

## RESEARCH RESULTS

Archaeological investigations were conducted during a two-week period in November of 1998 within a ROW along the waterfront of the Christina River running west from Market Street to Shipley Run Ditch. Ten trenches were excavated by machine within three "tracts," with the expectation that they would expose features associated with past waterfront activity. A qualified archaeological supervisor monitored the excavation of each trench, assisted by field technicians who were instructed to archaeologically investigate soil strata, structural features, and artifacts uncovered during the trenching operation. Each trench was subjected to photographic recordation as well as the accurate drawing of soil profiles and plan views and features encountered. The results of the excavation of trenches are summarized below.

### Tract 1: Market Street to Orange Street

#### Historical Documentation

The first portion of this study area, lying between Market and Shipley Streets, falls within Wilmington Block 882 and has been discussed within Wilmington's Archaeological Resources Management Plan (**Bromberg 1988**), based on original research by Patricia Maley and Conrad Goodwin. This study includes a "Block-by-Block Archaeological Analysis of the Waterfront Management Unit." The following is taken verbatim from that document:

*Development of Block 882 began during the Merchant Milling Phase of Wilmington's history. A structure appears at the corner of Market and Water Streets on the earliest map available of the town, and shipbuilding activities may have occurred in that area during the late 18th century. Any evidence of use from the 1730 to 1830 period would have high significance according to Study Units 8-11 in Goodwin (1986:69-91). In particular, information about waterfront activities during this era would be of importance (Study Unit 9 in Goodwin 1986:75-80).*

*In addition, Block 882 has the potential to yield prehistoric material... [T]he area between the two creeks on the north side of the Christina would have been particularly attractive for prehistoric populations....*

*During the mid-19th century, a wharf was present on the block which served as a storage area for lumber.... [E]xcavation in the wharf area, which was filled sometime between 1850 and 1876, could shed light on the maritime activities of this era.*

*The expected archaeological integrity on Block 882 is assessed as medium for sub-surface remains. ... [W]aterfront areas are often characterized by considerable historic fill material, and test excavation is the best way to ascertain if any significant resources remain.*

The earliest map showing any detail of any block of the study area is the Plan of the City of Wilmington, 1847, which shows a boat slip on the west side of Market Street and a wharf near Shipley Street (**Figure I-3**). The 1850 Sidney map shows the boat slip along the Market Street bridge, and the wharf has been enlarged into the Christina River to fill the remainder of the block to Market Street. At that time, the block was occupied by the William Bush lumber yard, with two small buildings located away from the waterfront. Along Water Street on the north side of the block was the A. Flagler & Co. Coach Factory. The 1868 Beer Atlas map (**Figure I-5**) of the block shows that the boat slip has been filled, and there is a similar configuration of buildings to that shown on the 1850 map; the block is labelled as "Carriage Factory." A coal yard is located at the foot of Shipley Street.

The next maps which depict developments on the block are the 1876 City Atlas (**Figure I-6**) and the 1884 Sanborn Insurance Map (**Figure I-7**). The 1876 map depicts William Bush's lumber shed (frame), a brick building along Water Street with two nearby outhouses (one frame, one brick or stone); and a frame house along Market Street and the Christina River. The H. L. Tatnall & Company lumber yard (no structures) occupies the west half of the block, and the carriage/coach factory was gone. On Shipley street is a coal shed and two small outbuildings. The 1884 Sanborn map depicts the same buildings, but not with the addition of a railroad spur through the lumber yard in the western half of the lot. The area near the waterfront is used as a lumber yard and the dwelling, with two stories, a rear one-story wing, and a front porch is still shown. The coal shed on Shipley Street is gone by 1884.

The 1901 Baist Atlas shows that Market Street has been widened in this area. The lone residence is still there, but the remainder of the block has changed. With the addition of more tracks along Water Street for the Baltimore and Ohio Railroad (B & O R.R. Co.), this block had been acquired by the railroad company. Existing buildings there have been razed, and a freight depot building has been erected near the waterfront, and a standard, smaller depot is now shown along the (former) Water Street. The configuration of the waterfront on this block remained essentially intact through the late nineteenth century. On the 1927 Sanborn Map, (**Figure I-8**), this block appears to be similar with the exception of the dwelling which previously existed in the area along Market Street and the river. Sometime before 1927, the area was further filled toward the river (approximately 50-70 feet).

