

CHAPTER III ELIGIBILITY CRITERIA AND EVALUATION

An outline of expected property types for each historic context introduces the evaluation of resources contained in this chapter. Levels of significance and integrity required for National Register eligibility have been developed for each historic context based upon the expected property types. These eligibility criteria, the expected levels of significance and integrity, are then applied to each resource identified by the survey and a determination of National Register eligibility subsequently made.

The "Secretary of the Interior's Standards and Guidelines for Historic Preservation" contains four Criteria and seven types of integrity that should be examined during an evaluation of potential National Register eligible properties. The Criteria are:

- A. association with events that have made a significant contribution to broad patterns of our history;
- B. association with the lives of persons significant in our past;
- C. distinctive characteristics of an architectural type, period, method of construction, the work of a master, high artistic values, or represent a significant and distinguishable entity;
- D. information, or potential information, important to history or prehistory.

This study evaluates resources for National Register eligibility under Criterion A only although expected levels of significance and integrity have been developed for Criterion C as well.

The "Secretary of the Interior's Standards" also delineates integrity levels as reflections of location, design, setting, material, workmanship, feeling and association in sufficient amounts to enable the resource to reflect its period of significance. For the purposes of this study integrity of location ~~infers~~ the building still stands on its original site while integrity of design supposes the building reflects its original floor plan and massing. Setting presupposes that the current environment of the resource relates to the landscape of its period of significance. Integrity of materials is defined by the presence of original construction materials while workmanship relates to the construction techniques indicative of the period of construction. Integrity of association and feeling, despite being somewhat

nebulous, refer to the overall character of the resource and its current relationship to its past functions and form.

Although the lists of property types introducing each historic period attempt to outline all buildings conceivably associated with manufacturing in Wilmington and identified by historic research, future researchers may uncover other property types which should be included. The lists should not be viewed as static documents excluding future historical investigations and architectural assessments.

Examining resources for eligibility under Criterion A, resources reflecting broad patterns of history, and Criterion C, buildings reflecting the distinctive characteristics of an architectural type, period or method of construction, sometimes proves very complex. The continual use of these buildings for manufacturing and other purposes since their construction or period of significance has resulted in the covering or removal of much historic fabric. Decorative ornament, often indicative of architectural style or type, has been either removed or sheathed by subsequent remodeling. The ubiquitous filling of window and door openings with concrete block or plywood sheets serves as one illustration of the layering of materials that obscure historic architectural features. The division or expansion of interior space, the re-roofing of buildings and the removal of manufacturing equipment related to the resource's historic use all help conceal or destroy characteristics reflecting the resource's past association with historical patterns and architectural types, periods or methods of construction. As a result, issues concerning the integrity of resources and their architectural features become extremely important when considering resources for eligibility under Criterion C and Criterion A.

Buildings considered eligible under Criterion C generally should possess elements reflecting an architectural type, period or method of construction prevalent during the period of their significance. The expected integrity of such elements would vary depending upon the period of significance and the resource's location within the survey area. For example, a resource significant for its documentation of post-and-beam grist mill construction along the Brandywine River during the seventeenth century would be expected to possess little integrity. Early settlement and the high incidence of reuse indicative of the Brandywine River area of the waterfront zone would preclude the existence of pristine architectural examples dating to that period of Wilmington's development. The resource should contain sufficient integrity, however, in order to convey information regarding its past use and appearance. Conversely, a resource significant for its use of art-deco decorative motifs in southern Wilmington during the 1930s would be expected to possess a higher degree of integrity reflecting the relatively late development of the waterfront area's southern sections and lack of subsequent, widespread reuse.

Resources eligible under Criterion A, association with events contributing to broad patterns of history, are expected to mirror their historic appearance with varying degrees of integrity as well, depending upon their period of significance. Similar to Criterion C, more modern resources should retain higher levels of fabric related to the period of significance than earlier buildings. These younger buildings should also reflect their historic appearance and use more closely. However a lack of high levels of integrity may be ameliorated by the presence of additional resources that illustrate an historic complex of related buildings. In such cases the complex helps convey the association of the resource to events significant to broad patterns of history. For example, an early twentieth-century former boiler house possessing little of its original fabric would not necessarily contain sufficient integrity for National Register eligibility. As part of a complex of historically related buildings documenting the growth of railcar manufacture in Wilmington, the boiler house's poor integrity would not necessarily detract from its eligibility. Generally, expected integrity levels for resources significant under Criterion A are not as high as those for resources under Criterion C.

