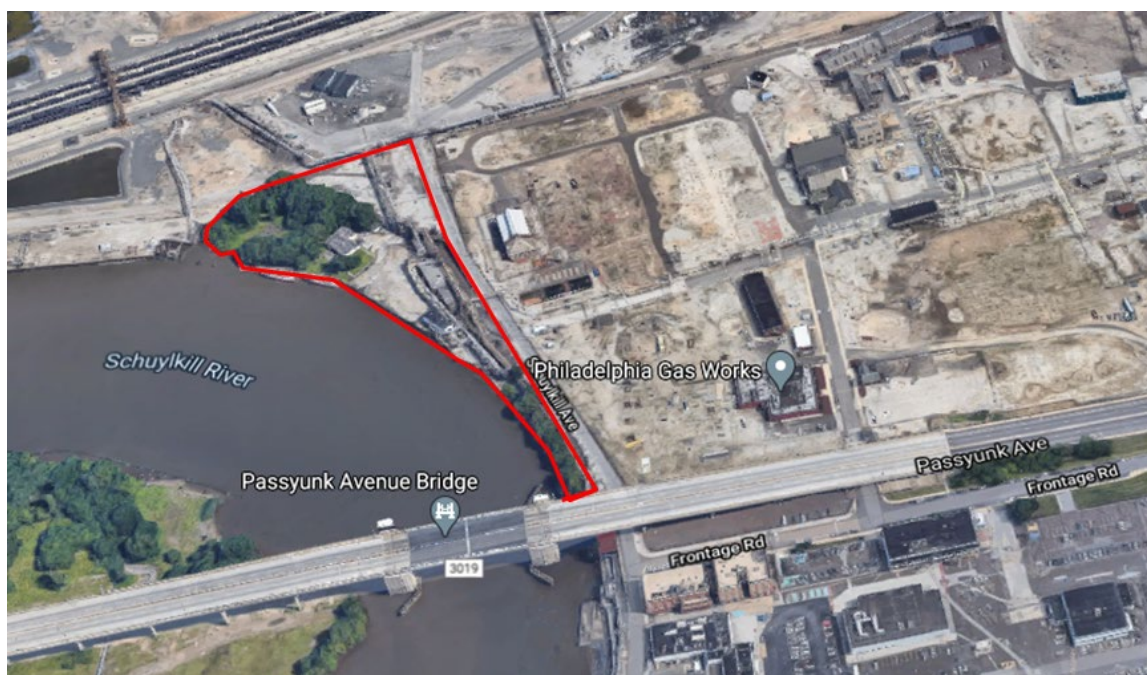


## Philadelphia Register of Historic Places

Point Breeze Gas Works  
3143 W. Passyunk Avenue  
Philadelphia, Pennsylvania



**Prepared for:**  
Philadelphia Energy Solutions Refining and Marketing LLC  
Chicago, IL

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**February 24, 2021**



## **EXECUTIVE SUMMARY**

Philadelphia Energy Solutions Refining and Marketing LLC (PESRM) retained Heritage Consulting Group to review the Philadelphia Register of Historic Places designation nomination for the subject property located at 3143 W. Passyunk Avenue.

Representatives of Heritage Consulting Group completed a survey of the subject property (aka PESRM Property) on December 10, 2020. During the survey it was observed that the subject property has been significantly altered since the period of significance outlined in the designation report. The upper portion of the site consists of an asphalt-paved access road, asphalt-paved parking lot and significant above ground infrastructure associated with the adjacent petroleum refineries. The lower portion of the site is accessible via a utilitarian, asphalt-paved access road which leads down to the “Wharf,” located adjacent to the Schuylkill River. The central portion of the Wharf consists of a gravel parking lot and mid-century Philadelphia Fire Department fireboat station. The south portion consists of a c. 1899 utilitarian brick pump house, modern CMU building associated with the petroleum refinery and significant above ground infrastructure related to the petroleum refineries. The north portion of the Wharf is completely overgrown and undeveloped with collapsing remnants of a stone wall that was associated with lime kilns at the site. Overall, it was observed that the subject site is only minimally visible from one public vantage point, the Passyunk Avenue Bridge over the Schuylkill River, and that the interior of the site is a typical industrial site, generally overgrown and overbuilt with modern infrastructure related to the adjacent petroleum refineries.

Within the subject property, there is one overall geographical identifier, The Wharf, with four sub structures: Retaining Walls, The Kilns, asphalt-paved Access Road, and Pump House. The nomination argues that these four sub structures are eligible under Criteria A, C, D, E, J for listing on the Philadelphia Register of Historic Places.

### **EVALUATION OF DESIGNATION CRITERIA**

The subject property was nominated for listing on the Philadelphia Register of Historic Places. The property is proposed for designation for its historical and architectural significance associated with the Point Breeze Gas Works during a period of significance of 1851 to 1899. The remaining structures within the subject property are proposed for designation under Criteria A, C, D, E and J.

Heritage has reviewed the nomination and history of the site and has determined that the remaining structures within the subject property do not meet the stated Criteria for designation. Heritage has also evaluated the physical integrity of the subject property. A close look at the historic maps and photographs compared with current conditions at the site make it plainly obvious that little physical fabric remains from the period of significance. Implicit in the designation criteria is the necessity that the structures proposed for designation must convey the appearance for which they have obtained significance and that there is a physical completeness of the designated property.

Overall, the subject property no longer conveys the physical characteristics which defined the Gas Works during the period of significance.

## **Criterion A:**

To designate a property under Criterion 14-1004(1)(a), a building must have “significant character, interest or value as part of the development, heritage or cultural characteristics of the City, Commonwealth or Nation or is associated with the life of a person significant in the past.”

The justification under Criterion A is that the Retaining Walls and The Kilns are associated with the development of the Point Breeze Gas Works during the given period of significance from 1851-1870.

Today, the Retaining Walls and Kilns at 3143 West Passyunk do not convey their historic use as structures associated with the development of a 19<sup>th</sup> century gas works complex, and on their own do not embody the heritage of the Point Breeze Gas Works. Their original roles as part of the Gas Works would not be recognizable to a contemporary observer, limiting their authenticity as a cultural resource.

Criterion A is not met as nominated.

## **Criterion C and D:**

To designate a property under Criterion 14-1004(1)(c), a resource must “reflect the environment in an era characterized by a distinctive architectural style,” and to designate a property under Criterion 14-1004(1)(d), a building must “embody distinguishing characteristics of an architectural style or engineering specimen.”

The justification given by the nomination for Criteria C and D is that the Retaining Walls, The Kilns, the asphalt-paved Access Road, and Pump House represent a manufacturing and public works that was executed in the Gothic Revival style, between 1851 and 1859, with resources added in 1899. That said, unlike the other potential resources the nomination justifies for designation under this criterion, there is no specific discussion of the four structures located within the subject property and no specific case is made that these four structures, in fact, are significant under Criterion C and D.