The 1972 Sanborn Map shows the block containing only one building: the B & O R.R. building in the northern end of the block. Formerly labeled as "depot," it is now depicted as the B & O R.R. "offices." A simple loading platform as well as another railroad spur has been added directly along Shipley Street. In the Christina River near the foot of the Market Street Bridge (west side) is the bridge tender's office. By the time the 1992 Sanborn map was produced, the railroad spurs had been removed, and the B & O R.R. building is still there but vacant.

The only standing structure on this lot today is the old B & O R.R. depot/office building, now vacant and boarded up. Archaeological trenching within the project area on this block could potentially encounter: 1) portions of the carriage works buildings depicted on 1850 and 1868 maps, 2) the residential structure first shown in 1876 along Market Street at water's edge, 3) remnants of the B & O R.R. freight depot building and, 4) associated railroad spurs as shown on 1901 maps. Other historic features and structures, such as bulkheading, remnants of slips, and railroad spurs, could also still be present. Prior to delineating specific trenches, a detailed analysis of historic building footprints was undertaken to ensure that highly disturbed areas are not subjected to archaeological work.

That portion of the Christina Riverfront Walkway falling between Shipley and Orange Streets is encompassed within Wilmington Block 883 of the Archaeological Resources Management Plan (**Bromberg 1988**). The following highlights are from that document:

*.... During the 18th century, a small stream cut through Block 883 and entered the Christina River near the terminus of Shipley Street.... Ferris (1846:280) [suggests that] ... the entire block was marshland during the late 18th century with the exception of the ground occupied by the old shipyard of John Harris. The 1785 Filson Map ... indicates the presence of a dock to the west of the small stream .... The 1804 map of Wilmington ... depicts a pier ... near the terminus of Orange Street. Perhaps these wharf areas were part of the old Harris shipyard ...*

By the mid-nineteenth century, this block was no longer marshland and the 1850 Sidney map shows J. Harris' shipyard here. The 1850 map also shows several structures on the east side of the block as belonging to an L. & A. Kirby. The 1868 Beers Atlas (**Figure I-5**) shows a large slip on the eastern half of this block, as well as a soap and candle works, all of which is shown as being owned by J. Harris. The Hopkins atlas of 1876 (**Figure I-6**) continues to show Harris' wharf and large slip. On the map, there is a pair of perpendicular lines at the head of the slip (possibly suggesting a ship's way) terminating at an octagonal configuration toward the north of the block. Craig's lumber yard and Samuel Bush's Hrs. (horse stables?) are also shown, as are a small wheelwright and blacksmith structures along Shipley Street. Just over a decade later in 1884, the Sanborn map (**Figure I-7**) clearly indicates that the slip has been filled in and the block has definitively changed. The railroad spurs and a freight house are now shown, with nearby sheds for flour, lime, and other materials. Also included in this complex is a two-story "lumber house" at water's edge, coal bins and coal sheds, a cement house, and two small office buildings at the back (north side) of the lot.

At the turn of the twentieth century, even further changes had taken place on Block 883. The 1901 Baist Atlas shows the Wilmington Paper Box Company along the

waterfront and near Elizabeth & Mary Harris's wood yard. The remainder of the block is occupied by T. Blumenthal & Company, with a warehouse (the "Kent Building") behind it near the railroad tracks (previously Water Street).

Daniel H. Kent acquired the lot upon which the building now stands in 1882, and this was sold on a number of other occasions. The New Castle Leather Company was started in 1900, and the company's former Administration Building and Payroll Office and its raw stock warehouse were erected in 1917 on North Poplar Street in Wilmington. These buildings are listed on the National Register of Historic Places (Dixon 1992:142-143).

