century transportation history of Delaware. The highway itself 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” (National Park Service 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 NR 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 or contain an area of documented archeological potential.

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.<sup>7</sup>

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 du Pont 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 website ([www.historicroads.org](http://www.historicroads.org)).

## **5.5 RESIDENCES**

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.

### *5.5.1 BUNGALOW*

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

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<sup>7</sup> The discussion of integrity is informed by text on the Historic Roads website ([www.historicroads.org](http://www.historicroads.org)) and by Marriott (1998).

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. The bungalow interior must contain original elements such as built-in bookcases, cabinetry or inglenooks and/or decorative woodwork, if these were part of the original design. Eligibility under Criterion D requires that the property possess information potential either in the existing building fabric or in associated archeological deposits. Few, if any, of the bungalows in the study area are expected to meet any of these eligibility criteria.

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 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. Because of the commonness of the bungalow type throughout much of the United States, NR eligibility requires more than retention of integrity.

### 5.5.2 *FOUR-SQUARES*

A four-square house must be a two- or two-and-one-half story, hipped-roof house of a simple square or nearly-square both in plan and elevation. It should be a plain, substantial building with a porch across the front. Its eligibility is strengthened if it has dormers as an additional feature (Chase et al. 1992:62).

To possess significance under Criterion A, the four-square 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 four-square will be more elaborate and better preserved than the average four-square in a particular area. Stylistic elements that contribute to significance under Criterion C are derived from the Prairie, Craftsman or Colonial Revival styles. Elements typical of the Prairie style include elaborate main entries, geometrically patterned window glazing, and paneled square porch posts. Elements typical of the Craftsman style include battered porch posts, multi-light-over-one windows, and exposed rafter ends. Elements typical of the Colonial Revival style include elaborate pedimented door surrounds, often with fanlights, single or paired classical column porch posts, and occasionally, pedimented dormers. Eligibility under Criterion D requires that the property possess information potential either in the existing building fabric or in associated archeological deposits. Few, if any, of the four-squares in the study area are expected to meet any of these eligibility criteria.

To be eligible for the National Register, a four-square must possess integrity of location, design, setting, materials, workmanship, and association. All diagnostic elements, such as multi-light windows, battered porch posts, and brackets must be present and visible. Window or door replacements, if present, must retain the character of the original windows and doors. Resheathing in modern materials is acceptable only if the resheathing occurred more than 50 years ago.

### 5.5.3 *COLONIAL REVIVAL*

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 either in the existing building fabric or in associated archeological deposits. Few, if any, of the houses of this style in the study area are expected to meet any of these eligibility criteria.

Eligible Colonial Revival houses should retain integrity of location, design, feeling, association, materials and workmanship 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.

### 5.5.4 *CAPE COD*

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 either in the existing building fabric or in associated archeological deposits. Few, if any, of the Cape Cods in the study area are expected to meet any of these eligibility criteria.

To be eligible for the NR, a Cape Code must possess integrity of location, design, materials, workmanship, and association. All of the original diagnostic elements of the type must be present and unaltered including ornamental shutters. The house must not have been re-sheathed. 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.

#### 5.5.5 *ENGLISH COTTAGE (TUDOR)*

To be eligible for its architecture an English cottage should be irregularly massed and one, one-and-one-half or two-stories in elevation. Side-gabled in orientation, the style has a substantial cross-gable with a steeply-pitched roof that extends from the central block of the building. The entry door should be located in the cross gable; the exterior chimney for the dwelling's fireplace is frequently placed next to the cross-gable. The house itself should have a steep roof, often pierced by dormers (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 English cottage will be more finely detailed (explain) and better preserved than the average house of this style in a particular area. Exterior ornamentation contributing to architectural significance includes decorative chimney pots, decorative half-timbering, use of contrasting materials such as brick and stone, simple round-arched doorways, and patterned window glazing. Eligibility under Criterion D requires that the property possess information potential either in the existing building fabric or in associated archeological deposits. Few, if any, of the English cottages in the study area are expected to meet any of these eligibility criteria.