- INDUSTRIALIZATION AND EARLY URBANIZATION
1830 - 1880 +/-
- URBANIZATION AND EARLY SUBURBANIZATION
1880 - 1940 +/-
- POST 1940

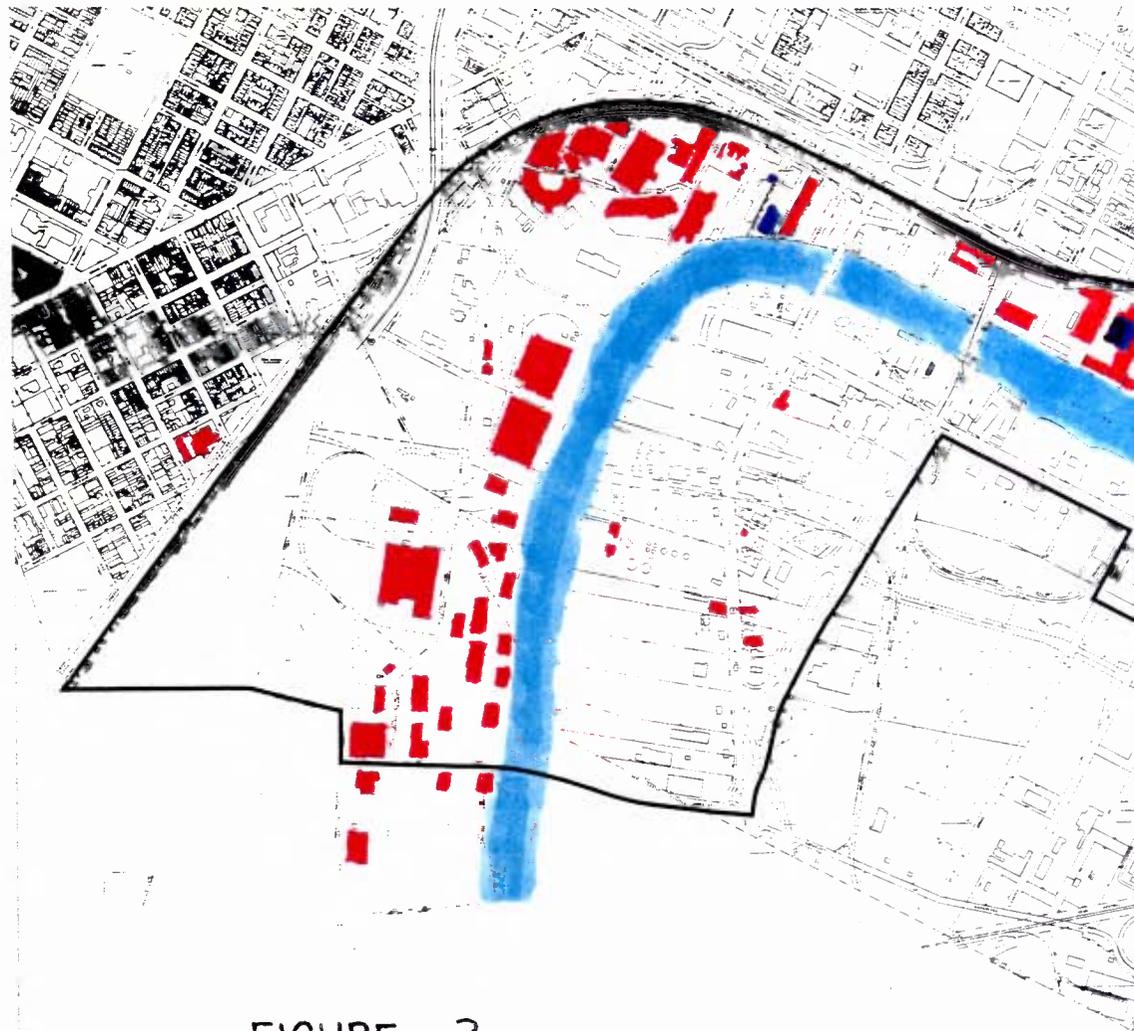
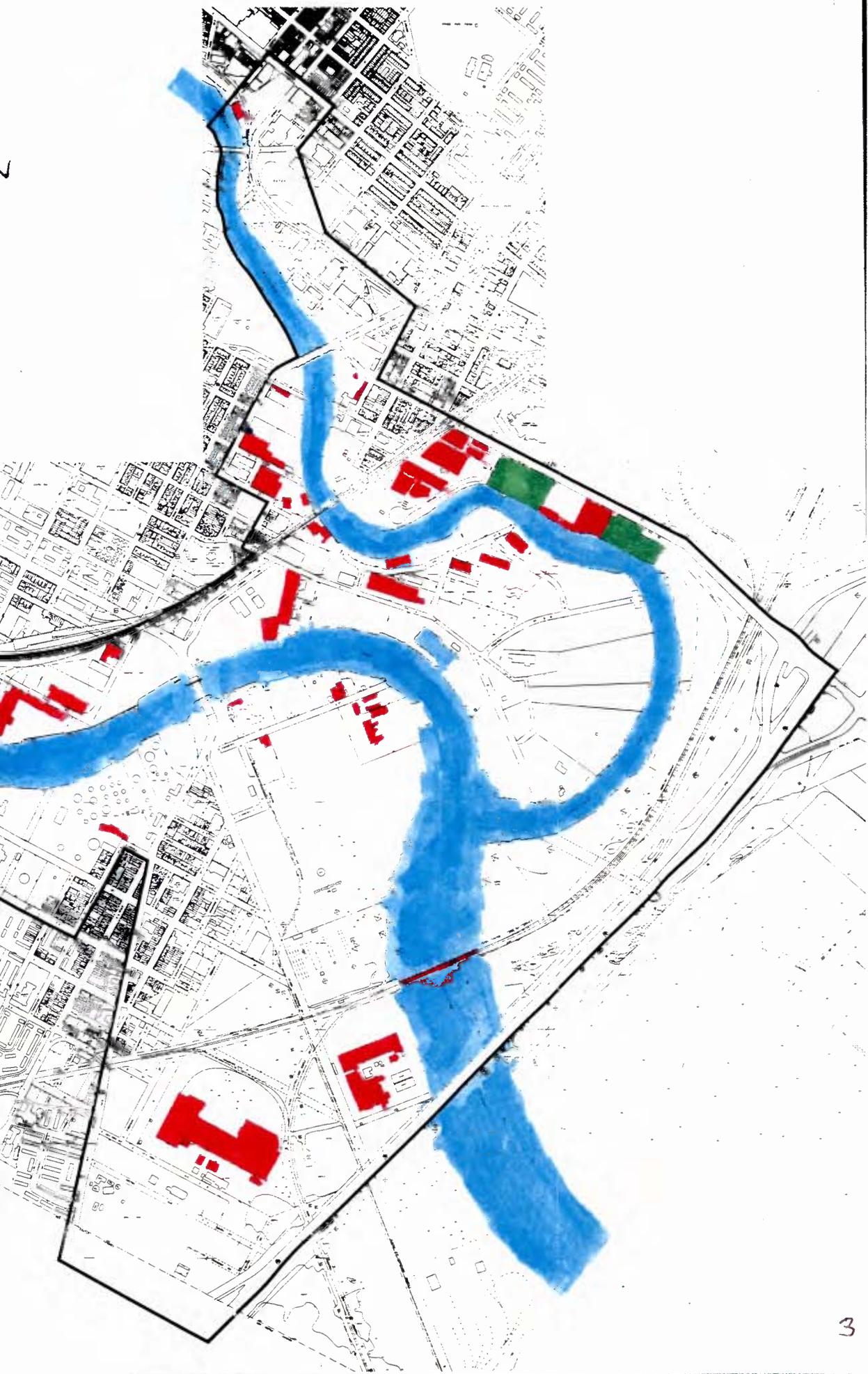