Blumenthal & Co. erected the present two-story, brick storehouse adjoining the Kent Building to the rear soon after buying the property (Dixon 1992:144). The Baist Atlas of 1901 shows this wing; and by 1914, a Sanborn map shows that the southern tip was slightly angled in a toward the south, hugging the shoreline. This portion of the building, which might be impacted by the riverwalk project, is described by Dixon:

*The wing's south elevation parallels the angled shoreline of the Christian River instead of perpendicular to the east and west elevations. Two upper story loading bays penetrate west of the south elevation's corbeled peak. Stucco covers the western-most bay while the east bay contains a wooden board-and-batten door. Concrete block fills the two first-story loading bays. Rowlock segmental arch lintels crown all bays.*

By 1927, the Sanborn map (Figure I-8) shows that the east half of the block contains five railroad spurs, all terminating near the water's edge. The former large T. Blumenthal & Company building is now occupied by the Wilmington Warehousing Company. The structure includes sections for furniture storage, woodworking, the Perfection incubator Company, and a grocer toward the north end of the block.

The layout of the block was the same in 1972, but the large warehouse structure was then owned by Berger Brothers, Inc. By 1992, all railroad spurs had been removed. Today, the warehouse continues to be occupied by Berger Brothers, Inc.

Bromberg (1988) states:

*Evidence of the various structures, features, and activities dating to the mid-19th century may ... exist on the block.... In 1876, a blacksmith and wheelwright shop were situated there. Remains of these structures would have medium significance...*

*... Remains of the shipyard and wharves would fall into this category [medium level of significance].... In particular, excavation in the wharf area, which was filled sometime between 1876 and 1901, could shed light on maritime activities of the 19th century....*

Archaeological trenching in this area could potentially locate: 1) remains or indications of Ja. Harris' Ship Yard, 2) wharves, slips, railroad spurs and storage buildings (as shown on the 1884 map), and 3) remains of the Wilmington Paper Box Company (shown on 1901 Baist map). Also, as shown in 1927, the warehouse currently occupied by Berger Brothers had a small, one-story frame wing at the south end of the building near the waterfront that could be potentially located. Prior to undertaking the trenching, a detailed analysis was undertaken to ensure that highly disturbed areas were not subjected to archaeological work.

## Archaeological Investigations

### Trench #1

Trench #1 was situated perpendicular and immediately adjacent to Shipley Street on its west side, about seventy-feet north of the current bank of the Christina River (**Figure II-1**). The purpose of its placement was to assess what remained of a boat slip as seen on the 1868 Beers (**Figure I-5**) and 1876 Hopkins (**Figure I-6**) maps, as well as foundation remains of the later Wilmington Paper Box Company illustrated on the 1901 Baist Map. The trench, which measured about fifty-eight feet in length and approximately six feet in width, was excavated to a maximum depth of four feet (**Figures II-2 & II-3; Plates II-1 & II-2**).

Excavation of the trench ceased when it was apparent that there was no further wood framing, or, in the case of the boat slip, when the profile indicated the presence of an introduced clean fill (**Figure II-3; Plate II-3**). Since the boat slip and the Wilmington Paper Box structure, based on reference to historic maps, both measured approximately fifty-feet in width, the absence of wood and the shallow fill were the indicators that further excavation of the trench was not necessary.

The trench contained the remains of a wood structure, which had been incorporated within the earlier boat slip. The slip had been initially filled with clean sand, upon which the wood structure was built. The Baist map of 1901 shows this structure to extend up to the edge of the water front. In order to verify further integrity of the structure, an additional small trench was excavated about ten feet south of Trench #1. A solid planked floor was encountered, which was assumed to be associated with the former Wilmington Paper Box Company. In addition to the boat-slip remnant and structural remains of the paper box factory, a north-south running wooden culvert (**Plate II-4**) was recorded within the east end of the trench. The rectangular

wood-enclosed conduit ran parallel about two-feet west of Shipley Street and appears to have served as a storm drain, which emptied about seventy-feet to the south into the Christina River.

