Baltimore Gas & Electric Spring Gardens Station
(B-1032)
Baltimore City, Md.
private, 1855

Statement of Significance

The Spring Gardens Station of the Baltimore Gas & Electric Company was the primary gas manufacturing plant for the city of Baltimore. It was built in 1855 to produce coal gas, and converted to water gas in 1886. The plant remained the primary source of gas in Baltimore until 1950, when natural gas was brought to the city by pipeline from Texas. Spring Gardens was converted to produce oil gas and was used to relieve peak demands and any interruptions in pipeline service. The station is still in use today.

Survey No. B-1032

Magi No. 0410325516

DOE __yes __no

Maryland Historical Trust
State Historic Sites Inventory Form

1. Name (indicate preferred name)

historic

and/or common Baltimore Gas & Electric Spring Gardens Station

2. Location

street & number Leadenhall Street ___ not for publication

city, town Baltimore ___ vicinity of **congressional district**

state Maryland **county**

3. Classification

Category	Ownership	Status	Present Use	
___ district	___ public	_X_ occupied	___ agriculture	___ museum
___ building(s)	_x_ private	___ unoccupied	___ commercial	___ park
___ structure	___ both	___ work in progress	___ educational	___ private residence
___ site	**Public Acquisition**	**Accessible**	___ entertainment	___ religious
___ object	___ in process	___ yes: restricted	___ government	___ scientific
	___ being considered	___ yes: unrestricted	___ industrial	___ transportation
	___ not applicable	___ no	___ military	___ other:

4. Owner of Property (give names and mailing addresses of all owners)

name Baltimore Gas & Electric Company

street & number P.O. Box 1475 **telephone no.:** 234-5000

city, town Baltimore **state and zip code** Maryland 21203

5. Location of Legal Description

courthouse, registry of deeds, etc. Baltimore City Courthouse liber JFC 1486

street & number Fayette and Calvert Streets folio 252

city, town Baltimore **state** Maryland

6. Representation in Existing Historical Surveys

title none

date ___ federal ___ state ___ county ___ local

depository for survey records

city, town **state**

7. Description

Survey No. B-1032

Condition
___ excellent
___ good
___ fair
___ deteriorated
___ ruins
___ unexposed

Check one
___ unaltered
___ altered

Check one
___ original site
___ moved **date** of move _____

Prepare both a summary paragraph and a general description of the resource and its various elements as it exists today.

Several structures still remain from the first gas manufacturing installation on this site, providing a good record of the scale of gas-making operations in the mid-nineteenth century. Although none of the original machinery remains many of the structures remain virtually unaltered. Because of the ready availability of excellent coking coal in Baltimore, the Spring Gardens Plant continued to make gas well into the twentieth century.

The nucleus of the gas-making operation at Spring Garden was the large stone masonry structure which housed the retorts. Built in 1869, it was spurred by the post Civil War expansion of the city and a boom in the demand for gas. The Retort House is a high one-story building where semi-bituminous coal from the mines of Western Maryland and West Virginia was partially combusted to drive off the volatile gasses. This was performed in retorts, large furnances in which the air could be controlled to produce a minimum of burn and a maximum of gas. The building is ten bays long and three bays wide except for the western three bays which form an el, projected two additional bays south. Its roof has been drastically altered, the original now replaced by a flat roof.

A small group of buildings east of the Retort House formed an early complex composed of an office, a machine shop, and a valve house. The scale of these structures indicates a much smaller level of activity prior to about 1860. The most unusual of these is the small valve house. This octagonal brick structure sheltered the valve stems which protruded from the ground and which controlled the direction of gas flow from the producer retorts to the storage tanks and the street mains. Nearby was the small office structure consisting of a central mass and two flanking wings. A semi-circular arch surmounts its central doorway and transom light. All three bays of the facade are framed by heavy brick corbelling. Adjacent to the offices is a shop building which formerly housed the machine shop. This brick masonry building is a high one-story structive with a steep gable roof surmounted by two smoke monitors. On the interior, the machine shop is divided in half by a brick wall. The section adjacent to the offices housed the machinery while the eastern half housed a boiler and a small steam engine to power the shop. The roof of the shop is supported by a wooden truss. The original gas producer building to the south and the holders on the north have been demolished.

Several other structures dating from the late nineteenth century include the laboratory building and the present machine shop structures. The laboratory building is east of the old machine shop. Its function was to test the quality and purity of the gas as it passed

8. Significance

Survey No. B-1032

Period	Areas of Significance—Check and justify below				
___ prehistoric	___ archeology-prehistoric	___ community planning	___ landscape architecture	___ religion	
___ 1400–1499	___ archeology-historic	___ conservation	___ law	___ science	
___ 1500–1599	___ agriculture	___ economics	___ literature	___ sculpture	
___ 1600–1699	_X_ architecture	___ education	___ military	___ social/ humanitarian	
___ 1700–1799	___ art	___ engineering	___ music	___ theater	
_X_ 1800–1899	___ commerce	___ exploration/settlement	___ philosophy	___ transportation	
___ 1900–	___ communications	_X_ industry	___ politics/government	___ other (specify)	
		___ invention			

Specific dates 1855 **Builder/Architect**

check: Applicable Criteria: __A __B __C __D
and/or
Applicable Exception: __A __B __C __D __E __F __G

Level of Significance: __national __state __local

Prepare both a summary paragraph of significance and a general statement of history and support.

The Spring Gardens Station of the Baltimore Gas and Electric Company was the primary gas manufacturing plant for the city of Baltimore. It was built in 1855 to produce coal gas, and converted to produce water gas in 1886. The plant remained the primary source of gas in Baltimore until 1950, when natural gas was brought to the city by pipelines from Texas. Spring Gardens was converted to produce oil gas and was used to relieve peak loads and any interruptions in pipeline service. The station is still in use today.

The Gas Light Company of Baltimore was formed in 1817, making Baltimore the first city outside of England to be lit by gas. To meet the growing demand for gas and to prepare for future increases in demand, in 1855 the company purchased a 9¼ acre site at Spring Gardens to produce and store coal gas. The plant soon became the primary station for producing gas in Baltimore. The plant was converted to the production of water gas in 1886. In 1902, the company began to enrich the water gas by vaporizing oil in the gas. Also, in 1902 the plant was expanded to produce 10,000,000 cubic feet per day. It was expanded again in 1911 to produce 18,000,000 cubic feet per day and a 6,000,000 cubic foot storage tank was built. When Baltimore changed to natural gas piped in from Texas in 1950, the plant was converted once again to produce oil gas in order to relieve peak demands on the pipeline and to provide temporary service during interruptions in the pipeline supply. The Spring Gardens Station is still in use by the Baltimore Gas & Electric Company 128 years after its initial construction.

