



# Local Impact Report

*SugarHouse Casino*

*941-967, 1001 & 1015-1025 N. Delaware Avenue  
Philadelphia, PA*

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**Date:**

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## **EXECUTIVE SUMMARY**

This Local Impact Report has been developed on behalf of HSP (HSP) to document the local environmental impacts that are anticipated to occur, as well as the proposed mitigation measures to be employed, in connection with the development of the Former Jack Frost Sugar Refinery into the SugarHouse Casino, located at 941 through 967, 1001 and 1015-1025 North Delaware Avenue in the City of Philadelphia, Philadelphia County, Pennsylvania.

The existing site is currently a vacant, underutilized, former industrial property (i.e., Brownfield) that is overgrown with vegetation. The majority of this site has been vacant since approximately 1980, and was previously used by the Jack Frost Sugar Company as a sugar refinery, packaging and distribution center. All buildings on the site were demolished and removed between the late 1990's and 2004.

The entire existing site is currently zoned G-2 - Heavy Industrial according to the City of Philadelphia Zoning District Map. Since the City of Philadelphia does not have a specified zone classification for casinos or gaming establishments, the proposed site would need to be considered as a permitted non-conforming use, rezoned to a new and special classification for gaming, or found to be exempt from zoning as a result of state preemption provisions that are under discussion.

The project area consists of a mixed land use of industrial, commercial and limited residential development. Properties north of the project site contain commercial/industrial businesses and warehouses. Properties south and west of the project site include a mix of new residential condominium towers that are currently under construction (Waterfront Square), residential town homes and bar/restaurant establishments.

The property offers exceptional vehicular access from both north- and south-bound Interstate I-95 (Delaware Expressway), the Vine Street Expressway (Interstate I-476) and Center City Philadelphia. Just 1.1 miles from the foot of Market Street, the site enjoys proximity to Center City, but with a fraction of the real and perceived traffic congestion associated with “downtown” areas and other potential Delaware Avenue sites to the south. In addition, the property is minutes away and within a clear line of site of both the Benjamin Franklin and Betsy Ross Bridge spans to New Jersey.

Planned as a phased development, Phase 1 of the new gaming facility, named SugarHouse, will accommodate up to 3,000 slots, related gaming support and regulatory spaces, a myriad of exciting dining options, a multi-purpose event center and convenient customer parking in a facility representing almost 1.3 million square feet of new construction. Future expansion plans call for the complex to ultimately accommodate the statutory limit of 5,000 slots, a 500-room hotel tower, expanded dining facilities, a Spa and expanded garage parking. Upon completion, the SugarHouse Casino will ultimately exceed 2,100,000 square feet of new construction.

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No hazardous/regulated materials or conditions, except for the petroleum impacted soil and ground water, are currently known to exist on-site. The PADEP has determined that no further action is required for the remaining petroleum-impacted soil and ground water at the site, which was found to be associated with the former underground storage tanks. While further investigation/site characterization will be performed by HSP, the presence of any additional hazardous/regulated materials and conditions is not likely to adversely impact the proposed casino development.

The findings of this Local Impact Report are that, with the exception of increased traffic on North Delaware Avenue, there are no adverse impacts to surrounding properties, residents, schools, community services, transportation, parking, utilities, City services, air quality, cultural and historic resources, tourism, parklands/open space, ecosystems, and soil and water quality associated with the development of the site as the Sugarhouse Casino. With regard to traffic, only minor modifications to turning lanes and signaling will be required on North Delaware Avenue to mitigate the identified adverse impact and facilitate the planned future operations, as the existing capacity of North Delaware Avenue is more than adequate to meet the needs of the proposed development, as well as the continued and future needs of the surrounding area.

## **1.0 INTRODUCTION**

This Local Impact Report has been developed on behalf of HSP to document the local environmental impacts that are anticipated to occur, as well as the proposed mitigation measures to be employed, in connection with the development of the Former Jack Frost Sugar Refinery into the SugarHouse Casino, located at 941 through 967, 1001 and 1015-1025 North Delaware Avenue in the City of Philadelphia, Philadelphia County, Pennsylvania (site). A site location plan has been provided as Exhibit 31.1.

The development of the site into the SugarHouse Casino will have a significant positive impact on the local community. The development will convert a previously dormant industrial property that has been a blemish on the North Delaware Avenue and Delaware Riverfront for the past 25 years into a major new entertainment destination which will employ thousands of individuals and spur economic development throughout the North Delaware Avenue corridor. Furthermore, the proposed development of the site is in strategic conformance with the proposed land use studies completed to date by the City of Philadelphia for the Delaware River waterfront and Penn’s Landing areas.

Note that as part of HSP’s Category 2 – Application and Disclosure Information Form to the Pennsylvania Gaming Control Board, both a temporary and permanent casino facility are planned for the site. The use of a temporary facility will allow HSP to begin casino operations within approximately 6 months of receiving a Pennsylvania Gaming Control Board license. The temporary facility will continue to operate at the site during construction of the permanent facility, and will cease operations once the permanent facility opens. The project’s local environmental impacts discussed herein relate to both the impacts of the temporary and permanent facilities. Because the temporary casino facility will be physically smaller in size and its scope of operations more limited than that of the permanent facility, any planned mitigation measures for the permanent facility will also suffice for the temporary facility.

### **1.1 Purpose and Scope**

This report has been prepared for submission to the City of Philadelphia in accordance with the requirement stated in Appendix 31 of the Pennsylvania Gaming Control Board Category 2 – Application and Disclosure Information Form. The requirement states “Pursuant to 58 PA. Code §441.3(c), a copy of the Local Impact Report shall be provided to each political subdivision in which the licensed facility will be located at least seven (7) days prior to the filing of the application for a slot machine license.” The scope of this report is to present the local environmental impacts that are anticipated to occur, as well as the proposed mitigation measures to be employed, as a result of the development of the SugarHouse Casino site.

## 1.2 Report Organization

The remainder of this report is organized as follows:

- ◆ **Section 2.0 – PROJECT DESCRIPTION** discusses the purpose, property setting, project design and operational features for the SugarHouse Casino.
- ◆ **Section 3.0 – SITE HISTORY** discusses the known historic use of the site.
- ◆ **Section 4.0 – ASSESSMENT AND MITIGATION OF PROBABLE ENVIRONMENTAL IMPACTS** discusses the anticipated environmental impacts that will be associated with the development and use of the site as a casino complex, and how those impacts will be mitigated to the practical extent possible.
- ◆ **Section 5.0 – ENVIRONMENTAL AND REGULATORY REQUIREMENTS** discusses the known licenses, permits, certifications and potential remedial actions that will be required in order to develop the site.
- ◆ **Section 6.0 – CONCLUSIONS** summarizes the findings associated with this report, as well as conclusions relative to the overall impact of the proposed SugarHouse Casino development activity.
- ◆ **Section 7.0 – PREPARERS** identifies the various organizations and personnel that contributed to the development of this Local Impact Report.

Figures, tables and other supporting documentation referenced in the individual sections of this Local Impact Report are provided as exhibits.

## **2.0 PROJECT DESCRIPTION**

The following sections describe the purpose, project setting, type of development and operational features currently planned for the site.

### **2.1 Purpose**

In the broadest sense, the proposed SugarHouse Casino is in direct response to the Commonwealth's initiative and resulting enabling legislation to permit lawful gaming as an effective mechanism to retain significant gambling revenues that have increasingly dissipated to other jurisdictions, the proceeds of which will benefit the general populous in the form of property tax relief and other social programs. From a more local perspective, the SugarHouse Casino can be seen as an economic engine that, in the short term, will create hundreds of skilled construction jobs and in perpetuity will create even more permanent and skilled, service and managements positions. In a physical sense the SugarHouse Casino has the potential to become a tangible source of pride for native Philadelphians and should prove to be a major catalyst for the local convention and tourism business. In addition, development along the riverfront in this particular locale can be expected to stimulate significant residual off-site redevelopment of otherwise underutilized areas near the site.

Far beyond gaming alone, the SugarHouse development being planned by HSP will offer patrons a panoply of extraordinary dining, live performance and recreational options, befitting its centrally-located riverfront location. The property is ideally situated to both facilitate frequent repeat visits from local residents while attracting tourists and conventioners from Center City and residents of nearby New Jersey and Delaware. The SugarHouse Casino holds the promise of not only retaining gaming revenues in Pennsylvania, but also in attracting considerable numbers of out-of-state customers.

Planned as a phased development, the basic building program for Phase I is envisioned to accommodate up to 3,000 slots, related gaming support and regulatory spaces, a myriad of exciting dining options, a multi-purpose event center and convenient customer parking in a facility representing almost 1.3 million square feet of new construction. Future expansion plans call for the complex to ultimately accommodate the statutory limit of 5,000 slots, a 500-room hotel tower, expanded dining facilities, a Spa and expanded garage parking. Upon completion, the SugarHouse Casino will ultimately approach or exceed 2,100,000 square feet of new construction.

The site itself is expansive, encompassing a 22-acre property and approximately 16 acres of usable land, with over 1,000 linear feet of prime and highly visible frontage along North Delaware Avenue. This permits a rational layout of the various project components in fashion aimed at optimizing operational efficiency. Only a site approaching this size can properly

accommodate a phased development and the related traffic volume of a project of the scale contemplated at the SugarHouse Casino.

## **2.2 Project Setting**

The SugarHouse Casino’s proposed site location was selected for both its extraordinary accessibility and for the intangible and unique aesthetic qualities associated with its dynamic riverfront locale. The City of Philadelphia and its citizens have long aspired to have a world class waterfront and countless planning initiatives have called for the development of a myriad of intense entertainment-oriented activities along the Delaware. The Philadelphia Planning Commission and more recently the Mayor’s Gaming Task Force recognize this and have identified the northern portion of the Delaware riverfront along North Delaware Avenue as a “preferred” location for a casino development of such intensity.

The property offers exceptional vehicular access from both north- and south-bound Interstate I-95 (Delaware Expressway), the Vine Street Expressway (Interstate I-476) and Center City Philadelphia. Just 1.1 miles from the foot of Market Street, the site enjoys proximity to Center City, but with a fraction of the real and perceived traffic congestion associated with “downtown” areas and other potential Delaware Avenue sites to the south. In addition the property is minutes away and within a clear line of site of both the Benjamin Franklin and Betsy Ross Bridge spans to New Jersey. Aerial photographs depicting the location of the site are provided as Exhibits 31.2 and 31.3.

Existing access routes and capacity from I-95 to the site is more than adequate to serve the contemplated development. Nevertheless, a major reconfiguration and reconstruction of the I-95 on and off ramps at Aramingo Avenue is also planned. The Pennsylvania Department of Transportation (PennDOT) projects these funded improvements to be completed over the next 6-9 years. These improvements will only serve to further enhance access to and from North Columbus Boulevard area and the SugarHouse site. In the interim however, there is sufficient distance from these planned improvements, approximately ½-mile, so as not to materially impede access to the site during construction.

In addition to superior accessibility, the SugarHouse site boasts a truly exceptional riverfront setting with commanding views of the Delaware River and Center City. The site is situated at a particularly engaging bend in the Delaware River affording both bucolic views of verdant Hog Island to the east and dramatic views of the Ben Franklin Bridge and Center City skyline views to the south and southwest, respectively.

Public access to the waterfront and treatment of the river’s edge is a vital component of the plan. A continuous pedestrian promenade, or Riverwalk embarcadero, is proposed along the entire length of the property, with public access at both Penn Street at the south and Shackamaxon Street to the north. The public will be welcome to use this space for strolling, jogging, biking and even fishing. To increase the sense of activity along the river’s edge, a number of the casino’s proposed restaurants, including a fine dining establishment, the buffet and a diner will all front

along this expanse. In time, the site may also include water taxi and ferry service to facilitate easy access to and from points of interest along the burgeoning Philadelphia and Camden waterfronts. Subject to appropriate permitting, a small marina is proposed to be located inboard of the pier head line and within the confines of the current property limits.

Finally, few, if any of the other publicly-announced proposed sites offer the potential to stimulate other residual redevelopment opportunities on nearby properties. There are a number of underutilized and marginally occupied, former industrial uses near the SugarHouse site and these can be expected to be redeveloped as the SugarHouse comes to fruition. In fact, the SugarHouse parcel is of sufficient size to permit the future development of a free-standing residential tower, or other to-be-determined use, on an adjacent two-acre pad site within the property boundaries. This parcel could easily be redeveloped without impeding any casino operations or precluding future expansion of the gaming component.

### **2.3 Project Design and Operational Features**

From its inception, HSP and the project’s designers envisioned a Master Plan for the property that would embody sound urban design principles and demonstrate an understanding of the operational requirements and expansion considerations of a facility of this magnitude. The resulting scheme will allow incremental development to proceed expeditiously while providing patrons an attractive, safe and exciting entertainment experience throughout the course of construction and future expansion.

The management of vehicular movements both onto and within the site was of paramount importance in the site planning of the SugarHouse facility. Efficient operational requirements dictate that patrons must be able to safely navigate their way to either the main porte cochere or self-park garage and back again. Bus traffic and passenger vehicle movements should similarly be separated to the maximum practical extent. Added to this, are the separate inbound and outbound valet operations. These have all been considered in the site layout.

Two major site entrances to the SugarHouse Casino are proposed at currently signalized intersections along Delaware Avenue. These separate entrances are critically important to the operational considerations of the facility. Minimizing any potential congestion on Columbus Boulevard, these discrete site entrances will permit easy flow into and out of the complex. Once on site, a network of carefully engineered roadways with an absolute minimum of crossing, and potentially conflicting traffic crossings, permits the many permutations of travel to and from various points on the site.

Ample site area and thoughtful planning will permit the establishment of a “Temporary Casino” within a period of approximately nine months after Licensure. Requiring only minimal marine improvements and gangways and a temporary cul de sac, this temporary facility will be served by surface parking lots for both self-park and valet patrons. The gaming area itself is proposed aboard an existing and fully-outfitted gaming vessel that has met safety and regulatory



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requirements and successfully operated in other jurisdictions. This vessel is projected to remain operational throughout the construction of the larger “permanent” facility over the ensuing 24 months (or a total of 30 to 33 months from date of licensure).

An illustrative site plan for the temporary casino is provided as Exhibit 31.4.

The first permanent component of the project to be completed will be the self-park garage. Once operational, with over approximately 2,350 spaces, this will replace the need to maintain significant areas of temporary surface parking lots and allow construction of the permanent Phase I Casino to proceed. Arriving patrons will be able to enter the self-park garage from both the northern and southern site entrances. Similarly, exiting patrons may elect to depart via either Frankford Avenue or Shackamaxon Street exits. The proposed garage will be eight stories served by cascading speed ramps which will expedite flow within. A centralized elevator core will initially allow patrons to descend to the ground level for a short connection to the gaming vessel. Once the Phase I permanent casino has been completed, the same elevator core will allow patrons to descend directly to the main gaming floor. The ground level of the garage structure will ultimately be used to accommodate bus movements and passenger loading, as well as the central loading dock, sally port, employee entrance and other back-of-house functions.

The permanent Casino structure is envisioned to be a two-story high podium with an extensive mezzanine-like, intermediate floor level overlooking the gaming floor. The goal of the casino plan is to initially accommodate 3,000 slots and ultimately up to 5,000 devices on a single level, generally arrayed around the secured cage/cashier and back-of-house areas. Up to nine separate Food & Beverage venues of varying sizes and menu offerings with a total seating capacity of approximately 1,200 patrons will be arrayed around both the gaming floor and on the upper level. Many of these venues have been strategically placed to take advantage of the panoramic views afforded by the SugarHouse Casino’s unique riverfront location. A 25,000 sq. ft. multi-purpose Entertainment venue, with ample pre-function space and support facilities, is also planned within Phase I. Situated on the upper level, this flexible venue will incorporate state-of-the-art rigging and equipment to permit live concert and theatrical performances, as well as sit-down banquet and ballroom-style functions. The space will also be divisible into smaller spaces for multiple events and conferences.

In addition, a “Turf Club” (Off-Track Betting Facility) of approximately 20,000 square feet is proposed to occupy the street level at the western end of the garage structure facing North Delaware Avenue. This operation will have a dedicated parking area and a convenient connection up to the casino through the bus waiting lounge.

The plans for the SugarHouse have been developed with future expansion in mind, so as not to impede ongoing casino operations and to preserve a near seamless customer experience during construction. Outward expansion of the self-park garage, underground valet parking and the actual gaming floor podium have all been carefully considered with respect to constructability, staging and safety. A 20-story, 500-key hotel is also planned for a future expansion phase. The proposed hotel tower is situated to allow a separate and more intimate porte cochere area at the

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western section of the site. Additional parking areas or a new dedicated parking structure are also being considered as part of this future development.

An illustrative site plan for the permanent casino is provided as Exhibit 31.5.

### 3.0 SITE HISTORY

This site history described below was developed from information contained in previous environmental reports, a review of publicly-available environmental databases, United States Geological Survey (USGS) topographic maps, Sanborn fire insurance maps and historical aerial photographs.

The previous environmental reports include a December 2003 Phase I Environmental Site Assessment (ESA) of the 1001 North Delaware Avenue parcel prepared by Property Solutions Inc., and a March 2002 Remedial Investigation, Risk Assessment and Cleanup Plan Report of the former Jack Frost Sugar Refinery by Brown Environmental Services. Copies of these reports are provided as Exhibits 31.1 and 31.2.

The site is depicted on the USGS Philadelphia Pennsylvania-Camden 7.5 minute quadrangle topographic map. Historical USGS maps dated 1995, 1967-1994 (revised), 1967-1973 (revised), 1967, and 1955 were reviewed. Older topographic maps from 1943, 1901 and 1894 were also obtained, but were produced on a scale too small to evaluate specific site details. Copies of the historical USGS maps are provided as Exhibit 31.3.

Fire insurance maps prepared by the Sanborn Company from 1989, 1979, 1976, 1950 and 1916, and historical aerial photographs of the site taken in 1940, 1950, 1963, 1973, 1986 and 1995 were also reviewed. The Sanborn maps are provided as Exhibit 31.4, and the historical aerial photographs are provided as Exhibit 31.5.

The site includes 12 separate parcels and sections of three vacated streets. The sections of vacated streets contained in the site include the majority of Penn Street between Ellen and Shackamaxon Streets, Laurel Street south of Delaware Avenue and the western half of Shackamaxon Street. The total acreage of the site is approximately 22.6 acres, which includes approximately eight acres of submerged land along the riverfront. The street addresses occupied by the site include 941-967 North Delaware Avenue, 1001 North Delaware Avenue and 1015-1025 North Delaware Avenue, all of which lie in the Fifth Ward of the City of Philadelphia, Philadelphia County, Pennsylvania.

#### 3.1 Sanborn Fire Insurance Maps

The 1916 Sanborn Fire Insurance map indicates the site consisted of 8 piers and associated land along the southeastern side of North Delaware Avenue, as well as a strip of land between Delaware Avenue and Beach Street. The piers are identified from northwest to south east as North Pier No. 41 through North Pier No. 48, with North Pier No. 48 adjacent to Shackamaxon Street. It is noted that the present day North Delaware Avenue is in the location of the former Beach Street. In addition, the historical aerial photographs and topographic maps indicate that some submerged lands between piers were filled, and some of piers shortened between the late

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1960s and early 1970s. The Sanborn maps do not accurately reflect all of the historic changes to the shoreline.