### Trench #2

Trench #2 was excavated about twenty-feet west of Market Street and approximately forty feet north of the current bank of the Christina River (**Figure II-1**). The purpose was to locate the remnants of a structure illustrated on the 1901 Baist map). The trench measured about thirty-feet in length and roughly five feet in width, and was excavated to a maximum depth of 4.7 feet where glee was encountered (**Figure II-4 & II-5**). Due to the presence of extremely large poured-concrete structures, the trench was somewhat staggered (**Plates II-5 & II-6**). Although quite large, the blocks appear to have been disturbed from their original locations. It is believed that these structural blocks may have served as footings for an earlier Market Street Bridge. In addition to the concrete blocks, an east to west running row of pilings and planking, which appears to be the remains of a waterfront quay or pier, were recorded. This wall runs parallel with the Christina River. This presence of this wall is in keeping with the early nineteenth maps, which show this portion of the project area to be the waterfront. The wall is a good point of reference for features (i.e. structures, streets, and slips) shown on these early nineteenth-century maps.

### Trench #3

Trench #3 was excavated about fifteen feet west of the Market street Bridge and 135 feet from the north bank of the Christina River (**Figure II-1**). The trench was excavated for the purpose of locating the remnants of a carriage works, which first appears on the Sidney Clark Map of 1850. The trench measured about twenty-four feet in length and about six feet wide, and was excavated to a maximum depth of four feet where glee was again encountered. The trench contained the remnants of what appears to be either a piling or telephone pole, and a row of north to south-running, single course of planks (**Figure II-6; Plates II-7 & II-8**). The fill contained a high quantity of Belgium block and architectural debris, which continued down to the glee deposits. Aside from the row of planks, no other structural remnants remained.

### Trench #4

Trench #4 was placed running eastward from the edge of Shipley Street and one-hundred ninety feet north of the Christina River(**Figure II-1**). The purpose was to locate the remnants of the Baltimore and Ohio Railroad Freight Depot, which first appears on the Baist Map of 1901. A photograph dated 1931 shows the structure still extant at that date. The trench measured about twenty-one feet long and twelve feet wide at its widest point (**Figure II-7; Plate II-9 & II-10**). The remnants of a structure

suggest that the former freight depot was wood-framed and built on brick piers. A brick pier measuring about three to four feet square was uncovered resting on an earlier wood platform that lay in clean sand (**Plate II-11**). Wood timbers were recorded running square with the brick pier. A corduroy walkway was uncovered along what would have been the west side of the former structure. The log timbers of this walkway ran perpendicular, butting against Shipley Street. The northeast corner of the trench contained a displaced concrete wall. About two feet south of the wall was a concrete set of steps, which had been pushed over on its side (**Plate II-12**).

## **Tract 2: Orange Street to Tatnall Street**

### Historical Documentation

In the Archaeological Resources Management Plan (**Bromberg 1988**), Block 884 is discussed in detail. The plan states:

*...the 1785 Filsen map ...depicts a pier which may have been in this area, and the 1804 Map of Wilmington ... shows a dock near the terminus of Thorn Street ... By 1850 [Sidney map ...], bulkheads and slips were present along the waterfront in [this block].... At that time, most of Block 884 served as the Simmons Lumber Yard, and there were several small structures present on it. ...*

*Jonathan Rumford, a wealthy 19th century merchant, operated his business from a wharf near the terminus of Thorn Street ... Information on waterfront activities in highly significant for the 1730-1830 period and of medium significance for the 1830-1880 phase ... There has been minimal subsequent disturbance in the wharf areas ..., and the potential archaeological integrity is high.*

The waterfront portion of this block had wharves, piers, and boat slips for at least the first three-quarters of the nineteenth century (**Figures I-4 I-5, and I-6**). The 1850 Sidney map shows the Simmons Lumber Yard, along with several small structures. The 1868 Beers atlas (**Figure I-5**) shows a machine shop and two small structures; the 1876 Hopkins atlas (**Figure I-6**) shows a large Poole Machine Shop and another smaller building. The Steam Soap and Candle Works were also located here. By 1884, the Sanborn map (**Figure I-7**) shows that a railroad spur had reached the block and served the Simmons Brothers Lumber Yard. The large machine shop complex occupied the block between Thorn and Orange Street; and the J. Morton Poole machine works and Simmons Lumber Yards occupied the block between Thorn and Tatnall Streets. Stuart Dixon, in his "Wilmington Waterfront Analysis Area Intensive Level Architectural Survey" (**1992**), assesses the National Register significance of Complex 8, what he defines as the J. Morton Poole & Company, Machine Works, as positive. During this time, only a few small structures were near the waterfront, including a coal shed, a wood-cutting shed, and the southern wing of the machine shop complex between Thorn and Orange Streets.

