NPS Form 10-900
(Oct. 1990)

OMB No. 10024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name: Maryland White Lead Works, B-1013

other names: N/A

2. Location

street & number: 921-979 East Fort Avenue ☐ not for publication

city or town: Baltimore ☐ vicinity

state: Maryland code: MD county: Baltimore City code: 510 zip code: 21230

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this ☑ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☑ meets ☐ does not meet the National Register criteria. I recommend that this property be considered significant ☐ nationally ☐ statewide ☑ locally. (☐ See continuation sheet for additional comments).

Signature of certifying official/Title — Date: 11-12-02

State or Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. (☐ See continuation sheet for additional comments).

Signature of certifying official/Title — Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby, certify that this property is:

☐ entered in the National Register.
☐ See continuation sheet.
☐ determined eligible for the National Register.
☐ See continuation sheet.
☐ Determined not eligible for the National Register.
☐ removed from the National Register.
☐ other (explain): _____

Signature of the Keeper — Date of Action

5. Classification

Ownership of Property (Check as many boxes as apply)

- ☒ private
- ☐ public-local
- ☐ public-State
- ☐ public-Federal

Category of Property (Check only one box)

- ☒ building(s)
- ☐ district
- ☐ site
- ☐ structure
- ☐ object

Number of Resources within Property (Do not include previously listed resources in the count)

Contributing	Noncontributing	
5	4	buildings
0	0	sites
0	0	structures
0	0	objects
5	4	Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing)

N/A

number of contributing resources previously listed in the National Register

N/A

6. Function or Use

Historic Functions (Enter categories from instructions)

INDUSTRY: lead works
INDUSTRY: paper bag manufactory

Current Functions (Enter categories from instructions)

COMMERCE/TRADE: bulk mailing
VACANT/NOT IN USE

7. Description

Architectural Classification (Enter categories from instructions)

OTHER: lead works

Materials (Enter categories from instructions)

foundation BRICK; WOOD; CONCRETE
walls BRICK; WOOD; METAL
roof ASPHALT
other N/A

Narrative Description
(Describe the historic and current condition of the property on one or more continuation sheets)

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- ☒ **A** Property is associated with events that have made a significant contribution to the broad pattern of our history.
- ☐ **B** Property associated with the lives of persons significant in our past.
- ☐ **C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- ☐ **D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply)

Property is:

- ☐ **A** owned by a religious institution or used for religious purposes.
- ☐ **B** removed from its original location.
- ☐ **C** a birthplace or grave.
- ☐ **D** a cemetery.
- ☐ **E** a reconstructed building, object, or structure.
- ☐ **F** a commemorative property.
- ☐ **G** less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance
(Explain the significance of the property on one or more continuation sheets)

Area of Significance
(Enter categories from instructions)

INDUSTRY

Period of Significance

1867 -1896

Significant Dates

1867; 1896

Significant Person
(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

N/A

9. Major Bibliographical References

Bibliography
(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets)

Previous documentation on files (NPS):

- ☐ preliminary determination of individual listing (36 CFR 67) has been requested
- ☐ previously listed in the National Register
- ☐ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ recorded by Historic American Buildings Survey # _____
- ☐ recorded by Historic American Engineering Record # _____

Primary location of additional data:

- ☒ State Historic Preservation Office
- ☐ Other State agency
- ☐ Federal agency
- ☐ Local government
- ☐ University
- ☒ Other

Name of repository:
Baltimore Museum of Industry, Research Center

Maryland White Lead Works (B-1013)
Name of Property

Baltimore City, Maryland
County and State

10. Geographical Data

Acreage of Property 4 acres (approx.)

UTM References
(Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing		Zone	Easting	Northing
1	18	362890	4348280	3			
2				4			

☐ See continuation sheet

Verbal Boundary Description
(Describe the boundaries of the property on a continuation sheet)

Boundary Justification
(Explain why the boundaries were selected on a continuation sheet)

11. Form Prepared By

name/title Carolyn Eastman, Jennifer Goold & Betty Bird

Organization Betty Bird & Associates date October 7, 2001

street & number 2607 24th Street NW, Suite 3 telephone 202-588-9033

city or town Washington, DC state N/A zip code 20008

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional Items
(Check with the SHPO or FPO for any additional items)

Property Owner (Long-term Lessee)

(Complete this item at the request of SHPO or FPO)

name Fort Avenue Properties, L.L.C.

street & number 1040 Hull Street telephone 443-573-4356

city or town Baltimore state MD zip code 21230

Paperwork Reduction Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et. seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

SUMMARY DESCRIPTION

The Maryland White Lead Works (MWLW), constructed ca. 1867, is a U-shaped industrial complex that survives to represent its association with Baltimore's white lead paint industry leader. The industrial quadrangle consists of 9 interconnected brick and wood-frame buildings that vary in height from 1 to 4 stories surrounding a yard. The buildings in the complex include the powerhouse, two production sheds, a manufactory loft with an office wing, and a service building, as well as four non-contributing buildings at the rear of the property. (See Attachment D.) An 1873 engraving of the site demonstrates that the complex is largely intact. (See Attachment G.) The Maryland White Lead Company (MWLC) occupied the site from 1867 to 1896. Despite changes to the complex, including demolition of two buildings at the rear of the site and alterations to the remaining structures, its association with the Maryland White Lead Company remains clearly legible.

ARCHITECTURAL DESCRIPTION

The Maryland White Lead Works, constructed in 1867 and altered between 1890 and 1951, occupies a rectangular 4-acre site at the western edge of Locust Point, which is the industrial port of South Baltimore. The primary (north) facade of the complex fronts Fort Avenue, a principal street that passes through South Baltimore to Locust Point and forms the northern boundary for the site. The eastern and southern boundary for the site are defined by Ludlow Street, a secondary road and a private roadway running between the MWLW property and the CSX railroad yards to the south. A ca. 1980s shopping center, Southside, backs up to the western boundary. The Northwest Branch of the Patapsco River at the mouth of Baltimore's Inner Harbor is visible less than a ¼ mile north of the property.

The Maryland White Lead Works is designed as an industrial quadrangle, with a series of connected 1- to 4-story brick buildings enclosing an open yard. (See Attachment D.) Individual buildings in the ca. 1867 U-shaped complex include the powerhouse, two production sheds, a manufactory loft with an office wing, and a service building. The powerhouse, comprised of the engine room, furnace room, and stack, was the nucleus of the complex and its essential power center. Production shed 1 contained four floors of grinding mills to pulverize the lead. Production shed 2 housed washing and dying rooms. The manufactory loft housed an oil mill on the 1st floor, mixing on the 2nd floor, and a storage space on the 3rd floor. Office space was located in a wing of the manufactory loft. The service building included a stable, a cooperage and a carpentry shop. Packaging was produced on site in the cooperage and carpentry shop. Product distribution began with horse drawn wagons housed on-site in the stable.[1]

Powerhouse

The powerhouse is a 3-bay, 1-story square brick building. This building, which is in fair condition, is divided in half; the furnace room is the southern room and the boiler and engine room is the northern room. The rooms are separated by a firewall. The boiler and engine room adjoins both production sheds to the north with passage between the buildings. The furnace room, which contains the base of the brick stack, has a hipped roof. The main drive shaft and boiler remain in the engine room, which has a gable roof. Notable features include the wide, arched openings, one of which is infilled with a concrete lintel and metal door, that allow vehicular access to each of the rooms from the yard. The building has a corbelled brick cornice, brick jack-arch lintels, and wood sills. It retains a multiple-pane wood window. The interior of

[1] 1880 and 1890 Sanborn maps.

the powerhouse has an exposed structural system. The powerhouse is an integral part of the Maryland White Lead Works and contributes to the significance of the resource.

