

CARR-1586

Patapsco State Park, Sykesville vicinity

Summary:

The Elba Iron Furnace was constructed c. 1847 by three Baltimore businessmen, Eben Belknap, John Griffiths, and Ammon Cate. In 1849, Isaac Tyson, Jr. purchased the furnace and approximately 15 acres of land for \$10,000 for his son James Wood Tyson. Tyson also purchased dam and water rights from James Sykes, who had a mill in the vicinity. These rights would prove to be a source, as James' wife Elizabeth Tyson noted in a letter of 1851: "The country is parched for want of rain; the river is very low, so that the furnace has to stop for two or three hours every evening after old Sykes shuts his dam off until it spills and runs over. He built a dam against all James could do who told him it was not legal and now I am only waiting to feel a decisive inconvenience from it and will sue him."

**Maryland Historical Trust  
State Historic Sites Inventory Form**

**MARYLAND INVENTORY OF  
HISTORIC PROPERTIES**

Survey No. CARR-1586

Magi No.

DOE  yes  no

**1. Name** (indicate preferred name)

historic Elba Furnace

and/or common

**2. Location**

street & number Between CSX Railroad tracks & Patapsco River  not for publication

city, town Sykesville  vicinity of congressional district

state Maryland county Carroll

**3. Classification**

Category	Ownership	Status	Present Use
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input type="checkbox"/> occupied	<input type="checkbox"/> agriculture
<input type="checkbox"/> building(s)	<input type="checkbox"/> private	<input checked="" type="checkbox"/> unoccupied	<input type="checkbox"/> commercial
<input checked="" type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational
<input type="checkbox"/> site	<b>Public Acquisition</b>	<b>Accessible</b>	<input type="checkbox"/> entertainment
<input type="checkbox"/> object	<input type="checkbox"/> in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government
	<input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial
	<input checked="" type="checkbox"/> not applicable	<input type="checkbox"/> no	<input type="checkbox"/> military
			<input checked="" type="checkbox"/> museum
			<input type="checkbox"/> park
			<input type="checkbox"/> private residence
			<input type="checkbox"/> religious
			<input type="checkbox"/> scientific
			<input type="checkbox"/> transportation
			<input type="checkbox"/> other:

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

name State of Maryland, Department of Natural Resources

street & number telephone no.:

city, town state and zip code Maryland

**5. Location of Legal Description**

courthouse, registry of deeds, etc. Courthouse Annex liber 292

street & number 55 North Court Street folio 380

city, town Westminster 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. CARR-1586

<b>Condition</b>		<b>Check one</b>	<b>Check one</b>
<input type="checkbox"/> excellent	<input checked="" type="checkbox"/> deteriorated	<input checked="" type="checkbox"/> unaltered	<input checked="" type="checkbox"/> original site
<input type="checkbox"/> good	<input type="checkbox"/> ruins	<input type="checkbox"/> altered	<input type="checkbox"/> moved      date of move _____
<input type="checkbox"/> fair	<input type="checkbox"/> unexposed		

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

SEE ATTACHED

# 8. Significance

Survey No.

CARR-1586

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

**Specific dates**      C.1847      **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.

SEE ATTACHED

# 9. Major Bibliographical References

Survey No. CARR-1586

SEE ATTACHED

# 10. Geographical Data

Acreege of nominated property \_\_\_\_\_

Quadrangle name Sykesville

Quadrangle scale 1:24000

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 Kenneth M. Short, Historic Planner