In 1901, it is clear that Poole owned the entire machine shop complex, and there were coal yards along the waterfront. The Simmons lumber yard was still in place on the Shipley Street side. In 1927, the Sanborn map (**Figure I-8**) shows some significant changes on this block. The slip at the foot of Orange Street has been filled in; railroad spurs now come into the block, and Poole's machine shop complex is no longer depicted. The property has been converted for use as the Wilmington Provision Company which included a slaughterhouse, stock pens, freezers, pickling rooms, offices, etc. It is likely that the former buildings were reused for the business. The Simmons lumber yard is still there near the waterfront, and an "old" storage building and stock yards also line the waterfront. In 1972 (Sanborn map), the large building between Orange and Thorn Streets is still there, but it was apparently damaged by fire. The area between Thorn has the Grubb Lumber Company and a "concrete products" building, situated away from the waterfront. The former slaughterhouse complex is gone by 1992; in its place was a brick office building near the waterfront, a parking lot, and the Delaware Theater Company building toward the rear (north) of the lot. The lumber yard is gone, but the "concrete products" building is still there. Also extant along Orange Street is the front portion of the brick structure of the former Poole Machine shop; it has been converted for office use.

Archaeological trenching in this block could potentially locate: 1) nineteenth century wharves, piers, and boat slips, 2) former outbuildings or other components of the Poole complex structures, which occupied this block for decades, and 3) remnants of the historic storage warehouse and coal shed along Tatnall Street and near the waterfront (structure shown on 1884 and 1927 maps). Prior to delineating specific trenches, a detailed analysis of historic structure footprints was undertaken to ensure that highly disturbed areas were not subjected to archaeological work.

### Archaeological Excavations

#### Trench #6

The area of Trench #6 was excavated sixty-five feet long and six-feet-wide (**Figure II-8**); however, the trench could not be excavated to a depth greater than about two feet due to the presence of poured concrete. This concrete covers almost the entire lot between Tatnall Street and Avenue Of The Arts. The trench was placed at this location in order to locate the remnants of a coal shed, which first appears on an 1884 Sanborn (**Figure I-7**). No resources were located.

#### Trench #5

The area of Trenches #5 and #6 consisted of a vacant lot located between Avenue of the Arts (formerly Thorne Street) and Tatnall Street (**Figure II-8**). Trench #5 was excavated about six feet north of the river's edge for the purpose of locating

evidence of an ephemeral coal shed and remnants of a boat-slip that first appears on maps dating to the early nineteenth century (**Figure I-3**). The slip is partially still intact at its opening where both walls can be observed during low tide, as well as the remnants of an associated quay on the west side (**Figure II-9; Plate II-13**). The trench could only be excavated to a maximum length of seven feet and four-foot-wide due to the presence of poured concrete, which could not be penetrated by the machine (**Plates II-14 & II-15**). The trench was excavated to a maximum depth of eight feet where both glee and water were encountered (**Figure II-10; Plate II-16**). The only inland remnants of the previous slip that could be observed within the trench, besides the deep fill, was a piling, which lined up with the east wall of the slip.

### **Tract 3: Tatnall Street to Shipley Run**

#### Historical Documentation

Stuart Dixon (**1992**), in his *The Wilmington Waterfront Analysis Area Intensive Level Architectural Survey*, defines the entire tract as lying within his Complex 7, the Harlan & Hollingsworth Company. Dixon's concludes that the complex is eligible for listing on the National Register of Historic Places.