Production shed 1

Production shed 1 is 3-bay by 8-bay, 3 ½ story, rectangular brick building. Situated adjacent to the powerhouse (south), production shed 2 (east), and the manufactory loft (north), it is accessible from the outside from the yard (west), and from the interiors of the powerhouse (south) and production shed 2 (east). A 2-story, 2-bay hyphen links the production shed and the powerhouse. This building, which is in fair condition, has a flat roof. It has a corbelled brick cornice, brick jack-arch lintels, and wood sills. Graduated window openings reflect vertically decreasing floor heights. Uniformly placed window openings optimize natural light in the interior spaces. Multiple-pane wood sash windows are visible behind plywood. Some window openings have been infilled with concrete block. The interior of production shed 1 is a large open plan space with an exposed structural system. The masonry structural system has floors carried on posts and beams. A graceful row of fluted cast-iron columns bisects each floor. Additional wooden posts have been added to increase load capacity. Production shed 1 is an integral part of the Maryland White Lead Works and contributes to the significance of the resource.

Production shed 2

Production shed 2 is a 2-story, 5-bay by 14-bay, rectangular brick building with a 1-bay brick addition. Situated adjacent to the powerhouse (south), production shed 1 (west), and the manufactory loft (west), it is accessible from the interior of each of these spaces and from the outside along Ludlow Street (east) and Fort Avenue (north). This building, which is in fair condition, has a gable roof topped by a monitor. It has a corbelled brick cornice, brick jack-arch lintels, and wood sills. Uniformly placed window openings optimize natural light in the interior spaces. Multiple-pane wood sash windows are visible behind plywood on the second floor. Replacement windows are typical on the first floor. The interior of production shed 2 is a large open plan space with an exposed structural system. The roof is carried on timber Pratt trusses with wrought iron hangers providing the top floor with an extraordinary clear span of over 50 feet. The floors below are supported on cast iron columns and timber beams, later reinforced with additional timber posts. Production shed 2 is an integral part of the Maryland White Lead Works and contributes to the significance of the resource.

Manufactory loft

The manufactory loft is a 3-story, 7-bay by 4-bay, brick building with a 2-story 4-bay wing to the west. The wing received a 6-bay addition to the west and a 3rd story addition, both constructed between 1914 and 1951. The manufactory loft is sited at the northern property line along Fort Avenue, west of production shed 2 and north of production shed 1. A sally port runs through the building, dividing the main loft from the wing on the first floor, enclosing a drive that runs from Fort Avenue to the interior yard. The manufactory loft and the wing are connected on the second and third floors, above the sally port. The loft building is accessible from the interior of production shed 2 (east) and from the outside along Fort Avenue (north) and from the yard (south). This building, in fair condition, has an asphalt gable roof. It has a corbelled brick cornice, brick jack-arch lintels, and wood sills. Uniformly placed window openings optimize natural light in the interior spaces. Multiple-light wood sash windows are visible behind plywood. Replacement windows are typical on the second floor of the wing. The 3rd story addition has 20th c. industrial steel-frame windows. The interior of the manufactory loft is a large open plan space with an exposed structural system. The roof is carried on timber Pratt trusses

with wrought iron hangers. The manufactory loft is an integral part of the Maryland White Lead Works and contributes to the significance of the resource.

Service building

The service building includes the stable, cooperage, and carpentry shop. It is sited south of the west wing of the manufactory loft, along the western property line. The stable is a 2-story, 3-bay brick building that adjoins the wing of the manufactory loft to the north and the cooperage to the south. It is accessible from the yard only, through a loading bay in its east wall. The cooperage is a 3-story, 6-bay brick building. The carpentry shop is a 2-story, 3-bay brick building. A 1-story brick hyphen links the cooperage and the carpentry shop. The cooperage and carpentry shop are accessible from the yard, through a wood-frame shed. The service building is in near ruinous condition. The roofs and portions of the interior structures of the buildings have collapsed and the cornices are crumbling. The exterior walls are primarily intact and the footprint of the building remains. Nevertheless, the service building maintains an important spatial relationship within the quadrangle and represents the shipping facet of the MLWC. The service building, although it is in near ruinous condition, helps establish the sense of time and place of the Maryland White Lead Works and contributes to the ignificance of the resource.

Maryland White Lead Works – Non-contributing buildings and alterations

The Maryland White Lead Company ceased business operations ca. 1896. After this date, the site was no longer used for its original purpose and the Columbia Paper Bag Company converted the complex for paper bag manufacturing. As is typical for industrial complexes with new uses, changes were made to the complex. The wing west of the manufacturing loft was expanded between 1914 and 1951 by a new addition that added 6 bays to the west and a 3rd story. This addition replaced the northern-most portion of the stable and a brick barrel shed. Sanborn maps show that three 1-story MWLW buildings were demolished. The large wood-frame corroding house was demolished by 1902, the small wood-frame corroding house was demolished by 1914, and the brick barrel shed was demolished by 1951. The fact that the corroding houses utilized wood-frame construction for a harsh chemical process may indicate that these buildings were relatively impermanent structures.

Four 1-story buildings were added to the site between 1890 and 1951. The additional buildings are sited to the rear of the complex.

Wood-frame warehouse 1

Between 1890 and 1902, a metal clad, wood-frame warehouse building with a gable roof was constructed east of the service building, in the yard. Because this warehouse was constructed after the MWLC abandoned the site, it does not contribute to the Maryland White Lead Works.

Wood-frame warehouse 2

Between 1902 and 1914, the Columbia Paper Bag Company constructed another metal clad, wood-frame warehouse south of the powerhouse. Because this building was constructed after the MWLC abandoned the site, it does not contribute to the Maryland White Lead Works.

Brick warehouse

Between 1902 and 1914 the Columbia Paper Bag Company added a brick warehouse and shipping house south of the service building and the wood-frame warehouse 1. Because this building was constructed after the MWLC abandoned the site, it does not contribute to the Maryland White Lead Works.

Wood-frame building

Between 1914 and 1951, a wood-frame building was added in the back, southeast, corner of the site. This building is in ruinous condition. Because this building was constructed after the MWLC abandoned the site, it does not contribute to the Maryland White Lead Works.

Integrity

Despite changes to the complex, the Maryland White Lead Works retains ample architectural fabric to convey its identity as an industrial complex associated with the Maryland White Lead Company. The MWLW retains integrity of location, setting, design, materials, feeling, and association. The location of the MWLW, at the gateway to Locust Point, and its setting adjacent to the harbor and rail lines, remain intact as physical evidence of MWLW's role as pioneer in the development of industrial South Baltimore. Comparison of the present appearance of the site with the 1873 engraving of the MWLW shows that the complex retains all of its original masonry buildings and its distinctive stack. The association of the complex with 19th century Baltimore's largest white lead manufacturer is clearly legible in plan of the complex. Moreover, the scale and form of the buildings, which were specifically designed for the requirements of the process of refining lead and producing white lead paints, is still evident. The structural systems and spaces in the individual buildings, as well as the massing of the buildings as a complex, including the pattern of window and door openings, and textures and colors of surface materials remain intact to reflect its historic function. These elements contribute to the feeling of the mid-19th c. industrial complex, rare in Baltimore.