The house must retain all or almost all of its historic exterior materials. Particularly important are retention of those materials, such as sheathing, diagnostic of the style. If door or window replacements have been made, these replacements must be similar or identical in character to the originals. Additions, if present, must not be larger in scale than the original block and must not be visible from the front of the house. Because of the number of surviving examples of this house type, the possession of integrity is not sufficient for National Register eligibility.

#### 5.5.6 *WORLD WAR II-ERA COTTAGE*

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 areas, 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 either the building fabric possesses information potential or that the property possesses archeological 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.

#### *5.5.7 MINIMAL RANCH HOUSE*

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 either the building fabric possesses information potential or that the property possesses archeological 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.

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### 5.5.8 *STANDARD RANCH HOUSE*

The construction of ranch-style houses began in the mid-twentieth-century. The ranch house is a product of colonial Spanish Mission architecture in early California. This house type portrayed an informal, indoor-outdoor, rustic lifestyle. The style dominated American domestic building through the 1960s and is still popular and commonly featured throughout the United States today. Such houses were and are 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. 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. Individual eligibility requires innovative building technology present on the exterior and/ or interior, or important achievements of architecture/ engineering. However, the nature of the ranch house, as a simple, rapidly built, inexpensive dwelling, generally precludes this. Eligibility under Criterion D requires that either the building fabric possesses information potential or that the property possesses archeological 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, all original exterior details must be present. The one-story house must have a low-pitched roof. This style lacked extensive exterior decoration. However, sometimes detailing is featured around the windows and porch areas (i.e., wrought iron, or wood). The front and rear facades of the dwelling should appear to be maximized, stretching across the land. If windows have been replaced, the original fenestration and sash patterns must have been maintained. Large picture windows and ribbon windows are the most common. If doors have been replaced, the replacements must retain the original character. The placement of the house, setback from the roadside is an important landscape element that placed emphasis on the yard space. Courtyards and patios across the front and rear of the houses are common. To retain integrity, no additions may have been made to the house.

### 5.5.9 *SPLIT- LEVEL HOUSES*

The split level house is primarily found in suburban subdivisions of the 1950s and 1960s, although, as in the study area, isolated examples are found in less-populated areas. As noted, this house represented the enlargement of the ranch house with its levels designating separate activity areas. After the 1960s, the bi-level and raised ranch eclipsed the split level as the midlevel choice for new construction.

To possess significance under Criterion A, the split-level 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 the split-level house, as a simple, common, tract house generally precludes this. Eligibility under Criterion D requires that either the building fabric possesses information potential or that the property possesses archeological potential. Because of the

number of remaining properties of this type, individual examples are generally not eligible for the National Register.

To possess architectural integrity, the split-level must have no noticeable exterior alterations. Original doors, including garage doors, and windows must be in place. Ideally, the house must also retain its original exposed siding materials. Replacement siding materials do not necessarily preclude integrity should the original siding materials be intact beneath the newer sheathing.

#### 5.5.10 HALL-AND-PARLOR HOUSE

The traditional definition of a hall-and-parlor house is a single-story folk dwelling with two unequal sized first floor 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 is a two-story dwelling form as defined in Jakle, et al., *Common Houses in America's Small Towns*, and described in Section 4.6.10.

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, retention of original exterior fabric, and elaborate interior woodwork. Eligibility under Criterion D requires that either the building fabric possesses information potential or that the property possesses archeological potential. Few, if any of the houses of this form in the study areas are expected to meet any of these eligibility criteria.

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 original or historic exterior fabric including siding, fenestration, roof profile and structure, chimney(s), and porches, if any. Because of the commonness of this historic house type, National Register eligibility requires more than retention of integrity.

#### 5.5.11 I-HOUSE

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 either the building fabric possesses information potential or that the property possesses archeological 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 siding precludes eligibility. 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.

#### *5.5.12 DOUBLE-PILE COTTAGE*

A side-gabled 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 or shed-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 modern vernacular house type, double-pile cottages rarely meet eligibility requirements of Criterion C. Eligibility under Criterion D requires that either the building fabric possesses information potential or that the property possesses archeological potential. Few, if any of the houses of this form in the study areas are expected to meet any of these eligibility criteria.

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.