Dixon considers this complex significant as the physical remains of one of Wilmington's largest industrial firms, the Harlan & Hollingsworth Corporation iron shipbuilding and railcar manufacturing buildings. He feels that the surviving buildings are eligible for listing on the National Register of Historic Places under Criterion A, for their association with events contributing to broad patterns of history. The buildings were constructed between circa 1897 and circa 1919 (**Dixon 1992:91**). During the 1880s, the company expanded and included steamer berths on the north shore, as well as lumber yards, slips, gantry cranes, and railroad tracks. As noted by Dixon (**1992**), the Harlan & Hollingsworth complex:

*...illustrates the growth of a small machine shop into a large manufacturer of railcars and iron vessels serving international market between 1836 and 1943. The present buildings reflect a modernization and expansion program undertaken by the Harland & Hollisngworth Corp., then a subsidiery of the Bethlehem Steel Corporation, in circa 1905 to enable the firm to compete with larger shipbuilders along the Delaware River... (1992:91).*

Most of the buildings at the Harlan & Hollingsworth Company complex are considered eligible both individually and as a complex, including the former boilerhouse (N-12463). Similar to many of the industrial interests along the waterfront, the period of significance is for the 1880 - 1940 +/- period (Urbanization and Early Suburbanization), with the majority of the individual structures noted for railcar manufacture. One of the

buildings, the company office (N-12461/N-3637), is already listed on the National Register.

The boiler house, a structure immediately adjacent to, and to be possibly effected by, the Christina Riverfront Walkway project, was listed as possessing good integrity. This building, along with the former foundry building, are related to the shipbuilding theme. Briefly, the former boiler house is described as:

*...a large rectangular building exhibiting two parapeted roofs and one shallowly-sloped gable roof along its north elevation...*

*... Constructed of seven-to-one common bond brick, the main building exhibits aluminum-clad sills and exhibits aluminum-clad sills and pediments, and quadruple rowlock segmental arch lintels over all window bays... (Dixon 1992:127-128).*

The Archaeological Resources Management Plan (**Bromberg 1988**) also grouped these blocks together (Blocks 693, 694, 695) because they "exhibit similar patterns of development, particularly with regard to their use by the Harlan and Hollingsworth Company." For this discussion, this includes the blocks from Tatnall to West and West to Justison to the channelized bed of Shipley Run.

*Most of the upstream area of Block 695 was marshland until the middle of the 19th century. The marshy conditions are indicated on the 1785 Filson Map ... and the 1842 Fairlamb map.... A creek drained through the marshland and entered the Christina in this area.... [It] was eventually channeled and later placed underground.*

*The first known development in this area is depicted on Ferris's copy of the 1736 map of Willing Town. One structure appears on this map....*

*After the construction of the railroad in the 1830s, industrial development began in the non-marshy area of these blocks between the tracks and Christina River.*

Since the area between Justison and West Avenues south of the railroad tracks was so marshy, construction of wharves and other structures occurred between West and Tatnall Streets, as shown on the 1850 Sidney map. The J. Hedges Rope Works runs from Dock Street and along Tatnall Street to down toward the waterfront; to the west of it along Tatnall Street is J. Walter's saw mill. There are wharves here as well as a fairly small boat slip. The Beers Atlas of 1868 (**Figure I-5**) no longer shows the rope works; there is a planing mill in its place and a saw mill is still there. The boat slip takes on a new, larger configuration. The Harlan and Hollingsworth Company, boiler works, and shipyard are now shown in the area between West and Justison Streets, but there are still no structures of any kind directly along the waterfront.

By 1876, as shown by the Hopkins atlas (**Figure I-6**), construction in the area has greatly increased. There are railroad spurs entering the block between Tatnall and West Streets, and there is now a coal and lumber yard in addition to the planing mill and saw mill. Harlan and Hollingsworth, Iron Ship and Car Builders, has now erected a large complex in the blocks of West to Justison Streets. There are wharves with launching ways occupying most of the waterfront area; as well as a rigger's house next to the boat slip at the foot of West Street.