organization Carroll County Planning & Develop. date May 25, 1999

street & number 225 North Center Street telephone (410) 386-2145

city or town Westminster 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

MARYLAND HISTORICAL TRUST.  
 DHCP/DHCD  
 100 COMMUNITY PLACE  
 CROWNSVILLE, MD 21032-2023  
 514-7600

MARYLAND HISTORICAL TRUST  
STATE HISTORIC SITES INVENTORY FORM

Survey No. CARR-1586

Description

Section 7 Page 1

Elbe Furnace is located 3/4 of a mile southeast of Main Street, Sykesville, in Southeastern Carroll County Maryland. The furnace is located on the northside of the Patapsco river, between the river and the scx railroad tracks. The river is about 60' south of the furnace and sweeps in an arch around the site. River road runs on the south side of the river, the tracks are approximately 45' north of the furnace. The furnace is oriented facing southeast with a bank on the northwest. The large stones appear to be dry laid and are quarried containing many signs of drill marks. The structure is constructed primarily of large ashlar stones with some small stone infill. The interior of the stone wall is of smaller stones and the furnace has a lining of witch shaped fire bricks that are 10" long 3" high and are 5 1/2 wide at the wide end and 4 1/2 wide at the narrow end. The ground level is now much higher, it has been raised in part by the collapse of stones from the top of the structure.

The southeast elevation has a corbeled opening in the center that is 4' 5 1/2 wide and at least 5' x 4 1/2 high. The southwest elevation also has a corbeled opening in the center, but it is much lower than that on the southeast. There is an iron strap with an eye on the end projecting from the wall just south of the opening. The northwest elevation also has a corbeled opening about the same height as the southwest opening, this opening is 2' x 9 1/4 wide at the top but the opening is splayed so that it is wider at the base. This splay is in part due to the fact that all four walls of the furnace are battered. On the northeast elevation there is a great deal of collapse and it is not possible to tell if there is an opening here. There is a banked ramp of earth on the northwest side of the furnace that runs off to the northwest, there the remains of a stone wall on the northwest with a short section of it on the northeast. The northwest elevation was 21' x 8 1/2 inches where it was measured 5' 2" above the ground level. The ground level was determined at the north corner where the structure survives in the best condition, and this is probably close to the original ground level or slightly higher. The surviving structure at the north corner is 16' 8 1/4 inches tall approximately. This is probably close to the original height. The walls batter in about 1 inch in every foot. The southwest elevation was measured to be 21' 8" wide at the same height of 5' 2". This measurement was not exact because one corner is collapsed. The interior of the structure is 8' 8 1/2 in diameter from the outside of the brick to the outside of the brick on the opposite side. The lining is one brick thick with the narrow ends set to the inner side and there is a thick brown parging on the outer side of the bricks. There is a gap between the stone wall and the brick lining of 18 1/2 to 20 1/2 inches. The brown parging is approximately 5" thick, the interior appears to taper in as it goes up to the top.

MARYLAND HISTORICAL TRUST  
STATE HISTORIC SITES INVENTORY FORM

Survey No. CARR-1586

Description

Section 7 Page 2

About 100 or so yards upstream is a coursed stone wall along the bank of the river, this wall was at least 100' long and appears to have been constructed with the furnace to protect the furnace area from flooding. To the north of this stone wall is another stone wall along what appears to be a ramp that runs up to the northwest and then turns back to the southeast. About 150' yards or so further upstream is a portion of a dry laid stone wall of fairly large stones, this wall is about 10 to 15' south of the railroad tracks. There is no distinguishing features to determine its original function.

Contributing Resources 3

Significance

Section 8 Page 1

The Elba Iron Furnace was constructed c.1847 by three Baltimore businessmen, Eben Belknap, John Griffiths, and Ammon Cate. In 1849, Isaac Tyson, Jr. purchased the furnace and approximately 15 acres of land for \$10,000 for his son James Wood Tyson. Tyson also purchased dam and water rights from James Sykes, who had a mill in the vicinity. These rights would prove to be a source, as James' wife Elizabeth Tyson noted in a letter of 1851: "The country is parched for want of rain; the river is very low, so that the furnace has to stop for two or three hours every evening after old Sykes shuts his dam off until it spills and runs over. He built a dam against all James could do who told him it was not legal and now I am only waiting to feel a decisive inconvenience from it and will sue him."

