



*Martin O'Malley, Governor*  
*Anthony G. Brown, Lt. Governor*  
*John R. Griffin, Secretary*  
*Joseph P. Gill, Deputy Secretary*

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February 25, 2011

Mrs. Beth Cole  
Administrator, Review & Compliance  
Maryland Historical Trust  
100 Community Place  
Crownsville, Maryland 21032-2023

Re: Historic Documentation of Bloede's Dam, Patapsco Valley State Park

Dear Mrs. Cole: *Beth*

I have enclosed the historic documentation package for Bloede's Dam (BA-1587), at Patapsco Valley State Park that was completed by Paula S. Reed and Associates, Inc. The dam was found to be eligible for the National Register under Criterion A, B, and C.

The documentation package that Paula and staff put together for your office includes: a printed copy of the National Register Determination of Eligibility form (DOE), bibliography, 2 USGS quad maps, a property plat/site plan, interior floor plan, historic photos, one set of 12 black and white 5"x7" archival photos, and 35mm black and white negatives. Also included with this package is a CD ROM with DOE Access database, PDF/jpeg files of the report and attachments, and TIFF color digital photos.

Please review the documentation and let me know if you concur with the assessment of National Register eligibility. The removal of the dam is still proposed so if you agree that it is eligible we should discuss possible mitigation, and steps that will be needed to proceed with this project. If you have any questions or need any additional information I can be reached at 410.260.8932 or [cmazurek@dnr.state.md.us](mailto:cmazurek@dnr.state.md.us). Thank you.

Sincerely,

A handwritten signature in black ink that reads "Charles Mazurek".

Charles Mazurek  
Historic Preservation Planner  
Engineering & Construction

February 25, 2011  
Historic Documentation of Bloede's Dam  
Page 2 of 2

Copy:

Jordan Loran  
Michele Hurt  
Robin Melton  
Butch Norden  
Paula Reed  
Mary P. Andrews (NOAA)  
Serena McClain (American Rivers)

**MARYLAND HISTORICAL TRUST  
DETERMINATION OF ELIGIBILITY FORM**

NR Eligible: **yes**  
**no**

Property Name: Bloede's Dam Inventory Number: BA-1587  
 Address: on Patapsco River between Avalon and Ilchester Historic district: yes X no  
 City: Avalon Zip Code: County: Baltimore County

USGS Quadrangle(s): Savage

Property Owner: Maryland Department of Natural Resources Tax Account ID Number:

Tax Map Parcel Number(s): Tax Map Number:

Project: Agency: Maryland Department of Natural Resources

Agency Prepared By: Paula S. Reed & Associates, Inc.

Preparer's Name: Edie Wallace Date Prepared: 2/9/2011

Documentation is presented Hnedak, John. "Bloede's Dam/Patapsco Dam." BA-1587, Maryland Inventory of Historic Properties, 1978-79.

Preparer's Eligibility X Eligibility recommended Eligibility not recommended  
 Criteria: X A X B X C D Considerations A B C D E F G

*Complete if the property is a contributing or non-contributing resource to a NR*

Name of the District/Property:

Inventory Number: Eligible yes Listed yes

Site visit by MHT Staff yes X no Name: Date:

Description of Property and *(Please attach map and photo)*

Description:

Bloede's Dam crosses the Patapsco River in the Avalon section of Patapsco Valley State Park just southwest of Baltimore. The river divides Howard and Baltimore Counties. In this location the River bends in a C-shape, flowing south to southwest then east, and follows a channel between steep hills on either side. The B&O Railroad, runs along the east side of the river, entering a tunnel just above the dam site on the Baltimore County side of the River. The railroad emerges from the tunnel and crosses to the west side of the river a short distance upstream, near the site of the former Thistle Mills. The tunnel is a later railroad development, constructed after 1913. The original rail bed followed the river's edge. That right of way is now a park hiking trail. On the west, Howard County side of the river, a park road provides access to the dam. This road was once a public road leading to the village of Ilchester and Thistle Mills, the site of a former cotton mill and associated workers' housing. Because of the pronounced bend in the river just before the location of Bloede's Dam, the dam itself is oriented with its ends north (east bank, Baltimore Co. side) and south (west bank, Howard Co. side).

Built in 1906 for the Patapsco Electric and Manufacturing Company, the dam consists of flat slabs of reinforced concrete with a hollow interior which held electrical generating machinery. Thus the power plant for this hydro-electrical generating facility

**MARYLAND HISTORICAL TRUST REVIEW**

Eligibility recommended Eligibility not recommended  
 Criteria: A B C D Considerations: A B C D E F G

MHT Comments:

Reviewer, Office of Preservation Services Date

Reviewer, National Register Program Date

occupies the inside the dam itself, under the surface level of the water. The Ambursen Hydraulic Construction Company designed and built the dam. According to a 1907 description of the then-new dam, (see "Power plant Inside of a Dam on the Patapsco River," Electrical World, August, 1907, p. 207-210) it has a total length of 230 feet, is 26 ½ feet high from the downstream water level to its top, and 40 feet broad at the base. Buttresses at each end of the dam rise 10 feet above the crest and include ground level entrances on either end, providing access to the interior of the dam. Of the dam's 230-foot length, the spillway portion is 168 feet. A series of 19 buttresses placed 12 feet apart, support the dam's sloping upstream surface. Each buttress tapers from 24 inches thick at the base to 16 inches thick at the top. The shell of the dam is 18 inches thick at the base and decreases to 10 inches thick at the top. As built, the dam was equipped with anchor bolts along the spillway to allow the height of the dam to be raised temporarily by attaching upright boards across the top of the spillway. Openings in the upstream surface of the dam fed water into turbines inside the dam.