Regarding the structures that make up the Wharf, the nomination posits that the Retaining Walls should be considered Gothic Revival due to the presence of buttresses and stone coping in their construction that is keeping with the overall design of the Point Breeze complex. While the use of the buttress was a characteristic of the original Gothic architectural style, and was often featured in larger Gothic Revival buildings, the buttresses utilized by the Retaining Walls are much more driven by function rather than form, indeed, the retaining wall adjacent to the Access Road is a flush stone wall without buttressing. The use of stone is also not by itself a characteristic of Gothic Revival, as masonry construction was favored by numerous architectural styles of the 19<sup>th</sup> century. Finally, having been constructed between 1888 and 1894, the Retaining Walls are simple utilitarian structures of a common design in Philadelphia at the time, and having been constructed well after the passing of John C. Cresson, are not architecturally significant.

The nomination does not elaborate on the architectural style of the other three structures, nor does it explain the rationale for nominating them under Criteria C and D. The Kilns have no visible architectural style and survive in a collapsed, ruinous condition. The asphalt-paved Access Road does not have a visible architectural style as it is a simple earthen ramp paved with modern asphalt, located between the previously discussed Retaining Walls. It cannot be characterized as Gothic Revival.

The Pump House does not contain any of the decorative features that characterize the Gothic Revival style as defined.

It is important to note that Criterion 14-1004(1)(d) does state that a building must “embody distinguishing characteristics of an architectural style or **engineering specimen**,” (emphasis added). None of the four structures appear to demonstrate a larger significance for the field of engineering.

Criteria C and D are not met for any of the structures as nominated.

### **Criterion E:**

To designate a property under Criterion 14-1004(1)(e), a resource must “be the work of a designer, architect, landscape architect or designer, or engineer whose work has significantly influenced the historical, architectural, economic, social, or cultural development of the City, Commonwealth, or Nation.”

The justification under Criterion E is that the Retaining Walls and The Kilns were built under the leadership of designer and engineer John Chapman Cresson. The nomination contends that Cresson oversaw the construction at the Point Breeze Gas Works from 1850 to 1854 and in 1859.

The nomination posits that the Retaining Walls were built over time as part of ongoing improvements to the overall site. References to the Wharf section of the Gas Works were first made in 1851, so the nomination contends that the southernmost section of the Retaining Walls date to that period. However, the nomination goes on to say that “the larger portion of the retaining wall...were built between 1888 and 1894,” when the Access Road was constructed, well after the passing of Mr. Cresson in 1876. The basis for the earlier date does not appear sound, which would place the construction of the Retaining Walls largely outside of the period of significance that could be associated with John Chapman Cresson.

According to the nomination, the earliest reference to the Kilns is in an 1856 Philadelphia Gas Works report that describes their construction. The Kilns were then expanded in 1865 as part of a larger improvements plan for the Point Breeze Gas Works. These dates would place the Kilns outside of the period of significance that could be associated with John Chapman Cresson. Further, resources within the Gas Works associated with Cresson adopted the Gothic Revival style. The Kilns was a utilitarian structure with no clear association with Cresson in any historical documentation.

Criterion E is not met for either structure as nominated.

## **Criterion J**

Similarly to Criterion A, to designate a property under Criterion 14-1004(1)(j), a resource must “exemplify the cultural, political, economic, social, or historical heritage of the community.”

The justification under Criterion J is that the Retaining Walls and The Kilns exemplify the economic, social, and historical heritage of the community as a “significant and rare surviving municipal gas works of the mid-nineteenth century that represents the development of manufactured gas for illumination, which was first achieved for lighting streets and buildings through gas lighting. Being among the oldest of these structures to exist in the United States, Pennsylvania, and Philadelphia, Resource Nos. 1–8 represent a critical and significant period of economic, social, and technological development, as well as the greater achievements in public works of the Victorian-era.”

The justification under Criterion J is that the Retaining Walls and The Kilns are associated with the development of the Point Breeze Gas Works during the given period of significance from 1851-1870.

Similar to the discussion under Criterion A, the use of the word “exemplify” in the designation code establishes a requirement for authenticity. To exemplify, the building must be illustrative of the historic period for which designation is sought. The designation code does not define “exemplify” nor are there stated definitions in National Register guidelines. Nonetheless, implicit in the use of the word is the notion that the resource appear today as it did during the historic period. Again, it would need to be recognizable to a contemporary observer.

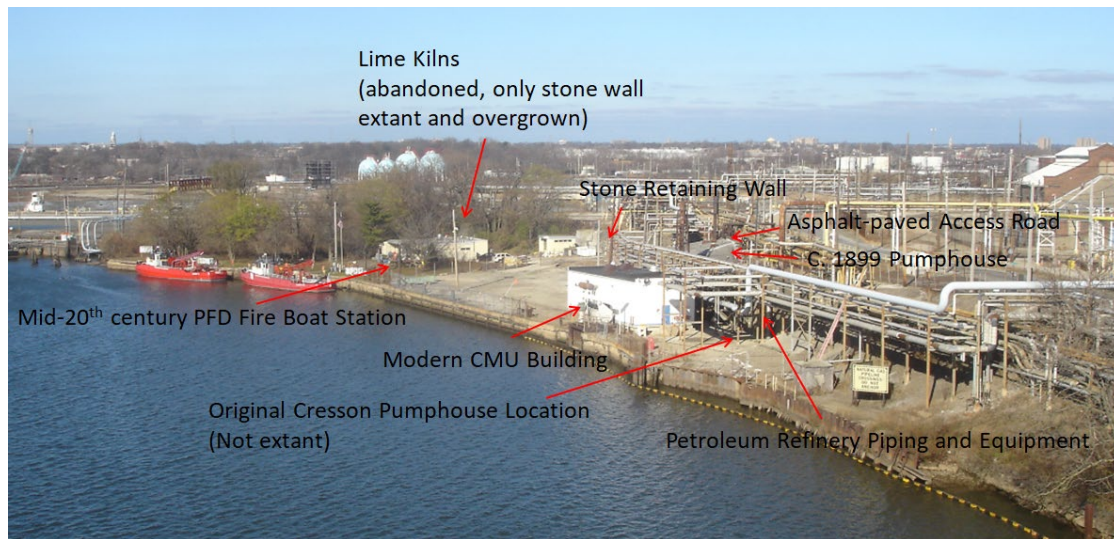
Similar to the discussion under Criterion A, the appearance of the two structures during the 19<sup>th</sup> century period of the Point Breeze Gas Works is not known. Further, much of the Retaining Wall structure was constructed c. 1890, outside the stated period of significance.

These structures are not illustrative of the history of the Point Breeze Gas Works.

Criterion J is not met for either structure as nominated.