FIGURE 2

PROJECT AREA SHOWING HISTORIC ERAS



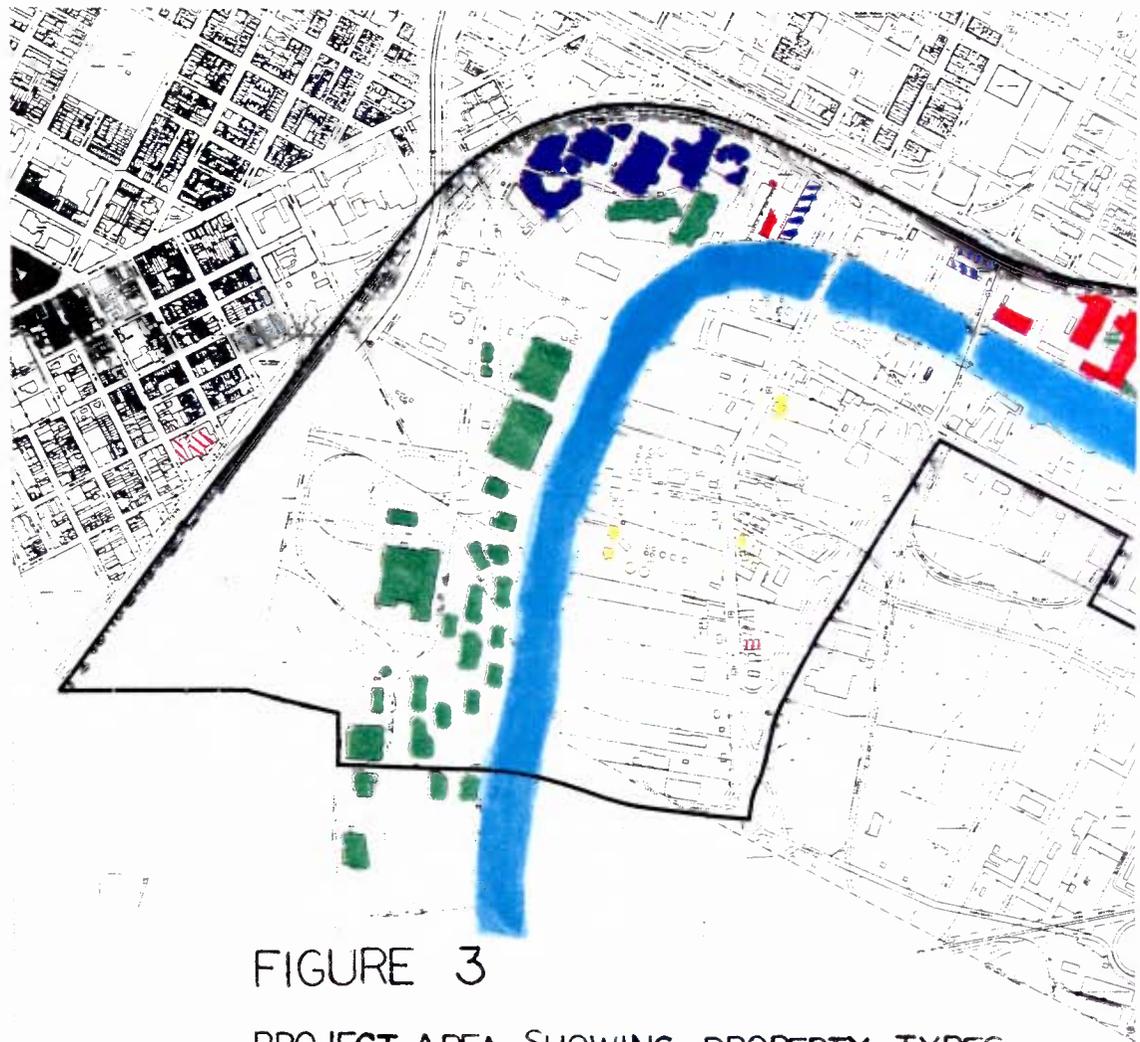