SUMMARY STATEMENT OF SIGNIFICANCE

The Maryland White Lead Works, constructed in 1867, housed Baltimore's first and most substantial manufacturer of lead paints. Established by William T. Davison, the founder of Davison Chemical, the Maryland White Lead Works powered the growth of paint manufacture, a significant component of Baltimore's late 19th century industrial base. The concern was a pioneer in the development of Locust Point, which ultimately became one of Baltimore's premiere industrial districts. The Maryland White Lead Works meets National Register Criterion A because of its association with one of the most significant operations in Baltimore's important paint manufacturing industry. While other small industrial and retail concerns used the site largely for warehousing after the Maryland White Lead Company abandoned it in 1896, the complex is largely intact and still closely resembles an 1873 engraving depicting the site.

RESOURCE HISTORY AND HISTORIC CONTEXT

White lead production 1804-1867

Baltimore manufacturers began to process white lead in the 1860s, after Philadelphia manufacturers had dominated the field since the early 19th century. The Philadelphia firm of Samuel Wetherill & Son had initiated the manufacture of white lead in 1804 and were joined in the field by John Harrison in 1811.[2] Until the Civil War era, Baltimore served primarily as a redistribution site for Philadelphia manufacturers, who funneled more of their product to Baltimore distributors than to those in any other city. Not until the Civil War era did manufacturers in other industrial cities, including New York, Cleveland, Pittsburgh, and Baltimore, join them in the field.[3] During the Civil War era, new firms began to enter the field due in part to new methods of processing that made it easier to refine the lead into saleable form. These processes made the business much more lucrative and helped to spur a postwar boom in white lead manufacture throughout the country.

White lead had long been recognized as the superior basis for white paint, since its covering power is greater than that of most other white pigments.[4] Manufacturers processed white lead carbonate into white paint using a method that had originated in Holland during the 17th century, frequently called the "old Dutch process" in their advertisements. They ground the lead to a fine powder and refined it by mixing it with water and carbon dioxide; they repeated the process by re-grinding it until it was extremely fine.[5] It was then suspended in flaxseed or linseed oil and called "lead-in-oil." By mid-century this process underwent some revision as many new firms began to skip the lengthy drying process by submerging the wet lead directly in oil, which displaced the water.

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[2] John George Glover & Rudolph L. Lagai, *Development of American Industries*, (New York: Simmons Boardman, 1959), p.635; Miriam Hussey, *From Merchants to "Colourmen,"* (State College, PA: Pennsylvania University, 1956), pp. 3-10.

[3] Ibid, pp. 10-11.

"White lead," *Infoplease.com Encyclopedia*, http://infoplease.lycos.com/ce6/sci/a0852121.html. Other Baltimore manufacturers specialized in yellow or red paints by using chrome as the basis for the pigments; the chrome was drawn from nearby chrome deposits.

[5] John George Glover & Rudolph L. Lagai, *Development of American Industries*, (New York: Simmons Boardman, 1959), p. 636.

William T. Davison and the Maryland White Lead Company 1867-1896

The Maryland White Lead Company (MWLC), founded in 1867, was the first of several companies to manufacture white lead on a wholesale basis in Baltimore, and the first such business south of Philadelphia.[6] Its founding was spurred by a post-war industrial boom that brought a large number of new manufacturers to Locust Point. Locust Point had begun to develop in the 1850s, after the Baltimore & Ohio Railroad company received permission in 1845 to extend its railroad lines through the area to the water and to establish an ocean terminal.[7] With railroad lines in place and the city wharves only two blocks from Fort Avenue, manufacturers -- particularly chemical manufacturers -- began to arrive. The four-acre MWLW site pioneered the industrial boom on Locust Point with several other large businesses. (See Attachment F.) By 1880, the MWLW was flanked to the north by Chesapeake Chemical Works and to the west by the Calvert Chemical Works, each of which could easily transport their goods to the South, the West, and to other port cities.[8]

William T. Davison, an Irish chemist who had begun to build a fortune manufacturing sulfuric acid and fertilizers since his arrival in the city in 1832, founded the Maryland White Lead Company.[9] The MWLC was one of two new wholesale companies created during the 1860s by Davison, who was eager to supply his seven sons with lucrative sources of income.[10] His move from sulfuric acid to white lead production was a natural one in the 19th century; there had been a close association between the two manufactures among white lead pioneers in Philadelphia, and popular literature on manufacturing likewise commonly linked paints and chemicals.[11] Now, with three separate firms -- the Maryland White Lead Company producing paints and varnishes, the William T. Davison Company in Canton producing quinine, calomel, Epsom salts, and heavy chemicals, and the longstanding Davison, Symington & Co.[12] producing sulfuric acid -- Davison was well positioned to control a large share of the manufacture of chemicals in Baltimore.[13] In fact, Davison had early turned his sulfuric acid production to fit agricultural markets, incorporating it into fertilizer manufacture during the 1850s.[14] His additional investments (and those of some of the members of his boards of directors[15]) in railroads and guano companies further undergirded the companies' financial health.[16]

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[6] "Maryland White Lead Company" in *Industries of Maryland: A Descriptive Review*, (New York: Historical Publishing Company, 1882), p. 319 states that this was "the oldest establishment of its kind south of Philadelphia," though the city directory evidence suggests that the George H. King Company was founded at approximately the same time.

[7] Robert C. Keith, *Baltimore Harbor*, (Baltimore: The Johns Hopkins University Press, 1991), p. 69.

[8] 1880 Sanborn map.

[9] Chester F. Hockley, *Davison Chemical*, (New York: Newcomen Society, 1951), p. 9,12.

[10] Davison Chemical Company, *One Hundredth Anniversary, 1826-1926*, p. 10.

[11] John Harrison, the second producer of white lead (cited above), was the first American manufacturer of sulfuric acid, originating his business in 1792. For popular literature, see J. Thomas Scharf, *History of Baltimore City and County* (Philadelphia: Everts, 1881), p. 402.

[12] This company had originally been named Davison & Kettlewell; they renamed it after the two men parted in 1855.

[13] Chester F. Hockley, *Davison Chemical*, (New York: Newcomen Society, 1951), p. 13.

[14] Ibid., p.12.

[15] See biographical sketch of Charles Joseph Baker, a director of the MWLC, in Thomas Scharf, *History of Baltimore City and Country* (Philadelphia: Everts, 1881), p. 402.

[16] Chester F. Hockley, *Davison Chemical*, (New York: Newcomen Society, 1951), p.13.

Despite competition from several other Baltimore white lead companies, the Maryland White Lead Company remained the leading white lead concern during the late 19th century. A large-scale wholesale business, it was the only local paint manufacturer to be mentioned by name in J. Thomas Scharf's *History of Baltimore City and County* in 1881, which described the firm as "very large corroders."[17] The company had an auspicious beginning. In June 1867, shortly after the Fort Avenue complex was completed, Davison invited the press to come tour the plant. The flattering review that appeared in the Baltimore *Sun* reported that the company was already producing 2400 tons of first-class white lead.[18] An 1881 notice boasted that the complex was "built of brick in the most substantial manner" and that the company ranked alongside "the largest in the country."[19] The MWLC was on the leading edge of a widespread interest in white lead manufacture during the late 19th century, and it was able to take advantage of its fortunate position viz-a-viz shipping and railroad lines. Baltimoreans frequently boasted that the B&O Railroad made Baltimore a far more centrally-located city than any other on the Northeastern seaboard, allowing it to transport goods far more quickly to their destinations. Not surprisingly, notices of the MWLC's business indicate that it found most of its markets in the Northeast.[20]

The Maryland White Lead Works and production of white lead paints

The wealth of the Davison Company permitted it to construct an extensive series of buildings specifically designed to facilitate the process of refining white lead. The Maryland White Lead Works embody the vertical production process of mid-19th century industry. The stages of white lead production, manufacturing, and distribution required specific systems housed in adjacent yet distinct building components.