## SUBJECT PROPERTY CONDITIONS



**2020 Photo – Current Photo from Passyunk Bridge – 3143 W. Passyunk: Annotated Site Features. Site significantly altered from proposed period of significance. Nominated resources concealed and not visible from public right-of-way.**



**Retaining Wall, 2020 Photo: Looking West**





**Lime Kilns, 2020 Photo: Detail of Collapsing Stone Wall and Tree Growth**



**Access Road, 2020 Photo: Looking North (Note: Modern, utilitarian asphalt paving)**





**Pump House, 2020 Photo: Passyunk Bridge, Pump House consumed by petroleum refinery piping and structure. As such, not visible from the public right-of-way.**

## **SUBJECT PROPERTY BACKGROUND**

The Point Breeze Gas Works was developed beginning in 1851 under the auspices of chief designer and engineer John C. Cresson. Owing to the growing demand for commercial gas for lighting and industry, the Gas Works was constructed at its present location to take advantage of available land and access to the Schuylkill River, which provided access for barges to deliver coal. The Gas Works was a coal gasification plant, which converted coal into gas by heating in specialized buildings called Retort Houses, after which the gas was then purified and then held in large gasometers until it was pumped through underground pipes to customers throughout the city. The initial Gas Works complex was constructed between 1851 and 1855, and then later expanded throughout the 19<sup>th</sup> century, as well as in the early 20<sup>th</sup> century until the gasification plant was shuttered in the mid-20<sup>th</sup> century following the introduction of mined natural “blue” gas. Following its closure, many of the over 20 buildings that historically made up the complex were demolished and only a limited number of resources remain from the proposed period of significance. In its current state, the site mainly consists of open land, with sparsely located buildings including what are known as the “Church Row” set of buildings located within the site proper which date to the original period of construction.

The subject property is located at the west end of the Point Breeze Gas Works within the land generally known as the Wharf. During the 19<sup>th</sup> century, the Wharf was utilized for the unloading of coal and oyster shells from ships to be utilized in the production of gas. The south end of the Wharf was improved with a Gothic-style Pump House which dated to the Cresson period, the north end was improved with a Lime Kiln structure and the center portion of the site was utilized for ship unloading as well as a tar distillery in the late 19<sup>th</sup> century. The Wharf has been altered over its history, with significant changes occurring in the late-19<sup>th</sup>



century when the original Pump House was demolished and replaced by the current Pump House, the extant Retaining Walls were constructed and the Lime Kilns were abandoned. Upon abandonment, the Lime Kiln buildings were demolished and the site utilized for coal storage, with only the Kiln's stone wall remaining in ruinous condition. By the 1920s, the Lime Kilns were buried beneath coal piles and a coal trestle had been constructed atop their ruins.

Following the closure of the gasification plant in the mid-20<sup>th</sup> century, the Kiln site was abandoned and is now fully grown over and in a state of ruin with the remaining stone walls collapsing due to significant growth of trees and freeze/thaw cycles. The central portion of the site was improved with a Philadelphia Fire Department (PFD) Fire Boat station in the mid-20<sup>th</sup> century, which remains active, but is not called out as a contributing resource in the nomination. At the south end of the Wharf, the late 19<sup>th</sup> century Retaining Walls, Access Road and Pump House remain, but are significantly obscured due to numerous pipes and structures associated with the adjacent petroleum refineries which purchased the site from the Gas Works upon its closure. Owing to the significant alterations and period of abandonment, the Wharf no longer conveys its appearance from the period of significance.

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## **PROBLEM STATEMENT**

The subject property located at 3143 West Passyunk Avenue, aka the PESRM property, has been submitted for designation to the Philadelphia Register of Historic Places. As the structures located on the subject property have not been previously identified as being noteworthy, the property ownership has asked Heritage Consulting Group to review the nominating document.

## **SUMMARY OF NOMINATOR'S STATEMENT OF SIGNIFICANCE**

The nominator has indicated that a small portion of the subject land parcel (OPA Account 046S060042) with the structures located at 3143 West Passyunk Avenue should be included in the designation of the larger former Point Breeze Gas Works as a site "significant to the City, pursuant to the criteria of 14-1004(1) and by definition "important to the education, culture, traditions, and economic values of the City." Specifically, they say that the structures present on the southern portion of this parcel meet Criteria 14-1004(1)(a), 14-1004(1)(c), 14-1004(1)(d), 14-1004(1)(e), and 14-1004(1)(j). To meet Criterion 14-1004(1)(a), a building "has significant character, interest or value as part of the development, heritage or cultural characteristics of the City, Commonwealth or Nation or is associated with the life of a person significant in the past." To meet Criterion 14-1004(1)(c), a building must "reflect the environment in an era characterized by distinctive architectural style." To meet Criterion 14-1004(1)(d), a building must embody "distinguishing characteristics of an architectural style or engineering specimen." To meet Criterion 14-1004(1)(e), a building must "be the work of a designer, architect, landscape architect or designer, or engineer whose work has significantly influenced the historical, architectural, economic, social, or cultural development of the City, Commonwealth, or Nation." To meet Criterion 14-1004(1)(j), a building "exemplifies the cultural, political, economic, social, or historical heritage of the community." The proposed period of significance for the 3143 W. Passyunk property is 1855-1899.

## **NOMINATED STRUCTURES WITHIN THE 3143 WEST PASSYUNK PARCEL**

The nomination asserts that the following structures extant on the 3143 West Passyunk Avenue parcel warrant designation for their association with the Point Breeze Gas Works:

The Wharf, which includes:

- Retaining Walls
- The Kilns
- Access Road (asphalt-paved)
- Pump House

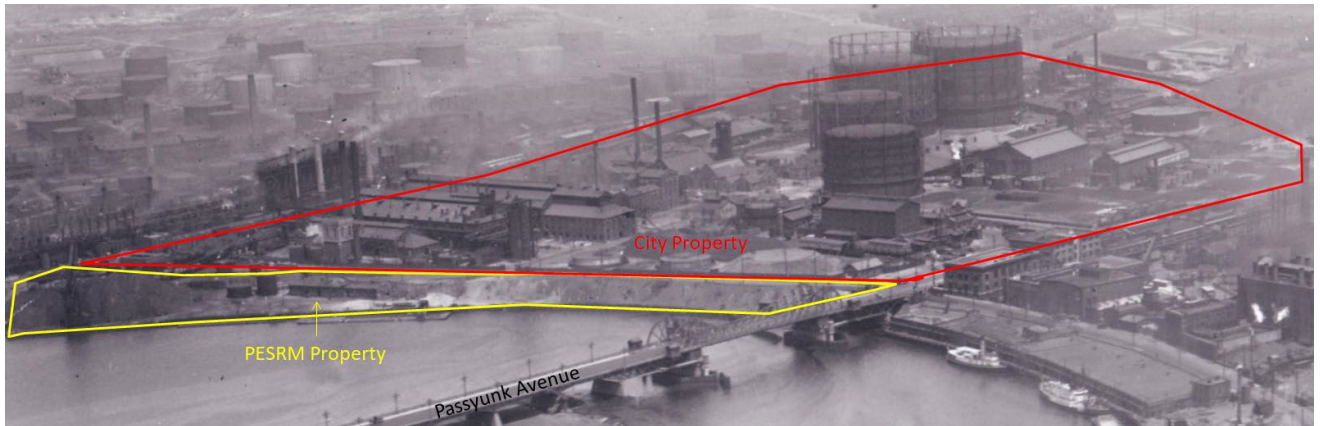
The nomination asserts that the Wharf was a functioning portion of the Point Breeze Gas Works since dating to 1851, and that the associated resources were constructed between 1855 and 1899. The portion of the 3143 West Passyunk Avenue parcel that is included within this nomination also contains a modern Philadelphia Fire Department building, parking lot, and dock though these are not outlined as contributing features.



## Overall Point Breeze Gas Works Site (City Property)

The Wharf makes up a small portion of the overall Point Breeze Gas Works complex as it appeared during the proposed period of significance as illustrated on the aerial photograph below. During the proposed period of significance, the larger Gas Works complex was populated with over 20 buildings, including large stone structures. These structures were generally located on the current City Property (3101 W. Passyunk), not the subject resource (PESRM Property).

As illustrated on the current aerial photo, it is clear that much of the building stock, including the Coal Shed, Coal House and Retort Houses, which were the most massive structures of the site and vital to the Gas Works operations, are no longer extant and a majority of the overall site now consists of vacant land and modern structures. Little historic fabric remains on the site. Overall, while a number of smaller buildings exist, the overall site no longer conveys the feeling of the Gas Works complex as it would have been experienced during the proposed period of significance outlined in the nomination.



1926 - Dallin Aerial Surveys Collection, Hagley Library: Point Breeze Gas Works site highlighted in red.



2020 – Google Earth Aerial Image: Point Breeze Gas Works site highlighted in red. Majority of site previously raised and little remains from the period of significance.

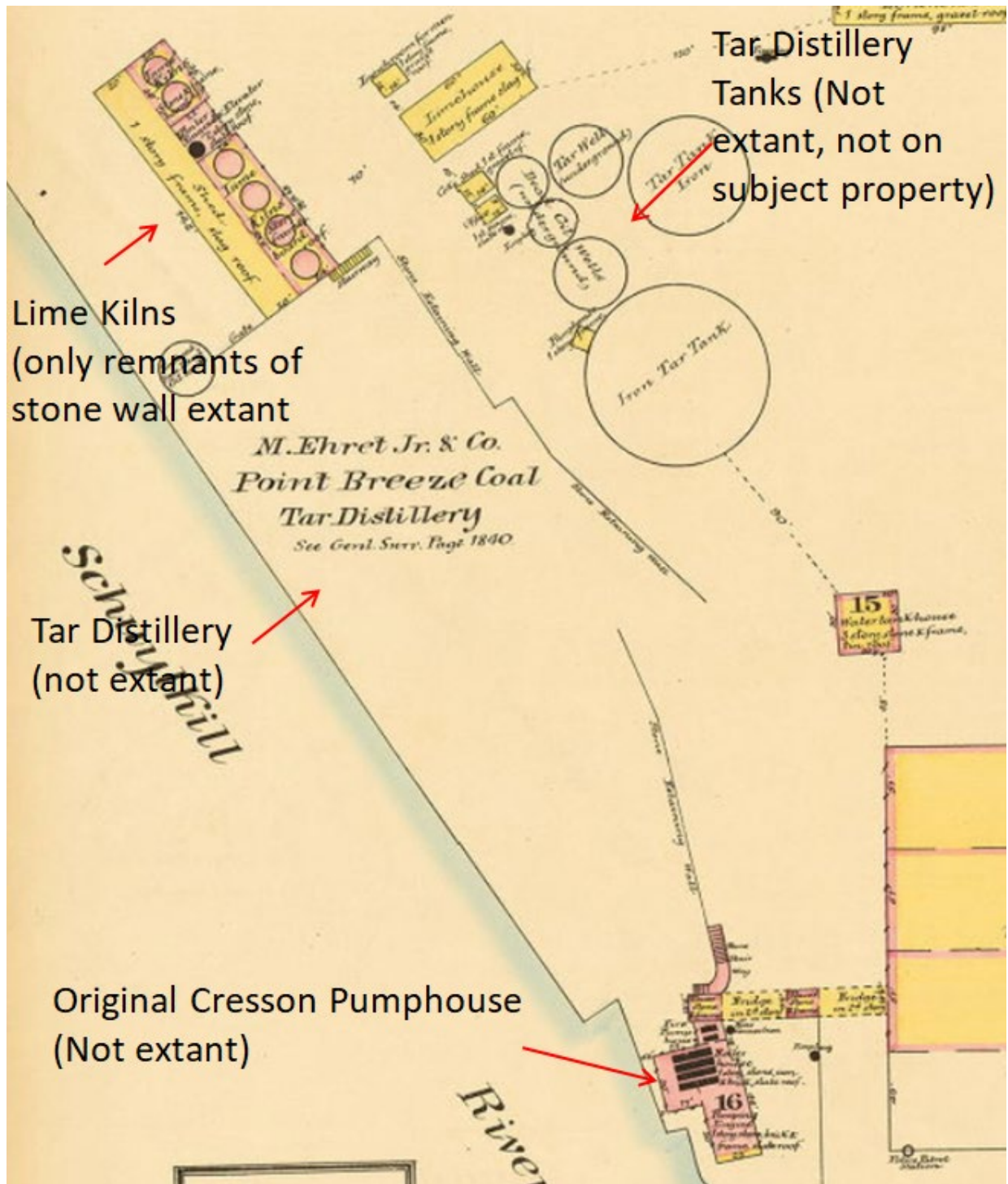
## **Subject Property (3143 W. Passyunk Ave., PESRM)**

The subject property, 3143 W. Passyunk Ave., abuts the Schuylkill River and represents only the westernmost edge of the former Point Breeze Gas Works property. While this section was formerly part of the Gas Works property, the subject site was sold to the adjacent petroleum refineries in the mid-20<sup>th</sup> century and has been transformed with the addition of significant refinery infrastructure which dominates the site. This piece of the property is located at a lower elevation, fronting the river, with the remainder of the site located approximately 30' above grade. The Wharf contains the four structures outlined in the nomination as contributing. A portion of the subject property is located above the Wharf, on level with the remainder of the site.

Historically, the Wharf was utilized for the unloading of coal barges, generally floated down the Schuylkill River. The coal would be unloaded at the Wharf, and then transported to the coal sheds and retort houses for processing into gas. The Wharf, as it appears today, is separated from the remainder of the Gas Works site by a stone Retaining Wall and associated asphalt-paved Access Road that was constructed c. 1890. Prior to its construction, it appears that there was a stone retaining wall though this was not illustrated until the 1894 Hexamer atlas. At the south end of the Wharf, there was a grand stone Pump House designed by Chief Engineer of the Gas Works, John C. Cresson as illustrated in the 1888 and 1894 Hexamer atlases. This Pump House, constructed prior to 1876, was demolished and replaced with the extant, utilitarian brick Pump House c. 1899. The north end of the Wharf was improved in the mid-late 19<sup>th</sup> century with a stone and brick Lime Kiln that was enclosed by a wood-framed building. The central portion of the Wharf was utilized for unloading and storage of coal prior to it being transported to the coal storage sheds within the main Gas Works site, as well as storage of Oyster Shells for burning in the Lime Kiln. By 1884, the central portion of the Wharf was utilized by the Point Breeze Coal Tar Distillery operated by M. Ehret, Jr., & Co. Located between the Lime Kiln and the coal/oyster storage area, the Distillery consisted of multiple buildings and tanks on the Wharf, as well as five large oil and tar storage tanks above on the main grade of the property. No remnants of the Distillery remain today, and the property is now occupied by the mid-century Philadelphia Fireboat Station, a gravel parking lot and overgrown, unimproved land.

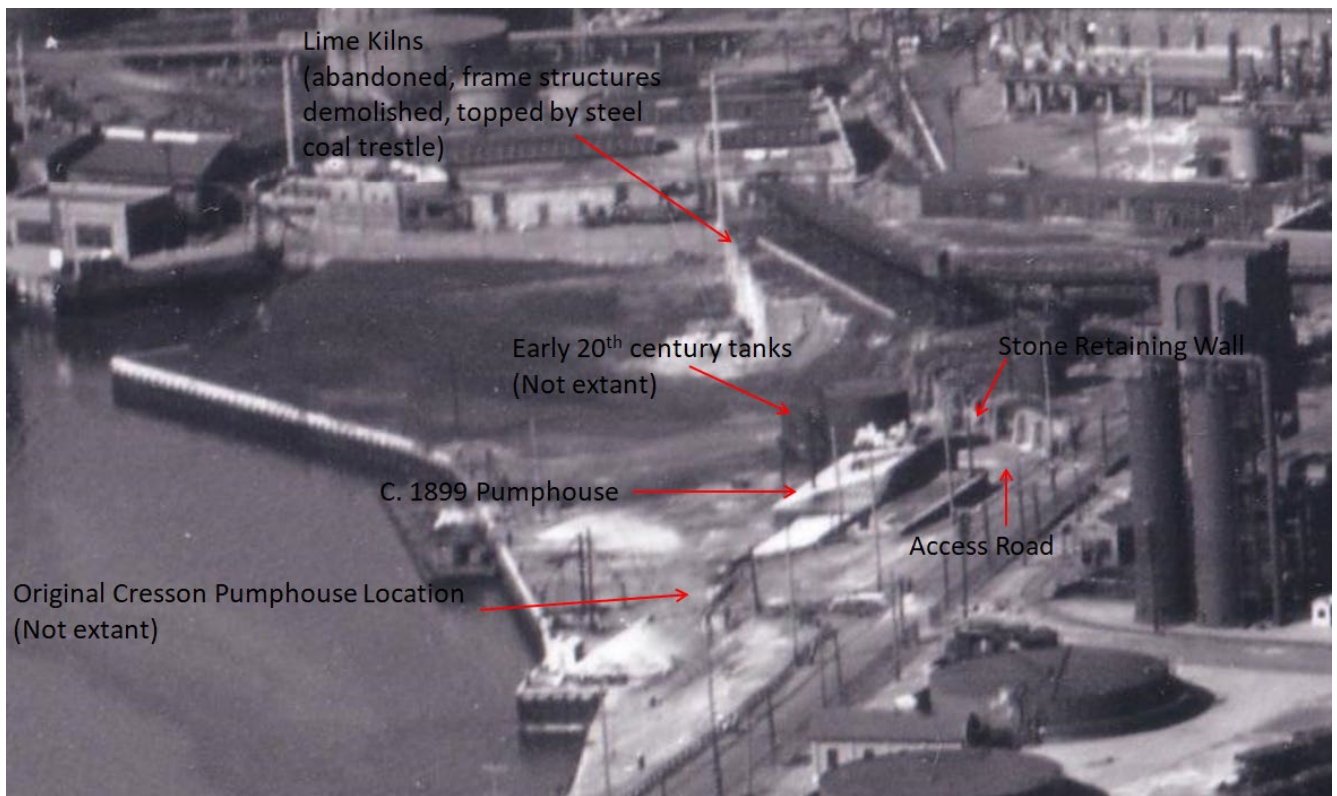
The subject property was significantly transformed over the late 19<sup>th</sup> and early 20<sup>th</sup> centuries as the spatial requirements of the Gas Works, as well as the adjacent petroleum refineries, changed the use of the site including the Wharf and the land above. The most significant building associated with the Gas Works, the historic Pump House (Resource 16 on the Hexamer atlases), was demolished and replaced with the extant, utilitarian Pump House in c. 1899. The Coal Tar Distillery was no longer extant by 1894 and all buildings appeared to have been removed. The Lime Kilns were abandoned in the early 20<sup>th</sup> century as gas processes changed and lime was imported by railcar. As illustrated in early 20<sup>th</sup> century aerial photographs, the buildings associated with the Lime Kilns were demolished and the site was fully occupied with coal storage, the Kilns buried and nearly unrecognizable beneath the coal piles. Further changes to the subject site occurred during the mid-20<sup>th</sup> century, with the construction of the extant Fire Station and as closure of the Gas Works coal processing facilities by 1960. With this portion of the property no longer utilized by the Gas Works, only remnants of the Lime Kiln stone wall remained and were left in a state of disrepair. Modern piping, connecting the adjacent petroleum refineries,

were built across the subject property, including around and above the c. 1899 Pump House, and a modern CMU building was constructed between the Pump House and river. The subject property, specifically the Wharf, bears little resemblance to its appearance during the period of significance, with significant demolition, construction of massive amounts of refinery piping and equipment and abandonment of the entire north portion of the site including the remnants of the Lime Kilns.



1888 Hexamer Atlas – 3143 W. Passyunk: Wharf intact with original Cresson Pump House, Ehret Tar Distillery and associated tanks, intact Lime Kiln (Resource 4b) with associated buildings.





1934 - Dallin Aerial Surveys Collection, Hagley Library – 3143 W. Passyunk: Annotated Site Features. Site significantly altered from proposed period of significance.



2020 – Current Photo from Passyunk Bridge – 3143 W. Passyunk: Annotated Site Features. Site significantly altered from proposed period of significance. Nominated resources concealed and not visible.



## Retaining Walls

While the 1888 Hexamer Atlas indicates that there were stone retaining walls present, they are not illustrated until the 1894 Hexamer Atlas. These walls do not date to Cresson, as he had left the Gas Works in 1876, and are typical, buttressed stone retaining walls. While the Retaining Walls remain generally intact, they are nearly completely concealed from view by the petroleum refinery piping. Although constructed by the Gas Works, these are a utilitarian site feature and do not have significance specifically associated with the nominated resource.



2020 Photo, South Stone Retaining Wall, Looking Northeast at c. 1899 Pump House



2020 Photo, North Retaining Wall, Looking West



## **The Kilns (Lime Kilns)**

The Lime Kilns were utilized to convert oyster shells into lime which was utilized in the coal gasification process. The lime was utilized to filter the coal gas. The Lime Kilns were operated during the mid-late 19<sup>th</sup> century but were abandoned by 1899 as illustrated in the enclosed historical photograph. During the nominated period of significance, the resource consisted of six stone and brick kilns and associated frame buildings both above and at the Wharf. Upon abandonment c. 1899, the associated frame buildings were demolished and the kilns infilled, with only the stone face remaining. As this area was then converted for use as a coal storage and processing yard, a steel crane and coal trestle were constructed atop the ruins of the Kilns. By 1960, the Gas Works coal gasification facility was shuttered and the site associated with the former Lime Kilns was abandoned. Since that time, the ruins have become overgrown with significant structural deterioration of the stone wall and the infill atop which has collapsed in areas. The stone wall has also collapsed in areas, and many areas are failing as large trees have grown up through the stone. Generally not visible due to the significant overgrowth of the area, the Lime Kilns remain as only a relic and do not retain their appearance from during the nominator's recommended period of significance.