#### *5.5.13 DOUBLE PILE COTTAGE WITH FRONT EXTENSION*

In this twentieth century house form, the main block is oriented with its roof line parallel to the street and is one or one-and-one-half stories in height. A front extension, consisting of a front gabled block, is placed to one side of the façade. The main entry is often located at the junction of the main block and the front extension.

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, double-pile cottages rarely meet eligibility requirements of Criterion C. Eligibility under Criterion D requires that either the building fabric possesses information potential or that the property

possesses archeological potential. Few, if any of the houses of this form in the study areas are expected to meet any of these eligibility criteria.

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.

#### *5.5.14 GABLE-FRONT DOUBLE PILE COTTAGE*

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, gable-front, double-pile cottages rarely meet eligibility requirements of Criterion C. Eligibility under Criterion D requires that either the building fabric possesses information potential or that the property possesses archeological potential. Few, if any of the houses of this form in the study areas are expected to meet any of these eligibility criteria.

To possess integrity, the gable front, double pile cottage must adhere to standards of simplicity similar to the side-gable cottage. It must be one- or one-and-one-half stories in height and constructed with two or three bays. It should be oriented so that the roofline is perpendicular to the street and the gable forms the façade of the building. The roof must have an average pitch and may be broken with a modest cross-gable dormer. The entry door should be sheltered by a front porch (Chase et al. 1992:63).

#### *5.5.15 L-SHAPED COTTAGES AND HOUSES*

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 either the building fabric possesses information potential or that the property possesses archeological potential. Few, if any of the houses of this form in the study areas are expected to meet any of these eligibility criteria.

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.

### *5.5.16 CROSS PLAN COTTAGES AND HOUSES*

These dwellings, one-to-two stories in height, consist of a side-gabled central block with front gabled blocks projecting from the center of the front and rear walls of the middle block. The roof ridge of the cross-gabled blocks is usually equal in height to that of the middle block. L-shaped and shed porches often project from the front wall(s) of these houses.

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, cross plan cottages and houses rarely meet eligibility requirements of Criterion C. Eligibility under Criterion D requires that either the building fabric possesses information potential or that the property possesses archeological potential. Few, if any of the houses of this form in the study areas are expected to meet any of these eligibility criteria.

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.

### *5.5.17 PREFABRICATED AND STANDARD DESIGN HOUSES*

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. 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 either that the building fabric possesses information potential or that the property possesses archeological potential. It is anticipated that few prefabricated and standard design houses were built in the area prior to 1960 and, of these, few are expected to meet any National Register eligibility criteria.

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

### *5.5.18 MOBILE OR MANUFACTURED HOME PARKS*

Because of the generally short life span of mobile homes and the recent introduction of manufactured homes (double-wides and modular homes), few isolated examples are expected to

predate 1963 nor are parks expected to contain substantial numbers of pre-1963 mobile homes. Therefore, most individual and grouped mobile homes must meet National Register Criterion Consideration G to be National Register-eligible. Under this consideration, a property must possess “exceptional importance.”

In assessing the significance of these parks, consideration should be given to the purpose of the park as envisioned by the development company, developer, planner, government agency or community. Does the vision for the park represent an important chapter in the social, economic, or planning history of the community or area? Due to standardization of mobile home designs and similarities of mobile home park layouts, it is extremely unlikely that any such properties in the study areas possess the requisite exceptional importance.

## **5.6 AGRICULTURAL DWELLINGS AND SUPPORTING OPERATIONS**

### *5.6.1 AGRICULTURAL COMPLEXES*

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 either the buildings have the potential for yielding information significance in building technology or that documented archeological deposits have the potential of yielding important information concerning agriculture in the area.

Agricultural complexes are primarily defined from the function and activities that took place or continue to take place there; the style of 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 (MTA 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 (MTA 2004:23).

### 5.6.2 *POULTRY INDUSTRY FACILITIES*

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 either have to have the potential to yield significant information about broiler house construction practice or its site would have to possess documented archeological potential.

Initial reconnaissance indicates 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 either have to have the potential to yield significant information about poultry house construction practice or its site would have to possess documented archeological potential.

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.