An 1873 advertisement for the Maryland White Lead Company depicts the complex. The advertisement published in *The Monumental City* shows that the complex was complete only six years after the lead works were established in Locust Point. (See Attachment G.) With the exception of the wooden corroding sheds at the rear of the complex, all the buildings shown in this image remain at the site. Because of the requirements of the refining process, it appears likely that the main series of brick- and wood framed buildings that appear in the 1873 engraving were all constructed in 1867. The lead was first corroded in two large wood-framed corroding houses at the rear (south) end of the MWLC complex. It was then calcined in the furnace room in the powerhouse. The lead was then transported into production shed 1 for the repetitive steps of grinding the lead. The lead was washed in the adjacent production shed 2, where color could be added. The

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[17] Scharf, *History of Baltimore City and County* (Philadelphia: Everts, 1881), p.402. By the time Scharf's book was published, several other white lead, copper, and chrome paint manufacturers had been established in Baltimore, including the Adams White Lead Co., Bair Bros. Copper Paint, Baltimore Chrome Works, Baltimore Copper Paint Co., William H. King CO. White Lead. John Leary & Co. Montour Slate Paint, Monumental Color Works (chrome.). 1875 Baltimore city directory.

[18] "The Sun 100 Years Ago," Baltimore *Sun*, 7 June 1968.

[19] "Maryland White Lead Company" in *Industries of Maryland: A Descriptive Review* (New York: Historical Publishing Company, 1882), p.319.

[20] Ibid, p. 319. The records of the Adams White Lead Company (1874-1885), one of the MWLC's competitors, reveal the kind of wholesale connections that the MWLC probably maintained. The Adams Company dealt solely with other large manufactures, importing linseed or flaxseed oil from Midwestern businesses and selling their products to other white lead companies in Philadelphia, New York, Pittsburgh, Cleveland, and Omaha, among others. An Adams Company memo from the early 1880s lists no fewer than 42 white lead companies (not including those in Baltimore) in the United States, producing white paint for a market eager to paint their homes. (Adams White Lead Company Records [1873-85], Box 1 of 6 [correspondence], Maryland Historical Society Manuscript Collections.

white lead was suspended in oil in the manufactory loft and then packaged in wooden barrels for distribution. Packaging was produced on-site in the cooperage and carpentry shop.[21]

The 1873 advertisement reveals not only the structures that formed the Maryland White Lead Works, but the image that the Maryland White Lead Company intended to project to the readers of *The Monumental City*. This image carefully balances the representation of an orderly street presence with display of technology and industry. Architectural convention denoted by the symmetrical front façade capped by a cupola is contrasted with progressive industrialism indicated by the massive smoking chimney. Well-dressed pedestrians pass by the building, horse-drawn wagons rush through the complex, and abundant smoke pours from the chimney; all signifying the productivity of the works.

The rise and fall of Maryland White Lead Company and the white lead market 1867-1896

The Maryland White Lead Company was the city's largest white lead manufacturer by far. Of the city's three white lead manufacturers, the MWLC employed sixty hands compared to the twenty hands employed by its two competitors together.[22] The company also boasted a capital of $180,000, whereas its two competitors had $170,000 between them.[23] Moreover, paint production was one of Baltimore's most important 19th-century industries. According to the 1870 census, the manufacture of lead and zinc paints ranked tenth among the most lucrative manufacturing businesses in Baltimore.[24] By 1880 it had dropped from the top ten but remained in the top twenty manufacturers.[25]

Like many of its competitors, the MWLC began to suffer during the 1890s as the white lead boom began to diminish in Baltimore. The Adams White Lead Company failed in 1885 and the MWLC's other competitors were gradually reduced from five to one by the early 1890s.[26] After William T. Davison died in 1881, his sons were left to determine the best course for the family businesses. Their choice to abandon white lead production in favor of focusing on sulfuric acid and fertilizer doubtless had much to do with devoting resources to their most profitable branches of manufacture, especially fertilizers. Fertilizer production was Baltimore's third top industry in 1880 and dropped only slightly to seventh in 1890 and tenth in 1900; paint never again broke into Baltimore's top industries after its peak during the 1870s and 1880s.[27] The MWLC was dissolved around 1895-1896.[28]

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[21] Barr & Zembala, Maryland Historic Trust Inventory Form B-1013.

[22] 1880 U.S. census material in *Celebration of the 150th Anniversary of the Settlement of Baltimore, 1730-1880*, p.152.

[23] Scharf, *History of Baltimore City and County* (Philadelphia: Everts, 1881), p.511; *Celebration of the 150th Anniversary of the Settlement of Baltimore, 1730-1880*, p.152.

[24] The most lucrative were, in order: refined molasses and sugar; boots and shoes; time, copper, and sheet-iron ware; canned oysters and fish; bread and other bakery products; printing and publishing; trunks, valises and satchels; distilled liquors; and musical instruments. 1870 U.S. census.

[25] Eleanor Stephens Bruchey, *The Business Elite in Baltimore, 1880-1914*, (Ann Arobor, MI: Xerox Univ. Microfilms, 1975), p.35, 39.

[26] Adams White Lead Company Records, Maryland Historical Society Manuscript Collections; 1880 and 1890 U.S. Censuses.

[27] Eleanor Stephens Bruchey, *The Business Elite in Baltimore, 1880-1914*, (Ann Arbor, MI: Xerox Univ. Microfilms, 1975), p.35, 39. If it was no longer a top-ten industry, however, paint manufacture remained important to the Baltimore economy. The Glidden Company and the Joseph Krebs division of the duPont Corporation became increasingly powerful Baltimore paint manufacturers during the early 20th century.

[28] This is when the company last appears in Baltimore city directories.

Later occupants of the Maryland White Lead Works

In 1901 the Columbia Paper Bag Company became the next occupant of the Maryland White Lead Works, moving to the site six years after their establishment appeared on Light Street. The firm produced self-opening, square, and flat paper bags for a variety of users, including confectionery businesses.[29] Paper bag manufacture was never a prominent Baltimore industry.[30] The Columbia Paper Bag Company's modest advertisements in annual city directories suggest that its business was focused on a local market. Whereas, the MWLC constructed a complex of buildings designed specifically for their manufacturing, the Columbia Paper Bag Company used most of the building space as warehouses and a shipping center.[31] As a result, the buildings that the firm added to site are simple warehouse structures. The Columbia Paper Bag Company left the MWLW between 1938 and 1940.[32] After it departed the complex was divided among several businesses and now stands largely vacant.

