

**FRAMEWORK FOR IDENTIFYING COMPREHENSIVE PLAN DATA**

**HISTORIC CONTEXT:**

**MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA**

Geographic Organization: Piedmont/Western shore

Chronological/Development Period(s):

Modern Period (1945-present)

Prehistoric/Historic Period Theme(s):

Military (World War II/Post World War II Era)  
Engineering/Invention

Resource Type:

Category: Buildings

Historic Environment (urban, suburban, village, or rural): suburban

Historic Function(s) and Use(s): Laboratories for testing and development of military (Navy) weapons systems.

Known Design Source:

Eggers & Higgins, Architects, New York, New York  
Taylor & Fisher, Baltimore, Associates

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

Survey No. M:33-19  
Magi No.  
DOE \_\_\_ Yes \_\_\_ No

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

historic White Oak X-Ray and Plastics Lab

and/or common Building 70

**2. Location**

street & number 10901 New Hampshire Avenue \_\_\_\_\_ not for publication

city, town Silver Spring \_\_\_\_\_ vicinity of congressional district 4th

state Maryland county Montgomery

**3. Classification**

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

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

name U.S. Navy - White Oak Laboratory

street & number 10901 New Hampshire Ave. telephone no.

city, town Silver Spring state and zip code MD 20903-5000

**5. Location of Legal Description**

courthouse, registry of deeds, etc. liber

street & number folio

city, town state:

**6. Representation in Existing** Historical Surveys

title

date \_\_\_ federal \_\_\_ state \_\_\_ county \_\_\_ local

depository for survey records

city, town state:

## 7. Description

Survey No. M:33-19

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

Constructed in 1947 as a storage facility, Building 70 was modified that same year to provide facilities for an X-ray laboratory. In 1948, the interior was again modified to create additional offices and laboratories. Surrounding structures were similarly used for the storage of materials and equipment.

Building 70 is a one story, flat-faced rectangular structure 200-feet long by 110-feet wide and 34-feet tall. The roof is flat with a parapet. Exterior brick is laid in American bond with five stretcher rows per header row. No foundation is visible with the brick, which extends upward from grade, terminating in simple rectangular limestone coping. Large roll-up doors provide vehicle entry to the double height interiors at the north and south ends of the building. Entrance is through simple doors located on each side of the building.

Each window is a simple metal frame and a stone sill. Individual windows are made up of an opening "awning" sash surrounded by rectangular fixed lights. Brick is recessed to form a large vertical frame around each set (upper and lower) of windows in a style similar to that found on the main buildings (e.g., Building 1-4 [M:33-14]) of the Front Area.

Originally, interior open space was maximized with two rows of I-beam roof supports. The I-beams run the length of the structure and support the raised central third of the roof which is elevated one-half story above the lateral sections of the roof. The side walls of this elevated section are glass, and serve as skylights for the natural lighting of the interior.

The I-beams also support the light metal roof trusses that carry the electrical, steam, and ventilation pipes and conduits through the open work area.

Principal modifications to this structure have been limited to the construction of the interior offices and laboratory space. In the northern half of the building, the originally open space has been divided into offices, workshops, and laboratories. A small plywood shed-style vestibule has been constructed over the door way just to the right of the large roll-up door on the south side of the building.

The configuration and equipment housed in the large work rooms has changed since construction. Currently, Building 70 houses the plastics R&D support laboratory and is used for a variety of design, engineering, and fabrication activities involving non-metallic materials. The X-ray laboratory, as a component of the Nondestructive Evaluation Laboratory, is still located there.

# 8. Significance

Survey No. M:33-19

Period	Areas of Significance—Check and justify below			
<input type="checkbox"/> prehistoric	<input type="checkbox"/> archaeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> archaeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science
<input type="checkbox"/> 500-1599	<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 checked="" 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 type="checkbox"/> 1800-1899	<input type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> transportation
<input checked="" 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	1945-1949	Builder/Architect	U.S. Navy/Eggers & Higgins, N.Y.
check: Applicable Criteria:	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D		
and/or			
Applicable Exception:	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G		
Level of Significance:	<input type="checkbox"/> national <input type="checkbox"/> state <input type="checkbox"/> local <input type="checkbox"/> None		

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

### Statement of Significance

Discussions of the potential NRHP eligibility of Building 70 which is one of the eight World War II era structures that comprise the Front Area at NSWC White Oak are influenced by three factors:

- The apparent absence of unique and significant events/developments or persons associated primarily with Naval activities at White Oak;
- The absence of unique architectural styles or architecture that embodies the best characteristics of a style or period; and,
- The relatively recent age (e.g., construction of the first structure was begun in 1945) in light of the absence of overwhelming significance as noted above.