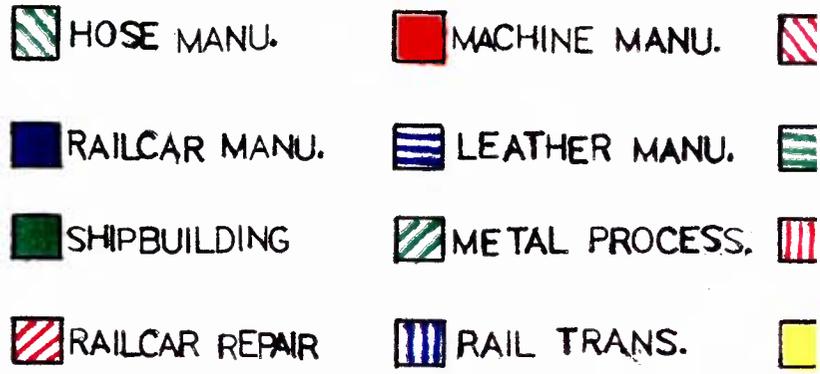
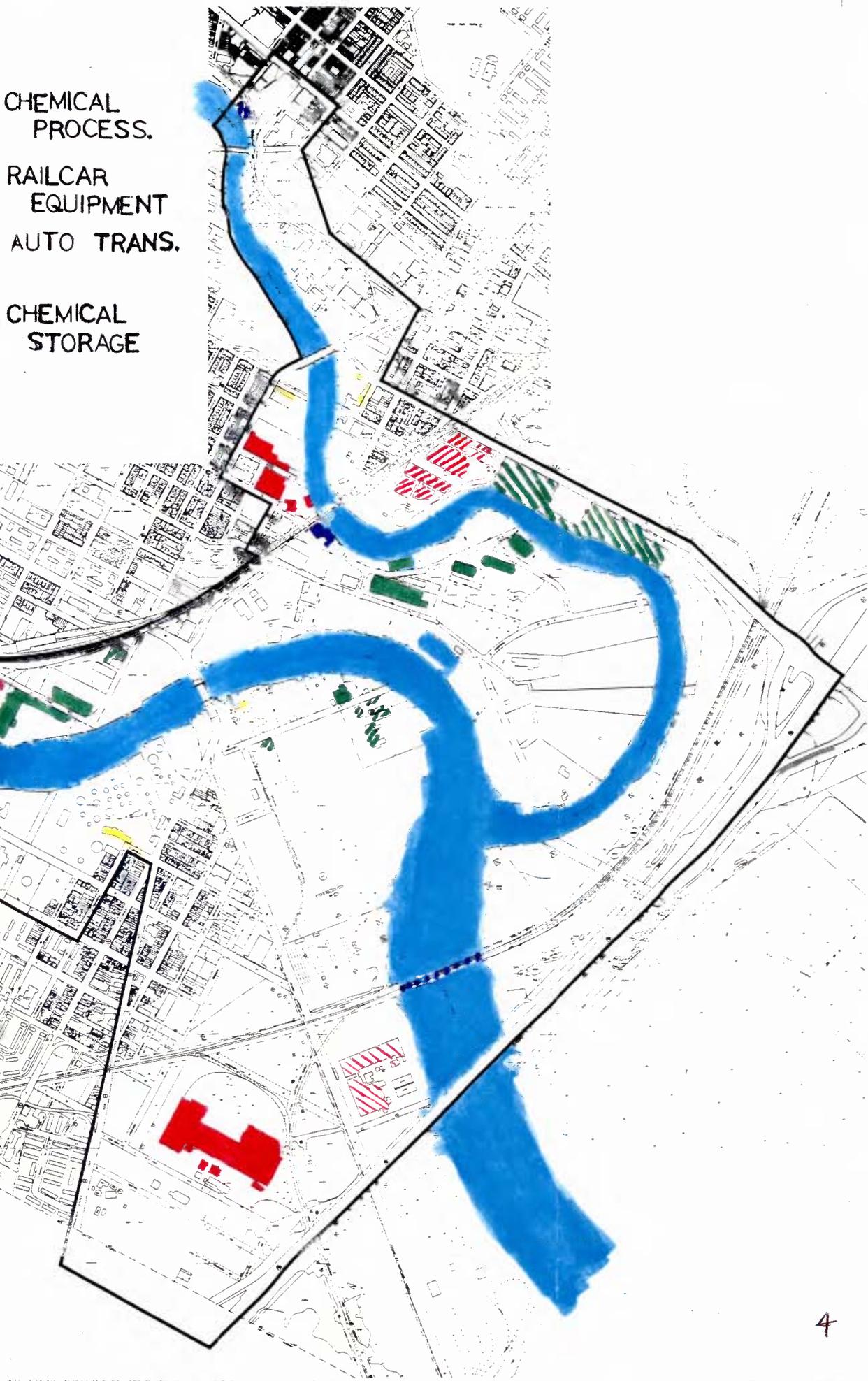