On the downstream side of the dam, the apron extends only partway down from the crest, flaring slightly where it ends, to kick the water away from the lower dam wall bays. Two round, 22-inch porthole windows per bay illuminated the interior of the dam where the electrical power generation took place. The kick in the dam's apron caused the water to project outward and away from the windows.

On the west bank (Howard Co. side) of the river, a concrete fish ladder uses a switchback design to allow fish to climb to their spawning area above the dam. The ramped trough has a steel grate cover and a steel railing to provide a walking surface for observation and maintenance purposes. The current fish ladder replaces an older wooden one that was part of the original construction. A large concrete pipe conduit extends from the north end (Baltimore Co. side) of the dam, supported by concrete piers, and continues down river for some distance.

Currently the interior of the dam is empty and dark. The electric generating equipment was removed after 1932 when the hydroelectric plant closed. Also currently the crest of the dam is level continuously across the river, and this was the appearance as constructed. However, in a 1914 photograph of the dam, two superstructures had been added on top of the dam's crest, approximately over the turbines. They were destroyed in 1972 by hurricane Agnes.

Although its condition is deteriorated, the dam is intact and appears much as it did as constructed in 1906.

#### Assessment of Integrity:

Bloede's Dam retains outstanding integrity of location, setting, design, materials (except for power plant equipment), workmanship, feeling and association. It appears today very similar to photographs taken shortly after construction in 1907.

#### Statement of Significance:

Bloede's Dam is significant under NR Criterion A for its role in the early 20th century generation of electricity in Baltimore County. Bloede established the Patapsco Electric & Manufacturing Company in 1906 and built the hydro-electric dam that bears his name to provide electricity to his Eden Terrace development adjoining Catonsville and the surrounding area in Baltimore County not yet serviced by the Consolidated Gas Electric Light & Power Company of Baltimore.

Bloede's Dam is significant under NR Criterion B for its association with Victor Gustav Bloede, who, as president of the Patapsco Electric & Manufacturing Company, financed the construction of the dam to provide electrical power to his Eden Terrace development and the surrounding rural area outside of Baltimore City. Victor G. Bloede was a chemical engineer who developed the "sun-fast" chemical dying process for textiles, a vegetable glue known as "Viscamite," a cellulose plastic known as "Viscolite," and also invented the adhesive used on U.S. postage and revenue stamps through the 1980s.

Bloede's Dam is significant under NR Criterion C as the first hollow concrete hydroelectric dam ever built in which the electrical generating equipment was housed within the dam interior. Although the hydroelectric plant ceased operations in 1932 and the equipment was removed, the dam structure itself remains largely intact and retains the ability to convey the significance of its design and construction.

The period of significance runs from 1906 when the dam was constructed through 1932 when the dam ceased operations as a hydroelectric production facility.

## Historic Context:

## Dam Construction and Hydroelectric Power

The construction of dams to create a reservoir of water dates back to early history. Writing initially in 1888, Civil Engineer Edward Wegmann observed: "The ordinary manner of forming these basins, some of which were of vast extent, consisted in closing a valley by dams of earth; and it was not until comparatively recent times that walls of masonry were employed for such purposes." (Wegmann, p. 1) Just twelve years later James Dix Schuyler issued a second edition of his own treatise on dam construction, noting in the new 1908 preface: "In the past ten or twelve years...the world in general appears to have entered upon a new era of dam and reservoir creation, and there has been such a remarkable degree of activity displayed in the conservation and utilization of water, that it may be quite reasonable to state that more dams have been built in the decade just passed than during any fifty years of previous history." Significantly, Schuyler's second edition added a new chapter "descriptive of reinforced concrete dams, the latest claimant to public attention..." (Schuyler, p. v).

It was in 1902, according to Schuyler, that the Ambursen Hydraulic Construction Company of Boston first introduced their patented designs for reinforced concrete dams in the eastern United States (Schuyler, p. 465). Within six years "No less than 39 dams, from 10 to 80 feet high, and from 60 to 1200 feet long, have been erected in this short interval..." (Ibid) Clearly impressed with the strength and versatility of the concrete dam, Schuyler wrote: "The designs for these dams are highly specialized and exhibit an intelligent conception of the problems involved. They also illustrate in a striking way the manifold uses and flexible adaptability of the new building material which is so rapidly entering into all forms of construction at the present day." (Ibid)

The new design apparently perfected in concrete by the Ambursen company in fact harkened back to the old triangular design of timber crib dams rather than the more vertical masonry dams. The dam was given a "long low back slope" the surface over which the dammed water produced "the vertical component of the static pressure...made to pin the dam more firmly down to its foundation." The strength of the reinforced concrete material also allowed the Ambursen design to utilize a base consisting of a series of buttresses, rather than the solid core of the typical masonry dam. According to Schuyler, "One apparent advantage of this design is that the dam when founded on rock has no continuous base, and therefore cannot be threatened by upward lifting pressure of water that may find its way through seams in the rock." (p. 467) Schuyler continued: "The design of these dams leaves them hollow, which has the advantage of permitting inspection of the interior. At the same time, the space can be utilized for handling flashboards, waste gates, log sluices, or movable crests from beneath safely and conveniently, and a passageway can be maintained through the interior of the structure from one side of the river to the other, as a substitute for a foot-bridge over the stream." (pp. 470-471).