**2020 Photo, Lime Kilns, South End, Looking east**





**2020 Photo, Lime Kilns, North End, Looking east**



**2020 Photo, Lime Kilns, Detail of Collapsing Stone Wall and Tree Growth**





**2020 Photo, Lime Kilns, Detail of Collapsed Stone Wall and Concrete Topping**



**2020 Photo, Lime Kilns, Area above Kilns is now paved over with concrete, no remnants of Lime Kiln structures.**



### **Access Road (Asphalt-Paved)**

While the 1888 Hexamer Atlas indicates that there were stone retaining walls present, and a gap that likely would have been an access road down to the Wharf, the Access Road is not illustrated until the 1894 Hexamer Atlas. The access wall is directly associated with the flanking retaining walls, which do not date to Cresson, as he had left the Gas Works in 1876. While the Access Road remains, it is paved with asphalt and is a utilitarian access road, simply a ramped passage to provide access between the overall Gas Works site with the Wharf. The access road is not visible from any public rights of way and is nearly completely concealed from view by the petroleum refinery piping, modern fencing and construction. Although constructed by the Gas Works, the Access Road is a utilitarian site feature and does not have significance specifically associated with the nominated resource.



**2020 Photo, Access Road, Looking North (Note: Modern, utilitarian asphalt paving)**

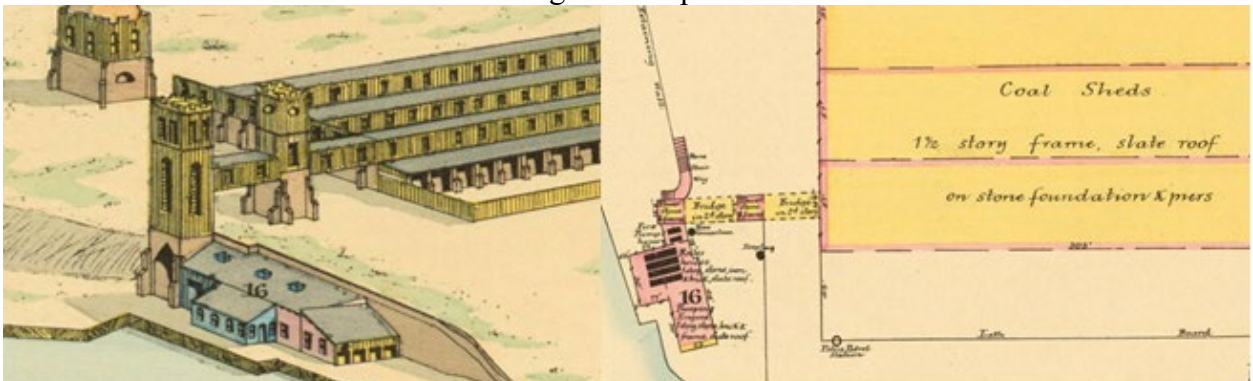


2020 Photo, Access Road to left, Looking North (Note: Significant modern refinery infrastructure)

## Pump House

As outlined in the draft nomination, the current Pump House was constructed on the Wharf in c. 1899. The current Pump House replaced the original Cresson-designed stone Pump House which had an ornamental bridge structure that provided access up to the Coal Sheds.

The 1888 Hexamer Atlas illustrates the original Pump House that is not extant:



1894 Hexamer Atlas – Original Pump House (Building 16, not extant)

After reconstruction of the stone retaining walls c. 1890, the original Pump House was demolished and replaced with the current Pump House c. 1899. The current Pump House also has undergone two more recent additions, one brick addition and one concrete



addition. The current Pump House is a utilitarian red brick structure with corrugated metal roofing and arched wood windows. It was constructed after the passing of John Cresson and while it was constructed by and operated as part of the overall Gas Works complex, is not specifically associated with the gasification process and was utilized to pump water from the river. The Pump House remained functional through the 20<sup>th</sup> century but is currently abandoned. During the mid-century period, the Wharf, and specifically, the property around the Pump House, were abandoned by the Gas Works as it shut down the gasification plant, and the subject property was sold to the adjacent petroleum refineries. This area became a right-of-way for refinery piping and equipment, which spans across the site. Numerous large-scale pipe installations are located directly overhead and around the current Pump House and it is not readily visible from any public rights-of-way. New construction related to the refineries was constructed between the Pump House and Access Road, with a CMU building constructed directly to the west of the Pump House. While the Pump House generally remains intact, the refinery piping and infrastructure has dramatically altered the site, setting and appearance of the resource and it no longer retains its appearance from the Nominator's proposed period of significance for the 3143 W. Passyunk parcel.



**2020 Photo, Wharf, Looking north towards Pump House. Not visible due to Refinery infrastructure and modern CMU building.**





**2020 Photo, Access Road, Looking north at Pump House. Pump House consumed by petroleum refinery piping and structure.**



**2020 Photo, Passyunk Bridge, Looking north at Pump House. Pump House consumed by petroleum refinery piping and structure. As such, not visible from the public right-of-way.**

## EVALUATION OF PHYSICAL INTEGRITY

As previously documented in this report, the site retains little physical integrity dating to the period of significance. Implicit in the designation criteria is the necessity that the structures proposed for designation to convey the appearance for which they have obtained significance and that there is a physical completeness of the designated property. A close look at the historic maps and photographs compared with current photographs of both the subject property and the City Property make it plainly obvious that little physical fabric remains from the period of significance. While individual buildings may retain physical integrity, the full Gas Works site retains little resemblance to the period of significance, when the entire site was populated with buildings and structures that were essential to the function of the site. The subject property, which is separated from the City Property by a paved road and security fencing, no longer has a physical connection to the overall Gas Works proper. Most significantly, within the City Property, the Coal Sheds and Retort Houses, of which the Gas Works could not have functioned without, are not extant.

Overall, the site no longer conveys the physical characteristics which defined the Gas Works during the period of significance. Specific to the subject property, the remaining structures have no physical connection to the overall Gas Works site and survive in an altered condition due to significant physical deterioration and installation of significant above-ground infrastructure by the adjacent petroleum refineries. As such, the structures on site no longer convey their feeling or appearance as would have been present during the proposed period of significance.

## EVALUATION OF DESIGNATION CRITERIA

The structures present on the 3143 West Passyunk parcel are being nominated under the following criteria:

Retaining Walls	A, C, D, E, J
The Kilns	A, C, D, E, J
Access Road	C, D
Pump House	C, D

The criterion will be discussed below as it relates to each structure.

### Criterion A:

To designate a property under Criterion 14-1004(1)(a), a building must have “significant character, interest or value as part of the development, heritage or cultural characteristics of the City, Commonwealth or Nation or is associated with the life of a person significant in the past.”

The justification under Criterion A is that the Retaining Walls and The Kilns are associated with the development of the Point Breeze Gas Works during the given period of significance from 1851-1870.

The designation criteria inherently require a notable degree of integrity and authenticity. By using the word “association,” criterion A specifically establishes a historic material baseline required in any evaluation. Association is a tangible and measurable quality. The designation code does not define what is meant by “association,” but the National Register guidelines provided by the National Park Service provide accepted professional standards. As detailed in National Register Bulletin 15, “Association is the direct link between an important historical event or person and a historic property. A property retains association if it is the place where the activity occurred and is sufficiently intact to convey the relationship to an observer. Like feeling, association requires the presence of physical features that convey a property’s historic character.” Simply put, association concerns what materials and qualities from the Point Breeze Gas Works era are visible and expressed today. A contemporary observer should recognize the structures today for their historic use.

The exact appearance of the two structures during the period of significance for Criterion A (1851-1870) is unknown. It is known is that The Kilns were originally associated with several other structures that are no longer extant, and that the Kilns themselves survive in ruinous condition with little resemblance to that during the period of significance. The 1888 Hexamer General Survey of the Point Breeze Gas Works shows that the Kilns were originally housed in a stone and wood-framed structure, which also featured a boiler and elevator (housed in a two-story stone structure) and were part of a larger lime-production complex on site. The Kilns were functionally linked to the adjacent Limehouse and Coke Shed that are shown on the map, neither of which are extant today. Further, the Kilns are encompassed by overgrown land and have no physical association with the remainder of the Gas Works site.

The Retaining Walls are first visible on the 1894 Hexamer General Survey of the Point Breeze Gas Works and are denoted as “stone retaining wall.” As such, it appears the extant Retaining Walls were constructed after the period of significance for this criterion. Today, the Retaining Walls are a small and undistinguished remnant of the larger complex and have been visually impacted by the surrounding site changes, specifically the significant post-period of significance construction undertaken by the petroleum refineries; most notably the significant amount of piping and new construction. While they do read as retaining walls, the changed to surrounding environment does not convey the purpose of the walls or their association with the Gas Works.

Today, the Retaining Walls and Kilns at 3143 West Passyunk do not convey their historic use as structures associated with the development of a 19<sup>th</sup> century gas works complex, and on their own do not embody the heritage of the Point Breeze Gas Works. Their original roles as part of the Gas Works would not be recognizable to a contemporary observer, limiting their authenticity as a cultural resource.

Criterion A is not met for either structure as nominated.

### **Criterion C and D:**

To designate a property under Criterion 14-1004(1)(c), a resource must “reflect the environment in an era characterized by a distinctive architectural style,” and to designate a property under Criterion 14-1004(1)(d), a building must “embody distinguishing



characteristics of an architectural style or engineering specimen.” The justification given by the nomination for Criteria C and D is that the Retaining Walls, The Kilns, Access Road (asphalt-paved), and Pump House represent a manufacturing and public works that was executed in the Gothic Revival style, between 1851 and 1859, with resources added in 1899. That said, unlike the other potential resources the nomination justifies for designated under this criterion, there is no specific discussion of the four structures located within the subject property and no specific case is made that these four structures, in fact, are significant under Criterion C and D.

The Gothic Revival style was part of the larger mid-19<sup>th</sup> century romantic movement in architecture, drawing inspiration from medieval architectural features and designs. While popular between 1830 and 1860, the forms of the Gothic Revival style continued to be used in the late 19<sup>th</sup> and early 20<sup>th</sup> century, often in public buildings. Per the Pennsylvania Architectural Field Guide, the Gothic Revival style has the following identifiable features: pointed arches as decorative element and window shape, front facing gables with decorative trim, porches with turned posts or columns, a steeply pitched roof, finials or crossbracing on gables, decorative crowns over windows and doors, and castle-like towers with parapets. The nomination submitted for the Point Breeze Gas Works highlights the complex’s use of stone construction and buttresses as evidence of the Gothic Revival style. Examples of contemporary public buildings that feature the Gothic Revival style are the Montgomery County Jail (left) and the St. John Episcopal Church (right).



**Examples of actual Gothic Revival style: Montgomery County Jail/St. John Episcopal Church**

The nomination also references the Jacobean Revival style for some of the later buildings in the complex. The Jacobean Revival style was a revival of architectural forms from the Jacobean period of the 17<sup>th</sup> century, featuring curved gables, elaborate brick chimneys, and mullioned and transomed windows. The Jacobean Revival is often categorized within the overarching Tudor Revival style that was popular between 1890 and 1920.

The nomination posits that the Retaining Walls should be considered Gothic Revival due to the presence of buttresses and stone coping in their construction that is keeping with the overall design of the Point Breeze complex. While the use of the buttress was a characteristic of the original Gothic architectural style, and was often featured in larger Gothic Revival buildings, the buttresses utilized by the Retaining Walls are much more driven by function rather than form, indeed, the retaining wall adjacent to the Access Road is a flush stone wall without buttressing. The use of stone is also not by itself a

characteristic of Gothic Revival, as masonry construction was favored by numerous architectural styles of the 19<sup>th</sup> century. Finally, having been constructed between 1888 and 1894, the Retaining Walls are simple utilitarian structures of a common design in Philadelphia at the time, and having been constructed well after the passing of John C. Cresson, are not architecturally significant.

The nomination does not elaborate on the architectural style of the other three structures, nor does it explain the rationale for nominating them under Criteria C and D. The Kilns have no visible architectural style and survive in a collapsed, ruinous condition. They are constructed of different kinds of stones and were built into the incline that was present on the site. Their original overarching structure, as visible on historic maps, does not appear to be of the Gothic Revival style. The 1888 Hexamer General Survey of the Point Breeze Gas Works shows that the Kilns were originally in a stone and wood-framed structure, which also featured a boiler and elevator (housed in a two-story stone structure). Neither wood structure appears to show any characteristics of the Gothic Revival style nor were both utilitarian in character. Further, these structures are no longer extant.

The Access Road does not have a visible architectural style as it is a simple earthen ramp paved with modern asphalt, located between the previously discussed Retaining Walls. It cannot be characterized as Gothic Revival.

The Pump House does not contain any of the decorative features that characterize the Gothic Revival style as defined above. It is a single-story red-brick building featuring a dentiled cornice, round arch windows, and a low hipped roof. It can best be defined as a utilitarian red brick commercial building, more akin to a simple garage than a Gothic Style building. As it was constructed c. 1899, it has no relationship to John C. Cresson or his architectural design for which the original buildings, exemplified by the “Church Row,” are known.

It is important to note that Criterion 14-1004(1)(d) does state that a building must “embody distinguishing characteristics of an architectural style or **engineering specimen**,” (emphasis added). None of the four resources appear to demonstrate a larger significance for the field of engineering, as they are typical features found on an industrial complex of the time period.