As noted, a single poultry feed mill is located within the study areas, the Mountaire Farms facility in Frankford. Built by Townsends, Inc., the mill may be eligible under National Register Criterion A for its important role in the history of chicken production in Sussex County. Eligibility under Criterion B is deemed unlikely, because it probably does not represent the property most closely associated with the productive life of any member of the Townsend family. Assessment of eligibility under Criterion C would require comparison to other area feed mills. Does it represent

a good, well-preserved example of its property type. Eligibility under Criterion D for information potential is unlikely. The feed mill's eligibility is dependent upon two factors: age and integrity. Further research should be conducted to determine the age of the major components of the mill. Should most or all of the major components date from before 1956, the property meets the age consideration of the National Register. Study of the various components and comparison with construction drawings or older photographs will facilitate an assessment of integrity. The property retains integrity of setting and location. Integrity of workmanship, materials, design, feeling and association remains to be evaluated.

### 5.6.3 *SEASONAL WORKER OR TENANT HOUSING*

Seasonal worker or tenant housing was generally erected on, or in proximity to, the farm on which the inhabitants worked. As mentioned earlier, early seasonal worker housing often consisted of gabled roof, wood-framed, single-room cabins. Few such individual cabins remain. More widespread are examples of row housing, attached single-story, wood-framed housing units comprising a long row somewhat similar to an early motel.

In general, worker or tenant housing is most appropriately considered as a component of a larger facility, either an agricultural complex or an industrial plant. To possess eligibility, the larger farm or industrial facility must be evaluated using the appropriate integrity and significance considerations.

To possess significance under Criterion A, the housing must be associated with events important in the history of southern Delaware agriculture or agricultural industry. For example, was a particular group of seasonal worker housing among the first housing of its type erected in the area? Was it the first temporary residence erected for workers of a particular ethnic group or geographic location? Eligibility under Criterion B would require association the productive life of with an individual significant in local history. Such an association is not to be expected. Eligibility under Criterion C requires that the housing be a good representative of a type of construction. Especially well-preserved seasonal workers houses may be eligible under this Criterion. Eligibility under Criterion D requires the buildings to yield important information concerning building technology or for the property have documented potential to yield significant archeological deposits related to the property's use. Few, if any such properties are expected to be eligible under Criterion D.

To be eligible for the National Register, isolated seasonal work or tenant housing must retain its original architectural character. Windows, doors, and siding must not have been changed, and any additions made must not obscure the original block.

## 5.7 **PROPERTY LAYOUT CONFIGURATIONS**

### 5.7.1 *MOBILE OR MANUFACTURED HOME PARKS*

As indicated, few groups of early mobile homes survive. Most manufactured homes are also less than 50 years of age. It is very unlikely that a park less than 50 years of age will possess the "exceptional importance" required under National Register Criterion Consideration G.

To possess significance under Criterion A, the park must have played a significant role in the history of the local area. For example, was the park the earliest one in a particular geographic area

and served as a model for later parks or communities? Was the park erected to house a particular population group whose arrival represented a significant historic event in the community? Because eligibility under Criterion B requires association with the productive life of an individual significant in local history, eligibility under this criterion is considered unlikely. Eligibility under Criterion C requires a resource to embody the distinctive characteristics of a type or period or represent a significant and distinguishable entity. To evaluate eligibility under this criterion, mobile home park construction practices of its time must be considered. Does this park represent a good, surviving example of a type of mobile home park of its period? Eligibility under Criterion D is unlikely. Few, if any, mobile home parks are expected to yield significant information concerning building construction practices or yield significant associated archeological deposits.

To be eligible for the National Register, an early mobile home park must possess integrity. To have integrity, most of the homes in the park must be from the pre-1963 period and must be clearly identifiable as products of that period. Additions to mobile homes such as lean-to porches or carports are common and do not preclude eligibility. Additions that encapsulate the mobile home and hide its original character would preclude eligibility. In addition to the integrity of individual mobile homes, the park itself must retain integrity. The original lot layout of the park must be discernable. If the park originally contained an office (often a converted single family dwelling), this building must be extant and must retain architectural integrity.

#### *5.7.2 STRIP DEVELOPMENT OR MINOR SUBDIVISIONS*

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 examples of them are neither historically or architectural significant. The significance of component properties should be more appropriately addressed by consideration of each individual property.