### Historical background and significance:

Established when existing facilities of the Naval Ordnance Laboratory became insufficient to meet the increasing need for Research, Development, Testing, and Evaluation facilities late during World War II, White Oak was only one of a variety of such facilities established throughout the areas of Maryland and Virginia around Washington, D.C. These technical and administrative centers were developed to maximize accessibility to military headquarters in Washington while being located in areas that provided the environmental conditions necessary for the performance of their missions and the social atmosphere necessary to attract and keep skilled personnel. For White Oak, these resources included the scientific/academic community of Washington and the surrounding area of Maryland while still being somewhat removed from the city congestion and security problems presented by a more urban center. Also, electromagnetic experiments (conducted in areas east of the Front Area) required magnetically neutral conditions.

The White Oak facility that developed during the final years of World War II reflected administrative and research work that was task-specific, contributing to larger weapons system development programs that included work done at other naval facilities. White Oak remained a group of buildings housing offices, laboratories, and shops designed for the tasks at hand. Upon completion of a set of activities, the facilities were refitted for the next set of required tasks. As a result, the facilities in the Front Area of White Oak were continuously changing with new sets of equipment installed for as long as necessary, before they were replaced or moved to a new area of White Oak or to another naval facility.

---

## 8. Significance (Cont.)

Survey No. M:33-19

---

The result of this role for White Oak was that, while it was an integral part of the Naval research and development program during World War II, there are no obvious manifestations of that role in the buildings or the setting of the Front Area of White Oak as they exist today, the generally high degree of integrity of location, setting and design notwithstanding.

Building 70, as well as all of the structures of the Front Area, whether viewed individually or as a potential district, do not exhibit the integrity of association with events that have made a significant contribution to the broad pattern of history (i.e., NRHP Criteria a, 36 CFR 60.4).

The Naval Ordnance Laboratory, while housed at White Oak, included Naval and civilian personnel who may have achieved considerable personal or professional renown. However, such individual importance was not connected with their tenure at White Oak and so would not satisfy NRHP Criteria b.

Since White Oak is a product of Navy activities begun during World War II and a relatively recent entity, it is unlikely that Building 70, or any component of the environment of the Front Area has the potential to yield information important to history itself. White Oak's potential historic importance lies in the scientific developments that have occurred there. Information about these developments are likely to be contained in documentary sources such as scientific notes and archives that exist separately from the physical structures that constitute the Front Area of White Oak. In addition, detailed plans and drawings exist that document the buildings of the Front Area are archived by the Public Works Department at White Oak, further reducing the potential for NRHP eligibility under Criteria d.

Building 70 exhibits the principal design shared by the original administration/laboratory buildings of the Front Area at White Oak. The exterior facades of any of these buildings (with the exception of Building 71) have not been substantially modified and appear largely the same as they would have shortly after their construction.

Although this building has maintained its architectural integrity, the combination of the campus-like setting and the "starved classicism" style that is expressed is not unique in the architecture of the period, or in federal buildings in general in the region around Washington, D.C. The stylistic elements suggests the continuation of modern architectural influences on the more formal classical designs as expressed in other buildings designed during the 1920s and the 1930s.

The buildings of the Front Area do not appear to satisfy eligibility Criteria C, for inclusion in the NRHP since they are neither distinctive examples of this architectural type nor "a significant and distinguishable entity" (U.S. Department of the Interior 1991).

## 9. Major Bibliographical References

Survey No. M:33-19

- Anonymous, 1959, "History of the Naval Ordnance Laboratory", manuscript on file at NSWC, White Oak, Maryland.
- Craig, Lois, 1978, *The Federal Presence: Architecture, Politics, and Symbols in United States Government Buildings*, The MIT Press, Cambridge, Massachusetts.
- Dittman, Richard B., 1973, letter to Stanley S. Jones, U.S. Naval Ordnance Laboratory, White Oak, Maryland, January 29, 1973, on file at Department of Public Works, NSWC, White Oak, Maryland.
- Greenhome & O'Mara, Inc., 1992, *Historic and Archaeological Resources Protection (HARP) Plan for Naval Surface Warfare Center, White Oak, Maryland*, on file at U.S. Navy, Engineering Field Activity-Chesapeake, Washington, Navy Yard, Washington, D.C.
- Smaildone, Joseph P., 1977, *History of the White Oak Laboratory 1945-1975*, Naval Surface Weapons Center, Silver Spring, Maryland.
- U.S. Naval Ordnance Laboratory, 1949, *The U.S. Naval Ordnance Laboratory; General and Descriptive Information*.

## 10. Geographical Data

### Acreage of nominated property

Quadrangle name Beltsville, MD Quadrangle scale 7.5 Min.