9. Major Bibliographical References

Survey No. B-1032

The Gas Distribution Department 1916

A History of Consolidated Gas Electric Light & Power Co. of Balto. 1950

10. Geographical Data

Acreage of nominated property _____

Quadrangle name _____ **Quadrangle scale** _____

UTM **References** do NOT complete UTM references

A	Zone	Easting	Northing	B	Zone	Easting	Northing
C				D			
E				F			
G				H			

Verbal boundary description and justification

List all states and counties for properties overlapping state or county boundaries

state	code	county	code
state	code	county	code

11. Form Prepared By

name/title Kevin Dolan , intern Dennis Zembala, director

organization Baltimore Museum of Industry **date** 5/83

street & number 1415 Key Highway **telephone** 727-4808

city or town Baltimore **state** Maryland

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust
Shaw House
21 State Circle
Annapolis, Maryland 21401
(301) 269-2438

7. DESCRIPTION (con't.)

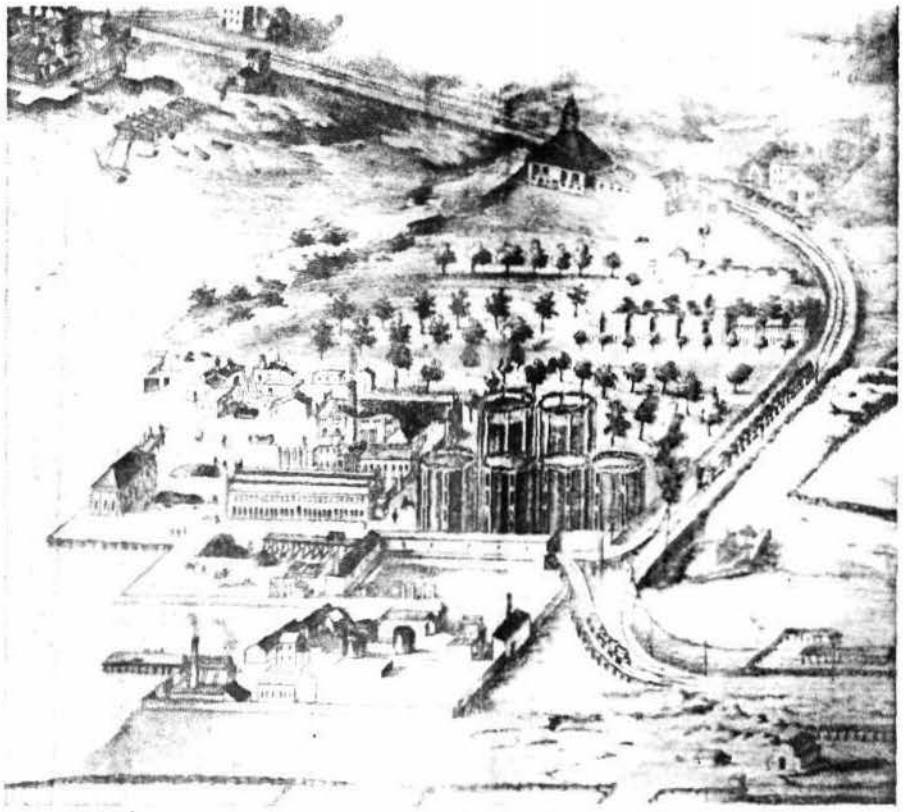
into the street mains. Its brick masonry walls support a gabled roof with a ventilation cupola in the center, all carried on a light riveted metal truss. The machine shop complex is comprised of three structures, two of about the same date. These lie at right angles to each other and the one whose facade faces east has an elaborate parapet wall. This is a one and a half story building which housed the shop offices. Its roof is supported on an unusual light metal truss composed of all wrought iron rods. The second structure is a single story with a small shed addition on the west. This structure has a Fink tricomposite truss, c.1870, supporting the roof. Invented in Baltimore by Albert Fink in 1852, this is one of a handful of early examples of a type which later became a standard in metal. The top chord is timber, compression members of cast iron and tension members of wrought iron. The last building in this group is an unusual structure in that its roof is a heavy iron plate water tank. The western end of this structure is the former engine room for the machine shops. It is a high one story probably built to contain the steam engine and/or boiler which the roof tank served. The eastern half of this building is two stories supported on heavy, square cast iron columns with chamfered corners.

South of the machine shop complex is another early structure which was added to increase the gas-making capacity of the plant about 1885. This is a long one-story brick structure with Fink tricomposite trusses as well. The building is a high story with two windows in each bay, one at the lower level with a semi-circular arched top and a smaller square window above. Most of the openings have been bricked up.

Finally, the new valve house, built in 1916 make the beginning of the modern era at Spring Garden. This structure has a high gabled roof supported by a riveted, all-steel Fink truss. It shelters the valve stems of multiple giant gas mains leading to and from the nearby gas holders.

The gas holders themselves are still in use though built at the same time. These were built by the firm of Bartlett and Hayward, a Baltimore machine shop which helped pioneer the gas holder and other gas and electric utility equipment. The present holders represent the third generation of such structures. They are telescoping cylinders whose base section rests in a tank of water. As they fill with gas succeeding sections rise inside the base each sealed to the next by a ring of water.

B-1032



1856 *An Early View of the Spring Gardens Gas Works*

the holder was torn down, but the buildings were used as headquarters for the Company's Street Department until 1905.

Although the Company had issued additional stock to cover part of the cost of the new plant on Spring Gardens, the annual dividend rate was increased to nine percent in 1856, and one year later it was raised to ten percent. The Company, however, shared its new-found prosperity with the consumers, for the price of gas was reduced ten percent. This gave a rate of $2.70 per 1,000 cubic feet.

The indications of handsome profits earned by the Gas Company very naturally attracted widespread attention, and ambitious promoters, anxious to get into the business, were not wanting. In 1858 James Wheedon attempted to secure franchise rights. However, the City Council refused to grant him the necessary powers. Although the Council turned down this offer of competition, and was unwilling to erect a municipal plant, it appears to have been dissatisfied with the service rendered by the Company. In 1859 the municipality offered a plan de-

signed to be beneficial to bo
of the plan were as follows
each year in laying mains
If, in the future, any other
and City Council to use th
had already laid its mains,
the cost of all mains laid b

If the City at some fut
direction, it was agreed th
attachment (for other tha
in the future pay $18 for e
sum of such deductions sh
the mains. According to th
be made effective could be
pened, the actual cost of
refunds for attachments, s

The Company accepte
embodied in an ordinance
this meeting of the minds
and the Company would,
competition and, no doub
creased assurance.

Although the agreem
almost to grant a monop
when it provided for the r
a few months later that
sistent James C. Wheedon
lature a charter for the
Wheedon's earlier failure
does not seem to have di
common with citizens else
could be supplied more ch
lated, company than by a
prejudice against monop
when a competitor attem

The Gas Light Comp
enlarge its plants and ext
an amendment to its cha
creased from $550,000 t
task of securing a charte
easy. The legislative Co

Thomas King, Consolidated of Baltimore, 1916-1950
(Balto. Md, 1950)

HAER INVENTORY

Historic American Engineering Record
Department of the Interior, Washington, D.C. 20240

1. SITE I.D. NO: B-1032

2. INDUSTRIAL CLASSIFICATION: Utilities / Manufacturing

3. PRIORITY:

4. DANGER OF DEMOLITION? (SPECIFY THREAT) ☐ YES ☑ NO ☐ UNKNOWN

5. DATE: 1855

6. GOVT SOURCE OF THREAT: OWNER / ADMIN

7. OWNER/ADMIN: Baltimore Gas & Electric Co.

8. NAME(S) OF STRUCTURE: Baltimore Gas & Electric Spring Gardens Station

9. OWNER'S ADDRESS: Box 1475

10. STATE / COUNTY: MD — COUNTY NAME: — CITY/VICINITY: Baltimore — CONG DIST: 3

STATE / COUNTY: MD — COUNTY NAME: — CITY/VICINITY: Baltimore — CONG DIST:

11. SITE ADDRESS (STREET & NO.): Leadenhall Street

12. EXISTING SURVEYS: ☐ NR ☐ NHL ☐ HABS ☐ HAER—I ☐ HAER ☐ NPS ☐ CL6 ☐ CONE ☐ STATE ☐ COUNTY ☐ LOCAL ☐ OTHER

13. SPECIAL FEATURES (DESCRIBE BELOW): ☐ INTERIOR INTACT ☑ EXTERIOR INTACT ☐ ENVIRONS INTACT

14. UTM ZONE: 18 — EASTING: 360310 — NORTHING: 4348160 — SIGN: — SCALE: ☑ 1:24 ☐ 1:62.5 ☐ OTHER — QUAD NAME:

UTM ZONE: — EASTING: — NORTHING: — SIGN: — SCALE: ☐ 1:24 ☐ 1:62.5 ☐ OTHER — QUAD NAME:

15. CONDITION: 70 ☐ EXCELLENT 71 ☑ GOOD 72 ☐ FAIR 73 ☐ DETERIORATED 74 ☐ RUINS 75 ☐ UNEXPOSED 76 ☐ ALTERED 80 ☐ DESTROYED 85 ☐ DEMOLISHED

16. INVENTORIED BY: Kevin Dolan, Dennis Zembala — AFFILIATION: Balto. Museum of Industry — DATE: 5/83

17. DESCRIPTION AND BACKGROUND HISTORY, INCLUDING CONSTRUCTION DATE(S), HISTORICAL DATE(S), PHYSICAL DIMENSIONS, MATERIALS, EXTANT EQUIPMENT, AND IMPORTANT BUILDERS, ENGINEERS, ETC.

see attached

(CONT OVER)

18. ORIGINAL USE: Gas producer plant — PRESENT USE: Utilities Station — ADAPTIVE USE:

19. REFERENCES—HISTORICAL REFERENCES, PERSONAL CONTACTS, AND/OR OTHER

The Gas Distribution Department 1916

A History of Consolidated Gas Electric Light & Power Co. of Baltimore 1950

(CONT OVER)

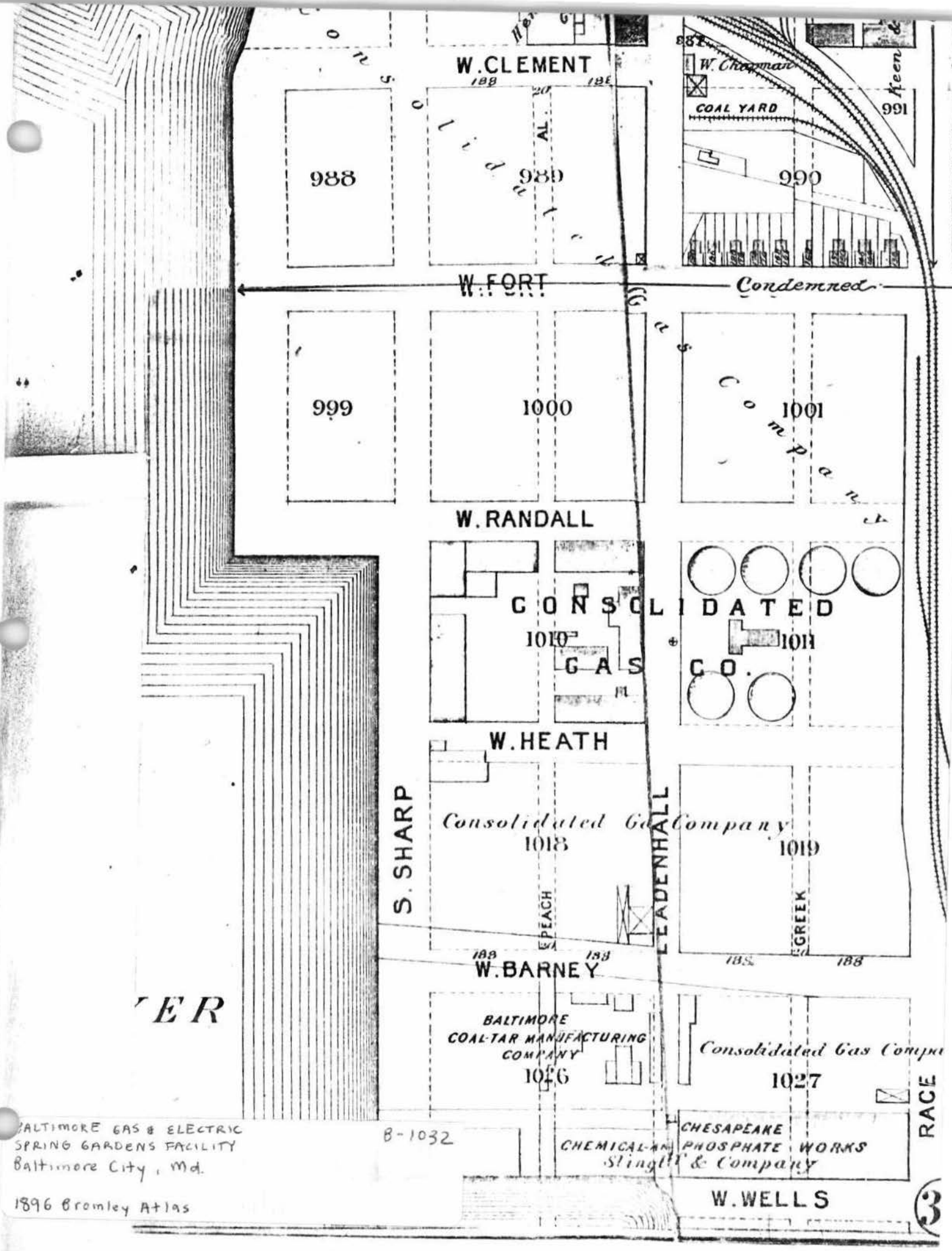
20. URBAN AREA 50,000 POP. OR MORE? ☑ YES ☐ NO