FIGURE 3
PROJECT AREA SHOWING PROPERTY TYPES

CHEMICAL
PROCESS.
RAILCAR
EQUIPMENT
AUTO TRANS.
CHEMICAL
STORAGE



A. Exploration and Frontier Settlement
1630 - 1730 +/-

Expected property types associated with Wilmington's manufacturing development during the period of Exploration and Frontier Settlement (1630 - 1730 +/-) include breweries, distilleries, cooper shops, grain mills, saw mills, and buildings related to the construction of wooden ships, including lumber sheds. In addition, home manufactures possibly included hand-loomed woolen and/or flaxen cloth, trapping and agricultural tools, shingles and other wooden products, and ships stores. Therefore buildings normally considered dwellings during this period could document manufacturing.

Significant industries to the development of Wilmington during this period include brewing, distilling, coopering, grain milling, wood processing, and ship building. Any vestiges of these industries would be extremely significant.

Layers of reuse probably sheath any surviving resources making issues of integrity problematic. The expected level of integrity of any resource associated with manufacturing along the waterfront areas would be low. Despite this fact any surviving resources reflecting any facet of their historic form or function would prove extremely significant on both a local, state and regional level in relation to their National Register eligibility under Criterion A and Criterion C.

As a result of the area's intensive reuse, no identified extant manufacturing-related resources associated with the period of Frontier Settlement survive in the Waterfront Area. Holy Trinity (Old Swedes) Church, a National Historic Landmark (N-340), stands as the sole documented resource dating to this period in the Waterfront Analysis Area.

B. Intensified and Durable Settlement
1730 - 1770 +/-

Resources affiliated with milling, shipbuilding and related trades dominate the list of expected property types associated with Wilmington's industrial growth during the period of Intensified and Durable Settlement (1730 - 1770 +/-). Grist mills, cooper shops, rope walks, sail lofts and buildings connected with construction of wooden ships should stand along Wilmington's riverfronts. Property types expected on the fringes of the Waterfront Area include buildings associated with tanyards and pottery works as well as breweries and distilleries. Expected property types reflecting manufacturing during this period also include dwellings since many smaller craft-oriented industries, such as cabinet-makers, chair-makers, silversmiths, and weavers, existed intermixed with retail establishments and dwellings. Detailed research and fieldwork is required to identify possible resources associated with craft manufactures in this period.

Resources associated with milling and shipbuilding should be considered extremely significant based upon their impact on Wilmington's development as a regional entrepot during this period and would reflect significance under Criterion A. Buildings documenting smaller craftshops also should be considered very significant since little information has been recorded concerning this type of manufacturing. These buildings would be significant under Criterion A as well.

Levels of significance for buildings eligible under Criterion C would require that they reflect specialized manufacturing uses, construction methods or building types. For example rope-walks should mirror the elongated, one-story plans prevalent at other naval construction centers. Any building associated with milling, shipbuilding, tanning, brewing or distilling exhibiting construction methods or building types intrinsic to its manufacturing function would be extremely significant under Criterion C. Dwellings documented as containing craft-oriented trades would be considered significant under Criterion C.

Expected levels of integrity for buildings significant under Criterion A or C are low mirroring the Waterfront Area's heavy reuse. Some resources may exist as portions of larger buildings and later additions thereby hiding virtually all traces of their past fabric and associations to manufacturing during this period. Therefore the expected integrity of these buildings should be low. A building should possess higher degrees of integrity of location, workmanship and materials in order for it to convey information regarding its historic function under Criterion C.