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	Maryland	code	MD	county	Montgomery	code	031
state		code		county		code	

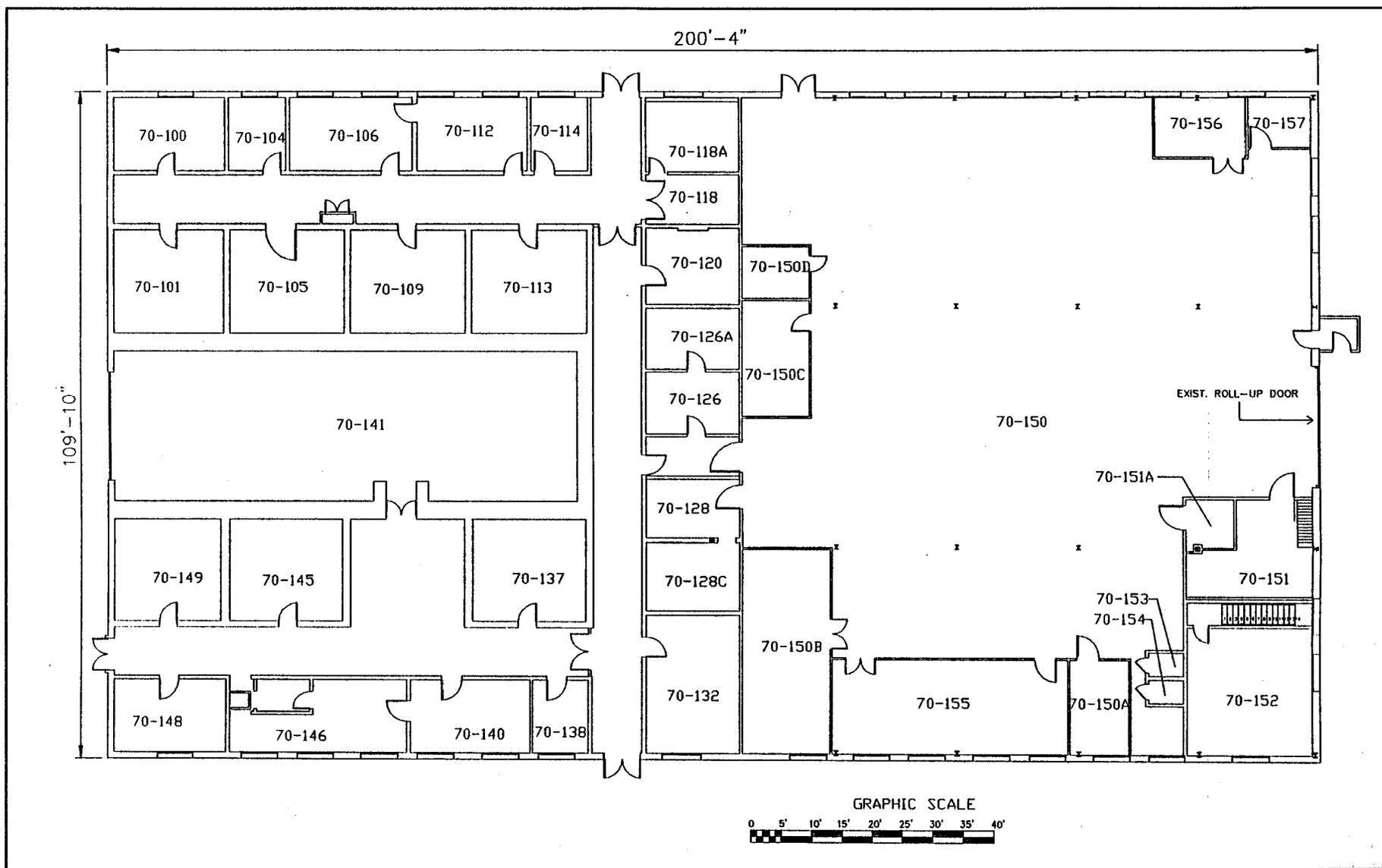
## 11. Form Prepared By

name/title	Mark Rosenzweig, Ph.D./Chief Archaeologist		
organization	Ecology and Environment, Inc.	date	March 25, 1994
street & number	368 Pleasantview Drive		telephone 716/684-8060
city or town	Lancaster	state	New York

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.