Conclusion

The Maryland White Lead Works survives as an important example of a mid-19th c., purpose-built white lead manufactory. Not only are the MWLW the first built in Baltimore, and one of the earliest industrial complexes in Locust Point, the Maryland White Lead Company was the largest lead business in the city. Despite alterations, the MWLW retains its distinctive quadrangle form and most of its buildings. The characteristic powerhouse, production sheds, manufacturing loft, and service building all remain in their original configuration. Only the wooden corroding houses have been lost. Furthermore, the interior arrangement complex that established specific zones for specific stages of production is still legible in features such as the stack of the powerhouse and monitor roof capping the production shed.

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[29] Robert Irvin, *Baltimore*

[30] According to the 1870 census, paper bag manufacture just broke into the top thirty most lucrative Baltimore industries. By the time the Columbia Paper Bag Company was established in the 1890s, however, the business had become markedly less important in contrast to other companies.

[31] 1901-1902 and 1914 Sanborn maps.

[32] 1937 Baltimore city directory.

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Vertical Files. Baltimore Museum of Industry, Research Center. Baltimore, Maryland.

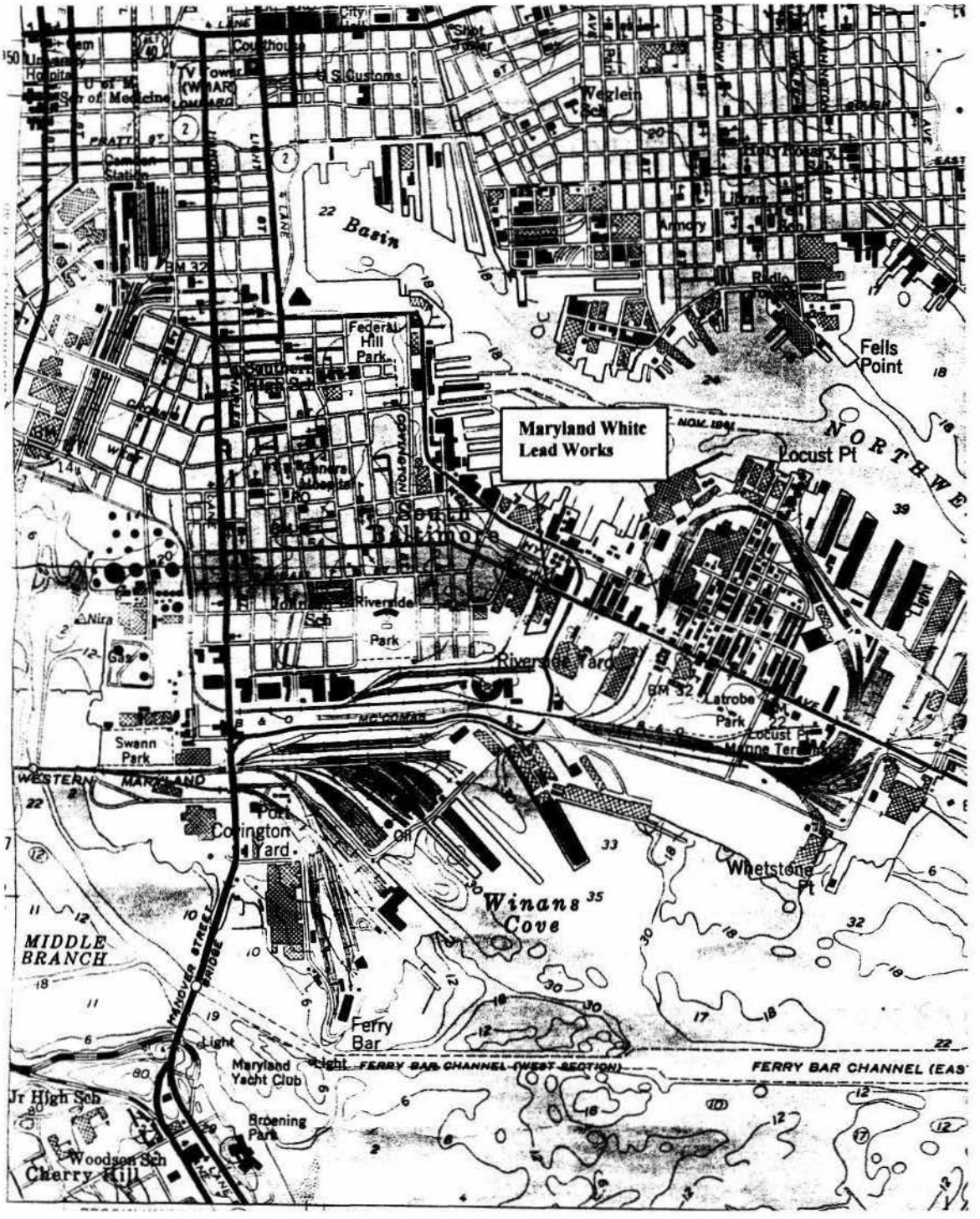
Zembala, Dennis, ed. *Baltimore: Industrial Gateway on the Chesapeake*. Baltimore, Baltimore Museum of Industry, 1995.

VERBAL BOUNDARY DESCRIPTION

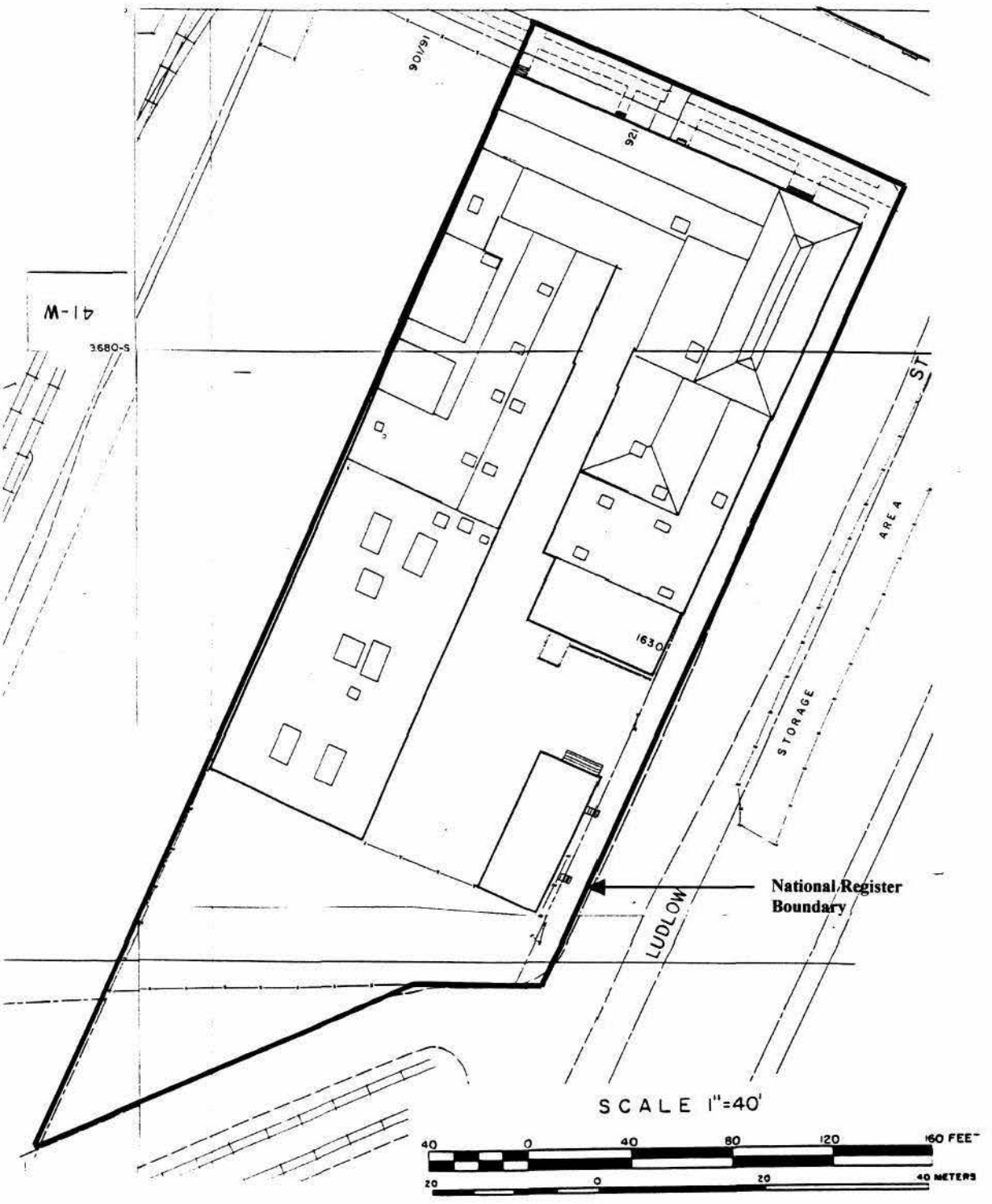
The Maryland White Lead Works property consists of Lot 16 as shown on the Plat for Ward 24, Section 9, Block 2029, as recorded in the Plat Records of Baltimore City.