21. NPS REGION:

22. PUBLIC ACCESSIBILITY: ☑ YES: LIMITED ☐ YES: UNLIMITED ☐ NO ☐ UNKNOWN

23. EDITOR / INDEXER:

24. LOCATED IN AN HISTORIC DISTRICT? ☐ YES ☑ NO — NAME: — DISTRICT I.D. NO:

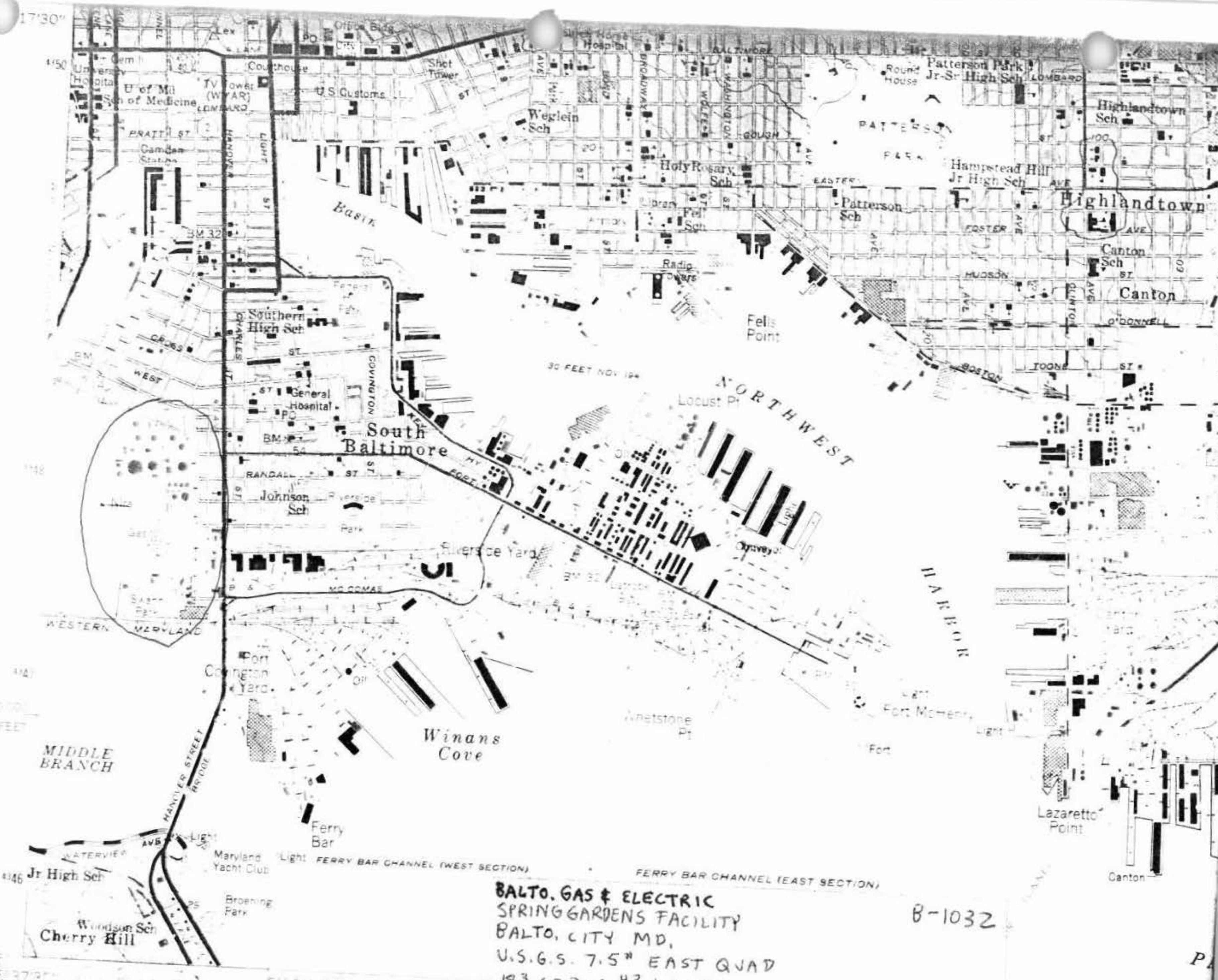


BALTIMORE GAS & ELECTRIC
SPRING GARDENS FACILITY
Baltimore City, Md.