In 1884 (**Figure I-7**), the Harlan and Hollingsworth's operation was flourishing, now with stocks/ways at the wharves along the waterfront. At water's edge, the former creek has been turned into a log slip, which was then "occupied by the United States Ship of War, Amphitrite, Iron Monitor, not finished (1884 Sanborn map)." Railroad spurs run throughout the area, a feature that continues into the twentieth century. In 1901, the configuration of the area is similar as it is in 1927 (**Figure I-8**). Along the river's edge were slips with launching "ways" (four of them), the large dry dock, and numerous railroad spurs terminating at wharves at the west bank of the Christina River. The former log slip used for the Amphitrite has been filled/removed and there was a "covered run" in its place. The Harlan and Hollingsworth plant had changed to Bethlehem Shipbuilding Corporation (the "Harlan Plant").

By 1972, there was no evidence of shipbuilding on these blocks, and the ships' ways, dry dock, and slips had been removed and filled in. Shipley Run had been reopened (previously it was covered). On the north side of Shipley Run were some new buildings, but most of the former car shop structures near the railroad tracks were still intact but served different purposes. The wharf configuration between West and Tatnall Street appeared to be unchanged. By 1992, a few modern warehouses and commercial and industrial structures had been built, and many of the older buildings had different occupants. Today, many of the structures as well as the waterfront layout have remained essentially the same. The former Harland & Hollingsworth boiler shop building is still extant at the foot of West Street, and it is currently being rehabilitated.

Bromberg (1988) states:

*The downstream portions of these blocks may contain evidence for prehistoric occupation. Adjacent to the swampland which was further upstream, the non-marshy areas of [these blocks] ... would have offered access to a wide variety of resources attractive to prehistoric populations....*

*The 1736 map of Willing Town ... indicates that one structure was present in [the block between Tatnall and West Street] ... Some evidence of this structure or associated features may lie buried in this block...*

*... Some evidence relating to the rope works, which later became a planing factory, may exist on the west side of Tatnall Street.... This area has medium to*

*high expected integrity. Carriage manufacturing was one of the leading industries in Wilmington at this time, and remains of the planing factory could .. Have medium significance....*

*The role played by the Harlan & Hollingsworth Company in the economy of Wilmington makes any evidence of their operations highly significant.... The firm was the largest industrial company in Wilmington during the late 19th century and was one of the oldest and most important ship-building concerns of the nation....*

*The Harlan & Hollingsworth Company and its successors are an important part of Wilmington's and the nation's maritime heritage....*

Archaeological trenching in this area could potentially yield remnants of a variety of structures and features: 1) for the area between Tatnall and West Streets, examples include wharves, a boat slip, the rope works and possibly the saw mill as shown on the 1850 map, 2) a variety of structures and features belonging to the Harlan and Hollingsworth operation (structures nearest to the waterfront include a boat slip and rigger's house at the foot of West Street, numerous launching ways and smaller boat slips, a steam riveter, and a store house as shown on the 1876 map), 3) evidence of railroad spurs as well as cross-walks over some of the slips (as shown in the 1884 map), 4) portions of stone retaining walls and wooden pier timbers associated with ship-building (still in evidence today along the waterfront), and 5) prehistoric sites in the vicinity of Shipley's Run. Prior to delineating any specific trenches, a thorough analysis of historic structure footprints was undertaken to ensure that archaeological testing was not done in highly disturbed areas.

## Archaeological Excavation

### Trench #7

Trench #7 was placed perpendicular to, and about fifteen feet east of, the former Harlan & Hollingsworth Ship Yard Boiler Shop (**Figure II-11**). The purpose of the trench was to explore the remnants of a former boat-slip and construction launching way (Sanborn 1927), the water front end of Tatnall Street, and a spur of the Philadelphia Wilmington & Baltimore Railroad (P.W.&B.R.R). The trench measured sixty feet by nine feet, and was excavated to a maximum depth of about four feet (**Figures II-12 & II-13**).

Features uncovered in the trench include a concrete pad whose edges had been impacted, Belgium block that had been laid in select course sand, a concrete block, a recent sewer pipe, and a ceramic drainage/water pipe (**Figure II-12; Plates II-17 & II-18**). Nothing remained of the former P.W.&B.R.R. The concrete block located at the southernmost edge of the trench may be the remnants of the launching way for the

former slip. The laid Belgium block is believed to be associated with the bed of Tatnall Street.