Much of the world's dam construction up to the late 19th century had been for the collection of water for irrigation. But in 1882, following recent advances in electrical production, the first hydroelectric plant was constructed in Wisconsin and in 1896 Niagara Falls began generating electrical power (Wisconsin Historical Society, "Introduction of Electrical Power," [www.wisconsinhistory.org/turningpoints/tp-041/?action=more\\_essay](http://www.wisconsinhistory.org/turningpoints/tp-041/?action=more_essay)). Schuyler wrote of the advent of hydroelectric generation: "The recent development of electrical machinery, by which power may be profitably transmitted long distances with comparatively small loss, has indirectly benefited the irrigation development of the country by adding an incentive to the construction of storage reservoirs for the primary and more profitable purpose of generating power" (Schuyler, p. xi; this book was first published in 1901). Indeed, by the early 20th century, 40% of U.S. electricity was generated by hydroelectric plants: "Niagara Falls was the first of the American hydroelectric power sites developed for major generation and is still a source of electric power today. The early hydroelectric plants were direct current stations built to power arc and incandescent lighting during the period from about 1880 to 1895. When the electric motor came into being the demand for new electrical energy started its upward spiral. The years 1895 through 1915 saw rapid changes occur in hydroelectric design and a wide variety of plant styles built." (U.S. Bureau of Reclamation, "The History of Hydropower Development in the United States," [www.usbr.gov/power/edu/history.html](http://www.usbr.gov/power/edu/history.html))

Hydroelectric plants and their associated dams were typically connected but constructed as separate structures. The hollow core design of the Ambursen reinforced concrete dam provided interior space within the dam that could potentially house the power plant. The first of this type of hydroelectric dam, and the smallest at only 26 1/2 feet high, was built in 1907 on the Patapsco River for the Patapsco Electric & Manufacturing Company (see Resource History below). This was followed in 1907-08 by the larger (71 1/2 feet high) Ellsworth Dam on the Union River in Maine (Schuyler, p. 471). This proved to be a cost and space-saving option, but appears to have been rarely adopted in hydroelectric dam construction.

## Electric Generation in Baltimore County

"On Tuesday evening, June 11, 1816, Rembrandt Peale illuminated a room in his Holliday Street museum in Baltimore with burning gas, dazzling the patrons gathered there with a 'ring beset with gems of light'." (www.bge.com) Within days, Peale, the son of the famous American portrait artist Charles Willson Peale, and two business partners established the Gas Light Company of Baltimore, providing manufactured gas to light the streets and homes of Baltimore City. By 1888, after facing fierce competition from rival gas companies, the company acquired its competitors and formed the Consolidated Gas Company of Baltimore.

By then Thomas Edison had invented the incandescent light bulb and early electrical generation plants were already in service. By the close of the 19th century, Baltimore City was serviced by several electric companies, but "Power plants were small and inefficient, rates varied widely, and distribution amounted to a tangle of duplicated and overloaded overhead lines." (www.bge.com) In 1906, United Electric Light and Power Company merged with Consolidated Gas and formed the Consolidated Gas Electric Light & Power Company of Baltimore, "the city's first fully integrated gas and electric service company." (www.bge.com)

At the same time through the 1880s and 1890s, Baltimore City and County was at the forefront of experimentation with electric railways. Numerous lines ran through the city and threaded out to surrounding suburbs, including the Catonsville & Ellicott Mills Railway Company, and by 1899 all were consolidated as the United Railways & Electric Company of Baltimore (Hall, Vol. I, p. 550). In 1900 the Company built a large power plant on Pratt Street in Baltimore which provided electrical power to the railway system. By 1904, according to the Sanborn Fire Insurance Company map, Catonsville had public electric lights. Presumably the electricity reached this suburban town through the passenger railway line.

In 1906 the United Railway & Electric Company merged with Consolidated Gas Electric Light & Power Company of Baltimore, bringing with it the Pratt Street power plant. Consolidated already had recently completed its massive power plant, the Westport Power Station built in 1905 (www.westportpartnerships.org). In 1907 the company acquired the Gould Street Generating Station among the assets that came with the Baltimore Electric Company and in 1910, began generating power at the Holtwood hydroelectric plant on the Susquehanna River, acquired by Consolidated president John E. Aldred when he took receivership of the McCall's Ferry Power Company (N. Christian Porse, July 2, 2010, HydroWorld.com).

Even with the developing electrical generating capacity of Consolidated Gas Electric Light & Power Company through the first decade of the 20th century, most rural areas of Baltimore County were left behind. Some towns, like Catonsville, were likely serviced through the electric railway connection. Victor G. Bloede, whose wealth and inventors spirit enabled him to pursue his own power source (see Resource History below), brought electricity to his rural community and the surrounding area in 1908. After World War I, the Baltimore City boundary was expanded by nearly 60-square miles to include many of its now-dense suburban neighborhoods, bringing electrification in its wake (www.bge.com).