BOUNDARY JUSTIFICATION

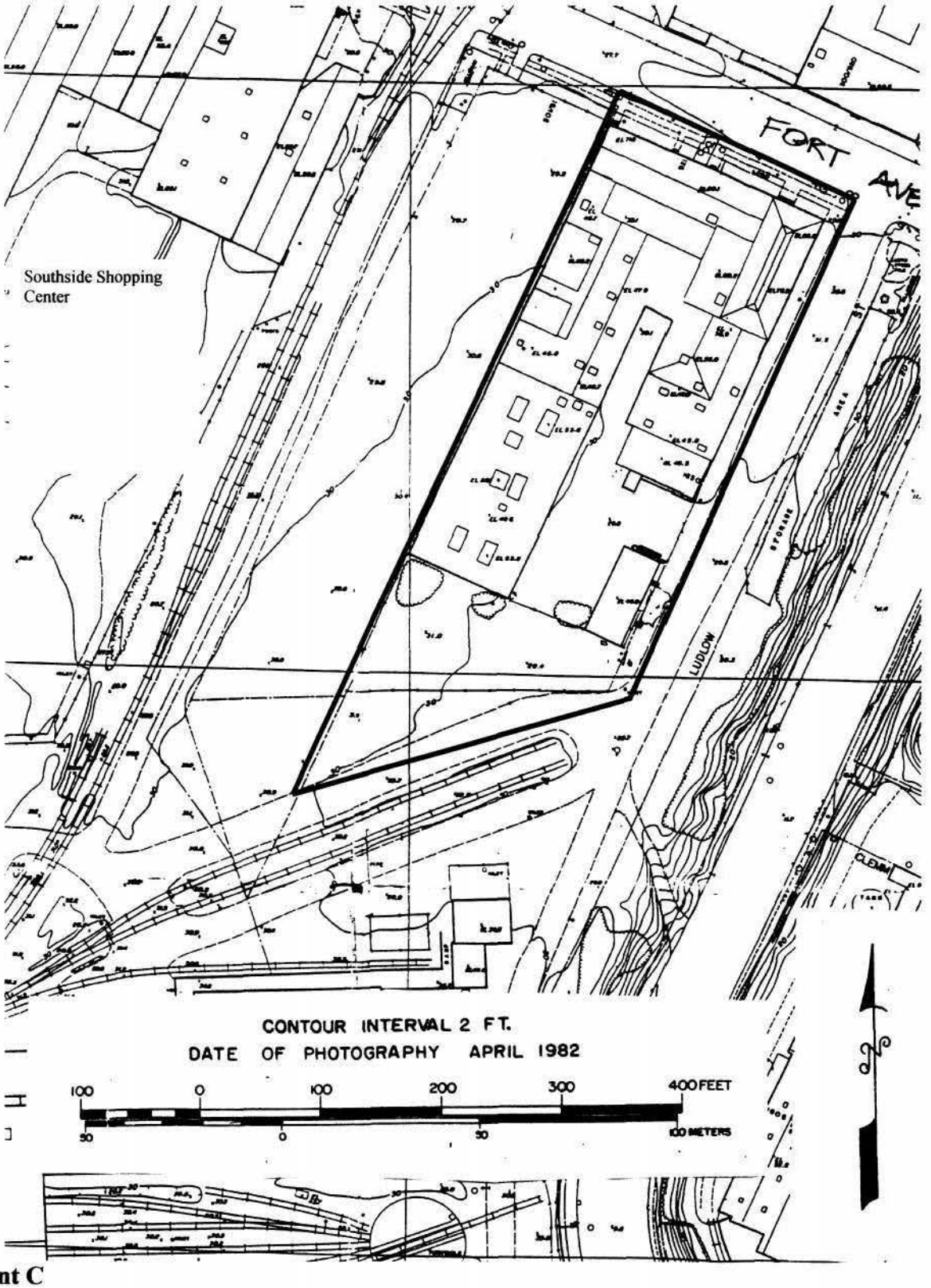
The boundary corresponds with the present legal description of the record lot occupied by the Maryland White Lead Works.



Attachment A
Maryland White Lead Works
Baltimore City, Maryland
Survey #B-1013
Baltimore East Quadrangle