Tyson had apparently researched the costs and performance of a number of Maryland furnaces and estimated that Elba could produce iron at \$20 a ton, delivered to Baltimore. Later refinements brought the cost down to between \$17.50 and \$18.16 a ton, depending on where the iron ore was acquired. Ores were used from George Patterson's Springfield estate, from the Clary ore bank Mt. Airy, from the Rice ore bank in Howard County, and from the Jalbot ore bank near Relay, which was a carbonate ore that was somewhat self-fluxing. At that time, December 1847, the single furnace had a 7 ½ foot diameter bosh with three tuyeres and produced 30 tons a week. In 1859, the furnace was reported to be 30 feet high, with an 8 ½ foot inside diameter. It burned charcoal, though there were reportedly experiments using anthracite coal, and operated both on water and steam power. It was considered to be an efficient hot blast furnace and was rated, in 1857, at 1,500 tons per year. In 1850, most of the labor was from Ireland, and some of it was from Germany. By 1860, most workers were natives of Maryland, with a few from Pennsylvania or Virginia. The July, 1868 flood that destroyed most of Sykesville also wiped out the Elba Furnace shortly after its blast had been blown out, and it was never rebuilt.

At present, much of a stone wall along the shore line of the site survives. The Patapsco River makes an arc to the south, forming a spit of land on which the furnace was constructed. This wall was probably intended to protect the site from typical flooding. The furnace stack survives in part, with portions of a stone wall to the north of the stack. There is sloping ground to the west that is probably a man-made earthen ramp for pushing wheelbarrows of ore, limestone, and charcoal up to the top of the furnace. There is also a stone foundation northwest of the furnace, but it is not possible to tell what it may have originally been. The site is scattered with slag and is now overgrown, which probably conceals other historic landscape features.

Geographic Organization:  
Piedmont

Chronological/Developmental Periods:  
Agricultural-Industrial Transition A.D. 1815-1870

Historic Period Themes:  
Industry

Resource Type:  
Iron Furnace

MARYLAND HISTORICAL TRUST  
STATE HISTORIC SITES INVENTORY FORM

Survey No. CARR-1586

Bibliography

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Notes compiled by Harold B. Johnsson, III, March 1997.

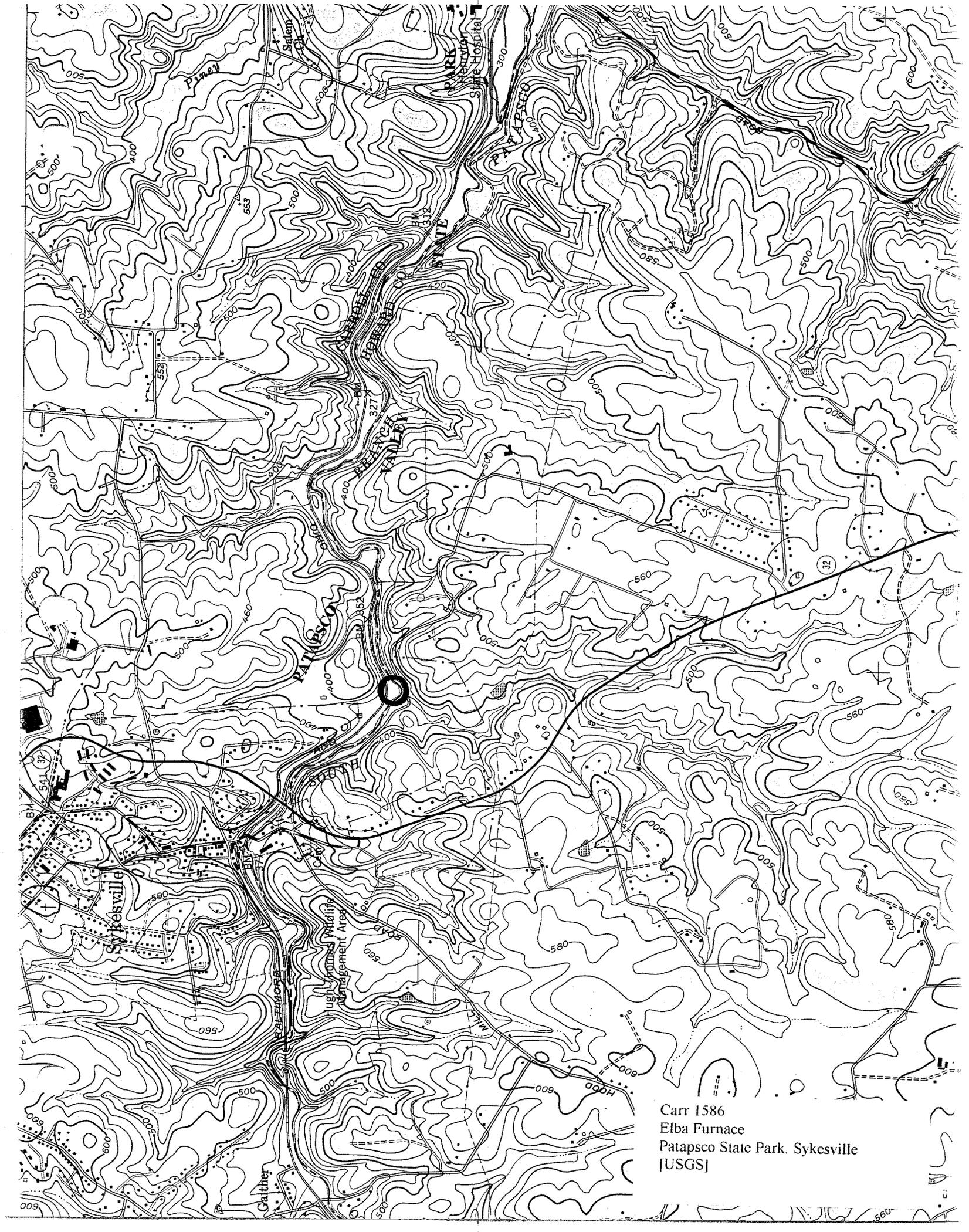
Maryland Geological Survey, Iron Ores of Maryland, 1911, pp. 149-150.