## Resource History:

Victor G. Bloede (pronounced Blerda) was born in Dresden, Germany in 1849 and immigrated with his parents to the United States before the Civil War. The family settled in Brooklyn, New York where young Victor attended Cooper Union (Institute). He graduated in 1867 among the first class to receive a degree in chemical engineering. That same year Bloede published *The Reducers Manual, and Gold & Silver Workers Guide, Being a Complete and Practical Hand-Book on the Saving and Reduction of every Class of Photographic Wastes and Gold & Silver Residues.* (New York: Joseph H. Ladd Publisher, 1867) Bloede's career began at a small chemical company in Brooklyn. He then moved to Ohio, eventually becoming a partner in the Parkersburg, West Virginia firm of Bloede & Rathbone. There he learned the trade of textile dyes and helped to develop a manufacturing process for the production of nitrobenzene. In 1877, Bloede moved to Baltimore, Maryland where he established his own company, Victor G. Bloede Company, and began the development of textile dye compositions among numerous other inventions: "between the years 1890 and 1895 he was granted fifteen or twenty patents upon chemical processes, one of the most important being the patent upon the process for dyeing in 'sun-fast', unfading shades." (Hall, p. 616) Other patents included a vegetable glue called "Viscamite," a cellulose plastic called "Viscolite" (V.C. Bloede, index), and an adhesive known as dextrin used on U.S. postage stamps and revenue stamps until they switched to the self-adhesive in the 1980s (Smith and Hamilton, *Chemical Engineering News*, 1944, 22 (17), p 1482). In 1894, Bloede was awarded the Edward Longstreth Medal in engineering from the Franklin Institute for his "process of tinting fabrics." (www.fi.edu/winner/detail.faw?winner\_id=2349; Amer. Men of Science p. 68)

In 1892 Bloede established the Eden Construction Company and laid out the Eden Terrace community adjoining Catonsville in Baltimore County (plat, BC Plat Bk JWS 1/82). Carl Shon Sr. (Bloede's father-in-law, a metallurgist/jeweler/architect) and William Lightfoot Price (Philadelphia architect) designed a number of the houses and "cottages" in the 57-lot community, including Bloede's own remarkable stone mansion called Arden, which burned in 1922.

It was in 1906 that Victor G. Bloede decided to bring electricity to his Eden Terrace community and the surrounding rural Baltimore County area. Although Catonsville had electricity as early as 1904 (Sanborn Insurance Co. map), it appears that the surrounding rural area was still unserved by the newly-formed Consolidated Gas Electric Light & Power Company of Baltimore. Bloede established the Patapsco Electric & Manufacturing Company and purchased a "water privilege" on the Patapsco River near the site of Grays Mill and the old Thistle Mills near Ilchester (Water & Water-Power Rights' Assessment). Immediately the Company, with Bloede as President, contracted a design for a state-of-the-art hydro-electric dam from the country's leading concrete dam-building company at the time, Ambursen Hydraulic Construction Company of Boston. Construction was completed in 1907 and it was immediately lauded in the August 3 issue of the industry publication *Electrical World* as the "first of its kind":

"The Patapsco Electric & Manufacturing Company, of Ellicott City, Md., has lately completed its new dam and power house on the Patapsco River near Ilchester Branch of the Baltimore & Ohio Railroad. The plant is unique in that it is placed within the dam and is thus completely under water. The plant also has the distinction of being the first of its kind ever built, and the cost is of course very much less than that of any other arrangement."

The article went on to describe the dam and power plant in detail:

"The dam has a total length of 220 ft. and is 40 ft. wide at the base. The height of the dam from normal tail water to the crest is 26 ½ ft. At each end the buttresses and deck of the dam rise 10 ft. above the spillway as a protection from floods and to afford convenient entrances to the interior of the dam. The spillway is 169 ft. long and is provided with anchor bolts so that if at any time it may be deemed desirable, flash boards may be bolted to them and the available head increased two feet. The back water extends ¾ of a mile with an average width of about 500 feet to the tail waters of a cotton mill located at Ilchester. The dam is built of reinforced concrete and the 'deck' is supported by 19 buttresses 24 ins. thick at the bottom and 16 ins. thick at the top, which are placed 12 ft. apart. The mixture used was 1:3:6. The edges of the buttresses and of the openings are reinforced with ¾ in. corrugated iron rods in groups of three. The shell of the dam is 18 ins. thick at the bottom and tapers to 10 ins. at the top. The concrete in the deck is a 1:2:4 mixture reinforced with ¾ in. corrugated iron bars at graduated distances down to 4 ½ -in. centers. The apron extends only half way down from the crown, the remaining down-stream portion being entirely open and provided with windows by means of which the interior is lighted. The shape of the apron is such that the water is thrown some little distance away from the windows. On a clear day the illumination is all that could be desired; while during rainy weather, at which time the water is muddy, the illumination is not quite so good...

At present only 108 feet of the dam is used for housing the power plant. This part of the dam is fitted with a false ceiling hung five feet from the inside of the dam so as to protect the apparatus from any water that might seep through the outer shell of the dam. The dam is built of a fine and rich mixture which was laid very wet. Aside from this no precautions were taken to eliminate water. The ceiling slopes until it reaches the vertical sides forming the power house. That portion of the dam not protected with the false ceiling is comparatively dry as very little water percolates through. What little water finds its way through the concrete trickles along the under side to the drain at the bottom. Were it not for this moisture a person within the power house would not be conscious that he was beneath the water. The waste water going over the crest of the dam is carried on the apron of the spillway to within 16 ft. of the tail water. This apron causes the water to fall about 20 ft. from the down-stream side of the dam and as the river bed is quite rocky at this point, no appreciable pitting takes place.

