SUMMARY AND RECOMMENDATIONS

Summary of Investigations

Two primary factors to consider in assessing the importance of any cultural resource base are significance and integrity. Significance focuses on the cultural activities and events that took place within a given study area and assesses their importance relative to other extant resources of a similar nature on a sliding scale (Local, Statewide or National). Integrity highlights the remaining tangible evidence of those activities and events and whether or not they can be considered relatively intact.

Study Area Significance Potential

Although the presence of aboriginal cultural activity within the study area has not been demonstrated, it is likely that prehistoric peoples tranversed and utilized this portion of the Wilmington waterfront in various ways. Note has already been taken of the high to moderate potential of the confluence of several streams, including Shipley Run, with the Christina River as settlement areas. In addition, high and marshy banks on the north side of this major waterway may also have witnessed some occupation during most of the prehistoric period. Nevertheless, based on the lack of evidence for such settlement, it cannot be stated with certainty that aboriginal occupation constitutes a significant resource within this study area.

Document research indicates that the initial settlement of the Wilmington area by European colonists took place further down river at the site of Fort Christina and, later, at the foot of and to the east of Market Street (Willingtown). The colonial seaport of Wilmington remained small and confined to a limited area for much of its early history. With the exception of a few vague references to ship building enterprises and shipping facilities upriver from the base settlement area, it appears that the study area witnessed very little activity during the seventeenth and eighteenth centuries.

Phases III & IV of the Christina Riverfront Walkway project will, nevertheless, traverse a large strip of Wilmington's later historic waterfront, a critical area within which the development of a minor riverside settlement into the prosperous City of Wilmington can be traced. While, as noted above, the colonial historic settlement of Willingtown had its origins a short distance downriver, where its seventeenth and early eighteenth century history unfolded, most of the industrial developments that transformed the colonial settlement into the industrial city took place within the current study area.

Based on documentary resources, it can be stated that the cultural resources of most import within the current study area are those representing the infrastructure of

Wilmington's industrial past. While the building of this resource base may be considered to have occurred in a fashion generally similar to that of countless other industrial cities of America's east coast, much remains to be understood about the events, technology, specific land use development and socio-economic parameters which contributed to Wilmington's historical development and, in fact, to the specific development of any of the other numerous urban centers from which the above generalization may have been formulated. Document research is a useful but somewhat limited method to use in illuminating this development, especially when it comes to the nature and rate of technological change, as well as the organizational improvements that often do not receive chronicilzation. It can be deemed, however, that the material remains of that infrastructure, both extant and below ground, may contain evidence for such changes and must be considered as an additional, extremely important source of obtainable data for adding to our understanding of the general process of urbanization and industrialization.

Specifically, material remains and sequences of buildings, machinery, spatial layout, support services, distribution and transportation facilities, and other integral aspects of each represented industry can be studied as a whole to facilitate our understanding of the overall system. The individual structural features and artifacts, with which this particular project-specific report deals, can be placed in a overall context from which the entirety can be elucidated. Each and every building foundation, machine pad, manufacturing pod, part and product storage area, and distribution and transportation facility may be perceived to contribute to the goal of understanding the whole. Thus, the significance of any item of the resource base must be expressed in the part it may have played, i.e., its context, within the overall system; and none can be overlooked as inconsequential until the whole is thoroughly understood.

Based upon the documentation undertaken during this and earlier studies, and the conclusions developed therein, the Christina Riverfront Walkway, Phases III & IV study corridor of the Christina River waterfront must be considered an area of historical significance. This significance lies within the contexts developed in the Delaware Comprehensive Historic Preservation Plan **(Ames, Herman, and Siders 1987)**, as listed below:

- Early Industrialization (1770-1830)
- Industrialization and Early Urbanization (1830-1880)
- Urbanization and Suburbanization (1880-1940)

Thematic units pertinent to this significance assessment, as defined in the Management Plan for Delaware's Historical Archaeological Resources **(De Cunzo and Catts 1990:120-121)**, include;

- Manufacturing and Trade
- Landscape

Potential Integrity of the Resources

From the cartographic data presented above alone, it can be seen that the historical evolution of the Christina River waterfront blocks in Wilmington which comprise the project area has been very complex and has involved many changes, most of which have occurred over a relatively short period of time during the latter years of its development. It is obvious that the substantial amount of "engineering" that has occured has resulted in extensive modifications to the original shoreline of the Christina River and, together with the many changes of ownership and land use of the properties fronting on the river, each of which engendered changes in the previously existing facilities located therein, it is likely that intensive impacts to, and in many cases the obliteration of all traces of, early cultural resources have occured. Integrity will, therefore, most likely be a limiting factor in the potential significance of any prehistoric and early historic resources within the study area.