#### *5.7.3 FARMLAND SUBDIVISION*

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.

## **5.8 TRADITIONAL CULTURAL PROPERTIES**

None in the study areas.

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## APPENDIX I: National Register Significance and Integrity Evaluations

The information in this section is largely excerpted and paraphrased from National Register Bulletin 15, *How to Use the National Register Criteria for Evaluation* (Shrimpton 2002).

### Significance

To determine whether a property is eligible for the National Register of Historic Places, it is necessary to apply the National Register Criteria for Evaluation:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of significant persons in our past;
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded or may be likely to yield, information important in history or prehistory.

### *Criteria Considerations*

Ordinarily cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significant within the past 50 years shall not be considered eligible for the National Register. However, such properties *will qualify* if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- a. a religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- b. a building or structure removed from its original location but which is primarily significant for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- c. a birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building associated with his or her productive life; or
- d. a cemetery that derives its primary importance from graves of persons of transcendence importance, from age, from distinctive design features, or from association with historic events; or
- e. a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
- f. a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or

- g. a property achieving significance within the past 50 years if it is of exceptional significance.

The primary basis for evaluating a property's significance and, ultimately, its eligibility under the above criteria is *historic context*.

#### *Criterion A*

To be considered eligible under Criterion A, a property must be associated with either a specific event marking an important moment in American prehistory or history or a pattern of events or a historic trend that has made a significant contribution to the development of a community, state, or the nation. In addition, the property must have an important association with the events or historic trends, it must retain historic integrity.

Examples of properties associated with specific events include the site of a battle, the building in which an important invention was developed, or a factory district where a significant strike occurred. Examples of properties associated with a pattern of events include a road associated with initial settlement of an area, a railroad station that served as the focus of a community's transportation system, or a mill district representative of the importance of textile manufacturing during a particular period.

#### *Criterion B*

Criterion B applies to properties associated with individuals whose activities are demonstrably important within a local, state or national context. This criterion is usually restricted to those properties associated with a person's productive life that illustrate a person's important achievements. The persons associated with the property must be individually significant within a historic context. For example, the residence of a doctor, a mayor, or a merchant may be eligible under Criterion B if the person was significant in the field of medicine, politics or commerce, respectively.

#### *Criterion C*

As noted, eligibility under Criterion C requires the property to meet one or more of the following requirements: embody distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic values. Distinctive characteristics are physical features or traits that commonly recur in individual types, periods, or methods of construction. To be eligible for "distinctive characteristics" a property must clearly illustrate:

- the patterns of features common to a particular class of resources,
- the individuality or variation of features that occurs within the class,
- the evolution of that class, or
- the transition between classes of resources.

For example, a building eligible under the theme of the Gothic Revival must have the distinctive characteristics that make up the qualities of the style, such as pointed gables, steep roof pitch, board and batten siding, and ornamental bargeboard trim.

"Type, period of method of construction" refers to the way properties are related to one another by cultural tradition or function, by dates of construction of style, or by choice or availability of

materials and technology. A property is eligible if it is an important example of building practices of a particular time in history.

A master is a figure of generally recognized greatness in a field, a known craftsman of consummate skill, or an anonymous craftsman whose work is distinguishable from others by its characteristic style and quality. The property must express a particular phase in the development of the master's career, an aspect of his or her work, or a particular idea or theme in his or her craft. A property is not eligible as the work of a master simply because it was designed by a prominent architect.

“High artistic values” may be expressed in numerous ways. A property is eligible for high artistic values if it so fully articulates a particular concept of design that it expresses an artistic ideal. An example could be a building that represents a classic expression of the design theories of the Craftsman Style, such as carefully detailed handwork.

#### *Criterion D*

Some research questions about human history can be answered only by the actual physical material of cultural resources. Criterion D encompasses properties that have the potential to answer these types of research questions. The most common type of property nominated under this Criterion is an archeological site, although buildings, objects and structures can also be eligible for information potential.