A fish ladder is placed at one side of the dam as required by law. This is 125 ft. long and has the proper slope and fins so that fish can easily go from the tail water to that above the dam. The wooden trough is shown at the entrance to one side of the dam. It might be well to state in passing that the reason for insisting on fish ways in dams is that when the fish spawn they go up stream to the head waters. To reach the water above the dam they jump from fin to fin of the fish ladder until they reach the top."

The power plant equipment included "two 34-in. horizontal, Leffel [James Leffel & Co., Springfield, Ohio] water-wheels fitted with Woodward governors," connected to "an Allis-Chalmers 300-kw, 11,000-volt, three-phase, 60-cycle alternator belted to the shaft." The apparatus sat on the concrete and steel floor "placed at a proper elevation above the lower pool." Large steel pipes in the up-stream side of the dam fed water directly to the turbines. The water was then "discharged by draft tubes into the base of the dam, dropping into a well sunk some three feet below the river bed," and out of the dam via a channel dug into the river bed.

"...The advantages of such an arrangement of water-wheel and generator are readily discerned. The dam foundation and structure are the power house; the chamber is free from moisture by reason of the free circulation of air around it and the development utilizes all the available fall.

The entire electrical installation is compact, secure, and of the highest efficiency so far as it can be obtained from flow and fall. It will be appreciated that the water falls directly through the top of the dam into and through the wheels below, thus avoiding the friction and other losses of power resulting from carrying the water through long race ways to the wheels. The difference between the present system and those already in vogue may be likened to direct-driven and belt-driven machinery."

The article listed the Ambursen Hydraulic Construction Company as the designer and builder of the dam, along with consulting hydraulic engineer H. Von Schon of Detroit and electrical engineers "Messrs. Newton and Painter, of Baltimore."

According to a 1933 assessment, the power plant at Bloede's Dam required three men to operate under normal conditions. In 1913, after an extended lawsuit between Victor G. Bloede (on behalf of Patapsco Electric) and Consolidated Gas Electric Light & Power Co., the Patapsco Electric & Manufacturing Co. leased, then sold the dam and power plant in 1916 to Consolidated Gas Electric Light & Power Company of Baltimore (report on the Maryland Public Service Commission, Electrical World, Vol. 61, No. 13, March 29, 1913). Apparently the sale was not official until 1928, when Consolidated "acquired all property and assets of Patapsco Electric & Manufacturing Co." (Water Privilege report, 1933). The power plant ceased operations in March 1932 and the equipment was removed from the dam.

Victor Gustav Bloede died in 1937 at the age of 88, according to his New York Times obituary, still active to the end as the president of his dye (ink) manufacturing company.



Bloede's Dam, BA-1587  
Determination of Eligibility  
February 2011

**Bibliographic Resources:**

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Cattell, J. McKeen and Gene R. Brimhall, eds. American Men of Science. The Science Press, Garrison, New York, 1921, p. 68.

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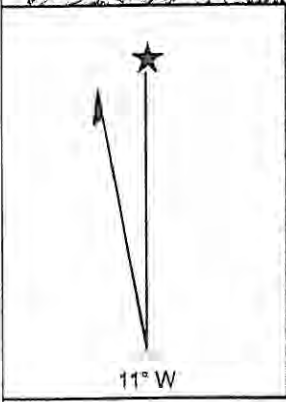
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"Water and Water-power Rights, Patapsco Project, Privilege No. P-2, Consolidated Gas Electric Light and Power Company of Baltimore." 1932 [Baltimore County assessment?], document provided by MD DNR.

Wegmann, C.E., Edward. The Design and Construction of Dams. John Wiley & Sons, New York, NY, 1918.

BA-1587  
Bloede's Dam  
Patapsco Valley State Park  
Baltimore Co., MD  
USGS Savage Quadrangle  
February 2011



D-106101

1932 Property Plat  
BA-1587, Bloede's Dam  
Patapsco Valley State Park  
Baltimore County  
Paula S. Reed & Associates, Inc.  
February 2011

Note:  
For Purchase No. 2, see plat  
No. 106101, Baltimore County  
and is of record in  
July September 19, 1911.

Note:  
This plat is a  
re-creation of the  
original plat as  
shown on the  
original plat  
of 1911.