No resources were identified during the Intensive Level Architectural Survey relating to Wilmington's development during the period of Intensified and Durable Settlement. There are no documented resources from this period within the zone listed by HABS/HAER or the National Register.

C. Early Industrialization

1770 - 1830 +/-

Property types expected from the period of Early Industrialization (1770 - 1830 +/-) include grist mills, cooper shops, cotton mills, woolen mills, tanneries, saw mills, paper mills, pulp mills, machine shops, forges, ship carpenters shops, nail factories, lumber sheds and other buildings associated with shipbuilding should stand along Wilmington's waterfronts as vestiges of its manufacturing past. Similar to the last period of Intensified and Durable Settlement smaller craftshops probably occupied portions of dwellings and should be included in a list of expected property types.

Buildings significant under Criterion A include those related to milling and shipbuilding in Wilmington during this period. These buildings should be considered extremely significant due to their continued impact on the city's growth. Textile and paper manufactures began a long association with the city during this period and should be viewed as significant contributors to Wilmington's industrial development as well and eligible under Criterion A. Machine shops, forges, nail factories, saw mills and smaller craftshops dating to this period, although important to the fabric of Wilmington's everyday life, are significant to a lesser degree but should still be eligible for the National Register under Criterion A.

Significance under Criterion C for the above listed property types demands that the building types reflect their specialized manufacturing. For example, grist mills should illustrate the vertical integration of Oliver Evans' automatic flour milling technology in order to be viewed significant under Criterion C. Textile and paper mills should also reflect the increasing integration of processes indicative of larger manufacturing establishments in the later portions of this period in order to be considered significant under Criterion C.

Similar to the previous historic period, expected levels of integrity for buildings significant under Criterion A or C are low mirroring the Waterfront Area's heavy reuse. Resources may survive encapsulated by larger buildings and later additions. Resources eligible under Criterion A must possess associations with the above mentioned types of manufacturing important to Wilmington's industrial history. However grist mills, paper mills and textile mills considered for eligibility under Criterion C should possess, at minimum, integrity of location, design, workmanship, and feeling in order to reflect their construction as integrated factories.

The Waterfront Intensive Level Architectural Survey failed to uncover any resources related to Wilmington's growth during the period of Early Industrialization. In addition there are no resources in the Waterfront Area documented by HABS/HAER or the National Register in the zone dating to this historic era.

D. Industrialization and Early Urbanization
1830 - 1880 +/-

Property types descriptive of the period of Industrialization and Early Urbanization (1830 - 1880 +/-) in the Waterfront Analysis Area include grist and cotton mills, cooper shops, lumber and other storage sheds, soap works, carpenter shops, cooper shops, cigar plants, forges, boiler houses, fabricating shops, storage facilities, pattern shops, metal working shops, rolling mills, nail mills, tool and die factories, machine manufactories, railroad rolling stock and component part factories, shipyards, dry docks, sail lofts, rope walks, and wagon and carriage factories.

Industries documenting great significance under Criterion A to Wilmington's growth during this historic period include railcar manufacture, shipbuilding, grain production, textile manufacture, carriage and wagon manufacture, machine manufacturing, metal processing and leather manufacture. Less significant industries include soap manufacturers and cigar manufactures. Similar to the previous period, property types potentially significant under Criterion C should reflect their industrial use.

Expected levels of integrity are low for Criterion A and C. Individual buildings should possess sufficient integrity of location and materials in order to reflect the buildings form and function during the period of its significance. A complex of buildings should exhibit integrity of association, material and location. Buildings eligible under Criterion C should also exhibit integrity of design and workmanship.

Five resources identified by the Intensive Level Architectural Survey date to this period of Wilmington's manufacturing past. Three of these resources are associated with the J. Morton Poole & Co. Machine Works (Complex #8): a pattern storage house (N-12465), a boiler house (N-12468) and a metal shop (N-12469). Of these buildings only the pattern storage house reflects its historic appearance and use, possessing integrity of location, materials, setting and association. Poole & Co. contributed significantly to Wilmington's industrial past as a machine manufacturer and the pattern storage house stands as the last remnant of this firm with any substantial integrity. Additions to the pattern storage house have been recently removed leaving the building's exterior appearance similar to its period of construction. This building is therefore eligible for listing on the National Register under Criterion A.

The former Poole & Co. boiler house and metal shop do not currently reflect their historic form or function, having been heavily

altered by rehabilitation efforts undertaken in the recent past. Three other buildings associated with Poole & Co. and identified by the reconnaissance level survey (N-12464, N-12466, N-12467) were demolished just prior to the Intensive Level Survey.

The former foundry of the Lobdell Car Wheel, Tire & Machine Co. (N-12476.05; Complex #11) helps to document the manufacture of railroad-related equipment in the Waterfront Area during this period of Early Industrialization, an extremely important industry to Wilmington's development. The round-arched roof building retains integrity of location, setting, design and association as well and is therefore eligible for the National Register under Criterion A.