1896 Bromley Atlas

B-1032

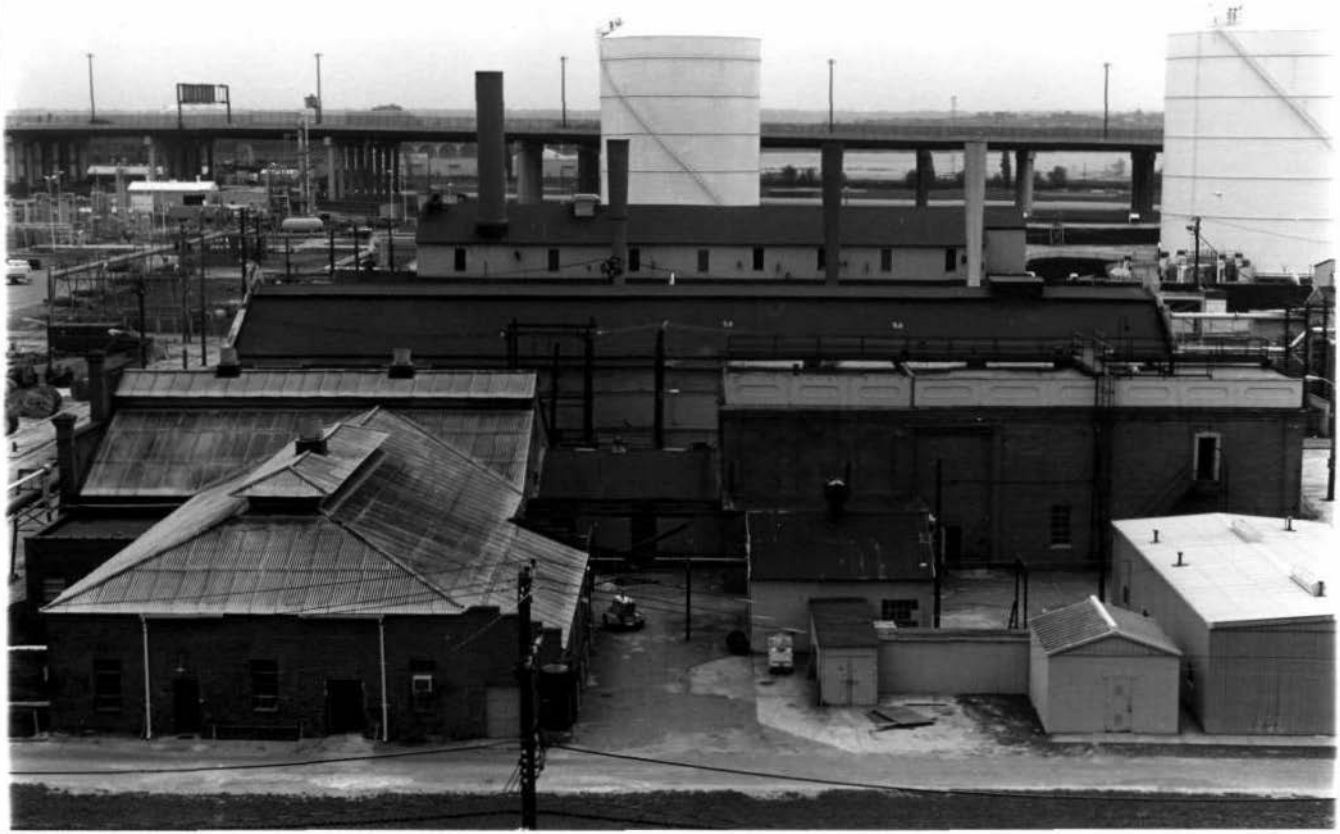
3



BALTO. GAS & ELECTRIC
SPRING GARDENS FACILITY
BALTO. CITY MD.
U.S.G.S. 7.5" EAST QUAD
18³ 60310 ⁴³ 48160

B-1032

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



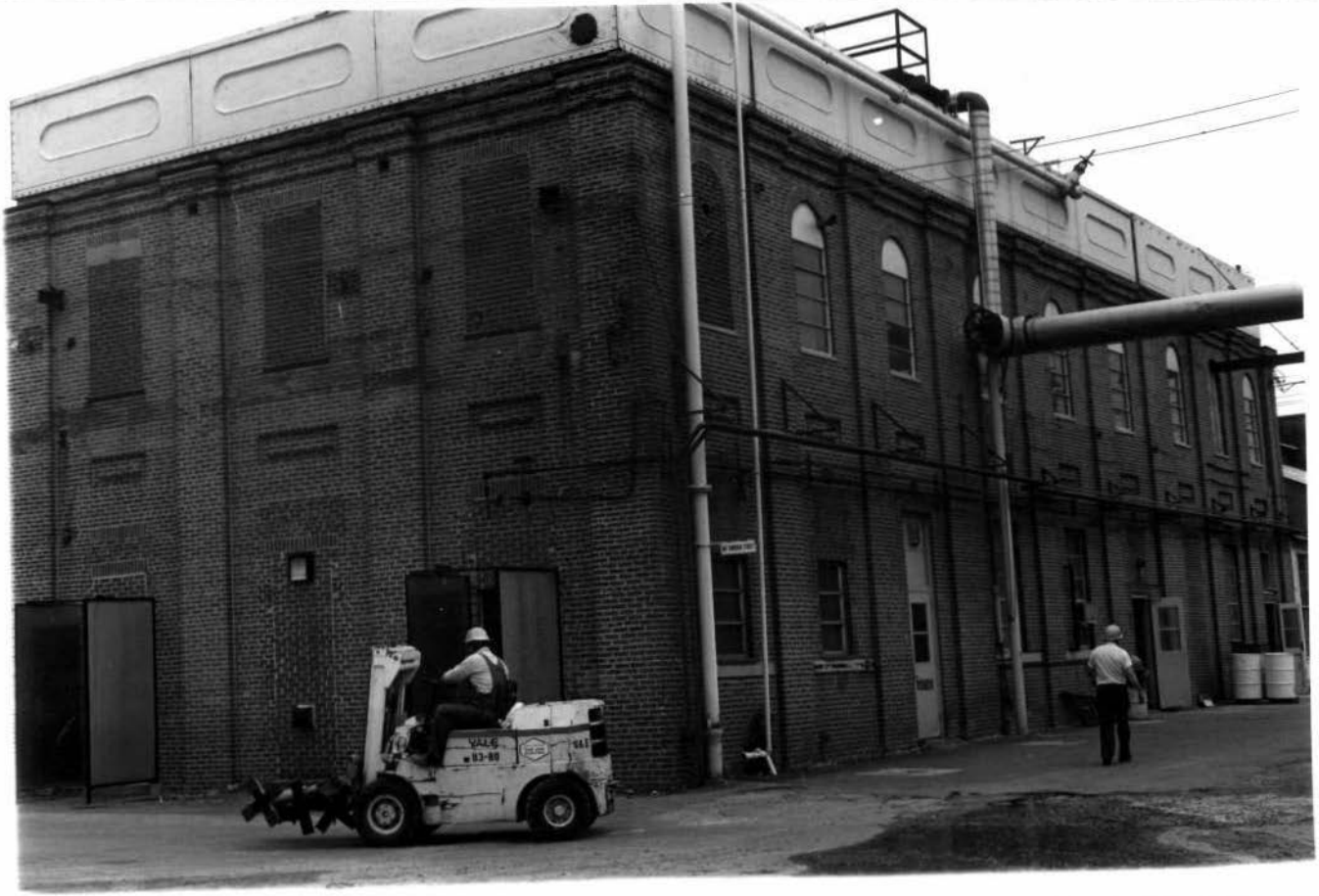
B-1032

ing Gardens STATION
r Liebhold BALT. CITY MD
machine shop, 5/83
Looking south

B-1032
Spring Gardens Station
Baltimore City, MD
Peter Liebhold, 5/83
Old Machine Shop,
Looking South

B-1032

Spring Gardens Station
Peter Liebhold Balt City, MD 5/83
Old machine shop, looking south-west



B-1032

SPRING GARDENS STATION
Peter Liebhold BALT. CITY, MD 5/63
OLD MACHINE SHOP, South + west facades

B-1032

Spring Gardens STATION
Peter Liebhold Balt. City, MD 5183
Old Machine Shop, looking north-east

B-1032
Spring Gardens Station
Baltimore City, MD
Peter Liebhold, 5/83
Old Machine Shop, looking northeast

SPRING GARDENS STATION
PETER LIEBHOLD BALT. CITY, MD
OLD MACHINE SHOP 5/83 (Roof truss detail)

B-1032

B-1032

'6 GARDENS STATION
Liebhold BALT. City, MD
MACHINE SHOP 5/83 (Detail - Roof truss)