The majority of the piers historically contained one or more railroad sidings that connected to the main rail line along North Delaware Avenue. The following table summarizes the occupants of these piers as identified on the 1916 Sanborn map:

<b>Pier Number</b>	<b>Identified Occupant on the 1916 Sanborn Fire Insurance Map</b>
North Pier No. 41	Philadelphia Rapid Transit Company Coal Pier
North Pier No. 42	Chas. F. Felin, Lumber Yard
North Pier No. 43	Eastern half of Pier 42 – No occupant identified
North Pier No. 44	Watson Malone and Sons Lumber Dealer
North Pier No. 45	J.W. Paxson Co. Foundry Supplies
North Pier No. 46	Pennsylvania Sugar Company Refinery
North Pier No. 47	Pennsylvania Sugar Company Refinery
North Pier No. 48	No occupant identified

North Pier No. 41 contained a conveyor that connected the pier to a Philadelphia Rapid Transit Company building between Delaware Avenue and Beach Street. This building was on the subject site, and was identified as a boiler and power house.

North Pier No. 42 contained lumber sheds and an office. The land between the former North Delaware Avenue and Beach Street contained lumber piles and several small buildings. The adjacent North Pier No. 43 contained rail tracks and a crane.

North Pier No. 44 contained a lumber shed and a rail siding. Lumber piles, another lumber shed and office were located along the southeastern edge of the former North Delaware Avenue. A series of rail sidings and a commercial building occupied the land between the former North Delaware Avenue and Beach Street, between Laurel Street and the intersection of the former North Delaware Avenue and Beach Street, at Shackamaxon Street. The commercial building is identified as the Pennsylvania Railroad Shackamaxon Street Freight Station and Merchant's Warehouse. Northeast of the merchant's warehouse, a railroad water tower and two small structures are also indicated.

The land on the shore side of the bulkhead line at North Pier No. 45 contained a facing mill, offices, and a storage and shipping shed.

North Pier No. 46 contained a packing and storage shed for the sugar refinery. The remainder of the facility was located on the shore side of the bulkhead line, and consisted of a melt house, pan house, char house, boiler house, machine shop, pump house and offices. The adjacent North Pier No. 47 contained a rail track, coal pile, sand pile, manure pile and office.

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North Pier No. 48 contained rail sidings, and a lumber and railroad tie pile. This pier was adjacent to a ferry slip at the end of Shackamaxon Street.

By 1950, the Sanborn map documents a substantial expansion of the sugar refinery. The buildings evident in the 1940 aerial photograph appear consistent with the 1950 Sanborn map, suggesting the expansion may have occurred in the 1930s. The 1950 Sanborn map indicates the sugar refinery has expanded onto North Piers Nos. 45 and 48. Additional structures identified on the map include aboveground molasses tanks on North Pier No. 45, and additional warehouse and storage buildings on North Piers Nos. 47 and 48.

Although some rail sidings remain on North Piers Nos. 41 and 43, no occupants are identified and the former Philadelphia Rapid Transit Company building is no longer present. The former building appears to have been demolished, and the space is identified as containing “used autos and parts”. Both lumber dealers and the foundry supply company are no longer identified. A traveling crane is indicated on the rail siding along North Pier No. 43. Beach Street is identified as North Delaware Avenue, and the former North Delaware Avenue is identified as Penn Street. Rail tracks remain along Penn Street with rail sidings between Penn and North Delaware Avenue. The commercial building formerly occupied by the Pennsylvania Railroad Shackamaxon Street Freight Station and Merchant’s Warehouse is occupied by Acme Fast Freight Inc. and Merchant’s Warehouse.

The 1976 Sanborn map indicates continued expansion of the sugar refinery, which is identified as the National Sugar Refining Company. A bulk handling building and conveyor have been added northwest of the molasses storage tanks on North Pier No. 45. On North Pier No. 41, the rail sidings have been cut back from the end of the pier, and a building labeled as barge repair has been constructed.

The 1979 Sanborn map identifies continued improvements to the sugar refinery with the addition of a by-products building on the northwest side of the facility along Penn Street. Former submerged lands between North Pier Nos. 48 and 46 have been filled, effectively covering over North Pier No. 47. Structures identified as a wharf shed and a wharf house on the southeastern end of North Piers Nos. 46 and 47 have been removed. No other significant changes to other areas of the site are evident.

The 1989 Sanborn map indicates only minor changes to the site since the 1979 map. The sugar mill was reportedly vacant at this time, with operations ceasing circa 1980. All rail sidings and the barge repair structure have been removed from North Pier No. 41. Also, the portion of the commercial building along North Delaware Avenue previously occupied by Acme Fast Freight is identified as cold storage. The sugar refinery continues to be identified as the National Sugar Refining Company, and appears to be the only industrial facility on the site.

Copies of the Sanborn maps are provided as Exhibit 31.6.

### **3.2 Historical USGS Topographic Maps and Aerial Photographs**

The small scale of the topographic maps and aerial photographs prevents much interpretation of site history beyond identifying structures on the site. As mentioned above, these sources indicate changes to the shore line that are only partially represented on the Sanborn maps.

Between 1967 and 1973, the topographic maps and aerial photographs indicate that North Piers Nos. 42/43, 44 and 46 were shortened, and the submerged land between North Piers Nos. 44-45, 45-46 and 47-48 was filled. A dock was constructed from the shortened end of North Pier No. 46 to a structure that has been identified as a pump house on a concrete platform. It appears this pump house was formerly at the end of North Pier No. 46, although it was not labeled on the Sanborn maps.

Copies of the historical topographic maps are provided as Exhibit 31.7. Copies of the historical aerial photographs are provided as Exhibit 31.8.

### **3.3 Present Day Conditions**

In the late 1990s, the previous above ground structures associated with the former sugar mill were demolished to grade. As part of the demolition activities, asbestos-containing materials were abated and underground storage tanks, and associated soil contamination, were removed.

In 2004, the former cold storage warehouse at 1001 North Delaware Avenue was demolished to grade.

The site is currently surrounded by a chain-link fence with overgrown vegetation, concrete slabs and sporadic nuisance debris throughout.

## 4.0 ASSESSMENT AND MITIGATION OF PROBABLE ENVIRONMENTAL IMPACTS

### 4.1 Land Use

The following sections describe the existing site and surrounding land use.

#### 4.1.1 Existing Site Use

The existing site is currently vacant and overgrown with vegetation. The majority of the site has been vacant since approximately 1980, and was previously used by the Jack Frost Sugar Company as a sugar refinery, packaging and distribution center. All buildings on the site were demolished and removed between the late 1990's and 2004.

The entire existing site is currently zoned G-2 - Heavy Industrial according to the City of Philadelphia Zoning District Map, provided as Exhibit 31.9. Since the City of Philadelphia does not have a specified zone classification for casinos or gaming establishments, the proposed site would need to be considered as a permitted non-conforming use, rezoned to a new and special classification for gaming, or found to be exempt from zoning as a result of state preemption provisions that are under discussion.

#### 4.1.2 Local Land Use Summary

The project area consists of a mixed land use of industrial, commercial and limited residential development. Properties north of the project site contain commercial/industrial businesses and warehouses. Properties south and west of the project site contain a mix of new residential condominium towers that are currently under construction (Waterfront Square), residential town homes and bar/restaurant establishments.

#### 4.1.3 Local Land Use Plans

The City of Philadelphia's Planning Commission has prepared several studies related to the renewal and redevelopment of the Delaware Riverfront. One report prepared in 2001, titled *North Delaware Riverfront: A Long-Term Vision for Renewal and Redevelopment*, focuses on revitalization of the riverfront through new housing, businesses, and leisure uses in areas that are no longer required for industrial use.

The report calls for the redevelopment of existing port, utility, and industrial sites, suggesting the incorporation of new environmental standards, sustainable technologies and public access to riverfront trails and views. The proposed development of the site is in strategic conformance with the proposed land use studies completed to date by the City of Philadelphia.

**4.1.4 Schools, Community Services, Facilities and Resources**

The following community facilities are located near the site:

Type of Facility	Name of facility	Address	Proximity from Site
Library	Fishtown Community	1217 E. Montgomery Avenue	0.58 miles
Public Health Center	Health Center 6	321 W. Girard Avenue	0.59 miles
Recreation Center	Tip Top Playground	Front & Allen Streets	0.22 miles
Private Schools	LaSalle Academy	1432-36 N. 2 <sup>nd</sup> Street	0.66 miles
Parochial Schools	St. Peter’s R. C.	1019 N. 5 <sup>th</sup> Street	0.69 miles
Charter Schools	Laboratory Charter School of Communication and Language	124 Bryn Mawr Avenue	0.57 miles
Public Schools	Adaire, Alexander	1300 E. Palmer Street	0.56 miles
P.A.L. Centers	Cozen	732 N. 17 <sup>th</sup> Street	1.71 miles
SEPTA Bus Stops	Frankford Avenue & Columbus Blvd.	Frankford Avenue & Columbus Blvd.	0.07 miles
SEPTA Train Stations	Girard	1200 N. Girard Avenue	0.32 miles

The proposed site development plans are not anticipated to adversely impact these community facilities, as they are located to the west of the site, effectively separated from the site by Interstate 95 (I-95).

**4.1.5 Housing/Surrounding Residents**

Most of the adjacent properties to this project consist of commercial and industrial uses; however, two residential condominium towers are presently under construction on the adjacent parcel south of the project site, and three additional towers are planned as part of a gated community known as Waterfront Square. The neighborhood west of the site, across North Delaware Avenue, is a mix of industrial facilities, with residential town homes beyond.

The proposed site development plans are not anticipated to adversely impact surrounding housing and area residents, as they are primarily located to the west of the site, effectively separated from the site by I-95. The Waterfront Square residential development immediately to the south of the site is a planned gated facility. As such, with the exception of traffic (refer to Section 4.3.2), no adverse impact is anticipated on this future residential development.



#### 4.2 Socioeconomic Characteristics of the Surrounding Neighborhood

Over the past 20 years (1980-2000), the population of the surrounding neighborhood - census tracts 129, 142, and 143 - has slowly increased by 2.0% every 10 years. The majority of the population is white by race, but has decreased by 7.7% from 1990 to 2000; while the African American, Asian, and Hispanic populations have grown by 40.7%, 37.5%, and 23.1%, respectively. By comparison, the City of Philadelphia as a whole has been experiencing a continuing decline in its population. There was a decrease of 5.7% between 1980 and 1990 and another decrease from 1990 to 2000 of 4.3%. Similarly, the majority of the population of Philadelphia is white, but has diminished by 13.3% from 1980 to 1990, and by 19.5% from 1990 to 2000. Conversely, the City has seen an overall growth in its African American, Asian, and Hispanic populations from 1980 to 2000, consistent with the trends in these census tracts.

Even with the smallest population increase in years, the number of owner-occupied housing units has been fluctuating between the years 1980 and 2000, with an increase of 4.7% from 1980 to 1990, and with a decrease of 0.6% from 1990 to 2000. However, the number of renter-occupied housing units has been steadily rising with an increase of 20.9% from 1980 to 1990, and with another increase of 22.4% from 1990 to 2000. The City of Philadelphia has experienced an overall decline in its owner-occupied housing. From 1980 to 1990, the number of owner-occupied units fell by 1.2%, and again by 6.4% from 1990 to 2000. Conversely, the number of renter-occupied housing units in the city has remained steady over the years, with a decrease of 5.0% between 1980 and 1990, and with an increase of 4.8% from 1990 to 2000. The growth in this area, compared to the City as a whole, confirms the rejuvenation that is visible on local streets.

The median household income of these census tracts has continually increased from \$12,125 in 1980 to \$26,244 in 1990, and \$34,916 in 2000. Philadelphia's median income has risen at a slower rate with \$13,282 in 1980, \$24,728 in 1990, and \$30,852 in 2000, suggesting, again, the steady improvement of the neighborhood over the past two decades. Similarly, the average household sizes, in the three census tracts and in the City as a whole, have continued to become smaller from 1980 to 2000. The average household size was recorded as 2.48 in the City of Philadelphia, and as 2.14 in the community proximate to the proposed site.

The area of the future casino is experiencing a growth in high-end residential units with the addition of Waterfront Square. This new development will include five high-rise towers on the Delaware River which offer studios, one, two and three-bedroom condominiums. This gated complex will also include the Waterfront Square Park, Waterfront Square Riverwalk, a spa, health club and fitness center.

Along with new residences, the adjacent properties are home to numerous nightclubs, restaurants, and businesses along North Delaware Avenue.

The proposed site development is not expected to adversely impact the socioeconomic characteristics of the surrounding neighborhood. In fact, the opposite is expected to occur, with the numerous, well paying employment positions having a positive impact on the surrounding socio-economic conditions.

### **4.3 Transportation**

The following sections include descriptions of the existing transit services, roads/highways, pedestrian routes and parking, as well as the anticipated impacts and mitigation measures to be employed as part of the proposed site development. In general, the relative isolation of the proposed site from the surrounding community will result in minor adverse transportation impacts.

#### ***4.3.1 Transit Services and Facilities***

The project site is located along North Delaware Avenue, approximately four blocks north of Spring Garden Street. Two Market-Frankford Line rapid transit stations exist near the project site: Girard Avenue and Spring Garden Street. Neither of these stations, however, is within ¼ of a mile of the proposed site, which is typically regarded as an acceptable walking distance. The most easily accessible Market-Frankford Line station is located on Spring Garden Street. The Market-Frankford Line provides quick and frequent access to Center City, West Philadelphia and the Frankford Transportation Center where many bus lines converge. Free transfer to the Broad Street Subway also provides access to North and South Philadelphia.

The site is directly served by two bus lines. The Route 43 bus line – Parkside to Northern Liberties and Fishtown, runs along North Delaware Avenue past the proposed site. The Route 25 bus line - Pier 70 to the Frankford Transportation Center, runs to and from North Delaware Avenue from Frankford Avenue, just south of the project site. These bus lines provide direct access to West Philadelphia and lower Northeast Philadelphia, and via a transfer, allow access to the remaining portions of Philadelphia and SEPTA's entire service area.

#### ***4.3.2 Roads and Highways***

The primary means of access to the proposed casino facility will be via automobile utilizing the local road and highway network. Regional access to the site from the north and south is provided by I-95. The Benjamin Franklin, Walt Whitman and Betsy Ross Bridges all provide access from New Jersey. These bridges connect with either I-95 or Delaware Avenue. Delaware Avenue provides local access from Center City and surrounding neighborhoods.

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Delaware Avenue, consists of three traffic lanes in both the north and southbound directions. Left turning lanes are provided on North Delaware Avenue at both signalized Frankford Avenue and Shackamaxon Street intersections. The northbound lanes of North Delaware Avenue are elevated approximately 4 to 5 inches above the southbound lanes directly in front of the proposed site; however, this elevation does not affect the turning movements available at Shackamaxon Street and Frankford Avenue.

The closest interchange from I-95 is located at Girard Avenue, immediately north of the site. Vehicles traveling south on I-95 exit at the Girard Avenue Exit, turn left onto one of several local streets, Berks or Montgomery, travel under I-95 and turn right on Delaware Avenue. Vehicles traveling north on I-95 must exit at the Girard Avenue Exit, travel north on Delaware Avenue, merge onto Richmond Street, turn right onto Beach Street, and follow Beach Street south to the intersection with Delaware Avenue. At this point vehicles must turn left onto the southbound lanes of Delaware Avenue to reach the proposed site. Because of this configuration, most northbound traffic destined for the casino facility will exit I-95 further south and access the site from Delaware Avenue.

Plans are being developed to reconfigure the Girard Avenue I-95 exit. In the proposed design northbound and southbound on and off ramps will tie into North Delaware Avenue at two signalized intersections approximately one-quarter mile north of the site. A significant benefit of this realignment will be the elimination of the need to travel north on North Delaware Avenue to access the southbound lanes of North Delaware Avenue. When the improvements are completed, likely in 2011, access to the site will be greatly improved. The current schedule suggests that construction of the proposed interchange will begin in approximately 2009, with a two- to three-year construction period. The project will be phased to provide continuous access and circulation; however, during the construction period lane closures and detours could impact traffic flow in the immediate vicinity of the casino.

Access to the site from local roads will be primarily from Frankford Avenue, Shackamaxon Street, and roads connecting to Delaware Avenue to the south.

Traffic analysis has been conducted to determine whether the existing roadway network is adequate to accommodate traffic generated by the proposed casino development. This analysis utilized trip generation data from the Philadelphia Gaming Advisory Task Force “Interim Report of Findings”. A background traffic growth factor of one percent annually was utilized to account for general growth in traffic over time. Future traffic which will be generated by proposed developments in proximity to the site was added to the volumes. The analysis was completed for the existing conditions; opening year + 10 (2021), no build scenario; and opening year + 10 build scenario.

This analysis demonstrates that existing traffic conditions are satisfactory at each signalized intersection with Level of Service C or better. Analysis of opening year + 10,

no build scenario also demonstrates satisfactory operations at each intersection with Level of Service C or better. In contrast, the opening year + 10, build condition analysis demonstrates operational inefficiencies at Shackamaxon Street and Frankford Street intersections during PM peak periods. This is mainly due to left turning traffic which is entering and exiting the proposed site.

A complete copy of the traffic study is provided in as Exhibit 31.10.

### **4.3.3 Non-Motorized Circulation**

Sidewalks are provided along all streets within the project area, including North Delaware Avenue, Shackamaxon Street, Frankford Avenue and local streets. The condition of sidewalks along these local streets vary in condition.

Along North Delaware Avenue, the sidewalks are generally in very good condition, though some sections are covered in dirt and debris. The sidewalks along North Delaware Avenue from Spring Garden Street to Shackamaxon Street generally vary from 4 feet to 10 feet in width, depending on the location. Directly in front of the proposed site, the sidewalks are at least 10 feet in width, except on the northbound side of North Delaware Avenue across from Frankford Avenue where they narrow to approximately 5 feet in width. Street trees are located approximately 25 feet apart for the section of sidewalk along northbound and southbound Delaware Avenue in front of the proposed site.

Bicycle lanes run along the right side of both northbound and southbound North Delaware Avenue. These lanes are located between the vehicular travel lane and the curb, or in the case of areas with on-street parking, in front of the proposed site between the travel lane and the on-street parking spaces. These bicycle lanes are part of a city-wide network that provides bicycle accessibility throughout the City.

### **4.3.4 Parking**

Parking is currently provided along most of the roads in the vicinity of the proposed project site. On-street metered parking is provided along both the northbound and southbound lanes of North Delaware Avenue in front of the proposed site. On-street parking is also available on many of the local roads in the area, and appears to be mostly utilized by residents. Consequently, there is limited on-street parking on local roads near North Delaware Avenue in the vicinity of the proposed site. In addition, most of the local roads are narrow and not desirable for parking by non-residents. The construction of Waterfront Square adjacent to the south side of the proposed site has generated a significant number of work vehicles which compete with residents for limited curb side spaces. Currently, North Penn Street is being utilized for parking on both sides, making the roadway somewhat narrow for through traffic.