The Hilles & Jones Co. metal shop (N-12482.01; Complex #13) also survives from this period as a remnant of Wilmington's machine manufacturers, a significant industry. Despite its survival however, the metal shop does not possess integrity sufficient to reflect its historic function. However the building possesses integrity of location, setting and association sufficient for eligibility as part of the Hilles & Jones Co. Complex (Complex #13), a collection of buildings related to the same manufacturer but whose period of significance dates to the next period of Urbanization and Early Suburbanization (1880 - 1940 +/-).

There are no resources documented by HABS/HAER or the National Register in the zone for this period.

E. Urbanization and Early Suburbanization
1880 - 1940 +/-

Expected property types for this period of Urbanization and Suburbanization in Wilmington include foundries, metal shops, machine shops, fabrication shops, tanneries, railroad-related industries including car shops, repair and maintenance facilities, boiler shops, engine houses, cigar factories, steel mills and furnaces, glass houses, tool and die factories, paper mills, carriage and wagon factories, automobile manufacturing shops, paper mills, grain mills, textile mills, brick-making facilities, rubber hose factories, ice factories and buildings associated with the construction of wooden and steel ships. Reflecting trends of physical expansion and the incorporation of large manufacturing firms, expected property types should include complexes of different buildings integrated into the production of a wide variety of similar goods.

Significant industries to Wilmington's development during the period of Urbanization and Early Suburbanization include railcar manufacture and repair, metal processing and manufacturing, machine manufacturing, tool and die manufacturing, tanning, textile manufacturing, carriage and wagon manufacturing and shipbuilding. Buildings associated with these industries should be considered extremely significant. Resources associated with glass manufacture, brewing, ice manufacture, rubber hose manufacture, and cigar manufacture would also be significant not as highly. Buildings potentially significant under Criterion C could document any of the above industries in addition to reflecting the particular manufacturing endeavor in its architecture.

Resources from this period should reflect high degrees of integrity if standing as lone resources eligible under Criterion A. Individual buildings should exhibit degrees of integrity of location, design, setting and materials. If surviving resources form part of a coherent manufacturing complex, levels of acceptable integrity for the separate buildings may be lessened. In these cases the whole complex forms a significant resource communicating the size of the former manufactories. However the complexes must possess integrity of location, setting, materials and association. Buildings eligible under Criterion C should possess integrity of design, materials and workmanship.

Although each resource will be evaluated separately, the remaining 124 resources identified by the reconnaissance level survey shall be grouped for examination according to the complexes identified by the reconnaissance survey. Determinations of eligibility will be made for the buildings as both complexes and as individual

buildings.

The Electric Hose and Rubber Complex (N-12421.01-.09) relates to the manufacture of rubber hose and would be considered a significant industry. However two of the buildings (N-12421.01 and N-12421.08) have been constructed within the past fifty years and are not eligible for consideration. The remaining buildings of the complex, constructed between circa 1911 and 1936, do not possess sufficient integrity for eligibility under Criteria A as separate buildings. A large portion of the complex has been destroyed since its period of significance and does not reflect its historic appearance. Therefore the buildings currently composing the Electric Hose and Rubber Complex are not eligible for listing on the National Register.

Five fabrication shops (N-12423 - N-12427) related to shipbuilding and one boiler house (N-12422) related to railcar manufacture compose the American Car And Foundry Complex (Complex #2). The boiler house has experienced extensive remodeling and no other structures related to the manufacture of railcars survive on the former American Car and Foundry property therefore leaving it ineligible for the National Register. The five fabrication shops have also experienced considerable remodeling and do not reflect their past forms or functions either separately or as part of a larger complex of American Car and Foundry shipbuilding-related buildings, thus making the shops ineligible.

The Dravo Shipyard Complex (Complex #3) consists of 24 buildings and five structures related to the manufacture of barges and ships during the latter stages of the period of Urbanization and Early Suburbanization. Many of these buildings have been remodeled and do not reflect their period of significance. As a complex these buildings do not appear to possess sufficient integrity for eligibility. The five structures (N-12438.02-.06), large cranes, may be eligible but further information is necessary.

The Diamond Oil Complex (Complex #4) contains two resources, a garage and a storage warehouse, related to the storage of fuel oil. These property types were not significant types or industries according to the developed criteria for evaluation.

The seven buildings composing Complex #5, the former Pullman Palace Car Repair Shops, relate to the manufacture and maintenance of passenger railroad cars during this period. The six repair shops (N-3648.01-.06) and one machine shop (N-3648.07) help document the establishment and expansion of railcar manufacturing, historically a very significant industry in Wilmington. The buildings separately possess integrity of location, setting, materials and design. However the high integrity of association exhibited by the seven building together leads to a positive assessment of National Register eligibility for the complex as a whole. The former Pullman Palace Car Repair Shops possess more significance as a

complex than as separate buildings.