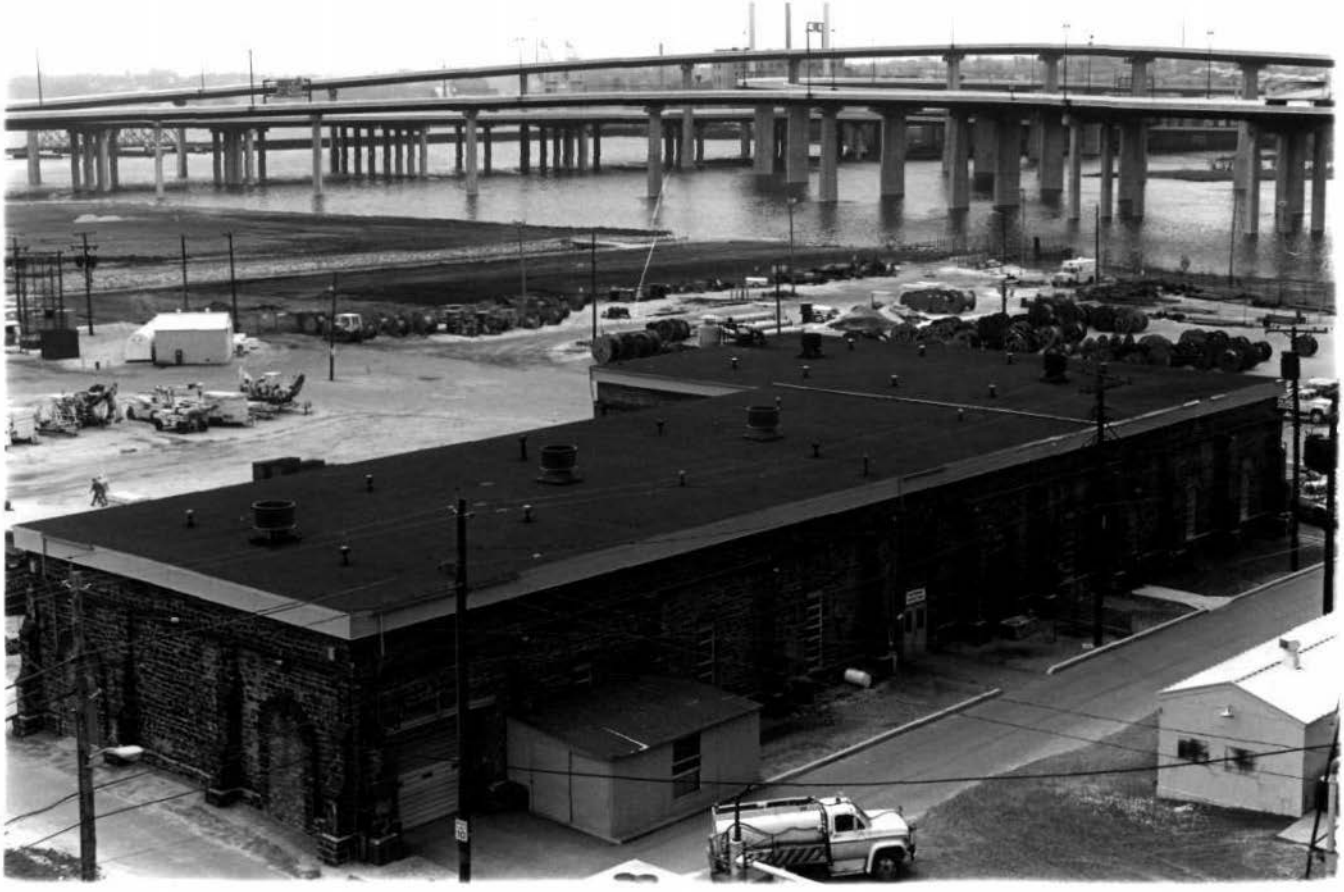
B-1032

Spring Gardens Station
Peter Liebhold, 5/83
Baltimore City, MD

Old Machine Shop
Detail - Roof TRUSS

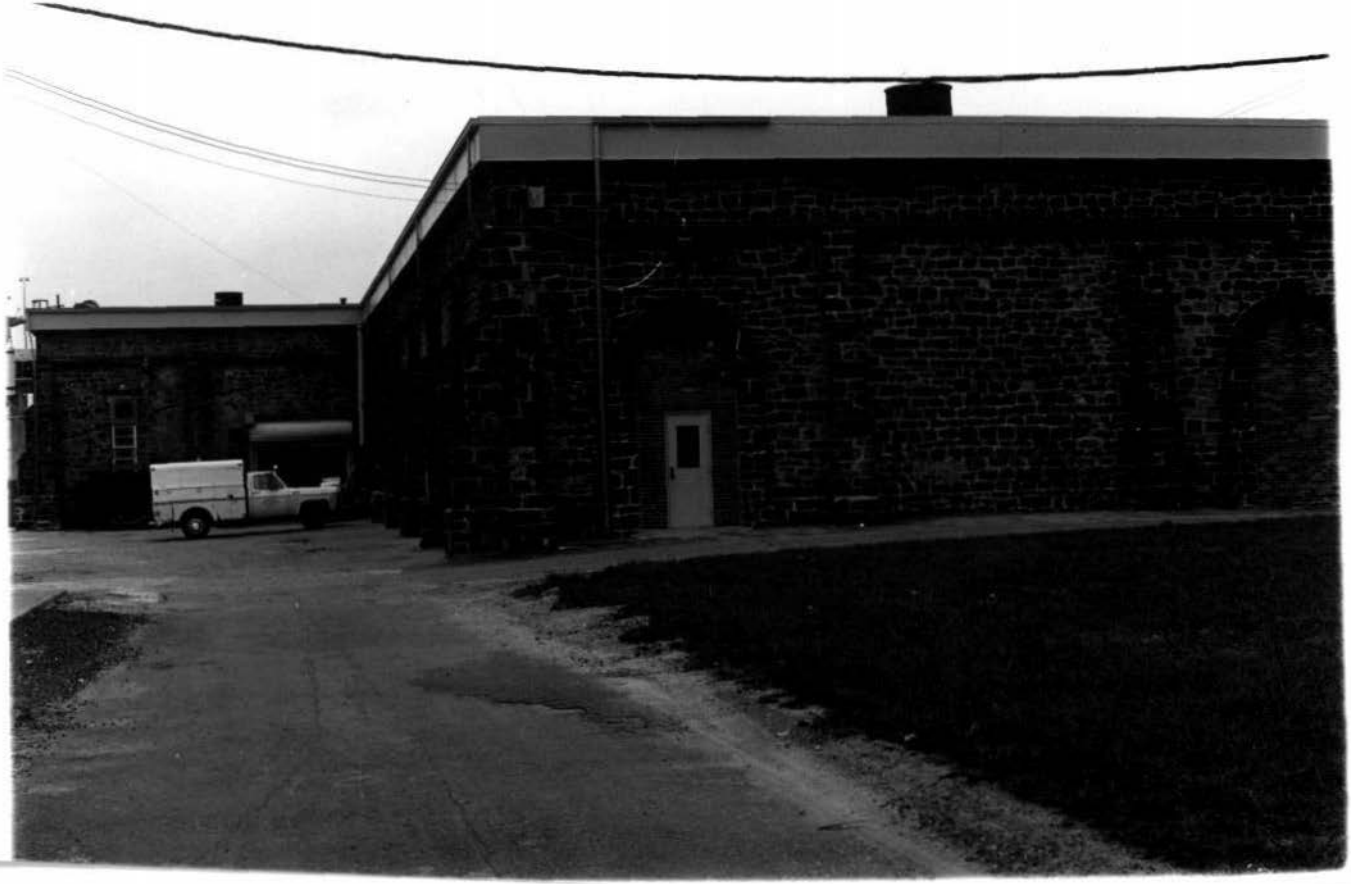
B-1032

SPRING GARDENS STATION
Peter Liebhold Balt. City MD. 5/83
Early coal gas plant, looking south-west



B-1032

Spring Gardens STATION
Peter Liebhold BALT. City, MD 5/83
OLD GAS GENERATING Building, looking South-West

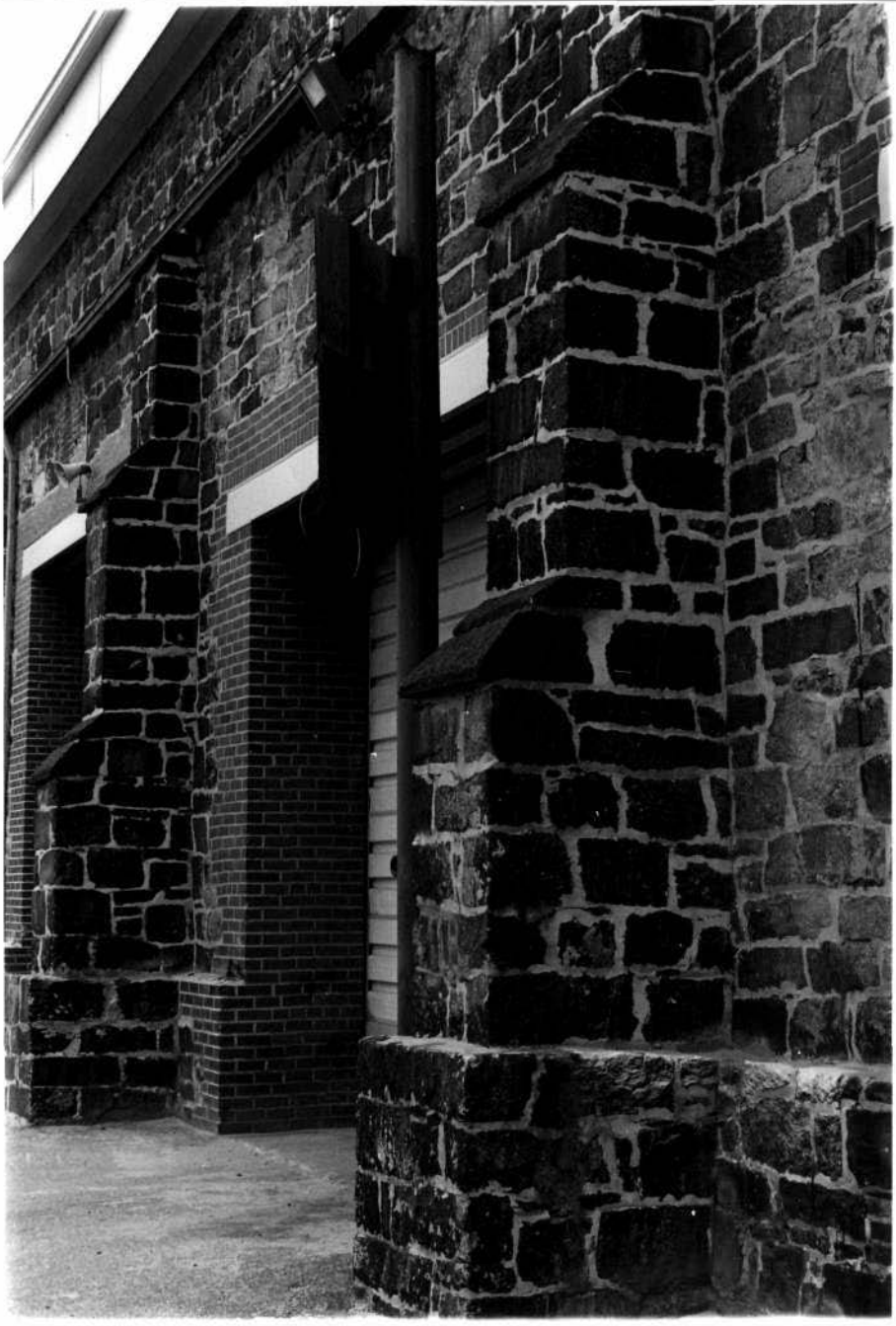


SPRING GARDENS STATION
PETER LIEBHOLD BALT. CITY, MD
OLD GAS GENERATING BUILDING. 5/83
LOOKING NORTH-WEST

B-1032
Spring Gardens Station
Baltimore City, MD
Peter Liebhold, 5/83
old Gas Generating Building
Looking northwest