The proposed site is expected to provide 3,000 free off-street parking spaces for patrons and workers. This will minimize or remove overflow parking in neighborhoods surrounding the site. Given the current parking situation for the Waterfront Square construction project, the proposed site will provide off-street parking for workers during construction, to prevent them from utilizing local neighborhood streets.

#### ***4.3.5 Local Transportation Improvement Plans***

The following sections describe the local transportation improvements that are currently planned to be implemented as part of the development of the Sugarhouse Casino site.

##### **4.3.5.1 Public Transit**

To improve accessibility to the nearest Market-Frankford Line station, HSP intends to provide a shuttle bus service. This shuttle service will be utilized almost entirely by workers, as they are the most likely to use public transit to reach the proposed site. It is possible, however, that some patrons may use the Market-Frankford Line and thus travel to the project site via a shuttle service.

Access to the Girard Station by shuttle bus is constrained. The Girard Avenue (#15) Streetcar Line runs along Girard Avenue and stops at the Market-Frankford Line. Curb-side parking exists along all streets surrounding the Girard Station, with no designated area for shuttle buses to pick-up or discharge passengers without blocking a vehicular travel lane or eliminating existing on-street parking.

Shuttle service to Spring Garden Station is the most likely form of improved transit service, since there is adequate curbside space under the station platform for bus loading/unloading operations. Currently, SEPTA buses park in this area to pick-up and discharge passengers for the Market-Frankford Line.

##### **4.3.5.2 Roads and Highways**

The following modifications will be necessary to mitigate operational inefficiencies at Shackamaxon Street and Frankford Street intersections during PM peak periods:

- ◆ Reassign one through movement lane to left turn only lane at the Frankford Avenue intersection, southbound approach. This will generate two left turn lanes at this approach.
- ◆ Modify the left turn lane to left turn and through lane at the Frankford Avenue eastbound approach.

- ◆ Optimize signal timing plans.

Upon implementation of these relatively simple measures, one operational inefficiency will remain: the through-right movement at the Frankford Avenue eastbound approach. This movement will operate at an unsatisfactory Level of Service F. To mitigate this operational inefficiency one of the following two measures will be implemented:

- ◆ Add a short right-turn bay at the Frankford Avenue eastbound approach for which further right-of-way and geometry investigation/analysis should be completed.
- ◆ Eliminate access to the site from Frankford Avenue from which very few vehicles are expected to arrive. This would make the Frankford Avenue eastbound approaches two lanes, only right and only left.

HSP intends to work closely with the City of Philadelphia and the Pennsylvania Department of Transportation (PennDOT) to provide adequate signage to and from I-95 before, during and after construction of the newly configured interchange.

#### **4.4 Utilities**

The following sections describe available and anticipated utilities required for the proposed site development. No adverse impact to the utilities is expected as part of the proposed site development.

##### ***4.4.1 Potable Water***

There is an existing 12-inch water main which parallels the proposed site along North Delaware Avenue. Tapping from the 12-inch main is an 8-inch main that extends into the site just south of Shackamaxon Street and is capped. There is also an existing 10-inch water main located in Penn Street, which extends through the proposed site and parallels North Delaware Avenue.

The proposed water load for domestic use is 233,225 gallons per day (GPD), and for fire protection is 1,750 GPD. Both the 12- and 10-inch water mains are available to supply the site and are expected to meet the anticipated demand.

##### ***4.4.2 Wastewater Disposal***

The City of Philadelphia has a combined system for both sanitary and storm water in the area of the site. There is an existing 18-inch gravity reinforced concrete pipe beneath North Delaware Avenue that increases to 24 inches at Laurel Avenue.

The estimated sanitary load for the proposed site is 215,000 GPD. It is expected that the existing 18/24-inch sewers are adequate to handle the anticipated demand of the site.

##### ***4.4.3 Storm Water Collection and Drainage***

The proposed site runoff will be collected into a storm water infiltration basin and biological treatment swales along the waterfront prior to discharge into the Delaware River. The new storm water collection system will comply with the Commonwealth of Pennsylvania's new NPDES Post-Construction Storm Water Management standards, and the City of Philadelphia's new Storm Water Management Code. North Delaware Avenue, at the west side of the site, is serviced by the City of Philadelphia's Combined Sewage System and will utilize the existing 18/24-inch sewers. This will continue under the future plans. (See Section 4.4.2 Wastewater Disposal).

##### ***4.4.4 Electric***

PECO Energy is the electric service provider for the proposed site. PECO has numerous underground facilities on North Delaware Avenue parallel to and extending the entire

length of the site. The existing electric facilities served the original use of the site, which was heavy industrial, and is expected to meet the demands of the proposed new use.

#### **4.4.5 Natural Gas**

Philadelphia Gas Works is the natural gas service provider for the proposed site. There is an existing 6-inch gas main which extends from Laurel Street, south along North Delaware Avenue. A 6-inch tee connection is located at Ellen Street and North Delaware Avenue. The 6-inch main taps from that point and extends east on Ellen Street to Penn Street, north on Penn Street to Laurel Street. In addition there is a 12-inch main beneath Shackamaxon Street, which terminates approximately 100 feet east of North Delaware Avenue. Both the 12- and 6-inch gas mains are available to supply the site and are expected to meet the anticipated demand.

#### **4.4.6 Telephone**

Verizon Pennsylvania Inc. is the telephone service provider for the proposed site. There are underground telephone facilities adjacent to the site along North Delaware Avenue. The existing telephone network is expected to meet the anticipated development demand.

#### **4.4.7 Cable TV**

Comcast Cable is the local cable network provider for the Philadelphia area, and has existing underground service lines along North Delaware Avenue. Comcast has recently expanded its cable network to service the condominium towers to the south, and will be able to provide cable and internet service to the proposed development.

### **4.5 Air Quality**

The weekday 24-Hour traffic volume on North Delaware Avenue is currently 25,000 vehicles per day. It is anticipated that a new gaming facility would add approximately 14,400 vehicles per day. These additional vehicles would increase vehicle air emissions in the immediate vicinity of the site. However, these additional emissions are estimated to be negligible in comparison with past and current emissions from other industrial facilities in the region (such as the PECO generating plant, and industrial facilities at Port Richmond and on Petty's Island) and the site itself (also a former industrial facility).

The entire region is a non-attainment area for ozone. Therefore, any proposed facility in the region will be locating in a non-attainment area.

### **4.6 Noise**



The project site consists of vacant lots surrounded by industrial sites and a site undergoing redevelopment. While no residential properties are currently nearby, a neighboring property is being converted to condominium towers to the south; additional residential towers are expected to be added for several years. Accordingly, any noise generated during construction at the project site is not expected to cause a significant disturbance to residential neighborhoods. Operation of the facility will be in compliance with the City’s noise ordinance.

When the project is complete, no significant sources of noise are expected to be present except for the increase in local traffic, which is expected to produce a negligible increase in noise levels.

#### **4.7 Vibration**

Casino operations are not known to cause any vibratory actions. Normal building acoustical and sound proofing mitigates any impacts from the operation of the gaming machines. As previously noted, this project will have a significantly positive affect on the local community by taking the property out of an industrial and terminal use and replacing it with an indoor recreational use.

#### **4.8 Visual and Aesthetic Resources**

The following sections describe the appearance of the proposed buildings, lighting and signage currently planned to be utilized.

##### ***4.8.1 Proposed Buildings***

As described above, the various principal project components have been arrayed across the site to facilitate easy circulation and future expansion. No less important however, are the visual impressions and the goal of creating a dramatic sense of arrival. Patrons arriving at the SugarHouse Casino will be greeted by a dramatic and sweeping four acre forecourt facing Columbus Boulevard, replete with extensive landscaping and water features. These will serve as a visual amenity to both guests and the passersby.

The main casino podium will have an inviting presence with articulated facades and, where appropriate, large glazed openings. The use of architectural pre-cast concrete, limited masonry, and dramatic curtain wall glazing systems on the primary facades will result in a project that is a decidedly contemporary, rather than neo-historical image. A grand glazed canopy structure at the porte cochere will clearly guide valet-bound patrons and those arriving by taxi to the main casino entrance. This broadly canopied area will provide basic cover from the elements for some forty-plus vehicles at a time.

The proposed self-park garage structure will also employ articulated architectural pre-cast spandrel panels with “punched” openings, more like windows than the relentless horizontal bands common on more typical garage structures. Ornamental metal screening elements will be integrated into the exposed garage facades to help conceal the mass of

this element. Deep setbacks, berming, brightly-lighted and glass enclosed stairwells at prominent corners, and appropriate plant materials will help to “soften” the mass of the parking facilities.

Along the river’s edge, a meandering public promenade with special pavers, pedestrian scaled light fixtures, banners, benches and, where possible, seasonal planters will create a streetscape-like promontory with wonderful views. The principal building facades along this Riverwalk will also include broad expanses of glass. A large, two-story, circular rotunda-like element containing restaurants and some gaming area will help to ensure that these spaces, both indoors and out remain active. An elevated deck or veranda will permits al fresco dining when weather permits.

Mechanical equipment and the central loading dock area will be appropriately screened from view from the street and riverbank.

#### **4.8.2 Lighting**

Site lighting and building illumination will be important design considerations for the SugarHouse Casino facility. Patrons expect, and surveillance cameras require, that outdoor spaces and areas within the garages, elevators, and stairwells will be properly illuminated. The main façades of the Casino podium facing North Delaware Avenue and 7<sup>th</sup> Street will be awash in diffused light with increasing intensity towards the main porte cochere as the focal point.

Lighting of vehicular cartways and sidewalk areas will be a minimum of 1.5-2.0 fc, provided by pedestrian-scaled fixtures. With the public garage area, surface mounted metal halide fixtures are proposed. Care will be taken in the placement and orientation of all site fixtures to minimize or eliminate glare onto adjoining properties.

Within public areas of the facility, appropriate light levels will be maintained to both create an exciting and vibrant gaming environment while maintaining light levels sufficient for proper surveillance throughout the facility. HSP will retain a qualified Lighting Designer for the project.

#### **4.8.3 Signage**

The SugarHouse Casino will require appropriately scaled, yet tasteful signage identifying the project as a major entertainment destination. To extent allowable by the Philadelphia Streets Department and the PennDOT, clear directional highway signage will be employed to efficiently direct arriving patrons to the facility and guide departing patrons back onto nearby arteries.

HSP, with the assistance of a qualified graphic design firm, plans to develop a comprehensive graphic identity and signage program for the entire facility. This will be submitted to the Pennsylvania Gaming Control Board, Philadelphia Department of Licenses and Inspection and the Philadelphia Art Commission for review and approval. Pertinent items will include proposed building signage, pylon signs, and on-site monument and traffic directional signs. Although electronic message boards may be proposed to announce performance events, etc., no box signs or signs employing flashing or rotating lights are contemplated.

#### **4.9 Cultural and Historic Resources**

The surrounding community contains many cultural and historic resources from elementary schools and universities to hospitals, museums, parks, and restaurants.

Within a one mile radius, there are 22 schools, including daycare, elementary, high school, and specialty schools. All of these schools are located on the west side of I-95 and, therefore, will be buffered from the operations of the proposed casino.

There is one hospital, Girard Medical Center, within the one mile radius of the proposed casino development. As with the schools, this facility is located on the west side of I-95, which will serve as a barrier. The Girard Medical Center should not experience any increases in its patient levels from the casino, as the offered services only include Medicare certified long-term acute care services, basic clinical ancillary services, hospital-level psychiatric services, residential-level mental health services, outpatient drug and alcohol services, outpatient mental health services, and renal dialysis services.

There are four prominent historical resources within one mile of the site. They are the Fireman's Hall Museum, Elfreth's Alley Museum, Penn Treaty Park, and the Edgar Allan Poe National Historic Site. There will be no adverse impacts on three out of the four historic sites, since they are located to the west of I-95.

The proposed casino may have an impact on Penn Treaty Park, which is located approximately .35 miles north of the proposed site. With the addition of the casino, traffic volumes will increase on North Delaware Avenue, which will result in negligible increases in air and noise pollution along the corridor. Increases in pedestrian activity may result in more use of the Penn Treaty Park, a positive impact. The planned pedestrian walkway along the riverfront portion of the site could potentially connect the southern neighboring areas to the Penn Treaty Park, thereby providing the public with access to the river, which is a goal of the City of Philadelphia for the entire northern portion of the Delaware riverfront.

#### **4.10 Existing Tourism**

The following sections describe the surrounding historical and cultural sites, as well as the anticipated impact on visitation to those sites as a result of the proposed casino development.

#### ***4.10.1 Historical Sites***

The following is the list of local historical sites.

**Fireman’s Hall Museum** – is located in a restored fire station that was in use from 1902-1952. The museum is directly descended from Ben Franklin’s 1736 “Union Fire Company.” Fireman’s Hall National Firehouse and Museum of Philadelphia offers exhibits on the history of firefighting in the United States. Since it is located on the opposite side of I-95 from the proposed casino, the proposed new development will not impact this historical site.

**Elfreth’s Alley Museum** – is a National Historic Landmark and is the nation’s oldest residential street. Many of the Alley’s 33 houses were built more than three hundred years ago. Since it is located on the opposite side of I-95 from the casino, the proposed new development will not impact this site.

**Penn Treaty Park** - is the traditional site of the treaty of 1682 between William Penn and the Lenape Indians, in which Penn obtained land to build the colony. This park has the potential of experiencing some impacts from the casino, including heavier vehicular traffic patterns and more pedestrian traffic through the park. The additional pedestrian traffic is viewed as a positive impact.

**Edgar Allan Poe National Historic Site** – is a national park and was the residence of Poe during his six year residency, 1838-1844 in Philadelphia. Poe wrote such classics as “The Tell-Tale Heart”, “The Fall of the House of Usher” and poems like “The Haunted Palace” and “To Helen” while he lived with his wife, Virginia, and his mother-in-law in Philadelphia. Since it is located on the opposite side of I-95 from the casino, the new development will have no adverse impact on this historical site.

#### ***4.10.2 Cultural Sites***

The following is a list of local cultural sites.

**Schools** – all are located on the west side of I-95, which will act as a barrier. No adverse impacts are anticipated on the surrounding schools.

**Churches** – there are about 40 churches, temples, and shrines located in the surrounding neighborhood. The casino will not adversely affect the majority of these religious institutions since they are on the west side of I-95. There are three facilities which are found to be on the east side of I-95. However, they are located on cross streets – Spring

Garden Street, Vine Street, and Susquehanna Avenue – all less affected by traffic patterns on North Delaware Avenue.

**Restaurants/Bars/Nightclubs** – there are more than 100 restaurants, bars, and nightclubs within the one mile radius around the proposed casino. It is anticipated that the proposed casino will enhance the visitation levels of these establishments, and will spur economic development along North Delaware Avenue.

#### ***4.10.3 Parklands/Open Space/Recreation Areas***

The following is a list of parklands, open space and recreation areas.

**Thomas Hart Park** – is located about one mile northwest of the site. It is protected from any impacts associated with the development of the site due to distance from the site and the buffer effect of I-95.

**Penn Treaty Park** – is located about .35 miles north of the site. As discussed previously, this park will experience some impact from the proposed development (refer to Section 4.10.1).

**Waterfront Square Park** – is immediately adjacent to the proposed site. It is a part of the Waterfront Square residential development, which will be a gated community. No impacts are anticipated given that access to the park will be limited to residents of Waterfront Square.

### **4.11 Ecosystems**

The following sections describe the anticipated ecosystems to be addressed and potentially impacted as part of the proposed site development.

#### ***4.11.1 Wetlands***

A certified Wetland Professional has inspected the site and found no wetlands. The site does not have the characteristic mix of soil types, ground/surface water hydraulics or plant species to support significant wetland areas. The shoreline consists of concrete rubble riprap protection or man-made bulkheads that are not a suitable substrate for wetland plants. In addition, the project site is located in a highly developed area, formerly used for heavy industry. Accordingly, the project will not impact any wetlands.

#### ***4.11.2 Long-Term Vegetation Impacts***

The only vegetation present consists mostly of scrubland vegetation and grass, overgrown between remaining patches of pavement and abandoned foundations. In addition, several

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small to medium-size trees are located along the site’s northern and eastern edges. The vegetation onsite does not present wildlife habitat of significant quantity or quality.

#### ***4.11.3 Wildlife Species***

As noted above, the site is currently vacant with an overgrowth of scrubland vegetation and grasses. Although there are trees along the waterfront, these are sparse and disjointed in their locations in comparison to natural wildlife habitat. There is no indication of nesting areas for native birds. During the spring and fall migrations, portions of the site may be used as temporary waterfowl resting areas and this will continue under the casino's development plan that includes a landscaped riverfront walk.

#### ***4.11.4 Protected Species***

A Pennsylvania Natural Diversity Inventories Search was conducted to identify potential endangered species that could be impacted by the project. The search identified three possible endangered species:

From the U.S Fish and Wildlife Service databases:

- ◆ Short-nosed sturgeon
- ◆ Bald Eagle

From the Pennsylvania Fish and Boat Commission databases:

- ◆ Short-nosed sturgeon
- ◆ Red-Belly Turtle

These species are far-ranging ones, and would be identified for any generic site along the lower Delaware and Schuylkill Rivers. There is no evidence that these species are resident at the site. In addition, the project will follow the appropriate guidance and regulations to prevent any potential impact to these species. No adverse effect upon them is expected.

A copy of the Pennsylvania Natural Diversity Inventories Search is provided as Exhibit 31.11.

#### ***4.11.5 Aquatic Habitat***

The project will result in no additional encroachments upon the Delaware River's aquatic habitats (beyond those temporary measures needed to restore bulkhead walls along the riverfront). As part of this project, many of the current man-made features along the waterfront will be cut back to create more open water. In addition, the stream bank will be enhanced to create more shallow water habitat for fish and aquatic species. Accordingly, a positive impact on aquatic habitats is expected.

## 4.12 Geology

The site is located along the north bank of the Delaware River. According to the 1995 USGS topographic map, the elevation of the site is between 10 and 20 feet above Mean Sea Level (MSL). The site slopes gently from the northwest down toward the southeast along the river bank, with a steep embankment along the river edge.

No adverse impacts to soils, surface water, sediment, ground water quality, or floodplains is anticipated as a result of the proposed development.

### 4.12.1 Geologic Setting

According to the *Geologic Map of Pennsylvania* (1980), produced by the Pennsylvania Department of Environmental Protection, the site is underlain by the Quaternary-age Trenton Gravel Formation. The Trenton Gravel consists of interbedded gravelly sand, sand, and clay-silt layers. Bedrock beneath the site consists of the Wissahickon schist.

### 4.12.2 Soil Types

According to the *Soil Survey of Bucks and Philadelphia Counties Pennsylvania* (1975), produced by the United States Department of Agriculture Soil Conservation Survey, soil in the vicinity of the site is classified as Urban Land (Ub). This soil type is characterized by heterogeneous material that has been altered by development.

Previous environmental reports describe the soil encountered at the site during the installation of test pits and monitoring wells as being a highly variable mixture of fill containing crushed stone, brick, cobbles, cinder material, sand, gravel river silt, wooden piers, pilings, concrete footers, foundations and large concrete blocks.