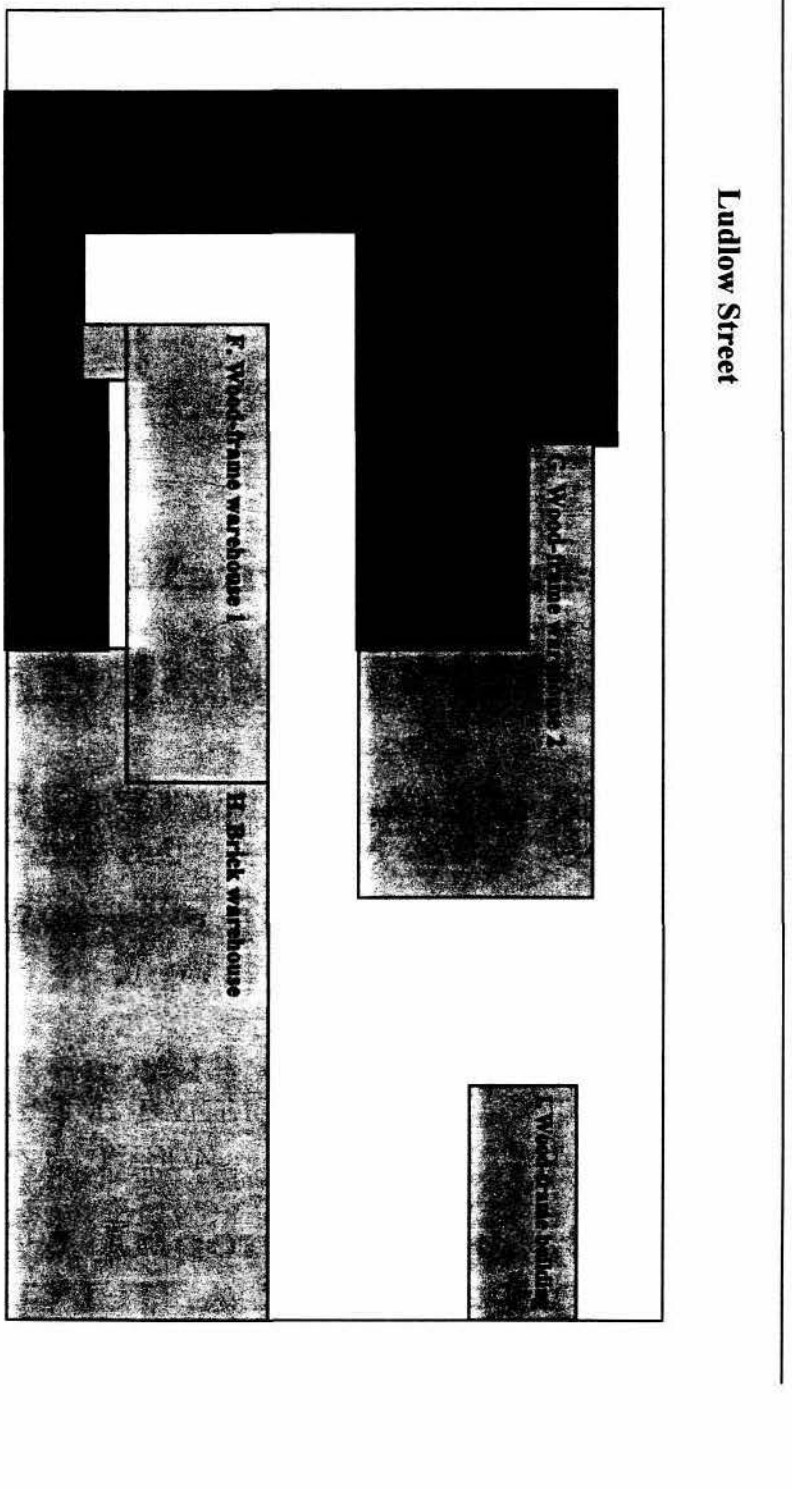


Attachment B
Maryland White Lead Works
Baltimore City, Maryland
Survey #B-1013
Property Boundary – Baltimore City 40' scale Planometric Map



Attachment C
Maryland White Lead Works
Baltimore City, Maryland
Survey #B-1013
City of Baltimore Topographical Map

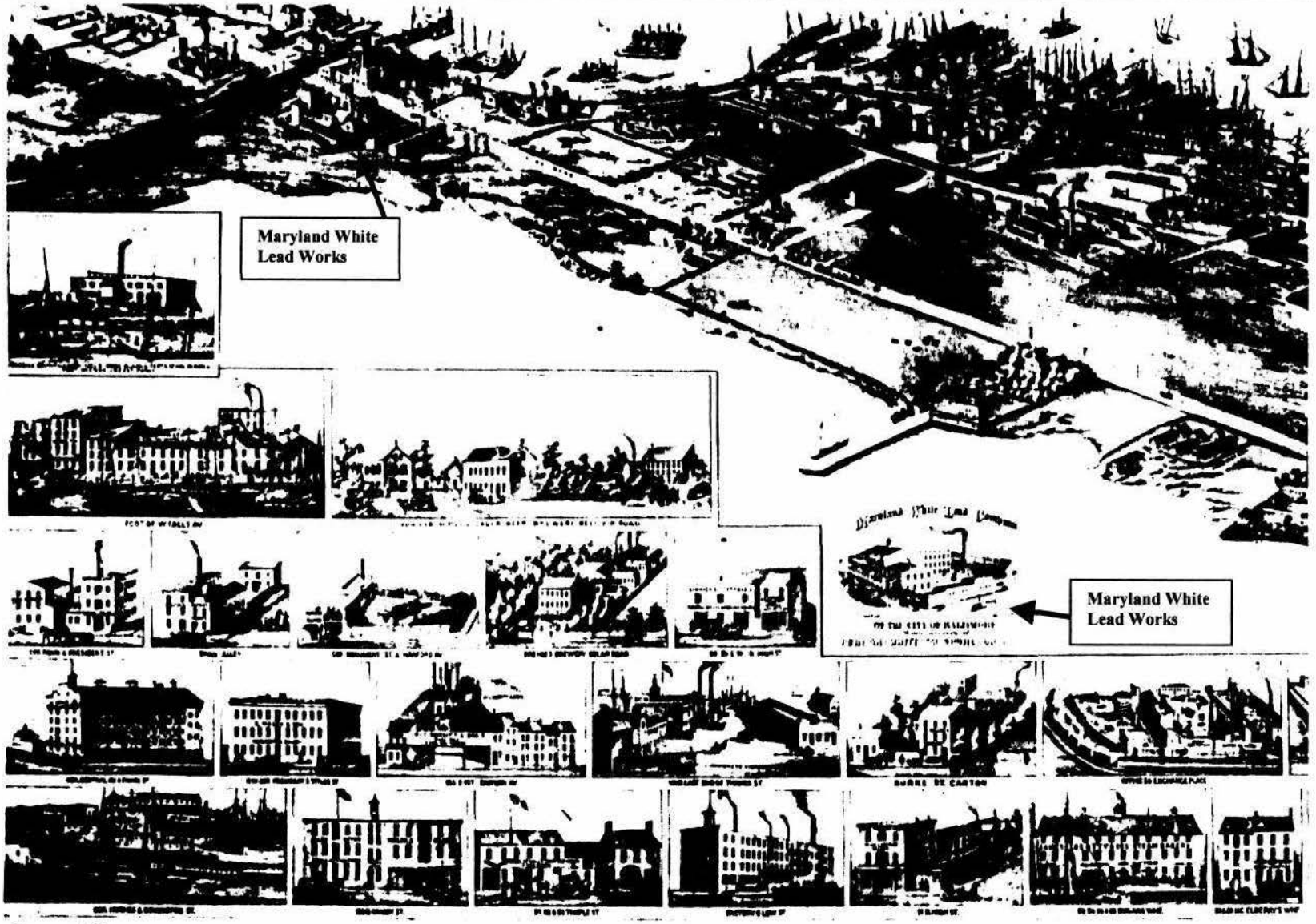
Fort Avenue



Attachment D
Maryland White Lead Works
Baltimore City, Maryland
Survey #B-1013
Site diagram & Contributing buildings