B-1032

Spring Gardens Station
Peter Liebhold Balt. City MD 5/83
Old Gas Generating Building, looking north-east



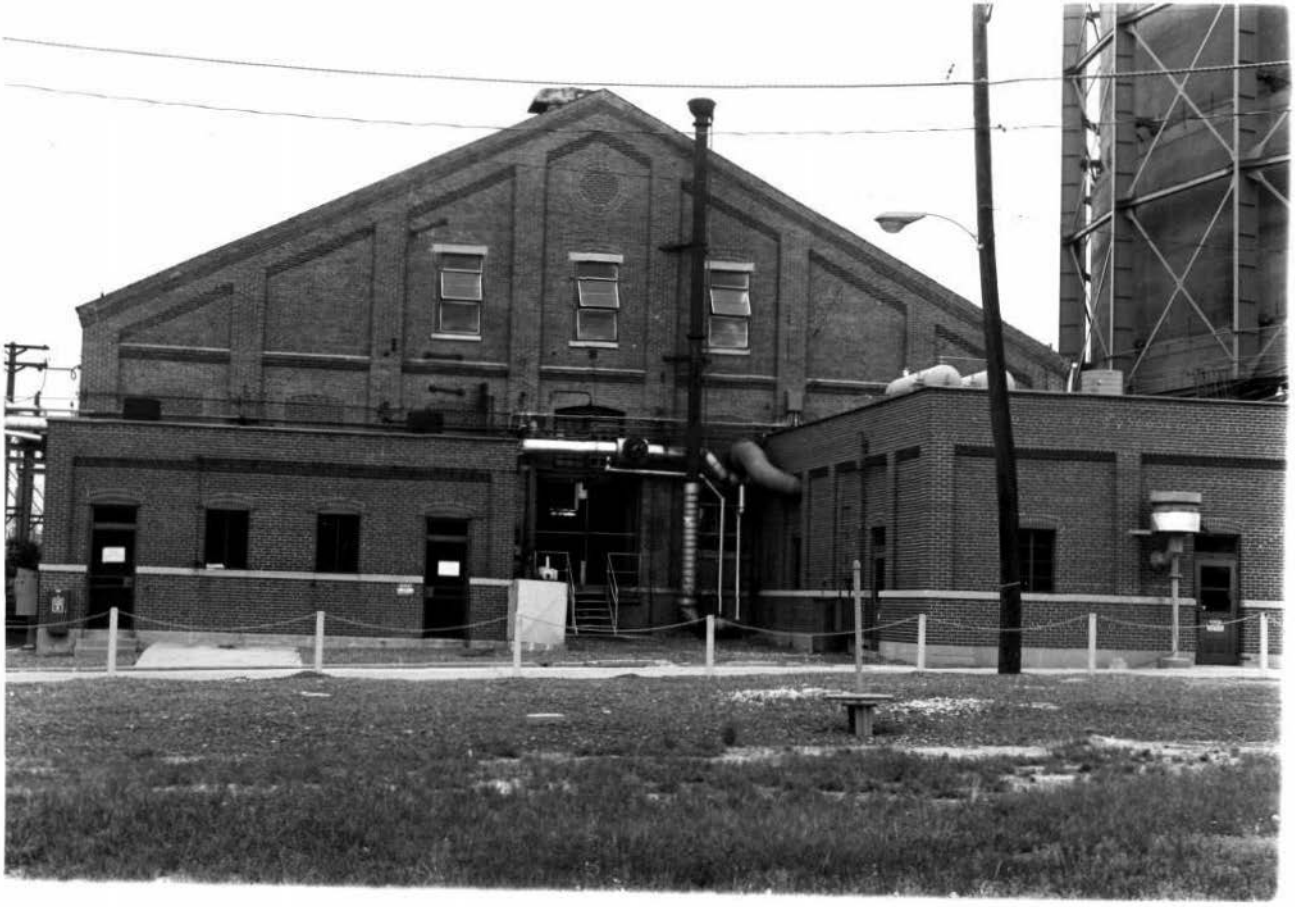
B-1032
Spring Gardens Station
Baltimore City, MD
Peter Liebhold, 5/83
Old gas generating building,
buttress detail, south facade

B-1032
g Gardens STATION
Liebhold BALT. CITY MD
GAS Generating Building 5/83
s detail, South façade


1869

B-1032

Spring Gardens Station
Peter Liebhold Balt. City, MD (Detail - Corner stone)
Old Gas Generating Building 5703
North-east corner



B-1032

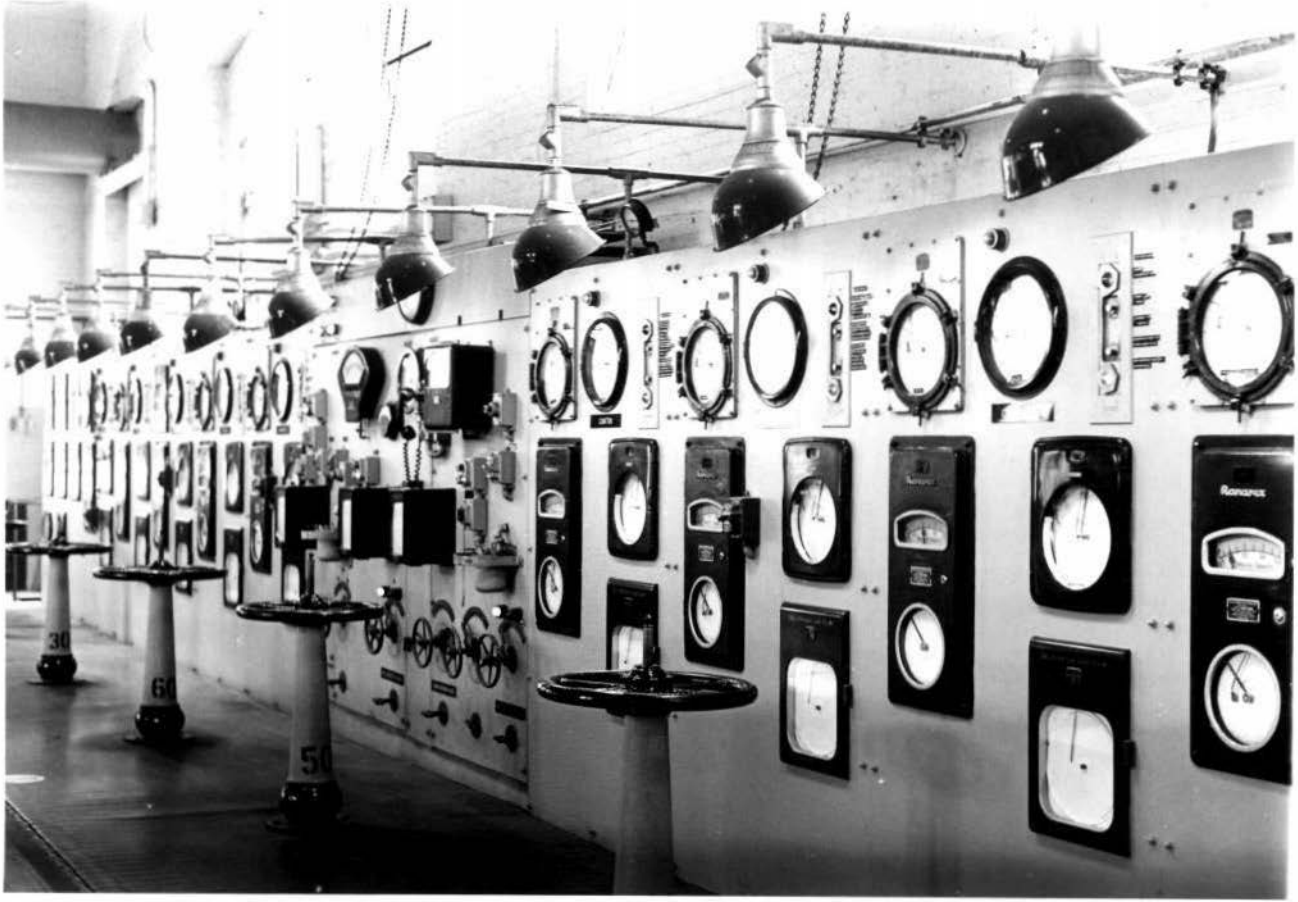
SPRING GARDENS STATION
Peter Liebhold BALT. City, MD 5/83
VALVE HOUSE (NEW), South facade