Some on-site soil has been impacted by releases of petroleum hydrocarbons from underground storage tanks formerly located on the site. Previous environmental activities at the site included the removal of over 1,000 tons of impact soil from two source areas. Known soil impacts from heavy heating oil remains at the soil/ground water table interface over approximately 2.4 acres of the site. Pathway elimination and natural attenuation have been approved by the Pennsylvania Department of Environmental Protection (PADEP), and a no further action determination has been granted.

Given the urban location and former industrial use of the site, additional soil quality impacts, beyond those associated with the former heating oil tanks, cannot be ruled out. HSP expects to conduct further investigation of soils throughout the site.



#### **4.13 Hydrology/Water Quality**

According to the previous environmental reports, ground water occurs at a depth of between 9 and 18.5 feet below ground surface. Surface drainage across the site follows the land contours toward the Delaware River.

##### ***4.13.1 Surface Water Quality***

The southeastern portion of the site is submerged by the Delaware River. Substantial industrial activity and shipping on the river in the vicinity of the site have resulted in some water quality degradation of the river. Tidal influences have the potential to impact sediments along the bank of the river.

##### ***4.13.2 Groundwater Quality***

Minor impacts to ground water quality resulted from petroleum releases from the former heavy heating oil UST systems located at the site. The Brown Environmental RI/RA documents remedial activities completed at the site involving source removal of impacted soil. The risk assessment completed by Brown Environmental indicates that impacted ground water is unlikely to migrate off-site, and natural attenuation has been approved by the PADEP as the preferred remedial alternative.

Given the urban location and former industrial use of the site, additional ground water quality impacts, beyond those associated with the former heating oil tanks, cannot be ruled out. HSP expects to perform further investigation of ground water quality.

##### ***4.13.3 Floodplains***

The majority of the site is indicated as being located in Zone AE of the Flood Insurance Rate Maps provided by the USGS, which means that the flood hazard for the site (i.e., the base flood elevations) has been mapped. A small strip along North Delaware Avenue is located in Zone X. The area within AE in this case corresponds to the 100-year flood elevation of 10-feet. The area within Zone X in this case represents the 500-year flood hazard area.

Although the site is shown to be within the Zone AE, based upon actual elevations a majority of the site is above the 10-foot, 100-year flood elevation. Specific measures will be taken to mitigate against flood hazards for the project, including elevating the first floor elevation. This issue is not expected to present any significant obstacles to the project.

#### **4.14 Hazardous/Regulated Materials and Conditions**

No hazardous/regulated materials or conditions except for the petroleum impacted soil and ground water addressed by the Brown Environmental RI/RA report are currently known to exist on-site. The PADEP has determined that no further action is required for the remaining petroleum-impacted soil and ground water at the site, which was found to be associated with the former underground storage tanks. While further investigation/site characterization will be performed by HSP, it is not anticipated that the presence of any additional hazardous/regulated materials and conditions will adversely impact the proposed casino development.

##### ***4.14.1 Known Environmental Conditions***

Information regarding known environmental conditions contained in the previous environmental reports is summarized below.

##### **4.14.1.1 Previous Phase I Environmental Site Assessment**

In December 2003, Property Solutions Inc. prepared a Phase I Environmental Site Assessment (ESA) of the former commercial building located at 1001 North Delaware Avenue, southeast of the intersection of Laurel Street and North Delaware Avenue. This portion of the site is described in the Sanborn maps as the commercial building containing the merchant's warehouse and freight services. The building was reportedly demolished in 2000.

The history of this building presented in the report is consistent with the discussion presented in Section 3.0. According to the ESA, the approximate 21,000 square foot building was vacant at the time of the property inspection. It had been most recently used as a night club, which had been converted from a warehouse. With the exception of suspected asbestos containing material and the potential for lead-based paint, no recognized environmental conditions were identified on the portion of the site occupied by this building.

A copy of the Phase I ESA is provided as Exhibit 31.12.

##### **4.14.1.2 Remedial Investigation, Risk Assessment and Cleanup Plan Report**

The March 2002 Remedial Investigation, Risk Assessment and Cleanup Plan Report (RI/RA) prepared by Brown Environmental Services addressed petroleum hydrocarbon contamination identified on the portion of the site formerly occupied

by the sugar refinery. Impacted soils were removed and disposed of off-site, and risk-based standards were subsequently developed for the remaining impacted soils and ground water. A non-residential deed notification was also reportedly filed with the City of Philadelphia.

According to this report, the sugar refinery operated until 1980. Following the closure of the plant, the property remained idle and vacant. In 1996, the property was purchased by LHTW Corporation, and all of the on-site buildings were demolished in 1997. No additional historical information or discussion of other potential areas of environmental concern was contained in the RI/RA report.

A copy of the RI/RA report is provided as Exhibit 31.12.

#### ***4.14.1.3 Environmental Database Review***

Information from publicly-available environmental databases was obtained for the site and surrounding properties from EDR Environmental Data Resources, Inc. (EDR) of Milford Connecticut. The database information provided by EDR complies with the requirements for a Phase I ESA established by the American Society for Testing and Materials (ASTM) Standard E-1527-00. The database review is intended to identify potential or documented instances of environmental impact to the site and surrounding properties within the specified radii of the ASTM standard.

One listing was identified for the site. Sugar House Realty, located at the intersection of Delaware Avenue and Shackamaxon was identified on the Comprehensive Environmental, Response, Compensation and Liability Information System (CERCLIS)-No Further Remedial Action Planned (NFRAP) database. According to EDR, this listing was related to transformers containing polychlorinated biphenyl (PCB)-laden oil on the abandoned Jack Frost sugar processing plant. Reportedly, the former owner removed the transformers from the site in 1988, and the site was assigned the NFRAP status.

A variety of other listings were identified for properties in the vicinity of the site. None of these listings is known to have affected the site; however environmental degradation from surrounding properties cannot be ruled out and will be investigated further by HSP.

A copy of the database report is provided as Exhibit 31.13.

#### ***4.14.2 Current Environmental Regulatory Status***

The site is a vacant, former industrial property that contains both soil and ground water contamination associated with historical industrial use. A common term applied to this type of property is “Brownfield”. The U.S. Environmental Protection Agency (USEPA) investigated the site in the 1980s and determined that no further action was warranted relative to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). As such, based upon previous actions and known environmental conditions associated with the site, USEPA’s involvement in the site is considered closed.

The Pennsylvania Department of Environmental Protection (PADEP) has granted liability protection to the current owner under the Land Recycling and Environmental Remediation Standards Act (Act 2). This liability protection applies only to the identified soil and ground water impacts associated with the former leaking heating oil underground storage tanks. The liability protection does not cover any other soil or ground water impacts that may exist. As such, HSP will be performing a complete and thorough characterization of environmental media prior to development of the site.

The Act 2 liability protection secured to date by the current owner will automatically be transferred to HSP upon transfer of the property title.

#### **4.15 Public Services**

The following sections describe the police, fire and emergency services that are provided by the City of Philadelphia in the area of the proposed casino.

#### **4.15.1 Police**

The proposed site is protected by the City of Philadelphia Police Department. The department provides service by a fully trained, paid staff on duty 24 hours a day.

The site is part of the Philadelphia Police East Division's 26<sup>th</sup> District located at 615 East Girard Avenue. The District is bounded by Lehigh Avenue to the north, the Delaware River to the east, Poplar Street to the south, and 10<sup>th</sup> Street to the west. It encompasses 3.3 square miles which is approximately 2.6 of the land mass of the City of Philadelphia.

The 26<sup>th</sup> District also maintains a Mobile Mini Station whose location is based on community needs. The Mini Station has seven officers assigned to it, six of whom are biked trained.

#### **4.15.2 Fire**

The proposed site is protected by the City of Philadelphia Fire Department. The department provides service by a fully trained paid staff on duty 24 hours a day.

**Engine Companies** - An engine company consists of a fire engine staffed by one officer and three firefighters. One of the three firefighters on every engine is an Emergency Medical Technician. This requirement assures that each engine company responding to a fire will be staffed by an individual capable of apply life preserving measures if necessary until more advanced medical assistance arrives.

The closest two fire engine companies to the proposed site are Engine 29 located at 400 West Girard Avenue, and Engine 6 located at 2601 Belgrade Street. The engine companies are located approximately 0.75 miles and 1.21 miles, respectfully, away from the site.

**Ladder Companies** - A ladder company consists of a ladder equipped fire vehicle staffed by one officer and four firefighters. All Philadelphia Fire Department ladder companies are equipped with the Jaws of Life extrication device.

The closest two ladder companies to the proposed site are Ladder 16 located at 2601 Belgrade Street, and Ladder 2 located at 100 North Fourth Street. The ladder companies located 1.20 miles and 1.72 miles, respectfully, away from the site.

**Marine Unit** - A Philadelphia Fire Department marine unit is located at Delaware and Washington Avenues. A marine unit will respond to any river related emergency, including pier fires and search and rescue situations. Each marine unit is staffed by one fire boat engineer and one fire boat pilot. Marine units come equipped with two small whaler boats which can be staffed by two firefighters if additional support is needed.

#### ***4.15.3 Emergency Medical Services***

The proposed site is protected by the Philadelphia Fire Department Emergency Medical Services Unit. The unit provides emergency, pre-hospital care and transportation by a fully trained, paid staff on duty 24 hours a day. The closest emergency medical unit to the proposed site is Medic 15, located at 400 West Girard Avenue. The medic unit's average response time is 6.5 minutes.

The closest hospital facility to the proposed site is Northeastern Hospital, located at 2301 East Alleghany Avenue which is approximately 2.25 miles away. The hospital is licensed for 258 beds in the facility and has an emergency room which is operational 24 hours a day. Other City hospitals are also located within a two mile radius of the site.

While all of these police, fire and emergency medical services meet the needs of the existing community, the anticipated volume of casino visitors will have some impact on their ability to deliver services. However, casino operations typically augment these City-provided services with internal staff, thereby minimizing the impact on City-based services.

#### **4.16 Construction/Land Development**

Given the location of the site on the Delaware River and the bordering by industrial properties to the north and gated residential community to the south (Waterfront Square), impacts of casino development on the surrounding area resulting from actual land development and construction activities will be minimal. The following sections describe the anticipated impacts.

##### ***4.16.1 Scenario***

As a former marine and industrial area with no current residential or other adjoining communities, the site is remotely located in an area tolerant of and zoned for such high traffic, noise and vibratory conditions caused by the loading and off loading of trucks and vessels. The site is also situated between the Delaware River (with its major port and terminal operations) on the east and both the six lane North Delaware Avenue and elevated six lane Interstate I-95 on the west. The river and two roadways act to further buffer the communities from the impacts of site development.

##### ***4.16.2 Noise***

This area is currently zoned for industrial and port/marine activities, and the higher noise and sound levels associated with such activities. In addition, the two highways on the west buffer the local community from the current adverse affects of such maritime uses, and will continue to do so during construction. In comparison, the casino operations will

have a significantly positive affect on the community by eliminating the industrial noises and reducing the traditional truck traffic along the roadways.

#### ***4.16.3 Vibration***

The soil within the footprint of proposed buildings will be compacted via dynamic compaction methods which were successfully utilized at the Waterfront Square condominium site located to the south of the project site. The proposed marine platform structure and building foundations are anticipated to be pile supported. These proposed compaction or pile driving activities may generate nominal seismic vibrations which will be monitored during the construction period. It is not anticipated that vibrations will impact the surrounding/adjacent areas.

#### ***4.16.4 Disruption of Utilities***

The City of Philadelphia’s utilities are on a grid system, with most utility connections taking place at the public street. This is the case along North Delaware Avenue. There are no on-site utility easements that can be disrupted during the constructions. Once the on-site utility systems are in place, there may be a short period in the evening when the actual interconnection with the public utility is made. The disruption of adjacent service during such connections is rare and not anticipated for the proposed development.

#### ***4.16.5 Access and Distribution of Traffic***

North Delaware Avenue is a major thoroughfare for north- and south-bound traffic. It is a six lane roadway, three lanes in each direction. The proposed construction site connects with but does not cross North Delaware Avenue. During construction there will be a slight increase in truck traffic. There will be provisions to stage construction equipment off-road and within the limits of the construction site, so that traffic along North Delaware Avenue will not be affected.

#### ***4.16.6 Air Quality***

Both the six lane Interstate I-95 and six lane North Delaware Avenue are major transportation routes within the City. These transportation corridors have a significant impact on local air quality. The removal of the site from an industrial and processing use to passive recreational use, and the reduction of potential truck traffic will ultimately aid in improving air quality in the area. Negligible air emissions are anticipated to be associated with on-site construction equipment during site development.

#### ***4.16.7 Disruption of Local Business Activities***

North Delaware Avenue is a major thoroughfare for north- and south-bound traffic. It is a six lane roadway, three lanes in each direction. The proposed construction site connects with but does not cross North Delaware Avenue. As such, there will be no impact on or disruption of services or patrons to the adjacent businesses.

#### ***4.16.8 Water Quality and Runoff***

The site has been historically impervious, with multiple structures visible on-site in historical maps and aerial photographs. Upon completion of the project, the amount of pervious areas onsite are actually expected to increase, with the removal of existing parking lots and structures and the construction of infiltration basins and vegetated buffers.

The project will include a new storm water infiltration system that meets or exceeds current City of Philadelphia and PADEP guidance. Storm water runoff during construction will be controlled pursuant to the requirements of the PADEP permit for earth disturbance (Section 102).

#### ***4.16.9 Land Disturbance***

The site is an existing developed area consisting of the remnants of former building foundations and pavement materials. The site consists of historic fill or dredged materials that were used to in-fill the finger piers that once stretched along the Delaware River. This infilling was done over an approximate 150-year period. The site is classified as Urban Lands and Filled Materials. Construction activities will be regulated under a National Pollution Discharge Permit (NPDES) for Construction Activities, issued by the Pennsylvania Department of Environmental Protection (PADEP). This permit will require the use of approved erosion and sedimentation controls during land disturbance activities.



## **5.0 ENVIRONMENTAL AND REGULATORY REQUIREMENTS**

The following sections describe the environmental and regulatory requirements for the proposed development of the site.

### **5.1 Licenses, Permits and Certifications Necessary for Approval**

There are several types of permits that must be obtained in order to build this project. These include one federal level permit (Section 404), three state level permits (Chapter 102 and Chapter 105) and various City of Philadelphia Building Construction and Occupancy Code permits.

Joint PADEP Chapter 105 and US Army Corps of Engineers Section 404 permits are expected to be required for the repairs to bulkhead walls and other structures along the banks of the waterfront. Instead of requesting a new permit, however, these actions are expected to be approved under existing permits as maintenance or removal activities; or as permit modifications. No impediments are foreseen to the completion and approval of these permits.

The PADEP Section 102 permit is part of the NPDES permit program regulating earth disturbance activities. This permit is required for projects greater than 1-acre in size. No impediments are foreseen to the completion and approval of this permit.

PADEP Act 537 Sewage Facilities Plan reviews. An Act 537 review is required for all new connections to wastewater treatment facilities, to ensure that adequate capacity exists to properly handle wastewater from new facilities. This is done as part of the local building permit review process. No impediments are foreseen to the completion and approval of this permit.

Local building permits are required for such things as structures, electrical work, fire protection, HVAC systems, plumbing work, water and sewer connections, and roadway openings. All developments within the City must comply with the City's building codes. Code compliance is a normal part of the architectural design process. No impediments are foreseen to the completion and approval of these permits.

If the temporary use of a moored vessel is approved, several gangways and catwalks will be needed to provide access to the vessel. The permits for such water-dependent uses are readily obtainable.

## **5.2 Site Remediation Activities Summary**

Liability protection for the site under the Commonwealth of Pennsylvania’s Land Recycling and Environmental Remediation Standards Act (Act 2) currently exists for subsurface contamination associated with the former operation of heating oil underground storage tanks. Approximately 1,000 tons of petroleum-impacted soil were excavated and disposed of off-site. Remaining soil contamination exists at the ground water interface, and impacted ground water is also present.

The existing Act 2 liability protection will be automatically transferred to HSP upon transfer of the property title. However, the existing liability protection only applies to the former tanks, and would not cover any other soil, ground water, surface water or sediment contamination that is found to exist. As such, it is HSP’s intent to perform a complete and thorough site characterization, and if necessary, obtain PADEP Act 2 liability protection for the entire site.

The site is located within a former Pennsylvania Department of Community and Economic Development (DCED) designated redevelopment zone. As such, under current PADEP regulations, the site qualifies as a Special Industrial Area. Under the Special Industrial Area provision of Act 2, a new user of a property is only required to remediate environmental conditions that are deemed an immediate threat to human health. Beyond these conditions, no remediation is typically required by the PADEP, including remediation of impacted ground water, as long as it can be definitively demonstrated that no adverse impact to human health will occur. It is HSP’s intent to utilize the SIA provision of Act 2 to the practical extent possible. In the unlikely event that the PADEP would not allow the use of the SIA provision, a risk-based closure of identified contamination under Act 2 will be obtained.

## 6.0 CONCLUSIONS

HSP proposes to develop the SugarHouse Casino, a phased development initially accommodating up to 3,000 slots, related gaming support and regulatory spaces, numerous dining options, a multi-purpose event center and convenient customer parking in a facility representing almost 1.3 million square feet of new construction. Future expansion plans call for the complex to ultimately accommodate the statutory limit of 5,000 slots, a 500-room hotel tower, expanded dining facilities, a Spa and expanded garage parking. Upon completion, the SugarHouse Casino will ultimately approach or exceed 2,100,000 square feet of new construction.

The SugarHouse Casino will be located at 941 through 967, 1001 and 1015-1025 North Delaware Avenue in the City of Philadelphia, Philadelphia County, Pennsylvania (site). As part of their development plans, HSP intends to utilize a temporary casino facility at the site while the permanent facility is under construction. The use of a temporary facility will allow gaming operations to begin within an estimated nine months of receiving a license from the Pennsylvania Gaming Control Board.

The site is the historic location of the former Jack Frost Sugar Refinery, a vacant and underutilized Brownfield property that has been dormant and not used productively since 1980. It is HSP's intent to redevelop this dormant and presumed contaminated property into an entertainment destination that will subsequently aid in revitalizing the surrounding North Delaware Avenue and Penn's Landing areas.

HSP's development plans for the site are consistent with the numerous City of Philadelphia Planning Commission studies associated with the reuse and revitalization of the Delaware River waterfront and Penn's Landing areas. Unlike many riverfront redevelopment projects, HSP intends to provide public access to the riverfront by way of an elevated walkway. This access could be utilized in the future to connect the southern neighboring properties to Penn Treaty Park.

All necessary utility, traffic, transit and non-motorized infrastructure already exists proximate to the site. Therefore, disturbance to the surrounding area during construction is anticipated to be minimal. Furthermore, HSP is confident that all environmental and construction permitting, as well as any necessary environmental remediation, is straightforward given the location and former use of the site.

The findings of this Local Impact Report are that, with the exception of increased traffic on North Delaware Avenue, there are no adverse impacts to surrounding properties, residents, schools, community services, transportation, parking, utilities, City services, air quality, cultural and historic resources, tourism, parklands/open space, ecosystems, and soil and water quality associated with the development of the site as the Sugarhouse Casino. In regards to traffic, only minor modifications to turning lanes and signaling will be required on North Delaware Avenue

*LOCAL IMPACT REPORT – SUGARHOUSE CASINO*  
CATEGORY 2 SLOT MACHINE LICENSE APPLICATION AND DISCLOSURE INFORMATION  
FORM

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to mitigate the identified adverse impact and facilitate the planned future operations, as the existing capacity of North Delaware Avenue is more than adequate to meet the needs of the proposed development, as well as the continued and future needs of the surrounding area.