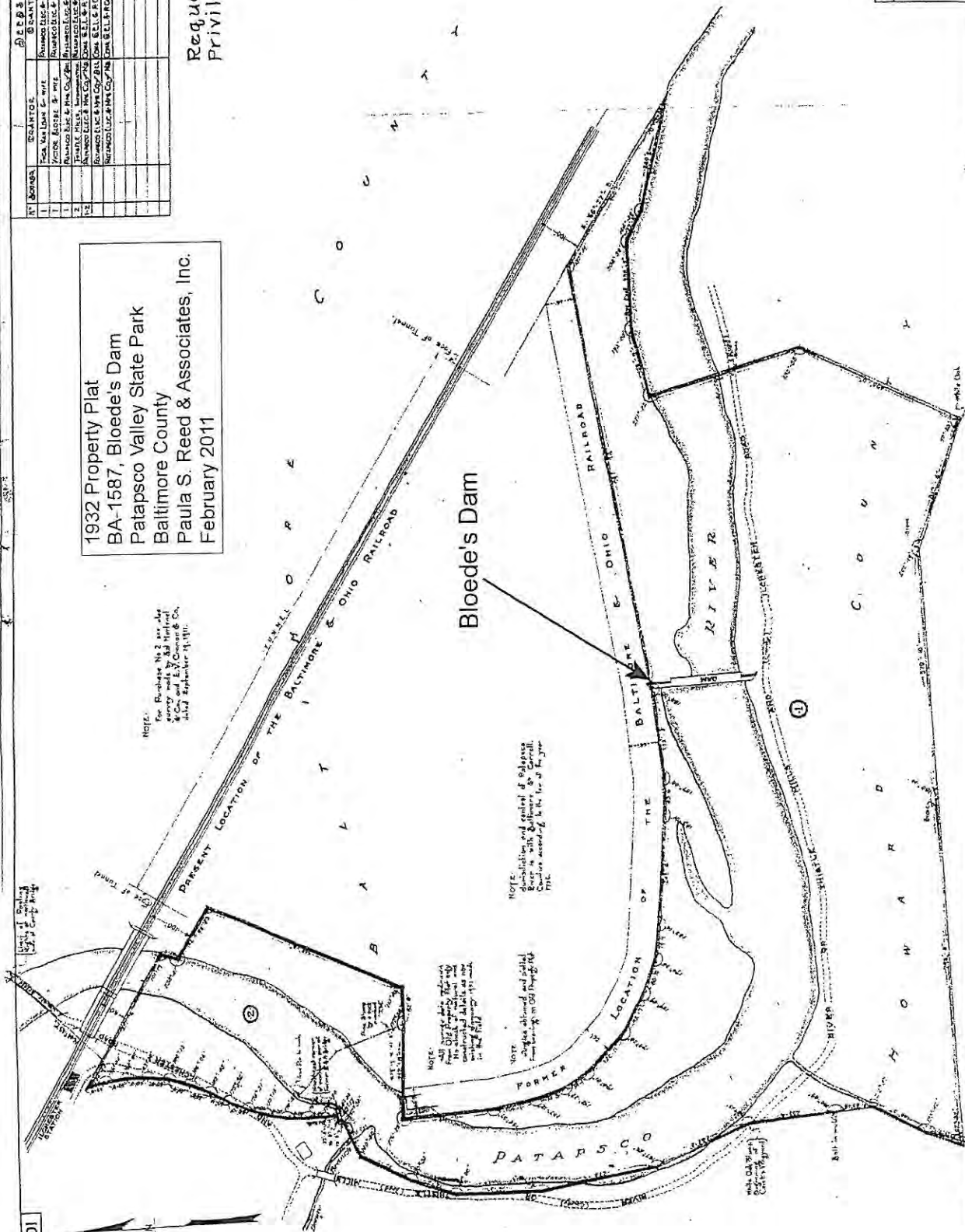
Note:  
Location and extent of Patapsco  
River is with Baltimore & Carroll  
R.R. as shown on the plat of  
1911.

Note:  
Changes shown and called  
for here on this plat  
from those on the plat of  
1911.

Request Item 13  
Privilege No. P. 2

NO.	OWNER	ACRES		REMARKS
		DEED	TOTAL	
1	W. B. BROWN	1.18	1.18	REMAINDER
2	W. B. BROWN	1.18	1.18	REMAINDER
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43	W. B. BROWN	1.18	1.18	REMAINDER
44	W. B. BROWN	1.18	1.18	REMAINDER
45	W. B. BROWN	1.18	1.18	REMAINDER
46	W. B. BROWN	1.18	1.18	REMAINDER
47	W. B. BROWN	1.18	1.18	REMAINDER
48	W. B. BROWN	1.18	1.18	REMAINDER
49	W. B. BROWN	1.18	1.18	REMAINDER
50	W. B. BROWN	1.18	1.18	REMAINDER

AREA IN GREEN LAND IN BALTIMORE COUNTY, 10.46  
AREA IN RED LAND IN HOWARD COUNTY, 19.70  
TOTAL AREA IN THESE COUNTIES, 29.16  
TOTAL AREA IN GREEN IN USE, 10.46