During most of the nineteenth and early twentieth centuries, however, the industrialization of the waterfront can be seen to have resulted in an extensive amount of substantial construction. The industrial base necessary for the successful building of large ships and railroad cars, along with the other industries that have been documented in Wilmington, was vast and structurally massive. Much of that built environment remains. The eventual evolution of Wilmington's industrial base from one largely oriented toward waterfront manufacturing to a more diverse service economy, has led to the abandonment and adaptive reuse of the established infrastructure of the study area. It can now be characterized as an area of warehousing, small commercial establishments, government facilities and, most recently, recreational facilities. Given the nature of these changes, it is evident that the late historic industrial resources within certain portions of the Christina River waterfront may have maintained a fairly high integrity.

Given these suppositions, it is necessary for field investigations to determine just how much of the former resources documented for the study area remain intact or retain a substantial amount of their former character. As can be ascertained from the above description of the field results of the testing conducted, the late nineteenth and early twentieth century resource base does appear to retain a fair amount of integrity. To be considered significant, the specific resources must be shown to retain much of their original integrity, a matter of conducting a sufficiently intense archaeological survey to demonstrate that intact remains exist.

Recommendations

There are various types of adverse effects which must be determined on a project by project basis, depending on the nature of the undertaking and type and quality of the eligible or listed historic resource. For example, adverse effect(s) are not

limited to properties which will be physically destroyed or damaged by the proposed project. The "Criteria of Effect and Adverse Effect" (36 CFR 800.9) lists a total of five categories of adverse effect:

(a) An undertaking has an effect on a historic property when the undertaking may alter characteristics of the property that may qualify the property for inclusion in the National Register. For the purpose of determining effect, alteration to features of a property's location, setting, or use may be relevant depending on a property's significant characteristics and should be considered.

(b) An undertaking is considered to have an adverse effect when the effect on a historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties include, but are not limited to:

(1) Physical destruction, damage, or alteration of all or part of the property;

(2) Isolation of the property from or alteration of the character of the property's setting when that character contributes to the property's qualification for the National Register;

(3) Introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting;

(4) Neglect of a property resulting in its deterioration or destruction; and

(5) Transfer, lease, or sale of the property.

(c) Effects of an undertaking that would otherwise be found to be adverse may be considered as not being adverse for the purpose of these regulations:

(1) When the historic property is of value only for its potential contribution to archeological, historical, or architectural research, and when such value can be substantially preserved through the conduct of appropriate research, and as such is conducted with applicable professional standards and guidelines;

(2) When the undertaking is limited to the rehabilitation of buildings and structures and is conducted in a manner that preserves the historical and architectural value of affected historic property through conformance with the Secretary's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings";

(3) When the undertaking is limited to the transfer, lease, or sale of a historic property, and adequate restrictions or conditions are included to ensure preservation of the property's significant historic features.

It is evident that the Section 106 regulations designed to protect potentially significant cultural resources from threats due to the undertaking of Federally-funded

and/or permitted projects must be considered in relation to the continuation of the Christina Riverfront Walkway. These regulations call for the protection of National Register-listed or eligible properties. Their implementation requires that two basic questions be addressed. The first deals with the determination of resource significance, i.e. their listing on, or eligibility for listing on the National Register of Historic Places. Significance is usually determined after a thorough study of the resource and an analysis of its relative importance within the local community, the State and the Nation. Department of the Interior standards for such an analysis are well established and, in this case, would traditionally require a "Phase II Intensive Survey" of the pertinent resource base as a whole. The Phase II study would include a thorough background document study as well as field investigations designed to verify the integrity of the specific resources being addressed.

1. Comphensive Background Study

Due to the continuing expansion and comprehensive nature of the Christina Riverfront Walkway project by the Riverfront Development Corporation (RDC) of the City of Wilmington, however, it is strongly recommended that:

> an initial, overall background study of the entire RDC project area be undertaken as soon as possible, rather than "piecemill" document reviews of individual project undertakings. This would not only allow for a more contextually-involved study and analysis, but would be beneficial to the client in terms of time and expense.

2. Intensive Terrestrial Field Investigation/Archaeological Monitoring

In general, intensive Phase II archaeological field investigations should be undertaken for each future individual element of the Christina Riverfront Walkway and other RDC projects in which potentially significant resources exist. These investigations should address the entire resource as is considered appropriate by consensus rather than be restricted to project impact areas. Phase II investigations should be scheduled far in advance of proposed construction as possible to allow for considered reviews of results and recommendations.

However, given the nature of the work schedule for the Christina Riverfront Walkway Phase III & IV sections, and the current project's proported lack of threatened disturbance to any identified resources, as defined in this current study, it can be recommended that:

> in lieu of intensive field investigations, archaeological monitoring be scheduled during construction of the following portions of the Phase III & IV walkway segments, as determined from reference to construction drawings **(see Appendix B)**:

Tract 1 - Market Street to Shipley Street
Entire construction ROW

Tract 1 - Shipley Street to Berger Brothers (Kent) Building
Entire construction ROW

Tract 2 - Orange Street to Tatnall Street
Western end, beyond concrete slab

Tract 3 - Tatnall Street to Shipley Run
Area east of O'Brien Building
Area south of O'Brien Building
Untrenched areas west of O'Brien Building
Utility trenches parallel to Shipley Run conduit

The archaeological monitor must be given the authority to halt construction operations and investigate any resources that may be discovered. He or she will call in a daily report to the client and advise as to any need for modification of the work plan.

3. Submerged Resources

As is indicated in **Appendix A**, underwater, or offshore, remote-sensing did not result in the identification of any submerged cultural resources within the study area. Although there was considerable magnetic noise, these magnetic signatures are typically associated with modern debris. Sonar records confirmed the presence of some debris-related material along the shoreline; including tree limbs, car/truck tires, deteriorating pilings, and bulkhead rubble. There was no remote-sensing evidence of potential submerged cultural resources along this stretch of the Christina River.

The following recommendation is presented in the submerged resources survey report:

> *No additional underwater archaeological investigation is recommended in conjunction with Construction Phases III & IV (Market St. to the Public Works Building) of the Christina Riverwalk Project, Christina River, Wilmington, New Castle County, Delaware."*

4. Architectural Recordation

As of this moment, plans are uncertain concerning various extant historic structures that may be subject to modification during the constructon of the Phase III & IV sections of the Christina Riverfront Walkway. Two structures that may be structurally modified include the Berger Brothers Building (Kent), which may require demolition of the rear portion, and the O'Brien Building (Harlan & Hollingsworth Boiler House), which

may have a rear addition removed. A third structure, a crane from the Dravo property, may be moved from its original context. These are discussed below.

Berger Brothers Building (Kent Building)

The Berger Brothers (Kent Building) has been evaluated under the theme of leather manufacture from the 1880 - 1940 +/- period. It maintains good overall integrity. The Kent Bulding was bult in ca. 1884, and is eligible for inclusion in the National Register of Historic Places under Criteron A, buildings associated with events contributing to broad patterns of history. According to Dixon's study **(1992)**, this building was used as a tannery and leather manufactury:

> *...Serving as a warehouse and storage facility for unprocessed hides and finished morocco leather, the Kent Building's location along the Pennsylvania Railroad (PRR) and the Baltimore & Ohio Railroad (B & O) proved extremely benficial to F. Blumenthal & Co., one of the largest manufacturers of morrocco in the world during the 1910s.*

The southern wing (or a portion of it) of the Kent Building may be removed for construction of the walkway. Based only on an exterior inspection, the portion of the building fronting on the riverside appears to be contemporaneous with the entire southern wing, which was erected by 1901 and modified prior to 1914. There is no indication that any portion of the southern wing was erected in the third or fourth quarters of the twentieth century. If this is the case, if any portion of the southern wing of the building were removed, this would constitute an Adverse Effect under Criterion (b)(1) of the Criteria of Adverse Effect. To mitigate Adverse Effects, a HABS-level recordation/documentation could be utlized at minimum. Tthis would call for medium-to-large scale format photographs, sketch plans, one to two elevation drawings, and an historical overview with architectural description, at minimum. Final stipulations would need to be coordinated with the SHPO's office and other agencies as needed.