## **7.0 PREPARERS**

This Local Impact Report as been prepared on behalf of HSP Gaming, L.P. by Keating Environmental Management, Inc., in association with Cope Linder Architects, Gannett Fleming, Inc., Keating Partners, LLC and Urban Engineers, Inc.

Professional profiles of the individuals that participated in the preparation of this Local Impact Report are provided as Exhibit 31.14.

**LIST OF EXHIBITS**

<b>Exhibit 31.1</b>	<i>Site Location Plan</i>
<b>Exhibit 31.2</b>	<i>Aerial Photograph – Plan View</i>
<b>Exhibit 31.3</b>	<i>Aerial Photograph – Center City Perspective</i>
<b>Exhibit 31.4</b>	<i>Illustrative Site Plan – Temporary Casino</i>
<b>Exhibit 31.5</b>	<i>Illustrative Site Plan – Permanent Casino</i>
<b>Exhibit 31.6</b>	<i>Sanborn Maps</i>
<b>Exhibit 31.7</b>	<i>Historical Topographic Maps</i>
<b>Exhibit 31.8</b>	<i>Historical Aerial Photographs</i>
<b>Exhibit 31.9</b>	<i>Zoning Map</i>
<b>Exhibit 31.10</b>	<i>Traffic Study</i>
<b>Exhibit 31.11</b>	<i>Pennsylvania Natural Diversity Inventories Search</i>
<b>Exhibit 31.12</b>	<i>Previous Environmental Reports</i>
<b>Exhibit 31.13</b>	<i>Environmental Database Summary</i>
<b>Exhibit 31.14</b>	<i>Professional Profiles</i>



SUBJECT

# LOCATION PLAN SUGARMILL CASINO SITE

DATE

12/20/05





Site Context

28 December 2005

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Applicant:  
**HSP Gaming, L.P.**  
Philadelphia, Pennsylvania

**SugarHouse Casino**  
Philadelphia, PA

**Pennsylvania Gaming Control Board**

Initial \_\_\_\_\_

Date \_\_\_\_\_



**Cope Linder Architects**  
30 South Fifteenth Street  
Philadelphia, Pennsylvania 19102  
www.Cope-Linder.com





Aerial View

28 December 2005

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Applicant:  
**HSP Gaming, L.P.**  
Philadelphia, Pennsylvania

**SugarHouse Casino**  
Philadelphia, PA

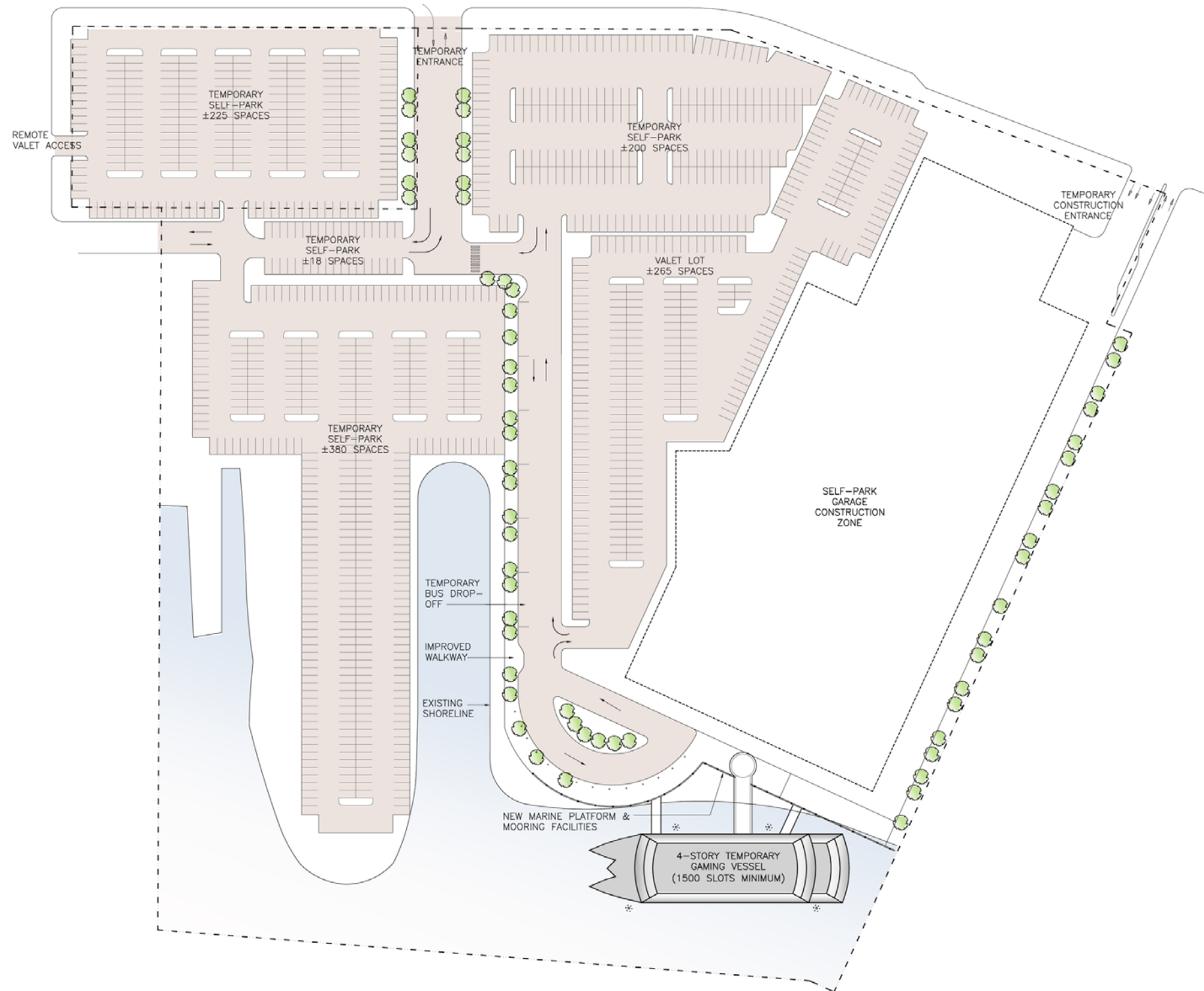
**Pennsylvania Gaming Control Board**

Initial

Date



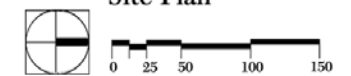
**Cope Linder Architects**  
30 South Fifteenth Street  
Philadelphia, Pennsylvania 19102  
www.Cope-Linder.com



**\*Stage I Total  
Surface Parking:  
1,088 spaces**

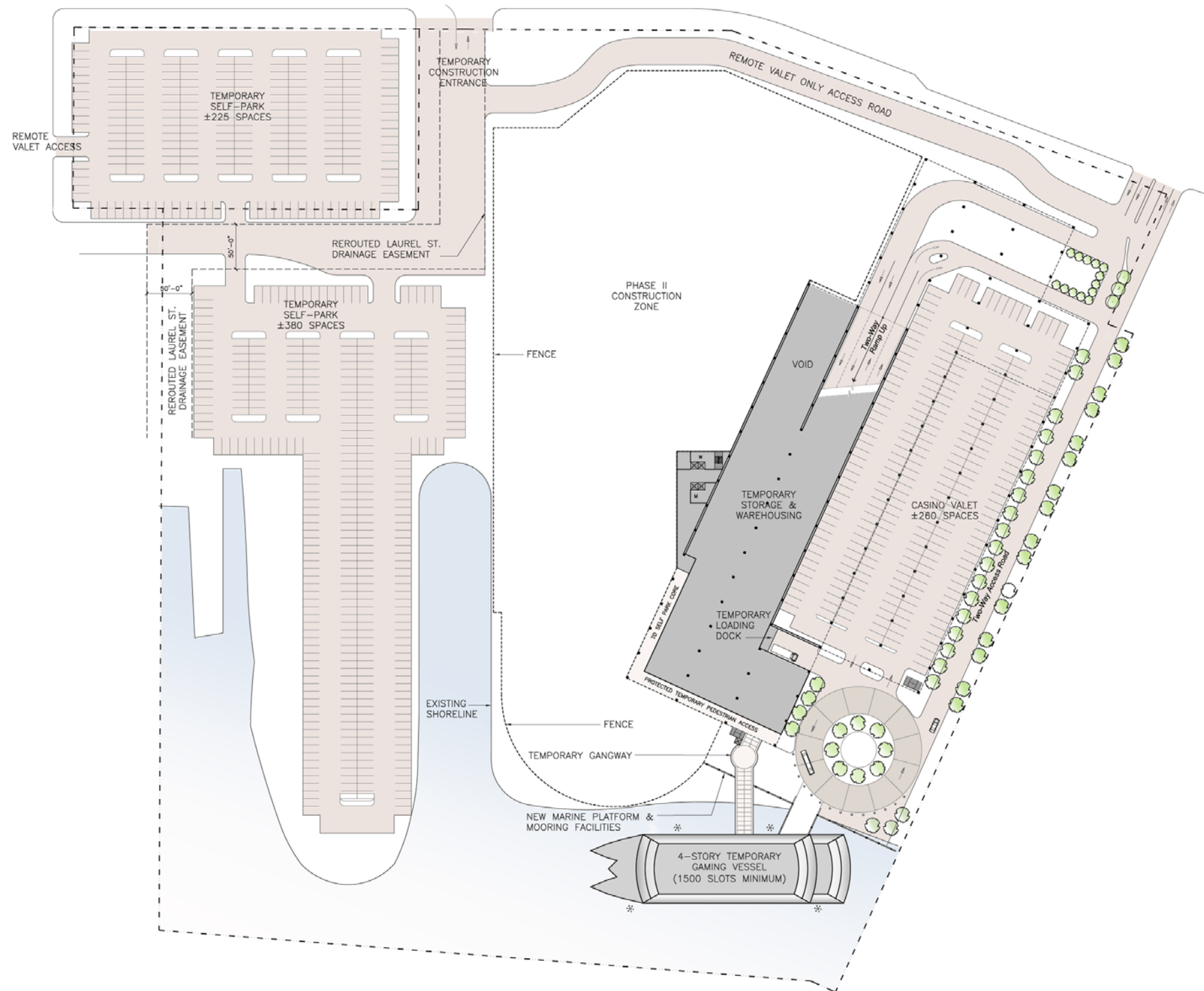
Temporary Casino  
Gaming Vessel  
Stage I

Site Plan



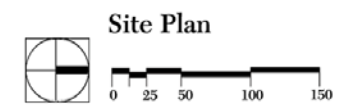
28 December 2005

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**\*Stage II Parking:**  
 865 surface lot  
 2,282 self-park garage  
**3,147 total spaces**

Temporary Casino  
 Gaming Vessel  
 Stage II



28 December 2005

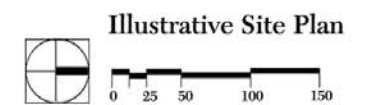
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PHASE I - Casino Low Rise	+/- 365,000 s.f.	257 spaces
PHASE I - Self Park Garage	+/- 911,000 s.f.	2367
PHASE I - Surface Parking	n/a	605
<b>Phase I subtotal:</b>	<b>+/- 1,267,000 s.f.</b>	<b>+/- 3229 spaces</b>

PHASE II - Casino Low Rise (including valet)	232,160 s.f.	150 spaces
PHASE II - Self Park Expansion	240,330 s.f.	686
PHASE II - Hotel (500 keys)	336,000 s.f.	n/a
PHASE II - (Displaced Surface)	n/a	(380)
PHASE II - Surface (Fut. Dev. Site)		225
<b>Phase II total:</b>	<b>2,084,430 s.f.</b>	<b>4,290 spaces</b>

TOTAL LOT AREA: +/- 22.57 Acres  
 TOTAL USABLE LAND: +/- 16.0 Acres



28 December 2005

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## Sanborn® Map Report

**Ship To:** Terry McKenna  
Keating Environmental  
123 John Robert Thomas  
Exton, PA 19341

**Order Date:** 12/1/2005    **Completion Date:** 12/2/2005  
**Inquiry #:** 1566367.3s  
**P.O. #:** 6675  
**Site Name:** 941-967/1001/1015-1025 N. Delaware

**Customer Project:** 6675  
1022501MEN                      610-594-2600

**Address:** 941 Delaware Avenue  
**City/State:** Philadelphia, PA 19125  
**Cross Streets:**

Based on client-supplied information, fire insurance maps for the following years were identified

- 1916 - 2 Maps
- 1950 - 2 Maps
- 1976 - 2 Maps
- 1979 - 2 Maps
- 1989 - 2 Maps

**Limited Permission to Photocopy**

**Total Maps: 10**

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## USER'S GUIDE

This User's Guide provides guidelines for accessing Sanborn Map® images and for transferring them to your Word Processor.

### Reading Sanborn Maps

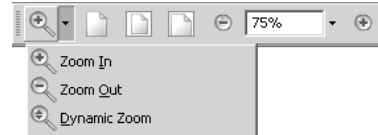
- Sanborn Maps document historical property use by displaying property information through words, abbreviations, and map symbols. The Sanborn Map Key provides information to help interpret the symbols and abbreviations used on Sanborn Maps. The Key is available from EDR's Web Site at: <http://www.edrnet.com/reports/samples/key.pdf>

### Organization of Electronic Sanborn Image File

- Sanborn Map Report, listing years of coverage
- User's Guide
- Oldest Sanborn Map Image
- Most recent Sanborn Map Image

### Navigating the Electronic Sanborn Image File

1. Open file on screen.
2. Identify TP (Target Property) on the most recent map.
3. Find TP on older printed images.
4. Using Acrobat® Reader®, zoom to 250% in order to view more clearly. (200-250% is the approximate equivalent scale of hardcopy Sanborn Maps.)
  - A. On the menu bar, click "View" and then "Zoom to..."
  - B. Or, use the magnifying tool and drag a box around the TP



### Printing a Sanborn Map From the Electronic File

- EDR recommends printing images at 300 dpi (300 dpi prints faster than 600 dpi)
- To print only the TP area, cut and paste from Acrobat to your word processor application.

#### Acrobat Versions 6 and 7

1. Go to the menu bar
2. Click the "Select Tool"
3. Draw a box around the area selected
4. "Right click" on your mouse
5. Select "Copy Image to Clipboard"
6. Go to Word Processor such as Microsoft Word, paste and print.



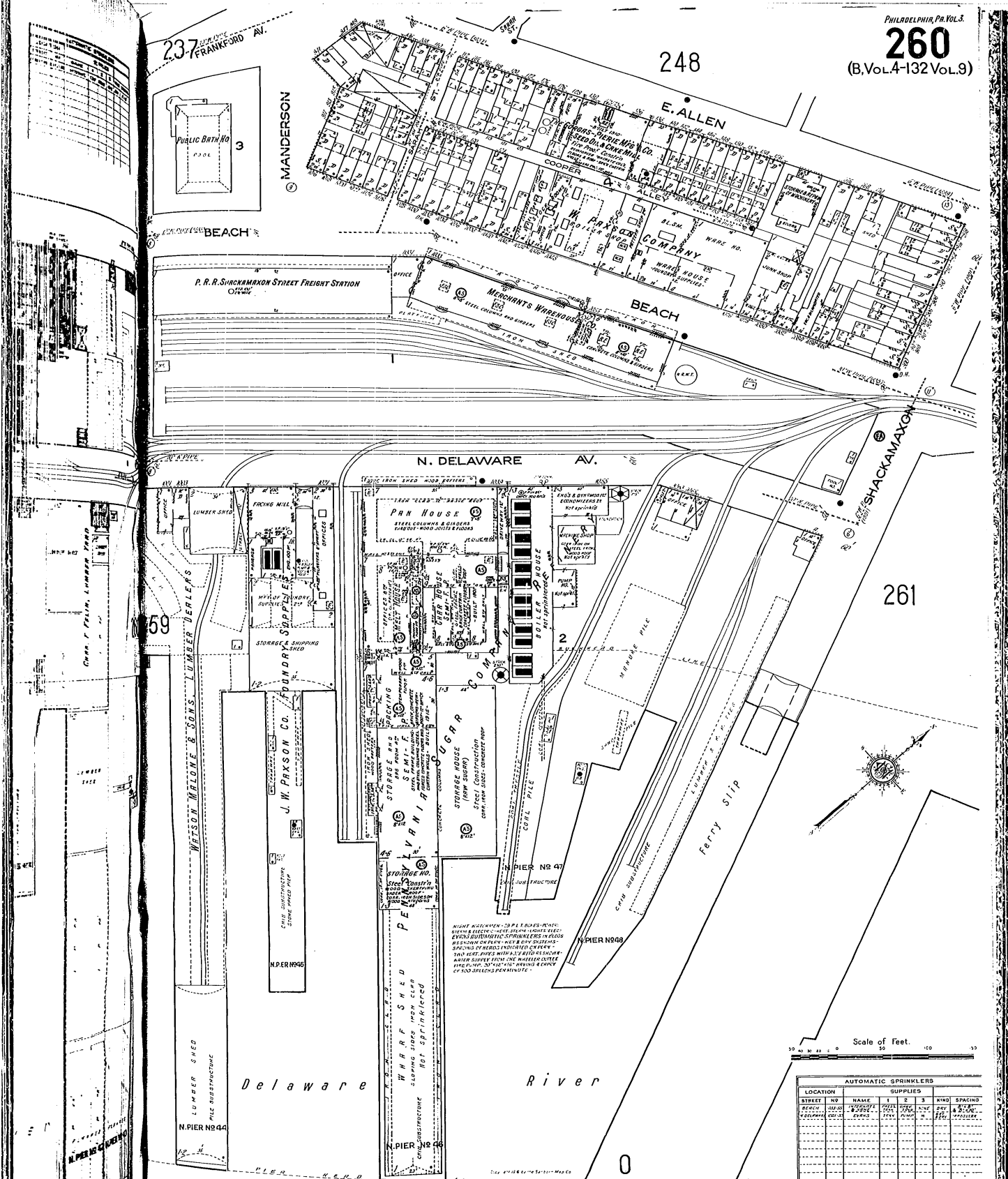
#### Acrobat Version 5

1. Go to the menu bar
2. Click the "Graphics Select Tool"
3. Draw a box around the area selected
4. Go to "Menu"
5. Highlight "Edit"
6. Highlight "Copy"
7. Go to Word Processor such as Microsoft Word, paste and print.



### Important Information about Email Delivery of Electronic Sanborn Map Images

- Images are grouped into one file, up to 2MB.
- In cases where in excess of 6-7 map years are available, the file size typically exceeds 2MB. In these cases, you will receive multiple files, labeled as "1 of 3", "2 of 3", etc. including all available map years.
- Due to file size limitations, certain ISPs, including AOL, may occasionally delay or decline to deliver files. Please contact your ISP to identify their specific file size limitations.



Scale of Feet.

LOCATION		AUTOMATIC SPRINKLERS					
		SUPPLIES					
STREET NO	NAME	1	2	3	KIND	SPACING	
BEACH	1234				1 1/2"	15'	



The Sanborn Library, LLC

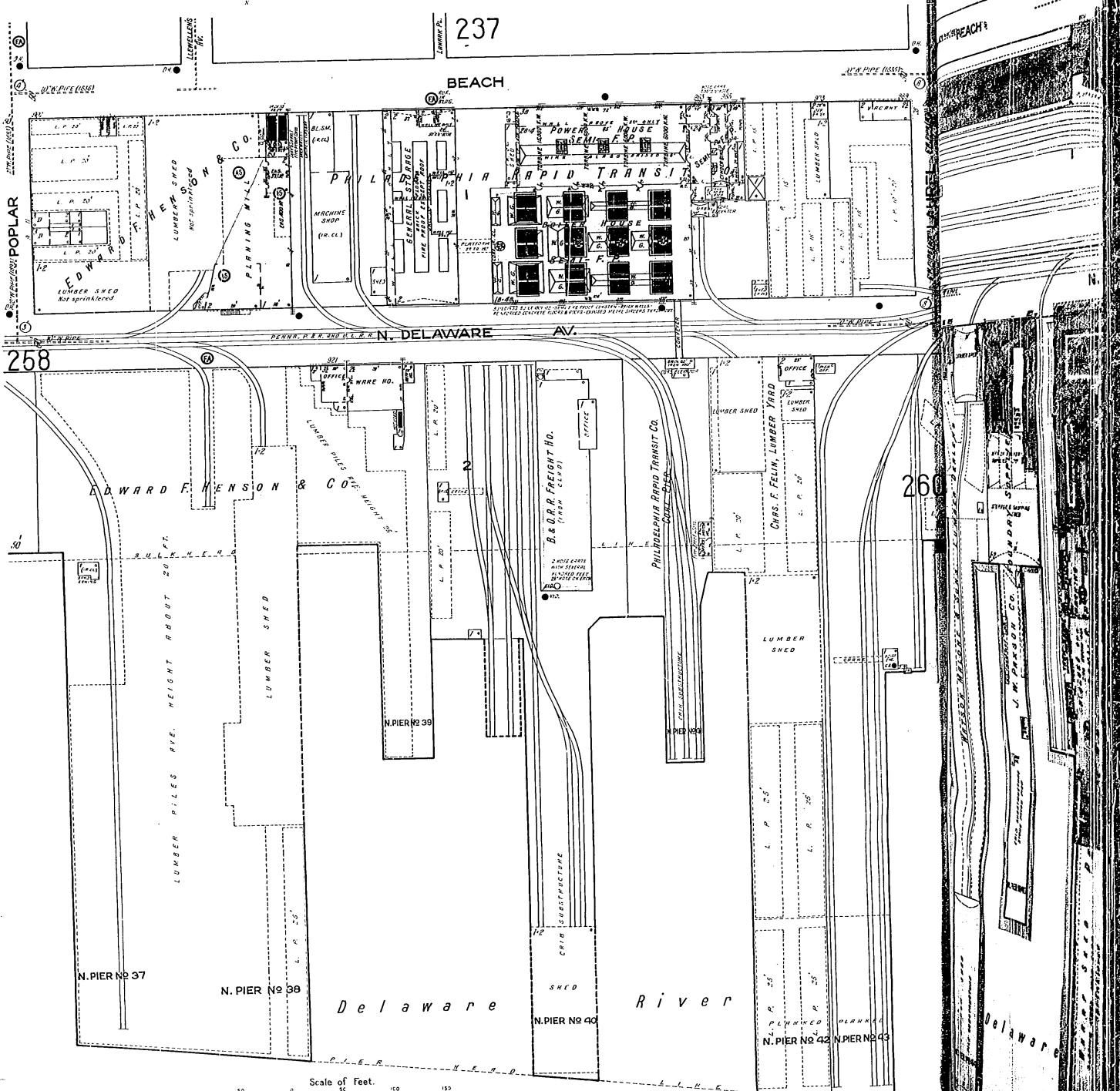
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PHILADELPHIA, PA. Vol. 3.  
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 (54½ Vol. 4)



LOCATION		AUTOMATIC SPRINKLERS					
STREET NO.	NAME	1	2	3	KIND	SPACING	
UNSPRINKLED	INTERVET	YAYE	YAYE	YAYE	YAYE	8' x 10'	



Scale of Feet.  
 50 100 150

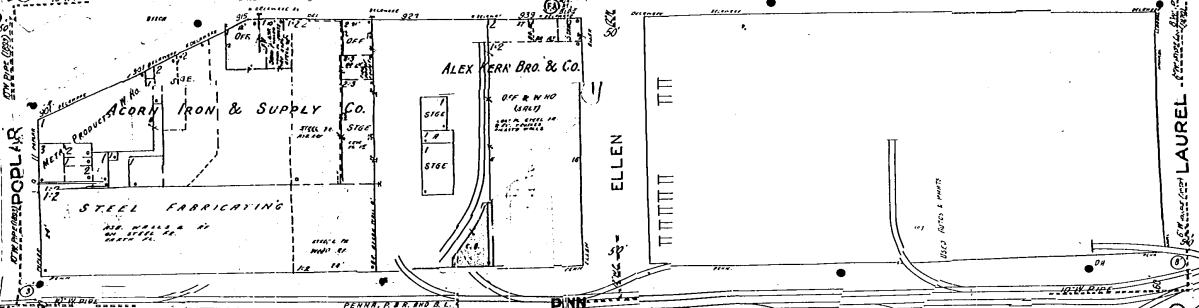


259  
(54 1/2 Vol. 4)

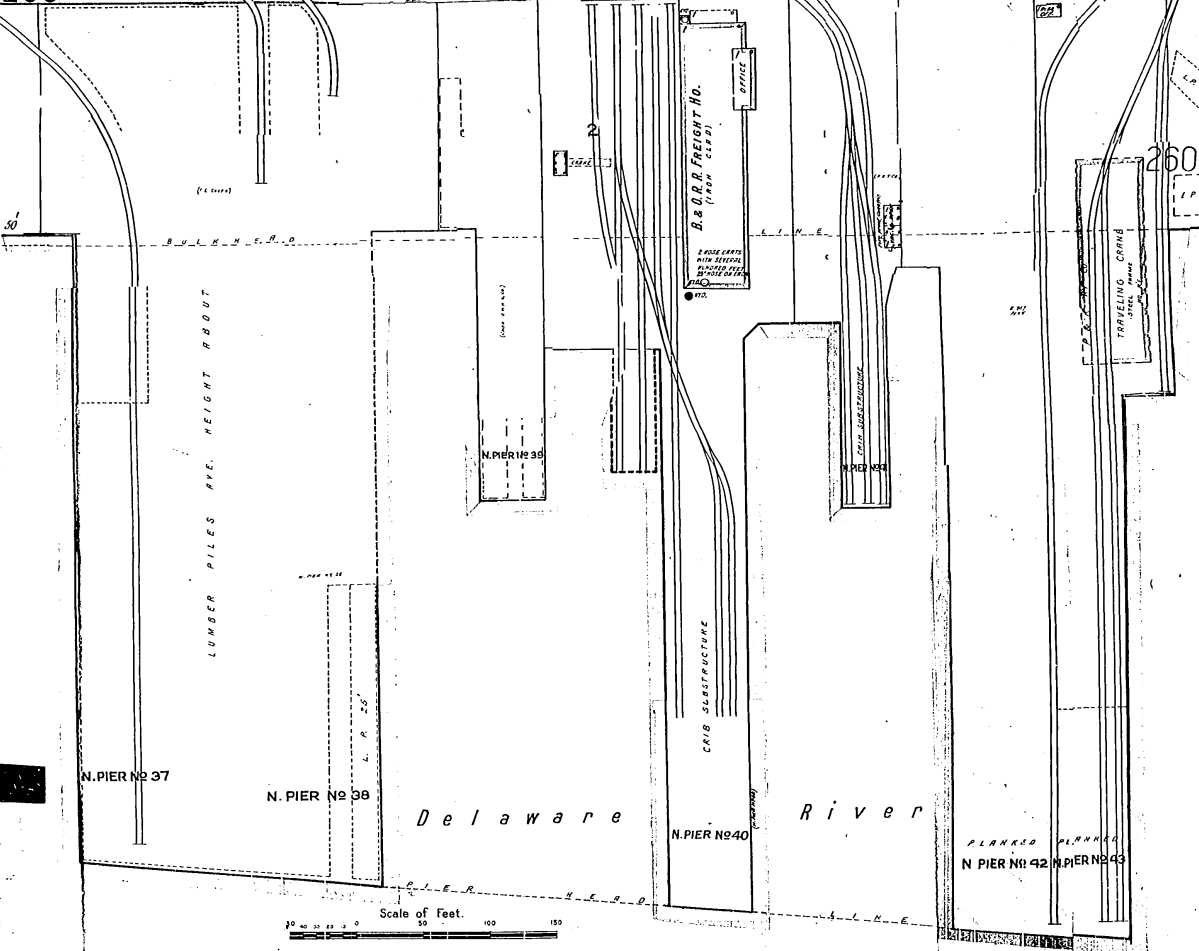
AUTOMATIC SPRINKLERS						
LOCATION		SUPPLIER				
STREET	NO.	NAME	1	2	3	SPACING

237

N. DELAWARE AV.  
(BEACH)



258



260

Scale of Feet.  
0 50 100 150

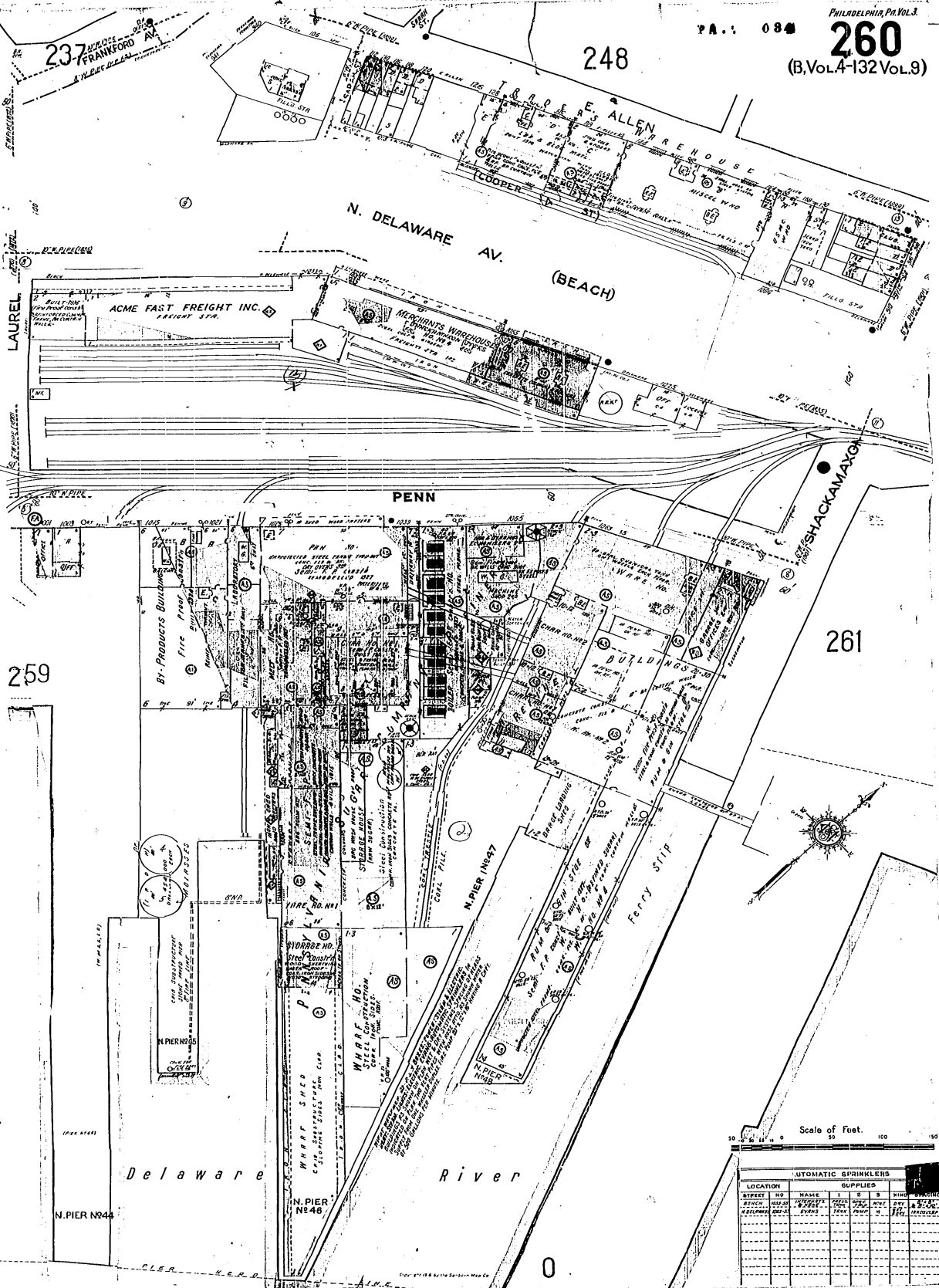
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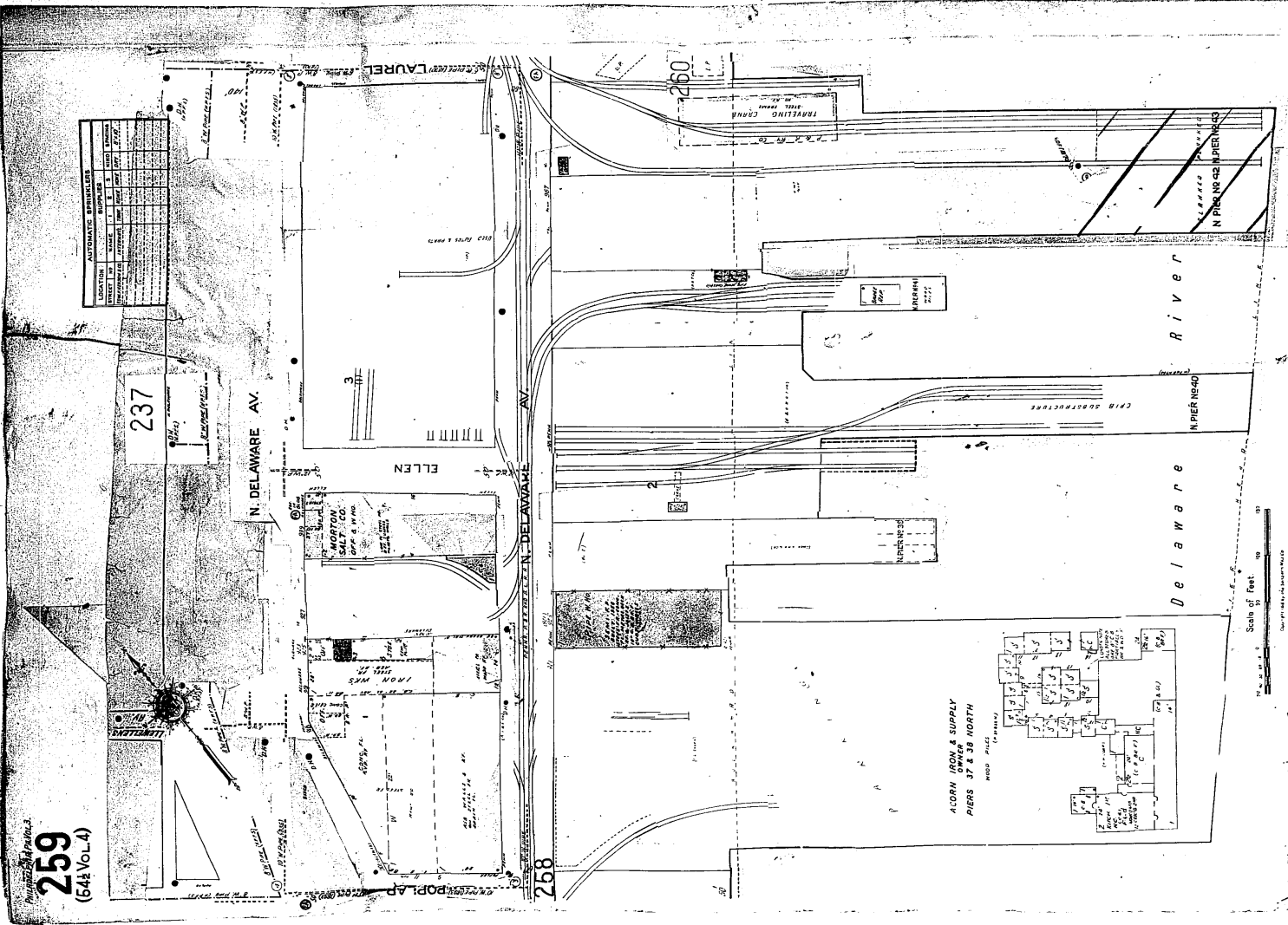


Scale of feet. 0 50 100 150

AUTOMATIC SPRINKLERS									
LOCATION		SUPPLIES							
STREET	NO.	WATER	1	2	3	4	5	6	7
BEACH	1000	100	100	100	100	100	100	100	100
COLUMBIA	1000	100	100	100	100	100	100	100	100
FRANKFORD	1000	100	100	100	100	100	100	100	100
LAUREL	1000	100	100	100	100	100	100	100	100
PENN	1000	100	100	100	100	100	100	100	100
SHACKAMAXON	1000	100	100	100	100	100	100	100	100



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**AUTOMATIC SPRINKLERS**

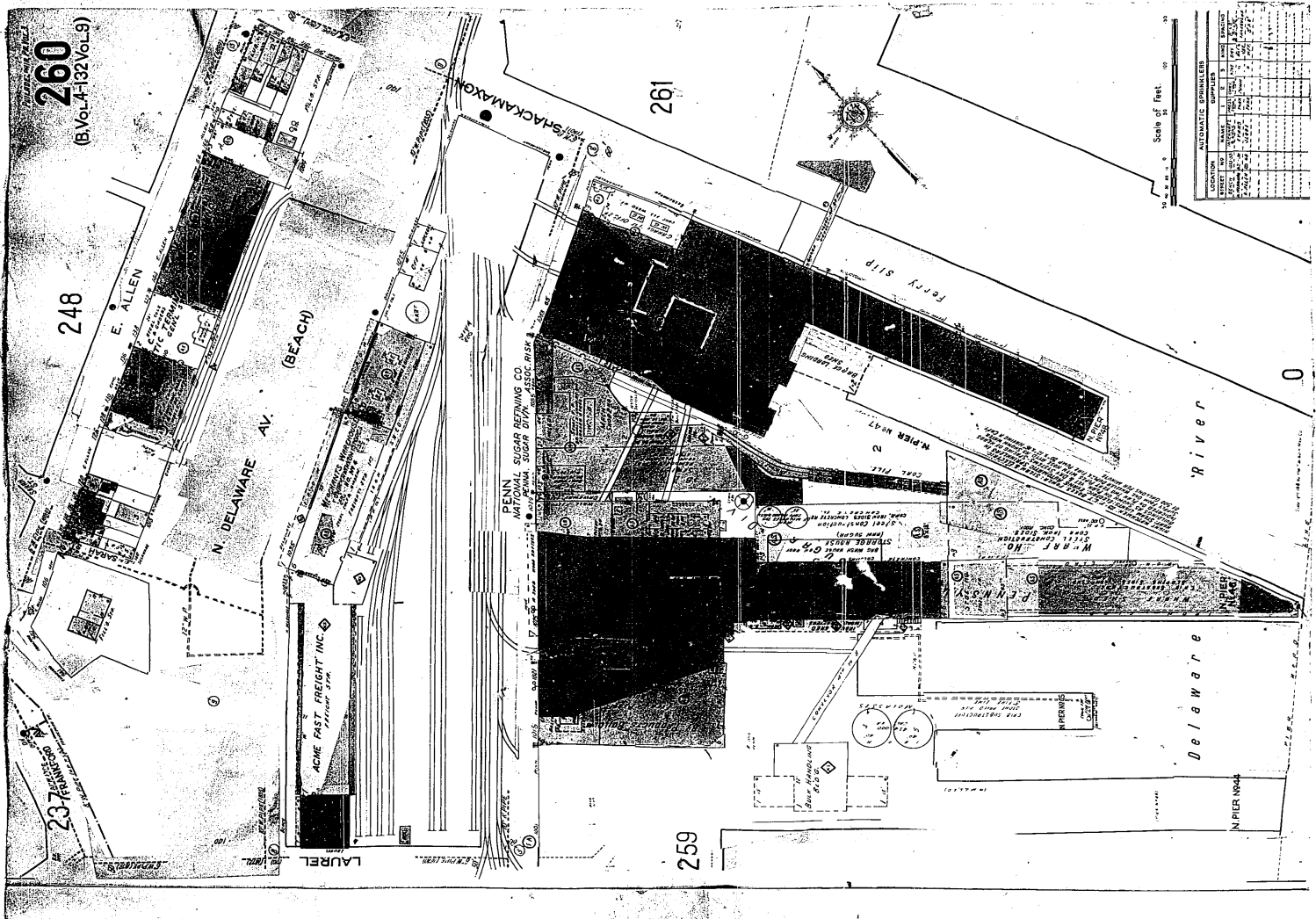
LOCATION	SIZE	TYPE	DATE

259  
(644 Vol. 4)

237

258

Scale of Feet



260  
(B Vol. 4-132 Vol. 9)

248

261

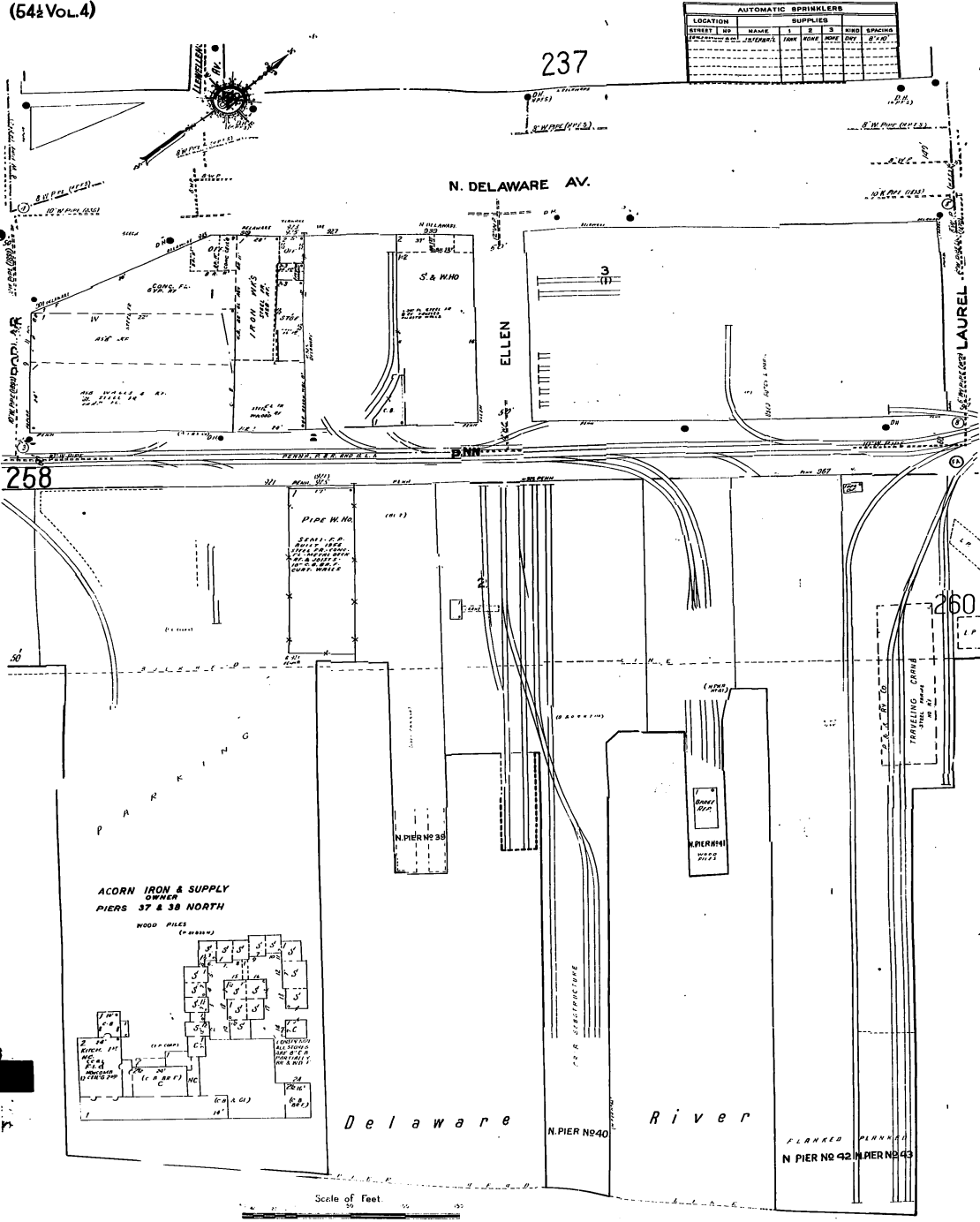
259

Scale of feet.

SYMBOL	NAME	1	2	3	4	5	6	7	8	9	10
(Symbol)	WATER										
(Symbol)	RAILROAD										
(Symbol)	STREET										
(Symbol)	WATER										
(Symbol)	RAILROAD										
(Symbol)	STREET										

Legend for AUTOMATIC SPRINKLER symbols.

PHILADELPHIA, PA VOL. 3.  
**259**  
 (64 1/2 VOL. 4)



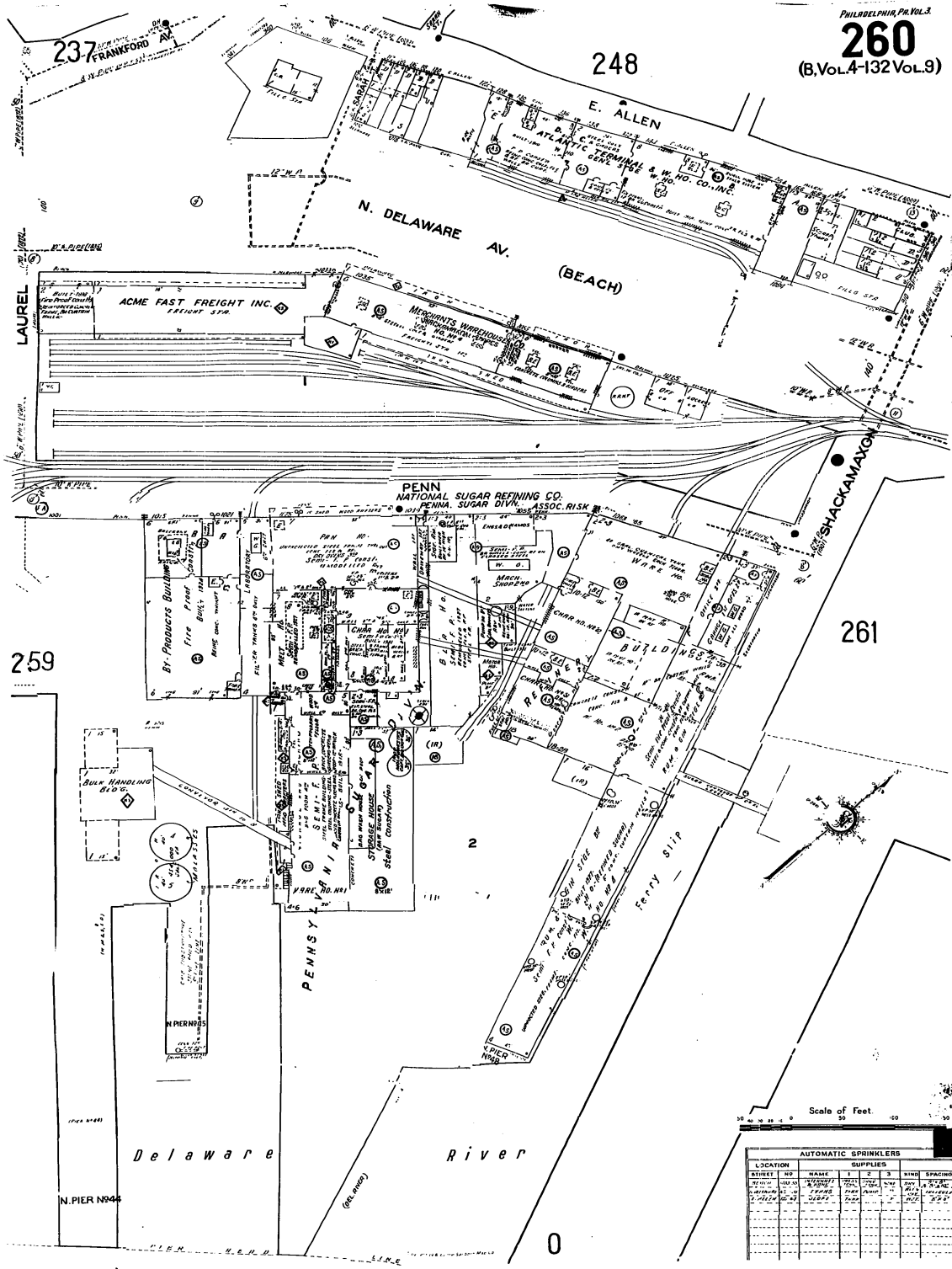
AUTOMATIC SPRINKLERS									
LOCATION	SUPPLIES			RATED SPRING					
REMARKS	TYPE	SIZE	NO.	TYPE	SIZE	NO.	TYPE	SIZE	NO.



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PHILADELPHIA, PA. VOL. 3

**260**

(B. Vol. 4-132 Vol. 9)

259

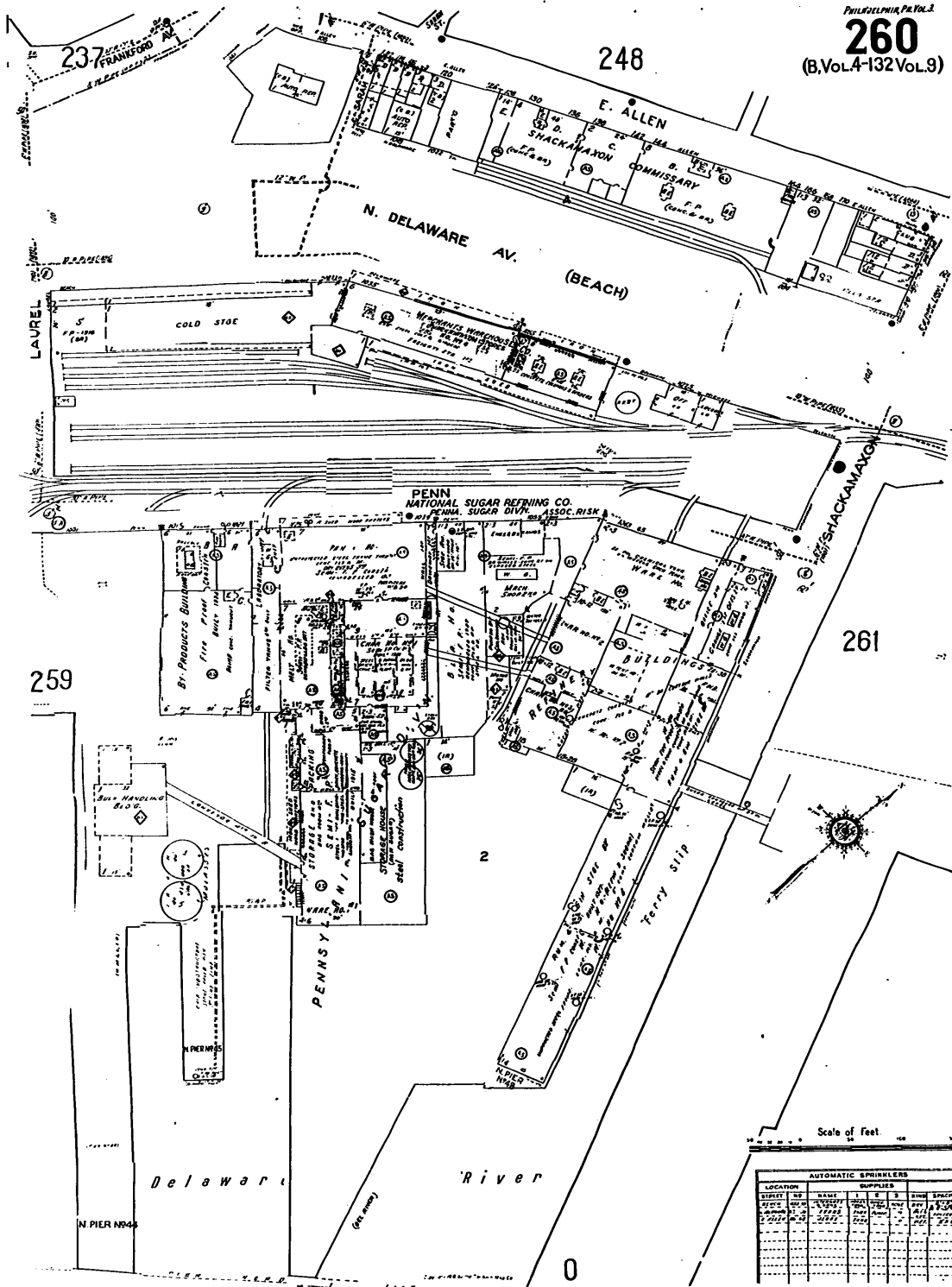
248

261

0

Scale of Feet

AUTOMATIC SPRINKLERS											
LOCATION	STREET	NO.	NAME	1	2	3	KIND	SPACING			



LOCATION		AUTOMATIC SPRINKLERS			
STREET NO.	BLK.	1	2	3	SPACER
237	1				
238	1				
239	1				
240	1				
241	1				
242	1				
243	1				
244	1				
245	1				
246	1				
247	1				
248	1				
249	1				
250	1				
251	1				
252	1				
253	1				
254	1				
255	1				
256	1				
257	1				
258	1				
259	1				
260	1				
261	1				
262	1				
263	1				
264	1				
265	1				
266	1				
267	1				
268	1				
269	1				
270	1				

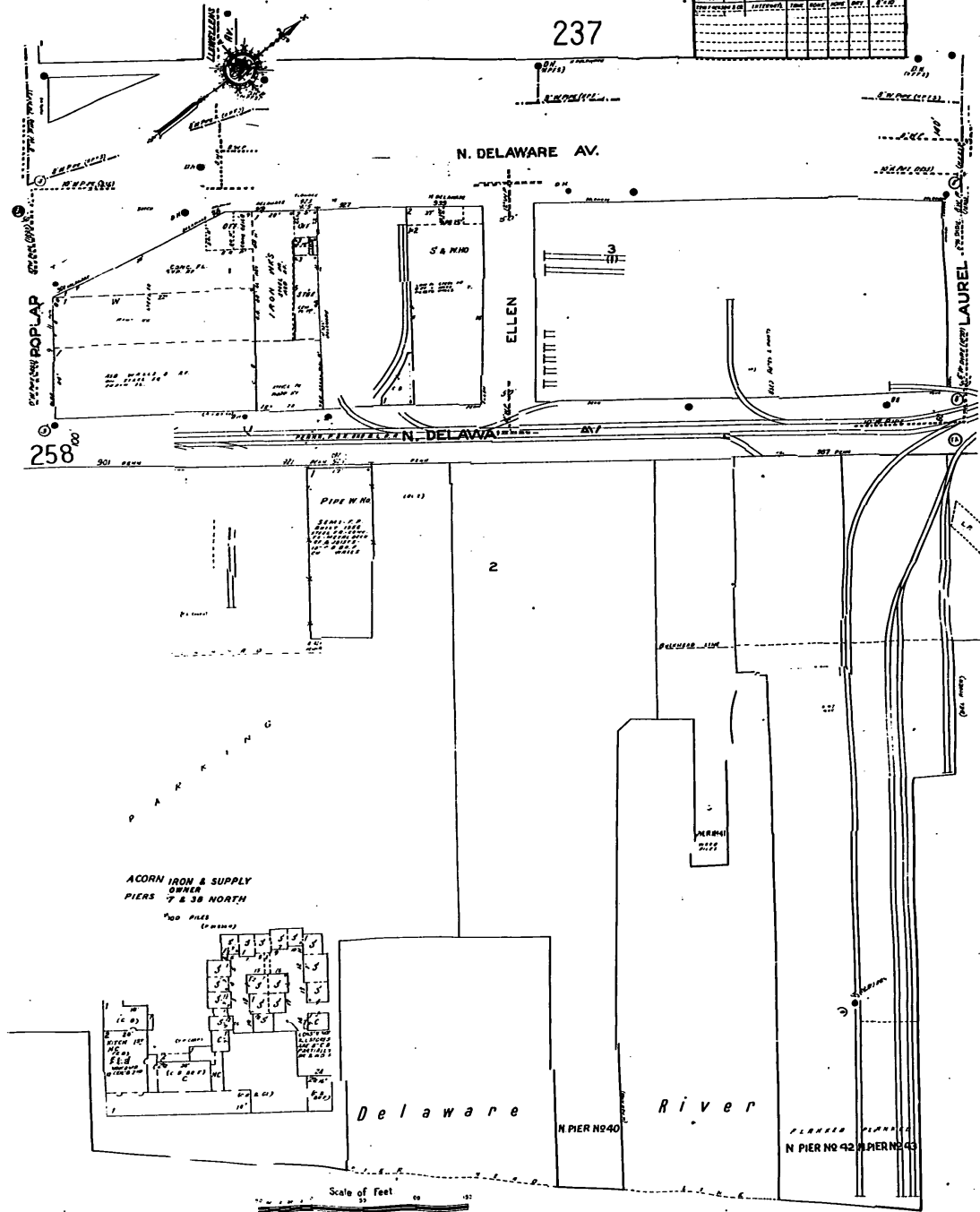


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AUTOMATIC SPRINKLERS						
LOCATION	SUPPLIES			SPECIFICATIONS		
STREET NO.	NAME	1	2	3	MIN.	MAX.