Healan Barrow, Sykesville Past and Present (Sykesville: Greenburg Pub. Co., 1987), p.6.





Carr 1586  
 Elba Furnace  
 Patapsco State Park, Sykesville  
 Martenet Map, 1862



Carr 1586  
Elba Furnace  
Patapsco State Park, Sykesville  
[USGS]



Cam-1586

Elba Furnace  
Patapsco State Park  
Carroll County, Maryland

2NNI 2-N N N \*KIS TERK

MSK

Photo: Kenneth M. Short  
Date: Mar. 97  
Neg. Loc.: Maryland Historical Trust  
SE Elevation

1 OF 7



Elba Furnace  
Patapsco State Park  
Carroll County, Maryland

Corn-1586

Photo: Kenneth M. Short

Date: Mar. 97

Neg. Loc: Maryland Historical Trust

Retaining Wall - V. W. Elevation

2 OF 7



Carr - 1586

Elba Furnace

Patapsco State Park

Carroll County, Maryland

2NN 2-N N N \*\* 12 10K

25-11-11

Photo: Kenneth M. Short

Date: Mar. 97

Neg. Loc.: Maryland Historical Trust

NW Elevation from West

30F7



Elba Furnace

Can 1586

Patapsco State Park  
Carroll County, Maryland

Photo: Kenneth M. Short

Date: Mar 97

Neg. Loc: Maryland Historical Trust

S.W. Elevation

40F7



Carr-1586

Elba Furnace

Patapsco State Park

Carrall County, Maryland

ZBB Z-N N N \*\*12 184

256W

Photo: Kenneth M. Short

Date: Mar. 97

Neg. Loc. Maryland Historical Trust

View from interior looking N.W.

50F7



Carroll 7526

Elba Furnace

Patapsco State Park

Carroll County, Maryland

Photo: Kenneth M. Start

Date: Mar. 97

Neg. Loc: Maryland Historical Trust

S.E. Elevation - detail of corbelled

opening

6 OF 7



Elba Furnace  
Patuxent State Park  
Carroll County, Maryland

Can-1586

Photo: Kenneth M. Short

Date: Mar. 97

Neg. Loc: Maryland Historical Trust

N.E. & S.E. Elevations

70F7