#### Trench #8

Trench #8 was placed about sixty feet south of the extant former Boiler Shop (**Figure II-11**) for the purpose of exploring the remnants of Launching Way #2, which appears on the 1927 Sanborn map (**Figure I-8**). The trench measured thirty-eight feet long and five feet wide, and was excavated to a maximum depth of two feet on the east end (**Plate II-19**) and three feet at the west end where water was encountered. Features uncovered in Trench #8 include five wooden planks spaced at about 1 foot apart running lengthwise east to west (**Figure II-14; Plate II-20**). Three of the planks measured about seven inches wide, while the other two measured five inches wide. One of the five inch planks have two nailed cross members still attached. The full lengths of the planks/ties could not be ascertained since they had all been truncated at the west end due to the excavation of a later trench, which had been back-filled with select fill. These planks are likely the remnants of Launching Way #2. Other features include a lead pipe at the westernmost edge, and brick rubble in the south-center of the trench.

#### Trench #9

Trench #9 was placed parallel to and about thirty feet from the waterfront (**Figure II-11**) for the purpose of investigating the possible remains of a pier as well as Harlan & Hollingsworth Ship Yard Launching Way #4. The remnants of a boat-slip associated with the launching way could be seen when the Christina River was at low tide as were quay pilings. The trench measured forty-six feet long and five-foot-wide, and was excavated to a maximum depth of about four feet deep.

The only features exposed within the trench were one foot to 2.5 feet-wide stacked wooden beams, which are viewed both in profile of the south wall of the trench and in the plan overview (**Figures II-15 & II-16; Plates II-21 & II-22**). These beams visually line up with other timbers exposed along the shoreline. A nine-foot-wide modern intrusion cut perpendicular through the middle of the trench. A styrofoam cup was observed in profile at the base of the intrusion. North and south profiles were dissimilar. Modern select sands occur in north profile, which are associated with the recent pipeline installation.

#### Trench #10

Trench #10 was oriented east-west, perpendicular to and about eighty feet from the Christina River (**Figure II-11**) which, at this point along the study area, runs north-south. The trench was placed within the black-topped parking lot of the Wilmington Rowing Club parallel with the sewer easement, which was formerly Shipley Run. The

purpose for the placement of this trench was to determine the presence of intact stratigraphy, which due to the confluence of Shipley Run and the Christina River, may possibly contain prehistoric cultural evidence. The dimensions of the trench were forty feet long and eight feet wide, and it was excavated to a maximum depth of 4.5 feet deep (**Plates II-23 & II-24**). Water was encountered at the west end of the trench. Features exposed within the trench include two sets of horizontally-running stacked wooden beams and two sets of poured concrete sections (**Figure II-17; Plate II-24**). The concrete pads were set at sixteen feet apart and stretched across nearly the entire width of the trench parallel to each other. These concrete pads appear to have served as footings of an unknown function. None of the maps, photographs, or lithographs of this area give any clue as to what stood on these footings.

The first concrete pad butts against the first set of beams to the east. The second concrete pad lies about one and half feet south of the second set of beams. The first set of stacked wooden beams were exposed nineteen feet from the west wall end of the unit, and extend across the width of the trench. The beams measured one-foot wide and are joined by iron pins. The second set of beams are located at thirty-two feet from the west wall of the unit, and extend about six feet out from the south wall of the trench. Like the first set, the beams are joined by iron pins, but are slightly wider (one and a half foot). In addition to the beams and concrete pads, two wood pilings were also recorded.

Nothing remained of the intact stratigraphy within this area (**Figure II-18**). It is possible that Shipley Run was originally much wider and that the glee deposit encountered at the base of the unit is associated with the original creek bottom. Conversely, with all the land building activities that occurred during the eighteenth, nineteenth, and twentieth centuries, it is possible that Trench #8 is located within the former fringing marsh and or open water of the Christina River.