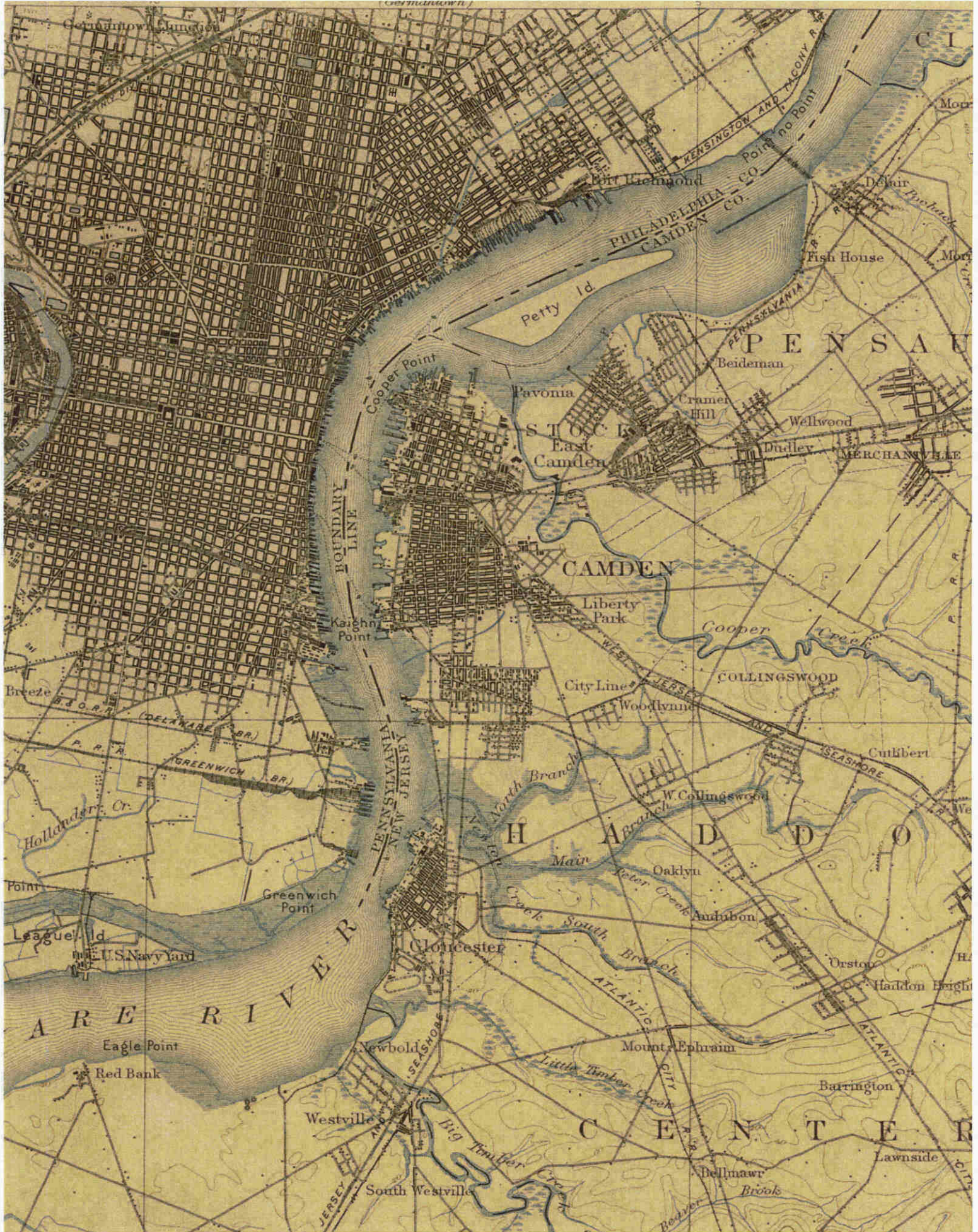
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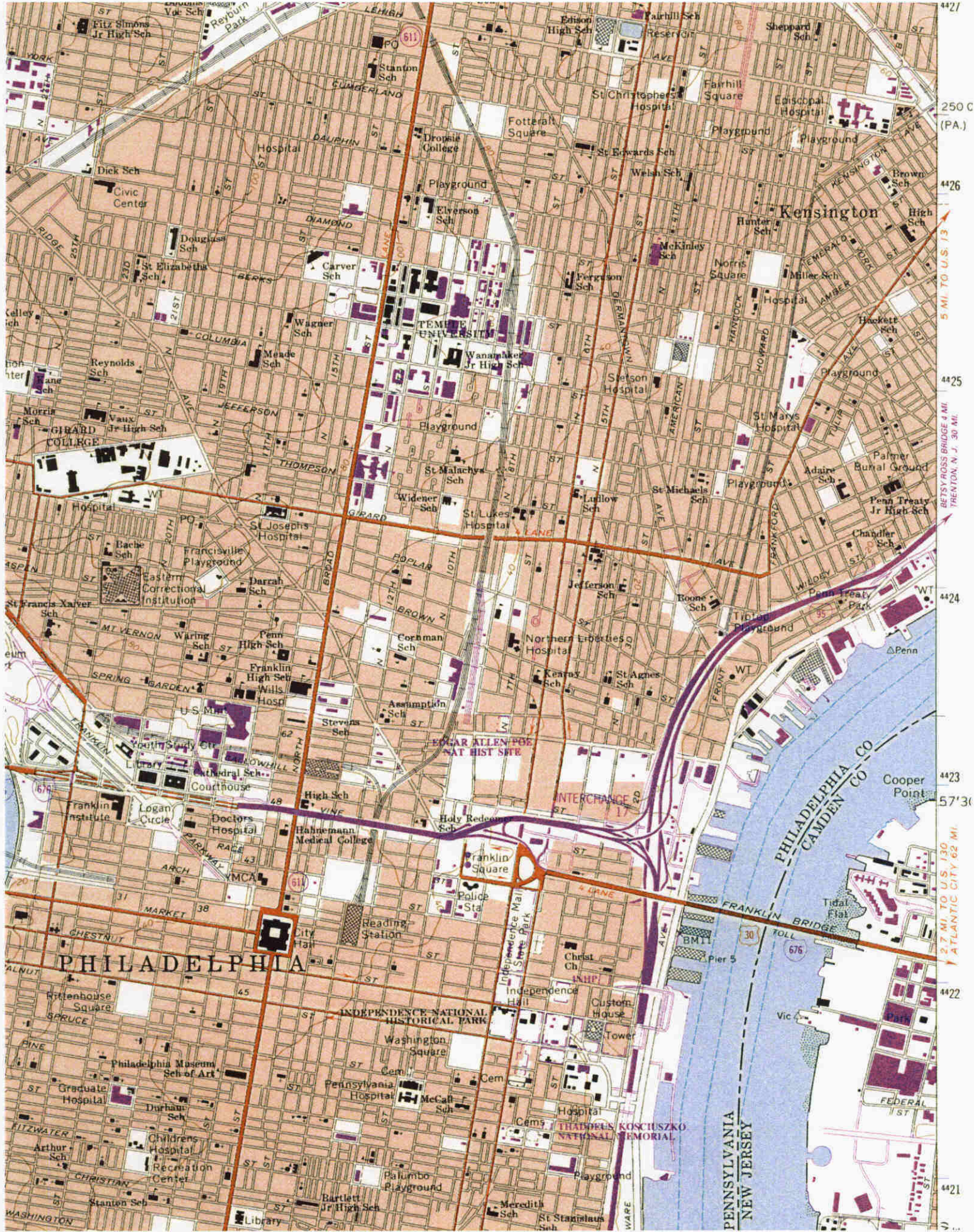




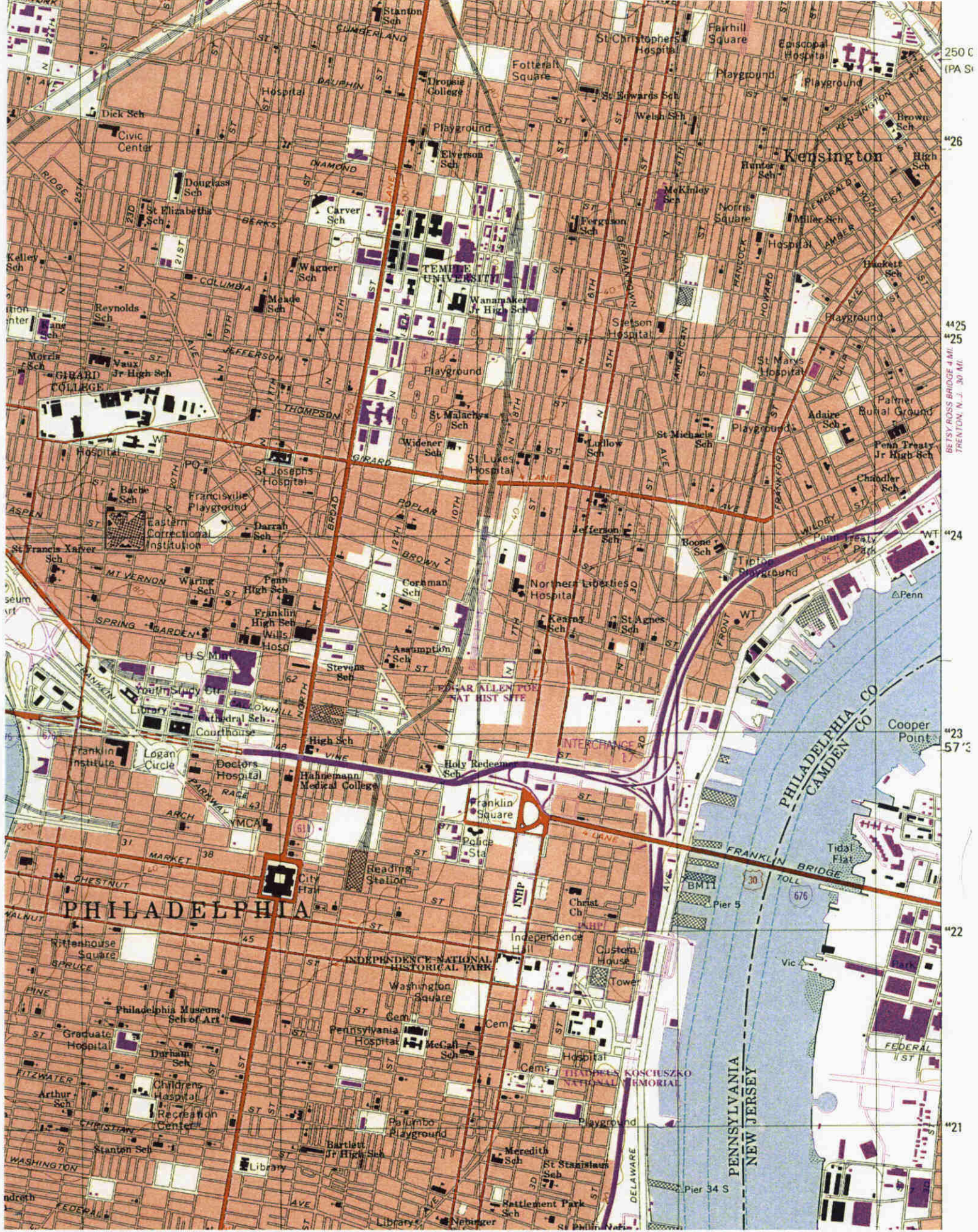
















INQUIRY #: 1566367.6

YEAR: 1940

| = 750'





**INQUIRY #:** 1566367.6

**YEAR:** 1950

— = 750'





INQUIRY #: 1566367.6

YEAR: 1963

— = 750'





**INQUIRY #:** 1566367.6

**YEAR:** 1973

| = 750'



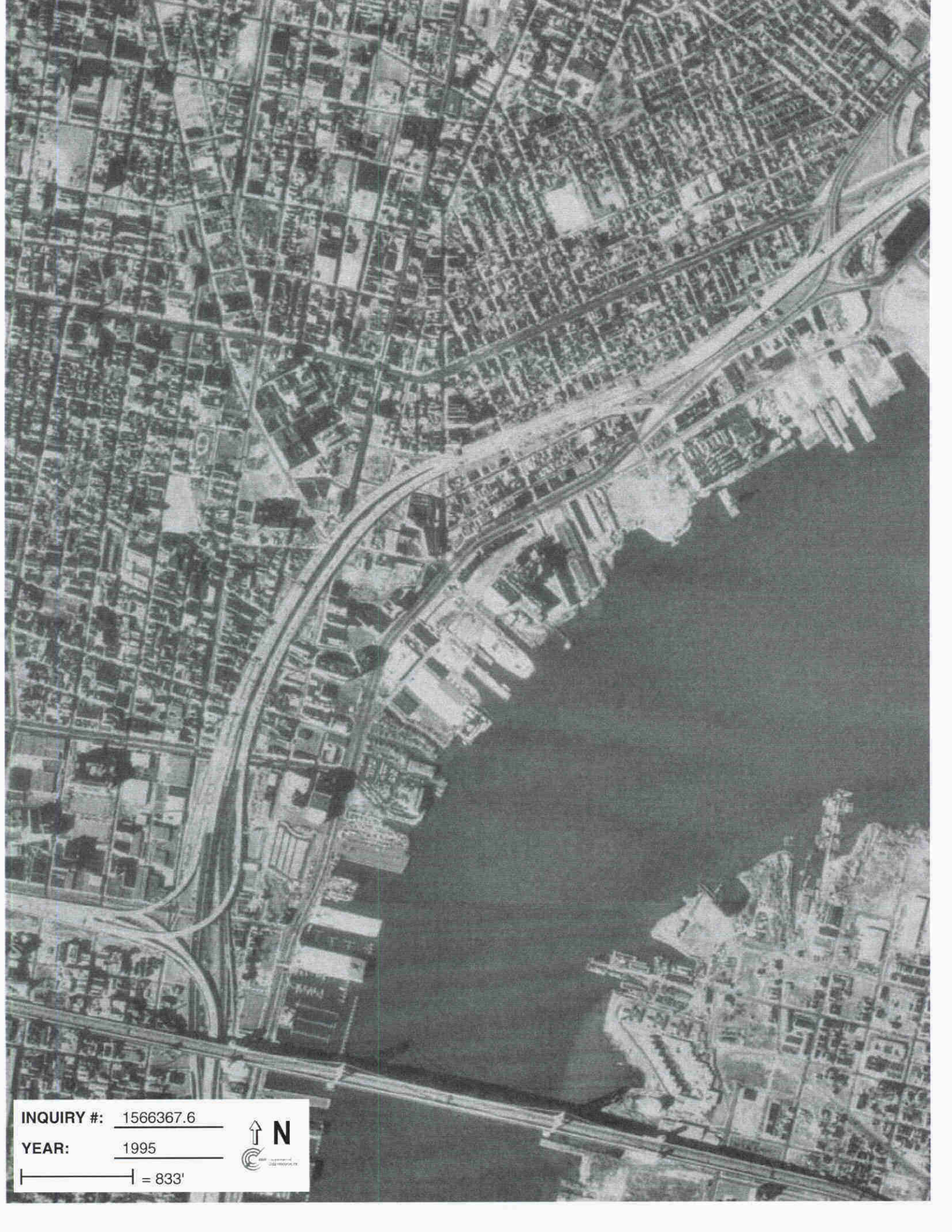


INQUIRY #: 1566367.6

YEAR: 1986

— = 750'





INQUIRY #: 1566367.6

YEAR: 1995

| = 833'



Figure 5: Zoning Map for Sugarhouse Casino

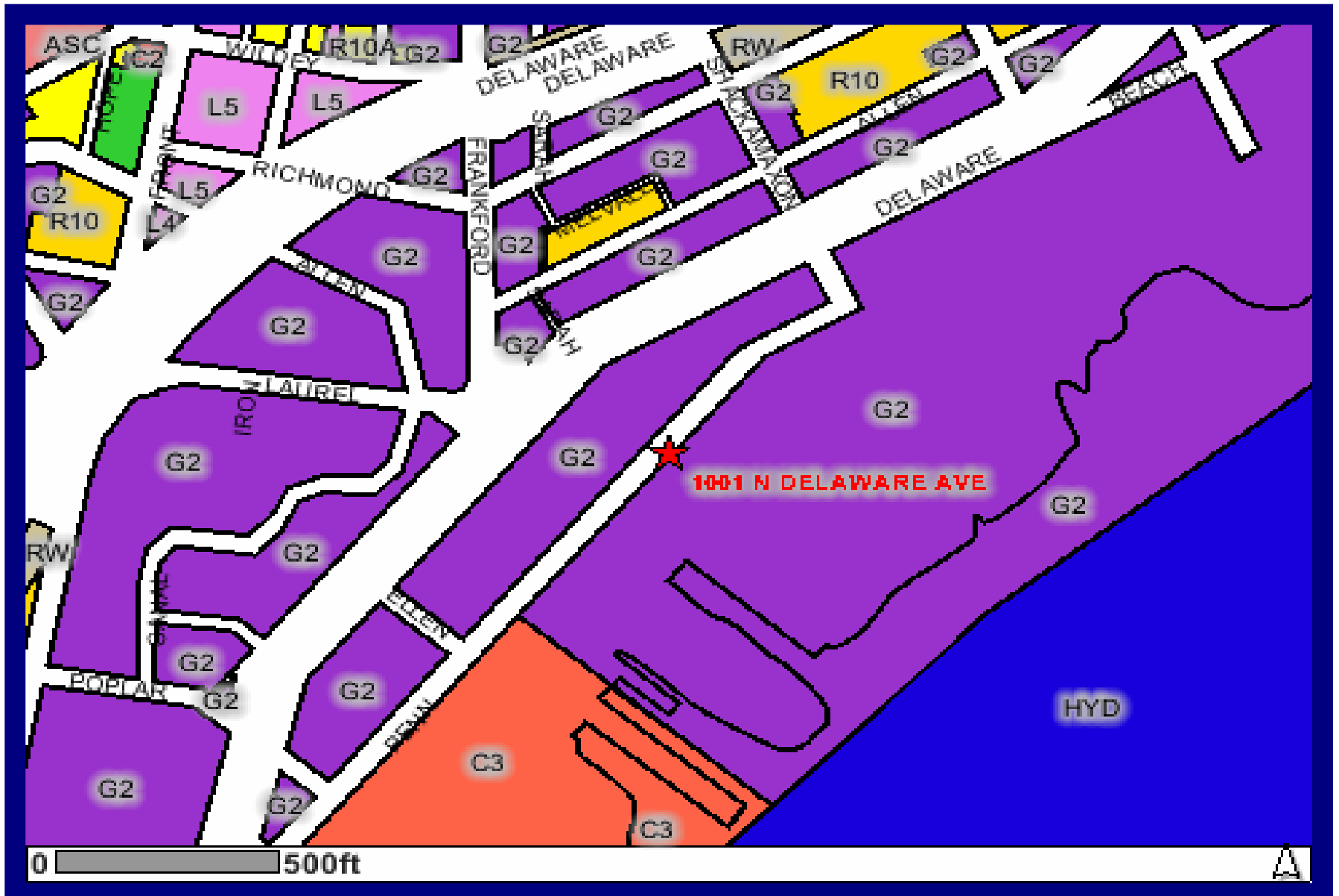


Figure 6: Zoning Map for Southtown Site