B-1032

Spring Gardens Station
Peter Liebhold Balt. City, MD 5/83
Valve House (new), looking east

B-1032

Spring Gardens Station
Peter Liebhold Balti. City MD
Valve House (NEW) 5/83 Roof truss system


Ronarc

B-1032

Spring Gardens STATION
Peter Lichtold BALT. City MD
VALVE House (NEW) 5/83

Control Board detail

B-1032

ing GARDENS STATION
er Liebhold BALT. CITY, MD 5/83
VALVE HOUSE & LABORATORY BUILDING, looking S.E.

B-1032
Spring Gardens Station
Baltimore City, MD
Peter Liebhold, 5/83
Old Valve House & Laboratory Building,
Looking southeast

B-1032

SPRING GARDENS STATION
PETER LIEBHOLD BALT. CITY, MD
OLD VALVE HOUSE & LABORATORY BUILDING 5/83
LOOKING SOUTH - EAST

B-1032

SPRING GARDENS STATION
Peter Liebhold Balt. City, MD 5/83
OLD VALVE HOUSE, looking ~~east~~

B-1032

Spring Garden Station
Peter Liebhold Baltimore, MD
Old valve House ceiling 5/83

B-1032

Spring Gardens Station
Peter Liebhold Balt. City MD 5/83
Laboratory Building, looking South-West

B-1032

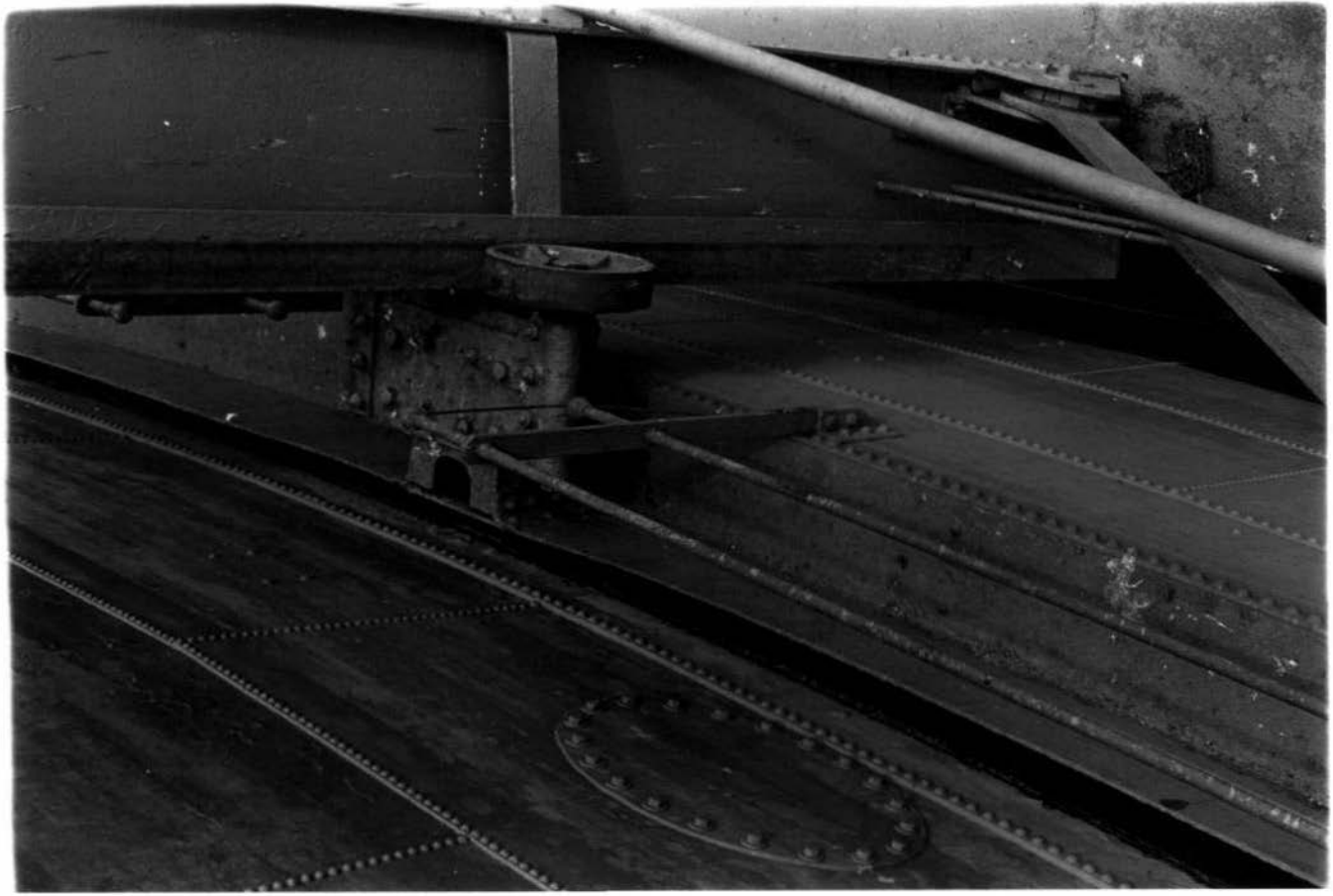
ng Gardens STATION
n Liebhold BALT. City MD
ORATORY Building 5/83 (detail - roof support system)

B-1032
Spring Gardens Station
Baltimore City, MD
Peter Liebhold, 5/83
Laboratory Building
Detail- roof support system


THE
BARTLETT HAYWARD CO.
BALTIMORE, MD.
ERECTED - 1919

B-1032

Spring Gardens STATION
Peter Liebhold BALT. City MD
GAS holder (maker's plate) 5/83



B-1032

n6 Gardens STATion
e Liebhold BALT. City MD
Holden 5/83 (Detail)

This Side Up ↓

B-1032
Spring Gardens Station
Baltimore City, MD
Peter Liebhold, 5/83
Gas holder, detail