For archeological sites, Criterion D applies to properties that contain or are likely to contain information bearing on an important archeological research question. In order for buildings, structures or objects to be eligible under Criterion D, they must be, or must have been the principal source of important information. For example, a building exhibiting a local variation on a standard design or construction technique could be eligible under Criterion D if study could yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

#### Criteria Considerations

To possess eligibility under one of the above-mentioned criteria considerations, a property must meet one or more of the four Criteria for Evaluation. Considering the identified properties located within the study corridor, criteria considerations D and G may be applicable. The remaining criteria considerations are not expected to be applicable.

#### *Criteria Consideration D*

A cemetery is a collection of graves that is marked by stones or other artifacts or that is unmarked but recognizable by features such as fencing or depressions, or through maps, or by means of testing. A cemetery may be eligible if it contains graves of person of great eminence in their fields or who have had a great impact on the history of their community, state or nation. A cemetery may also be eligible if it has achieved historic significance for its relative great age in a particular geographic or cultural context. A cemetery may be eligible on the basis of distinctive design values including aesthetic or technical achievement in the fields of city planning, architecture, landscape architecture, engineering, mortuary art, or sculpture. A cemetery may also be eligible for association with historic events or if it has the potential to yield important information.

### *Criteria Consideration G*

Because 50 years is a general estimate of the time needed to develop historical perspective and to evaluate significance, properties that have achieved significance within the past fifty years are generally not eligible for the National Register. Exceptions are made for “exceptional importance” including the extraordinary importance of an event or to an entire category of resources so fragile that survivors of any age are unusual. Examples of properties deemed to possess “exceptional importance” are the launch pad at Cape Canaveral from which men first traveled to the moon, and the Chrysler Building in New York significant as the epitome of the “Style Moderne” architecture.

### **Integrity**

National Register eligibility requires that a property possess both significance and integrity. Integrity may be defined as the ability of a property to convey its significance. Historic properties either retain integrity or they do not. Within the concept of integrity, the National Register criteria recognize seven aspects that define integrity. To retain integrity, a property will always possess several, and usually most, of the aspects. These aspects of integrity include location, design, setting, materials, workmanship, feeling and association.

### *Location*

Location is the place where the historic property was constructed or the place where the historic event occurred. To retain integrity of location, the historic property cannot have been moved.

### *Design*

Design is the combination of elements that create the form, plan, space, structure, and style of the property. Design includes such elements as organization of space, proportion, scale, technology, ornamental and materials. To retain integrity of design, the property must retain the primary design elements from its period of significance including pattern of fenestration; types of exterior cladding; and amount, type or style of ornamental detailing.

### *Setting*

Setting is the physical environment of a historic property. It refers to the character of the place in which the property played its historical role. Physical features that constitute the setting include topographic features, vegetation, manmade features such as paths and fences, and relationships between buildings and other features or open space. If the property’s setting contributes to its significance the character of its setting must be little changed from the period of its significance.

### *Materials*

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property. To retain integrity of materials, a property must retain the key exterior materials dating from the period of its historic significance.

### *Workmanship*

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. It is the evidence of artisans' labor or skill in constructing or altering a building. Examples of workmanship in historic buildings include tooling, carving, painting, graining, turning, and joinery. If manifestations of workmanship were visible during the property's period of significance, these manifestations must remain evident for the property to retain integrity of workmanship.

### *Feeling*

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, taken together, convey the property's historic character. To retain integrity of feeling, the property must continue to evoke the feelings of its period of significance. For example, a rural historic district retaining original design, materials, workmanship, and setting will relate the feeling of agricultural life in the nineteenth century.

### *Association*

Association is the direct link between an important historic event or person and a historic property. A property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer.

Integrity is based on significance: why, where and when a property is important. Only after significance is fully established can the issue of integrity be addressed. Four primary steps must be taken to assess integrity of a property:

- Define the *essential physical features* that must be present for a property to represent its significance.
- Determine whether the *essential physical features are visible* enough to convey their significance.
- Determine whether the property needs to be *compared with similar properties*. And
- Determine, based on the significance and essential physical features, *which aspects of integrity* are particularly vital to the property being nominated and if they are present.

APPENDIX I:

NATIONAL REGISTER SIGNIFICANCE  
AND INTEGRITY EVALUATIONS