The construction of the walkway near the southern end and along the east side of the building would constitute an Effect since this action might alter the property's setting. However, this would be considered No Adverse Effect in terms of the historic standing structure(s) since the building is eligible under Criterion A (patterns of history). While maintaining the setting is important, the walkway would not alter the characteristics of the property that qualify it for inclusion in the National Register.

Harlan & Hollingsworth Boiler House (O'Brien Building)

Plans are still in transition which may call for the removal of a small concrete block outbuilding and two smaller buildings composed of a one-story, gable-roofed addition and a one-story flat-roofed building at the southern end of the Boiler House.

Although these structures were added after the original construction of the main building, they date to the period of significance and appear to be contributing components of the eligible historic building and overall property.

The demolition of the southern additions or components of this building would constitute an Adverse Effect under Criterion (b)(1) of the Criteria of Adverse Effect. This could be considered No Adverse Effect if certain conditions are met; namely, that the southern components of the building be subjected to a brief recordation as per Historic American Buildings Survey (HABS) standards. It is possible that measured drawings would be required, but medium-to-large format photography, sketch plans, and historical overview with architectural description should be provided at minimum. Final stipulations would need to be coordinated with the SHPO's office and other agencies as needed.

Construction of the walkway after the southern components of the building have been removed would constitute an Effect, since this new feature could be seen from the building and is essentially out of context with its industrial setting. However, it should be considered a No Adverse Effect in terms of the historic standing structure(s) since the structure(s) are considered eligible under Criterion A (patterns of history). While maintaining the setting is important, the walkway would not alter the characteristics of the property that qualify it for inclusion in the National Register.

The placement of a modern pergola in the vicinity of the former boiler building is considered an Effect, since this new feature could be seen from the building and is essentially out of context with its industrial setting. However, it should be considered a No Adverse Effect on the condition that the pergola is sensitively designed with style, color(s) and materials that are in keeping with the complex.

Dravo Shipyard Crane

A number of construction cranes are currently located at the site of the former Dravo Shipyard, upriver from the current study area. All are in their original setting directly at the waterfront, on railroad tracks. Although a previously undertaken study **(Dixon 1992)** of the property as an industrial complex was not considered eligible, the cranes may be eligible for listing in the National Register (this determination has not yet been made). If one of the cranes were moved to another location, it would probably be considered an Effect on the Dravo Shipyard property since the crane would be removed from its original location. However, the Effect may not neccesarilly be considered adverse if the crane(s) were subjected to a level of documentation/recordation, and if the crane was re-placed in a similar context. The relationship between the cranes is not known, a factor which may have bearing on the Effects determination. For example, if the cranes were integrally connected to one

another in terms of function, it may be considered an impact to remove one from the group. It should be noted that no Effect determinations, nor suggestions for mitigation, can be properly addressed until a determination of eligiblity has been completed for this property and the historic cranes thereon.

The placement of a crane from the former Dravo Shipyard in the vicinity of the former Harlan & Hollingsworth Boiler House would constitute an Effect, since this new feature could be seen from the building and is essentially out of context with its industrial setting. The Effect may not necessarily be considered adverse, however, given certain conditions. According to Dixon's study **(1992)**, the boiler shop was related to shipbuilding and there were cranes present, at least in the late nineteenth century, and possibly later. The cranes appear to date from the 1940s but this date is conjectural only. If there were cranes at the Harlan & Hollinsgworth complex historically, particularly from the second quarter of the twentieth century, the placement of another crane also related to shipbuilding may be considered a No Adverse Effect. To minimize Effects, the crane should be specifically sited in a spot directly along the waterfront, on tracks, reflecting its former function. Interpretative material could also be provided, explaining how such cranes would have worked in a shipyard.

Before final Effects findings can be provided, further research would be required to determine if there had actually been similiar cranes at the Harlan & Hollingsworth facility, and if so, the time period they were used, how the mechanical technology changed, source of energy to operate the cranes, and changes in use, etc.