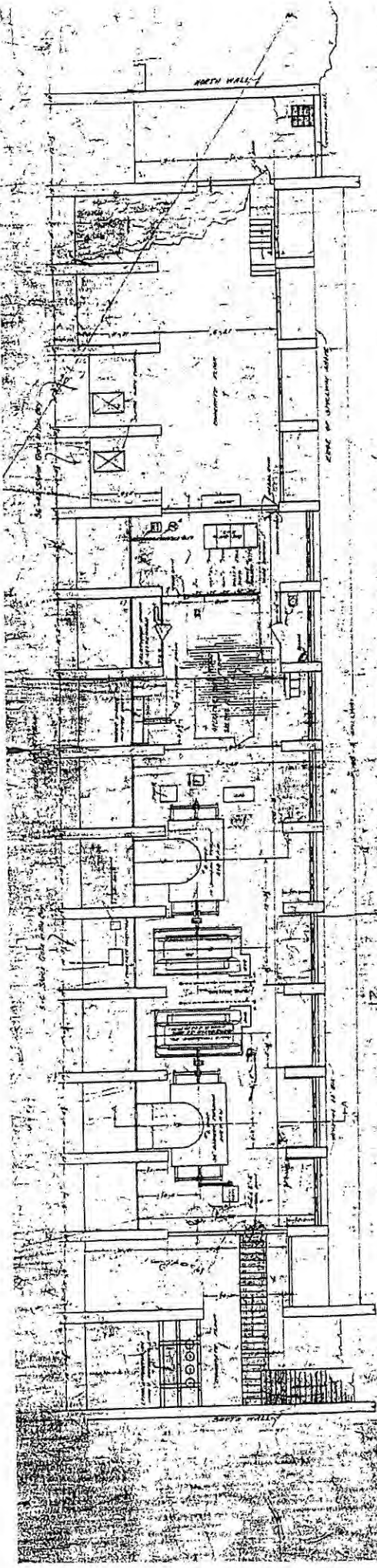


NO.	DESCRIPTION	ACRES
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PROPERTY PLAT  
LOCATION OF BLDGS. AND DEED DATA  
ILCHESTER,  
CONGRESSIONAL DISTRICT NO. 10  
BALTIMORE, MD.

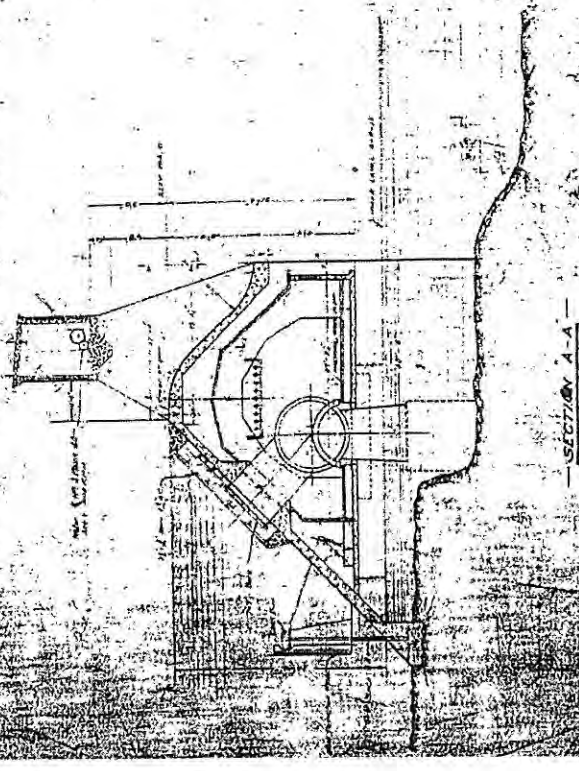
101901-D

NO.	DESCRIPTION	ACRES
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DESCRIPTION OF DAM

Reinforced concrete dam - designed and built by Ambursen Hydraulic Construction Company -  
 Footings carried on rock  
 Spillway parabolic  
 Stream face of dam: 18' slab at base - tapering to 10" at crest  
 Buttresses about 18" thick on 10' centers  
 Overall width of dam, ledge of spillway to heel of batter wall = 47'  
 Length of spillway between wing walls of end buttresses = 165'2"  
 Length of Power House inside dam = 105'8"  
 Portholes on downstream face 22" diameter  
 Length of dam between end walls = 196'2"



1932 Floor Plan & Section  
 BA-1587, Bloede's Dam  
 Patapsco Valley State Park  
 Baltimore County  
 Paula S. Reed & Associates, Inc.  
 February 2011

Bloede's Dam, BA-1587  
Determination of Eligibility  
February 2011

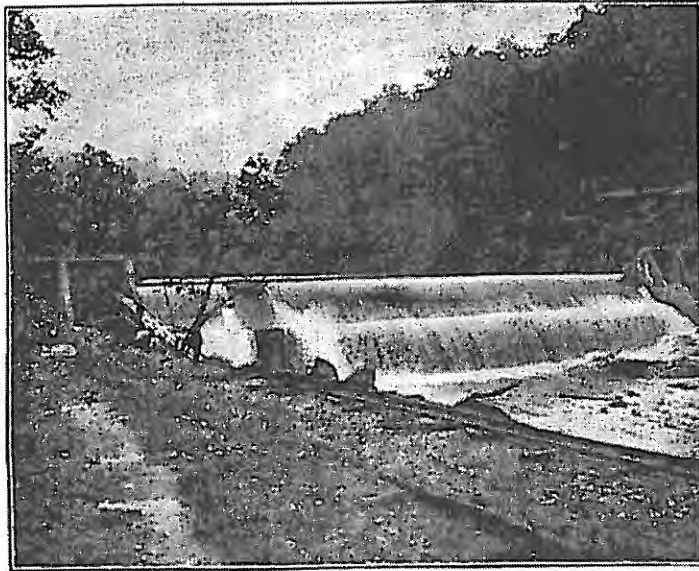


FIG. 317.—PATAPSCO DAM, ILCHESTER, MARYLAND.

Figure 1: Photo of Bloede's Dam from J. D. Schuyler Reservoirs for Irrigation, 1908 (p. 476).