Criteria C and D are not met for any of the four structures as nominated.

### **Criterion E:**

To designate a property under Criterion 14-1004(1)(e), a resource must “be the work of a designer, architect, landscape architect or designer, or engineer whose work has significantly influenced the historical, architectural, economic, social, or cultural development of the City, Commonwealth, or Nation.” The justification under Criterion E is that the Retaining Walls and The Kilns were built under the leadership of designer and engineer John Chapman Cresson. The nomination contends that Cresson oversaw the construction at the Point Breeze Gas Works from 1850 to 1854 and in 1859.

The nomination posits that the Retaining Walls were built over time as part of ongoing improvements to the overall site. References to the Wharf section of the Gas Works were

first made in 1851, so the nomination contends that the southernmost section of the Retaining Walls date to that period. However, the nomination goes on to say that “the larger portion of the retaining wall...were built between 1888 and 1894,” when the Access Road was constructed, well after the passing of Mr. Cresson in 1876. The basis for the earlier date does not appear sound, which would place the construction of the Retaining Walls largely outside of the period of significance that could be associated with John Chapman Cresson.

According to the nomination, the earliest reference to the Kilns is in an 1856 Philadelphia Gas Works report that describes their construction. The Kilns were then expanded in 1865 as part of a larger improvements plan for the Point Breeze Gas Works. These dates would place the Kilns outside of the period of significance that could be associated with John Chapman Cresson. Further, resources within the Gas Works associated with Cresson adopted the Gothic Revival style. The Kilns were a utilitarian structure with no clear association with Cresson in any historical documentation.

Criterion E is not met for either structure as nominated.

## **Criterion J**

Similarly to Criterion A, to designate a property under Criterion 14-1004(1)(j), a resource must “exemplify the cultural, political, economic, social, or historical heritage of the community.”

The justification under Criterion J is that the Retaining Walls and The Kilns exemplify the economic, social, and historical heritage of the community as a “significant and rare surviving municipal gas works of the mid-nineteenth century that represents the development of manufactured gas for illumination, which was first achieved for lighting streets and buildings through gas lighting. Being among the oldest of these structures to exist the United States, Pennsylvania, and Philadelphia, Resource Nos. 1–8 represent a critical and significant period of economic, social, and technological development, as well as the greater achievements in public works of the Victorian-era.”

The justification under Criterion J is that the Retaining Walls and The Kilns are associated with the development of the Point Breeze Gas Works during the given period of significance from 1851-1870.

Similar to the discussion under Criterion A, the use of the word “exemplify” in the designation code establishes a requirement for authenticity. To exemplify, the building must be illustrative of the historic period for which designation is sought. The designation code does not define “exemplify” nor are there stated definitions in National Register guidelines. Nonetheless, implicit in the use of the word is the notion that the resource appear today as it did during the historic period. Again, it would need to be recognizable to a contemporary observer.

Similar to the discussion under Criterion A, the appearance of the two structures during the 19<sup>th</sup> century period of the Point Breeze Gas Works is not known. Further, much of the Retaining Wall structure was constructed c. 1890, outside the stated period of significance.



These structures are not illustrative of the history of the Point Breeze Gas Works.

Criterion J is not met for either structure as nominated.

## **SUMMARY AND CONCLUSION**

The nomination proposes that the structures located on the 3143 West Passyunk Avenue (PESRM) property be designated under criteria A, C, D, E, and J for their association with the Point Breeze Gas Works. As previously illustrated, these structures are only minimally visible from the public right-of-way and are not visibly distinguishable due to significant modern construction and overgrowth.

While the City's designation criteria does not have specific "integrity" tests, Criterion A relates to association, and Criterion J speaks to a property's ability to exemplify the association. Integral to both is the notion that the property needs to be sufficiently intact to be recognizable to a contemporary observer. In the case of 3143 West Passyunk, the structures present have undergone substantial and comprehensive changes that have largely removed their larger historic setting and context.

The nomination contends that the structure be designated under Criteria C and D, as they represent a public works that was executed in the Gothic Revival style, between 1851 and 1859, with several later resources designed in Jacobean Revival style. None of the four resources exemplify the Gothic Revival style, nor do they embody characteristics of a distinguishing engineering specimen.

The justification for Criterion E is that the Retaining Walls and The Kilns were built under the leadership of designer and engineer John Chapman Cresson, who oversaw the construction at the Point Breeze Gas Works from 1850 to 1854 and site improvements in 1859. However, based on the information available, it appears that these two structures were likely constructed outside of the period of significance associated with Cresson or not identifiable as Cresson-designed.

The larger site, as well as the subject property specifically, retains little physical integrity, with much of the site having been demolished or significantly altered since the period of significance. As illustrated in the historical imagery, the site contains little of the historic fabric that was required for the production of municipal gas. Today, the overall site (City Property) is a generally open, undeveloped land with buildings sporadically located throughout. The structures located within the subject property do not retain physical integrity and would not be recognizable from the appearance during the proposed period of significance.

Based on this analysis, Heritage Consulting Group does not believe that the nominated structures located within the 3143 W. Passyunk parcel meet the Criteria for listing in the Philadelphia Register of Historic Places.

## HERITAGE CONSULTING GROUP

Heritage is a national firm that assists the owners and developers of older and historic buildings in understanding the relative significance of their resources, navigating the regulatory redevelopment processes, and securing financial opportunities from federal, state and local incentives. The firm is staffed by seasoned historic preservation professionals who meet the Professional Qualifications Standards under the category of Historic Architecture and Architectural History in the Secretary of the Interior's Standards and Guidelines, Code of Federal Regulations, 36 CFR Part 61.

The firm was founded in 1982 and since that time, Heritage has established a reputation for being a strident advocate for their clients, with a facile understanding of the rules and regulations relating to older and historic buildings, and for effectively navigating the agencies responsible for implementing preservation programs. Increasingly, Heritage has established a niche for "out-of-the-box" projects where preservation program guidelines apply, yet are not clear in their application. This is most apparent in the application of sustainable development principles to older buildings.

Heritage has completed projects across the country, totaling billions in construction. The firm routinely provides due diligence analysis, detailing the history, integrity and historic parameters for a site. In its 38 years, Heritage has prepared hundreds of National Register Nominations, arguably more than any other entity in the country. Working in the private sector, the firm has helped developers secure federal, state and local financial incentives. Heritage also handles surveys, both reconnaissance and intensive. The firm completes building documentation in anticipation of demolition; these reports are typically done to the standards of the Historic American Building Survey. Finally, the firm provides guidance for public entities in understanding and navigating relevant historic preservation laws.

Heritage's client base is national and broad and includes private developers, not-for-profit organizations, colleges and universities, as well as federal, state and local governments.

*Heritage does not provide accounting services, tax advice, or legal advice.*

*You are urged to review any accounting, tax or legal matters which may be involved in the historic consulting advice provided by Heritage with an appropriate accountant or lawyer. Additionally, Heritage is not responsible for incorrect facts provided to Heritage by the client or its architect, design professionals, contractor, or consultant.*