The Wilmington Malleable Iron Company (Complex #6) contains a foundry building (N-12451.01), a pattern storage house (N-12451.02) and a pattern shop (N-12451.03). Reflecting expected property types, the former Wilmington Malleable buildings help document significant trends illustrating Wilmington's manufacturing past. The buildings currently possess integrity of location, setting, materials and feeling. Similar to the Pullman Complex, though, the Wilmington Malleable buildings exhibit high integrity of association as a group of related buildings. Therefore the three buildings are eligible for the National Register under Criterion A. The Tee-shaped foundry would probably be eligible for the National Register separately.

The fourteen buildings that currently comprise the former Harlan & Hollingsworth Co. Complex (N-12452 - N-12463; Complex #7) help document the growth of a significant industry in Wilmington during this period, the manufacture of railcars. As a complex the buildings exhibit high integrity of location, association, design, setting, materials and feeling and are therefore eligible for the National Register. Resources N-12457 and N-12452, both former fabrication shops, do not possess sufficient integrity of materials for eligibility as a separate buildings. One resource, the Harlan & Hollingsworth Office Building (N-3637) already is listed on the National Register.

The Kent Building (N-12470), part of the J. Morton Poole & Co. Machine Works (Complex #8), meets the eligibility criteria for property type and significance, a storage facility related to the leather production industry. The building also possesses integrity of location, setting, materials and workmanship. This building is therefore eligible for the National Register under Criterion A.

The Crane Co. building (N-12471; Complex #9) relates to the processing of metal parts, specifically plumbing supplies, during the 1930s. Although plumbing supplies was not a significant industry, the building's association with the Crane Co., a Chicago-based national corporation, helps document the establishment of manufacturers involved in a national trading network. The building possesses integrity of location, setting, design and materials, and has been determined eligible for the National Register.

Complex #10, the City Public Works Yard, contains five buildings at three different locations and are apparently historically unconnected as well. None of the buildings relate to historically significant industries in Wilmington. Therefore the buildings are not eligible as a complex or individually.

The Pusey & Jones Co. Complex (Complex #11) embraces 16 resources associated with the Pusey & Jones Co., a significant manufacturer of steel ships and paper-making machinery throughout the period of

Urbanization and Early Suburbanization. One of the resources (N-12476.05) relates to the manufacture of chilled cast-iron railcar wheels by the Lobdell Co. during the previous period of Industrialization and Early Urbanization (1830 - 1880 +/-) and is separately eligible for the National Register. Composed of seven fabrication shops, a machine shop, a wood joiner shop, a boiler shop, a shipway, a paint shop, a mold loft and two storage buildings, the buildings exhibit integrity of location, design, setting, material and association as a complex. Resources N-12473, N-12474.03 and N-12480 do not possess sufficient integrity for eligibility as separate buildings under Criterion A. The other buildings might be eligible under Criterion A. However these buildings most strongly document the former Pusey & Jones Co. complex.

Complex #12 contains the Wilmington AMTRAK Passenger Station (N-3568) and is currently listed on the National Register of Historic Places.

The Hilles & Jones Machine Works (Complex #13) encompasses nine buildings related to the manufacture of machines and tools, a significant industry in Wilmington during the late-nineteenth and early-twentieth centuries. One resource (N-12481) is unrelated to the former Hilles & Jones Machine Works or any other significant manufacturing company and is determined not eligible. The remaining eight buildings include three fabricating and erecting shops, a foundry, a boiler house, a metal shop, an office and a storage building. As a complex the eight buildings possess integrity of location, setting, materials and association and are eligible for the National Register under Criterion A. Buildings N-12482.02, N-12482.03, N-12483.01 and N-12483.02, containing the three fabricating shops and the foundry, possess sufficient integrity of materials and design to allow separate determinations of eligibility.

The Commerce Street Complex (Complex #14) contains seven resources representing four separate, historically unrelated properties. The repair shop (N-12486) associated with small ship repair does not possess sufficient integrity for listing on the National Register. The three small fabricating shops and the machine shop related to metal processing (N-12487 - N-12498) likewise do not possess integrity adequate for eligibility. The other two buildings are not related to historically significant industries in Wilmington and therefore are not eligible.

The South Market Street Complex (Complex #15) contains six resources unrelated to manufacturing and are therefore not eligible. *under these criteria.*

The DuPont Company Christina Complex (Complex #16) contains five buildings and one bridge. The bridge may be eligible but does not properly fall under the heading of manufacturing and can not be

considered for eligibility by this study. The five buildings, although related to chemical processing, a significant industry, do not possess the required integrity for eligibility.

A large number of resources dating to this period have previously been documented by the National Register or HABS/HAER. Properties documented by the National Register in this zone include the Fort Christina Monument (N-338, also NHL), the Wilmington AMTRAK Station (N-713), the State of Pennsylvania (N-4041), the Harlan & Hollingsworth Office Building (N-3637), the Terminal Snack Bar (DOE; N-5280), the Wilmington Rail Viaduct (DOE; N-5281), and the B&O Railroad Station (N-3570). The Harlan & Hollingsworth (DE-8) property was recorded by HAER as well as the PRR improvements in Wilmington (DE-12) dating to the 1902-1905 period.