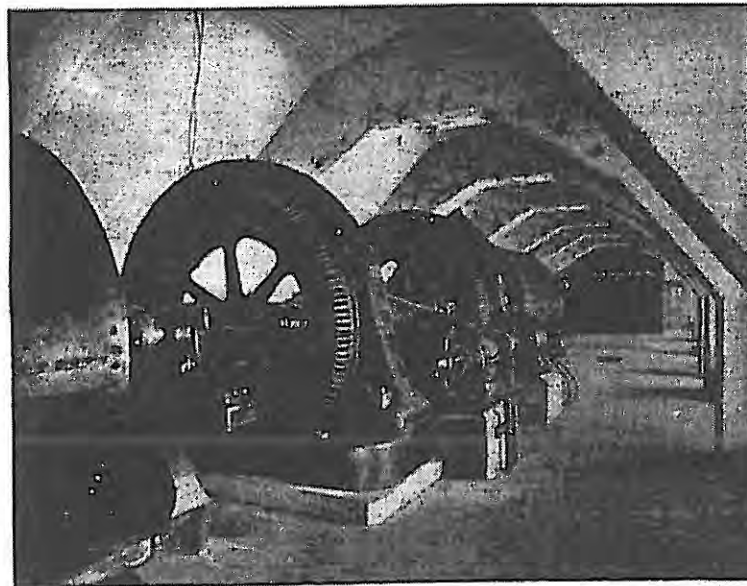


FIG. 319.—INTERIOR OF PATAPSCO SUBMERGED POWER-HOUSE.

Figure 2: Bloede's Dam powerhouse machinery (Schuyler 1908, p. 476)

Bloede's Dam, BA-1587  
Determination of Eligibility  
February 2011

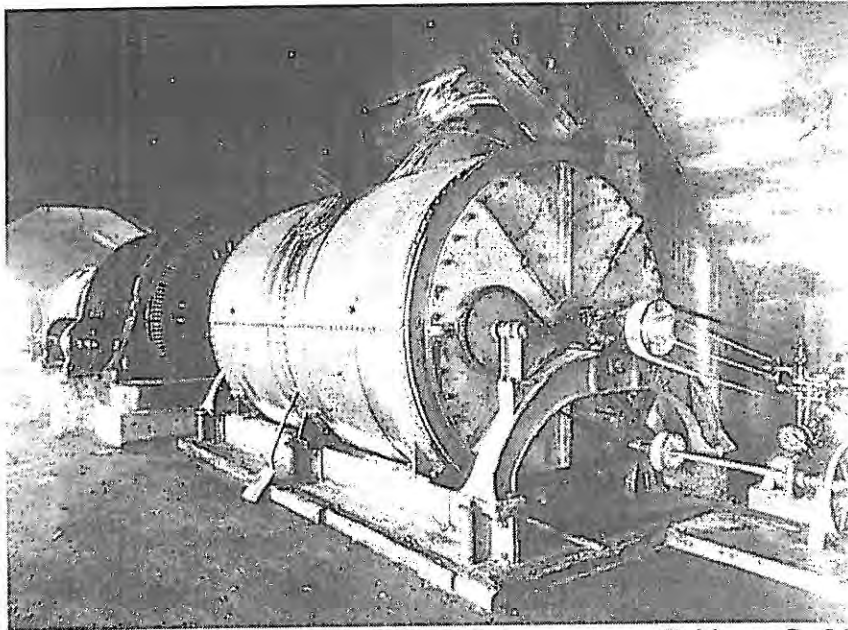


Figure 3: Undated photo of turbines in Bloede's Dam powerhouse (Baltimore Co. Library)

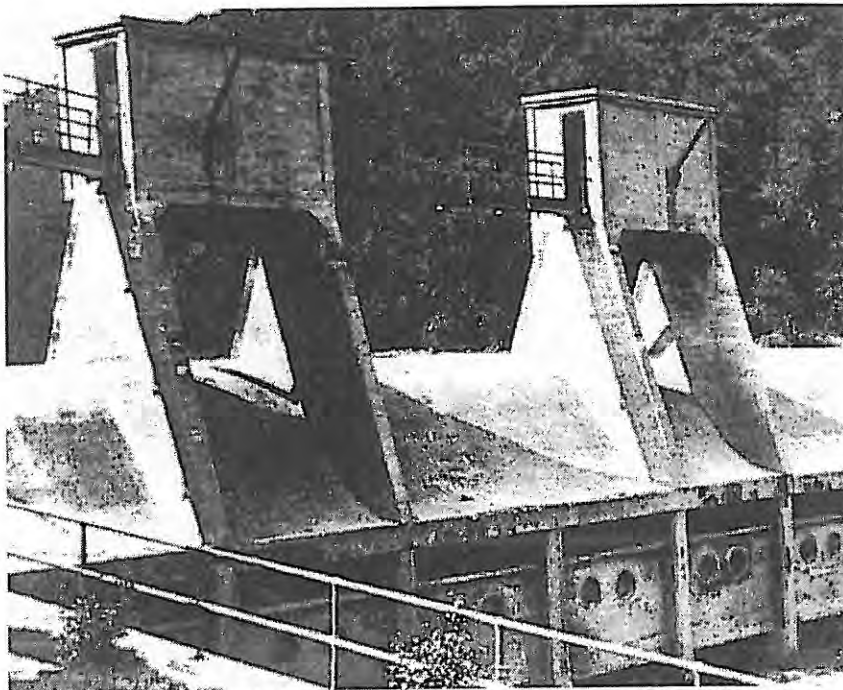


Figure 4: 1914 photo of dry Bloede's Dam (Baltimore Co. Library)

Bloede's Dam, BA-1587  
Determination of Eligibility  
February 2011



**Figure 5: Victor Gustav Bloede (Baltimore Co. Library)**