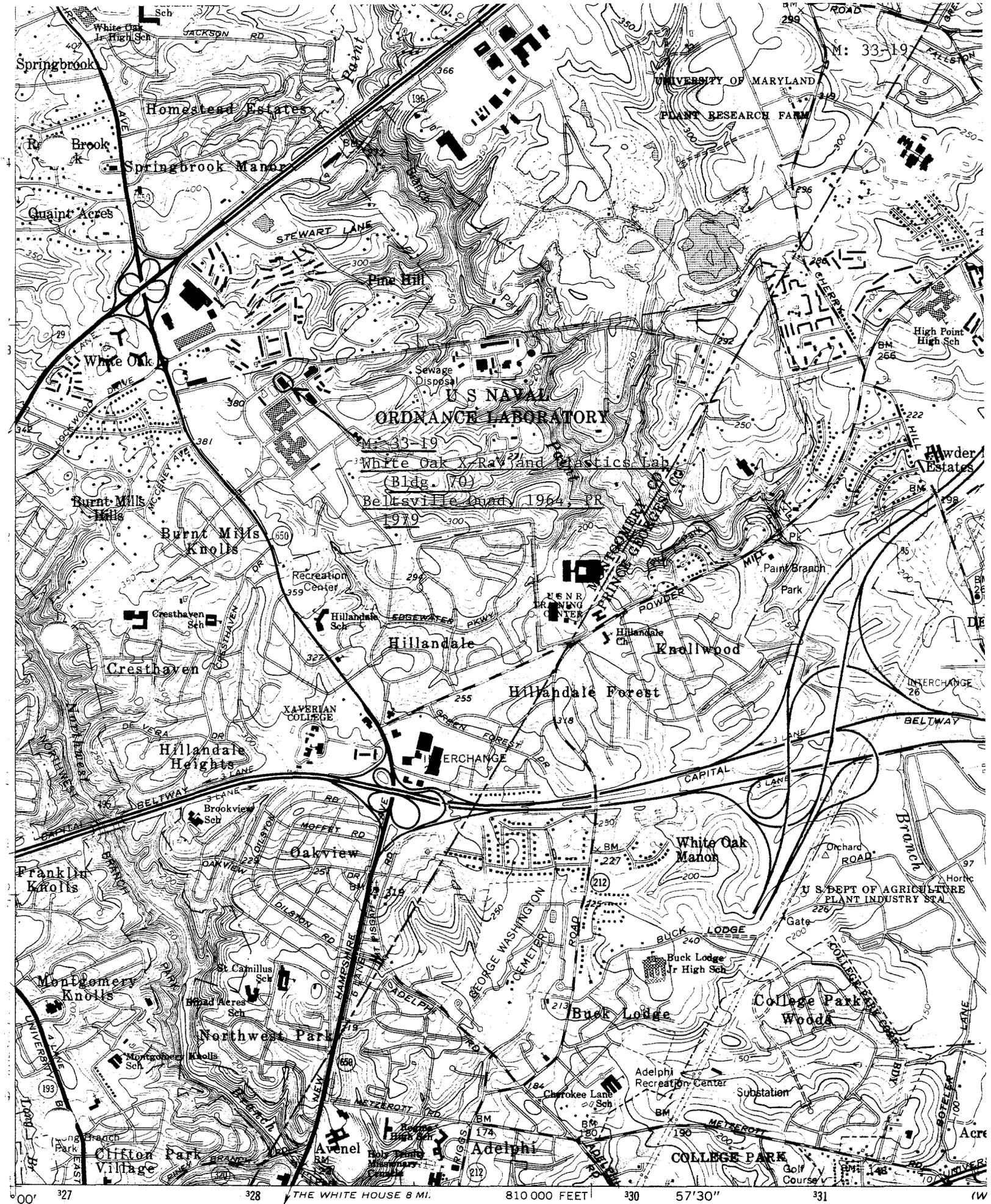
The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust  
DHCP/DHCD  
100 Community Place  
Crownsville, MD 21032-2023  
514-7600



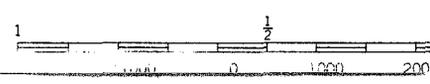
SOURCE: U. S. Navy NSWC White Oak Department of Public Works.

**SURVEY NO. M:33-19, BUILDING 70  
NSWC WHITE OAK, SILVER SPRING, MONTGOMERY COUNTY, MARYLAND**



Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, USSCS, and WSSC



MN



① M:33-19

NSWC White Oak Laboratory

X-RAY & Plastics LAB

Building 70

Montgomery Co MD

Ecology & Environment Inc.

Nov 1993

U S NAVY EFA CHESAPEAKE

Looking NE S elevation



(2)

M:33-19

NSWC White Oak Laboratory  
X-RAY & Plastics LAB

Building 70

Montgomery Co MD

Ecology & Environment Ave.

Nov 1993

US NAVY - EPA CHESAPEAKE

Looking NE

West elevation of Building 70



26 1994

③ M: 33-19

NSWC White Oak Laboratory  
X-ray & Plastics Lab

Building 70

Montgomery Co MD

Ecology & Environment, Inc.

Jan 1994

US NAVY - EFA Chesapeake

Looking NNE - Sand w elevations  
taken from near of Building 25