Non-Contributing

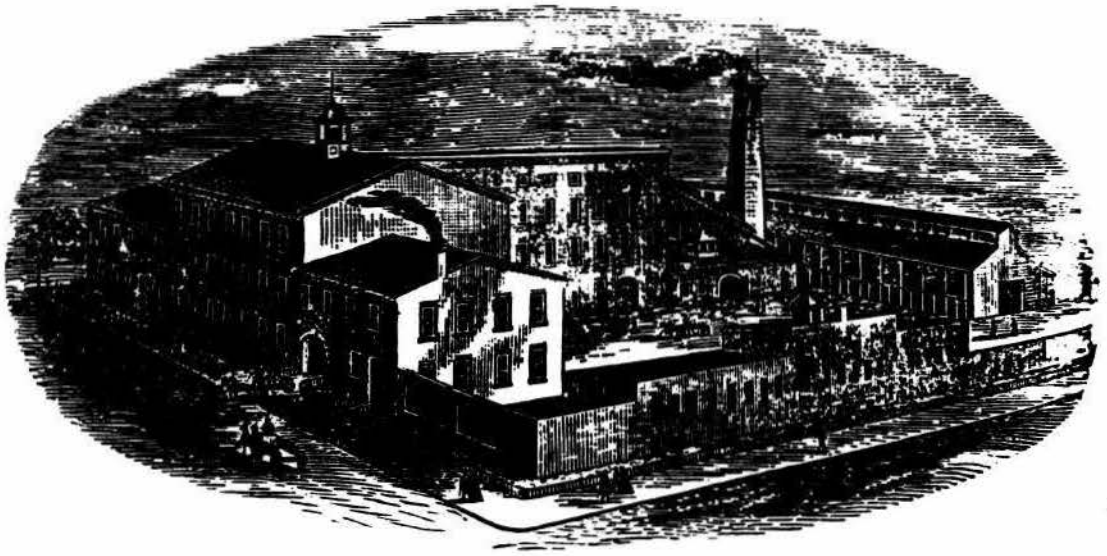
Attachment E
Maryland White Lead Works
Survey #B-1013
Sanborn maps: 1890 & 1951



Attachment F
Maryland White Lead Works
Baltimore City, Maryland
Survey #B-1013
E. Sachse & Co. *Bird's Eye View of the City of Baltimore* 1869

Maryland White Lead Company

OF THE CITY OF BALTIMORE.



Manufacturers of

PURE DRY WHITE LEAD

AND

PURE LEAD IN OIL.

Office—No. 89 West Lombard Street.

Factory—Locust Point.

DIRECTORS.

CHARLES J. BAKER, THOMAS M. SMITH.

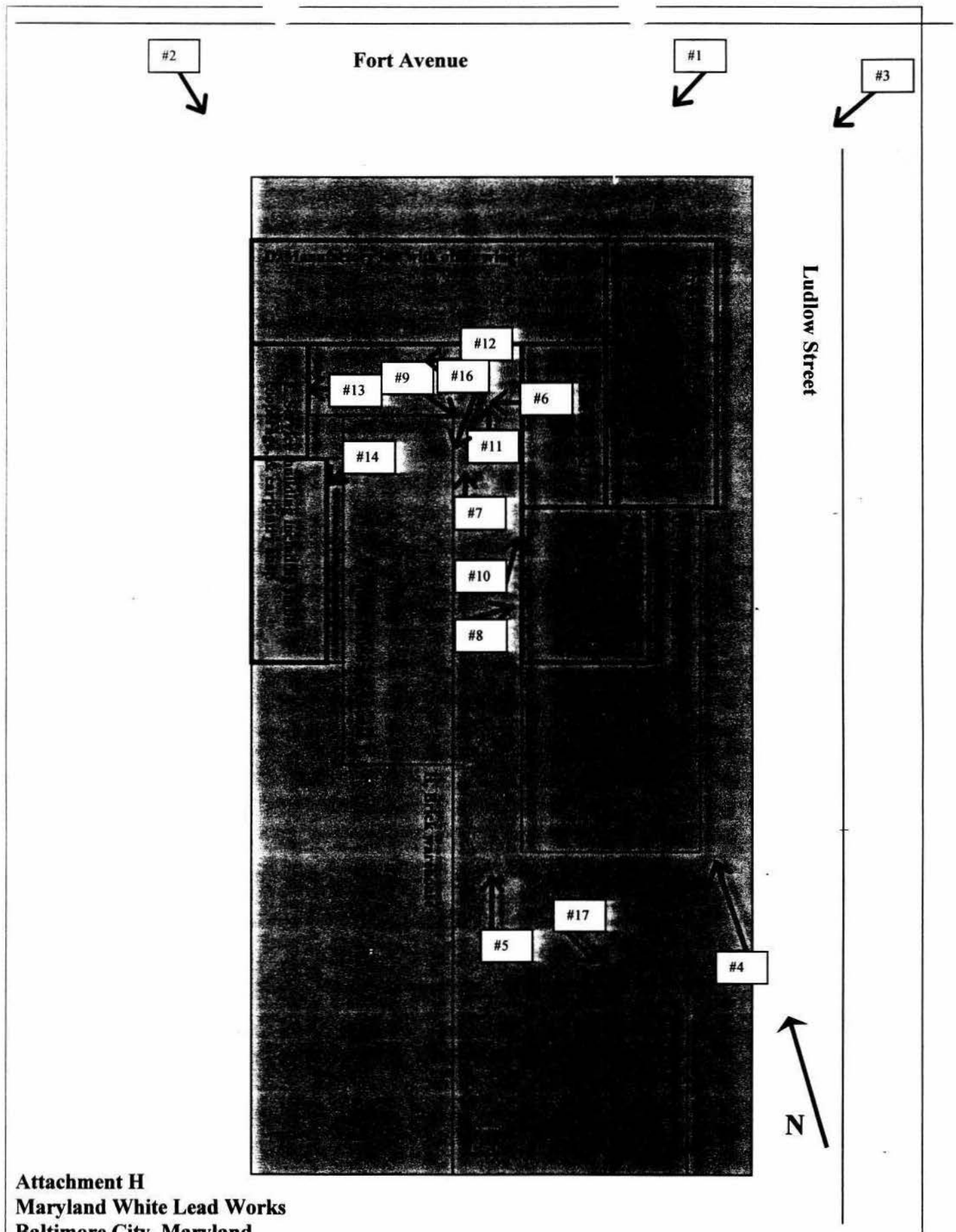
JAMES E. TYSON, JOHN GREGG.

Incorporated 1867.

CAPITAL, . . $300.000.

With a corroding capacity of 3,000 tons and upwards per annum, this Company possesses unsurpassed facilities for the manufacture of WHITE LEAD, (dry and ground in oil,) which is guaranteed to be ***strictly pure*** and in every respect equal in quality to the very finest made.

Attachment G
Maryland White Lead Works
Baltimore City, Maryland
Survey #B-1013
George W. Howard, *The Monumental City*, (Baltimore: Ehlers Publishing, 1873), p.226.



Attachment H
Maryland White Lead Works
Baltimore City, Maryland
Survey #B-1013
Key to Photographs

B-1013
Maryland White Lead Works
Baltimore, MD

18-362840-
4348280

(RELAY)
5662 II NW

Mapped by the Army Map Service
Edited and published by the Geological Survey

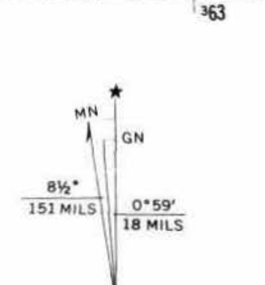
Control by USGS, USC&GS, USCE, and City of Baltimore

Topography from aerial photographs by photogrammetric methods. Aerial photographs taken 1943. Field checked 1944
Culture revised by the Geological Survey 1953

Hydrography compiled from USC&GS Chart 545 (1951)

Polyconic projection. 1927 North American datum
10,000-foot grid based on Maryland coordinate system
1000-meter Universal Transverse Mercator grid ticks, zone 18, shown in blue

Red tint indicates areas in which only landmark buildings are shown



UTM GRID AND 1974 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET