

**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:33-16  
Magi No.  
DOE \_\_\_ Yes \_\_\_ No

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

historic White Oak Ordnance Environmental Lab

and/or common Building 20

**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street & number 10901 New Hampshire Avenue \_\_\_\_\_ not for publication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	
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input checked="" type="checkbox"/> occupied	<input type="checkbox"/> agriculture	<input type="checkbox"/> museum
<input checked="" type="checkbox"/> building(s)	<input type="checkbox"/> private	<input type="checkbox"/> unoccupied	<input type="checkbox"/> commercial	<input type="checkbox"/> park
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational	<input type="checkbox"/> private residence
<input type="checkbox"/> site	<b>Public Acquisition</b>	<b>Accessible</b>	<input type="checkbox"/> entertainment	<input type="checkbox"/> religious
<input type="checkbox"/> object	<input type="checkbox"/> in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government	<input type="checkbox"/> scientific
	<input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial	<input type="checkbox"/> transportation
	<input type="checkbox"/> not applicable	<input type="checkbox"/> no	<input checked="" type="checkbox"/> military	<input type="checkbox"/> 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:33-16

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.

Building 20 was constructed in 1945. Currently, the site of the Materials Laboratory, it is used for research, development, testing, and evaluation of Navy vehicle, ship, and weapons systems components. Laboratories supporting research in materials and applications are also found here.

This rectangular two story structure measures 465-feet long by 255-feet wide including a southward extending ell and covered corridors which connect with Building 25 (M:33-15) to the north. The main body of the structure, however, is only 60-feet wide.

The ground around Building 20 slopes downward toward the north. As a result, the at-grade entrance to the southward projecting ell is on the second level of the building. All other entrances are on the first level. A loading dock is located at the northwest corner of the building. This two-bay docking area precludes the typical centrally located primary entrance found on other Front Area structures. Entry to the building is through doorways on the north and south sides of the building, which face a small parking lot, or a side entrance to Building 1-4.

The design of the entrance parallels that found on the other buildings in the Front Area at White Oak. It consists of a pair of plate glass doors with a flat unadorned overhang. Around the door, a rectangular border of limestone extends upward, enclosing a small transom window above the overhang. The brickwork of the central bay projects outwards approximately 1 foot from the facade, setting off the entrance. A short flight of granite steps lead from the sidewalk to these doors.

Along the lateral facades of this building the metal frame, multi-light windows are placed in vertical pairs set off by a surrounding frame of recessed brickwork. The area between the windows in each pair is brick. Each window has two lights that open; the upper light opens awning style while the lower light opens hopper style. The remaining lights are fixed.

The interior of Building 20, as well as the other administration and small laboratory buildings in the Front Area at White Oak, are largely similar consisting of long narrow corridors forming a spine for each structure. Offices and laboratories in a variety of sizes and shapes, from rectangular one-person offices to large high ceiling shops, open off the central hallway.

The majority of interior walls are undecorated painted metal. Non-load-bearing walls have been constructed to create specialized space and divide large rooms into smaller ones. These walls are frequently of the same metal panels used in the hallways. More recent temporary, movable walls and partitions have been used to create individual work areas. Some of the load-bearing walls have been left uncovered, exposing yellow glazed concrete block. This is especially evident along outside walls and around the stairwells and elevators. The floors are linoleum tile which have been covered with carpets in some of the administrative offices.

Suspended ceilings have been added in most areas to cover the formerly exposed utility lines. The original incandescent lights have been replaced by fluorescent lights. Ceilings are still relatively high, contributing to the narrow feeling of some of the hallways.

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## 7. Description (Cont.)

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The interior load-bearing walls that separate the work areas in the large shops and laboratories are typically of brick laid in the same bond as the exterior walls, although windows when filled may vary in pattern or material (e.g., concrete block).

Other modifications have included the construction of a film vault (1952) and a cafeteria with a kitchen and storage space (1967) along the enclosed aboveground corridors that connect buildings 20 and 25. During the late 1980s, a lift for handicapped access was built immediately to the left of the Dispensary entrance (i.e., the southwestern-most entrance). This lift, which is partially shielded by a small brick wall, replaced one of the windows that flanked the entrance.

In addition to these modifications, repairs to the upper courses of brick have resulted in some mismatching of color, particularly of the mortar. A metal cap has been placed over the rectangular limestone coping.

# 8. Significance

Survey No. M:33-16

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 20 which is one of the eight World War II era structures that comprise the Front Area at the White Oak Laboratory 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.

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## 8. Significance (Cont.)

Survey No. M:33-16

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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 20, 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 20, 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 20 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:33-16

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.

Greenhorne & 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.

Smaldone, 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.
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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

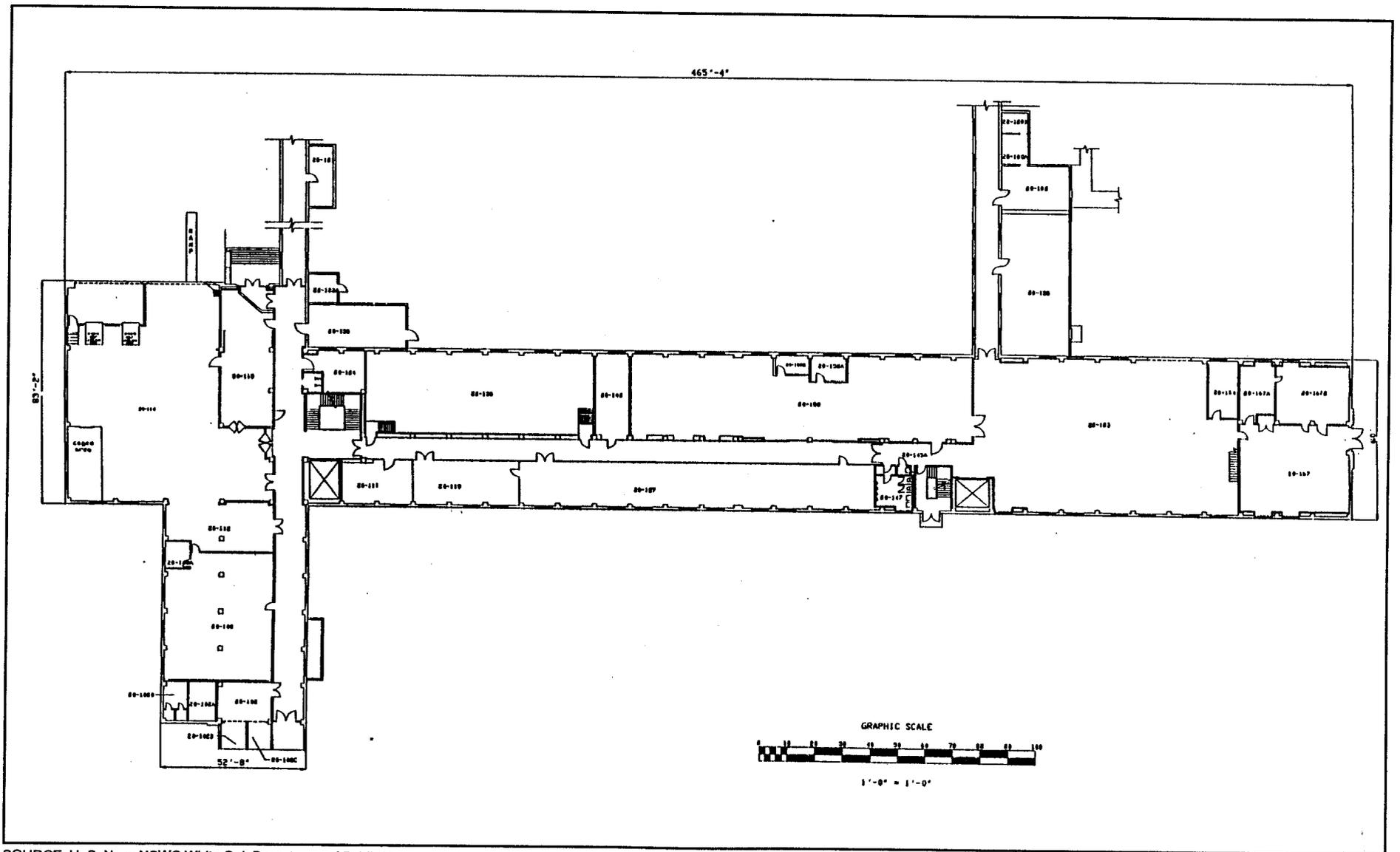
name/title	Mark Rosenzweig, Ph.D./Chief Archaeologist		
organization	Ecology and Environment, Inc.	date	March 25, 1994
street & number	368 Pleasantview Drive	telephone	716/684-8060
city or town	Lancaster	state	New York

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.

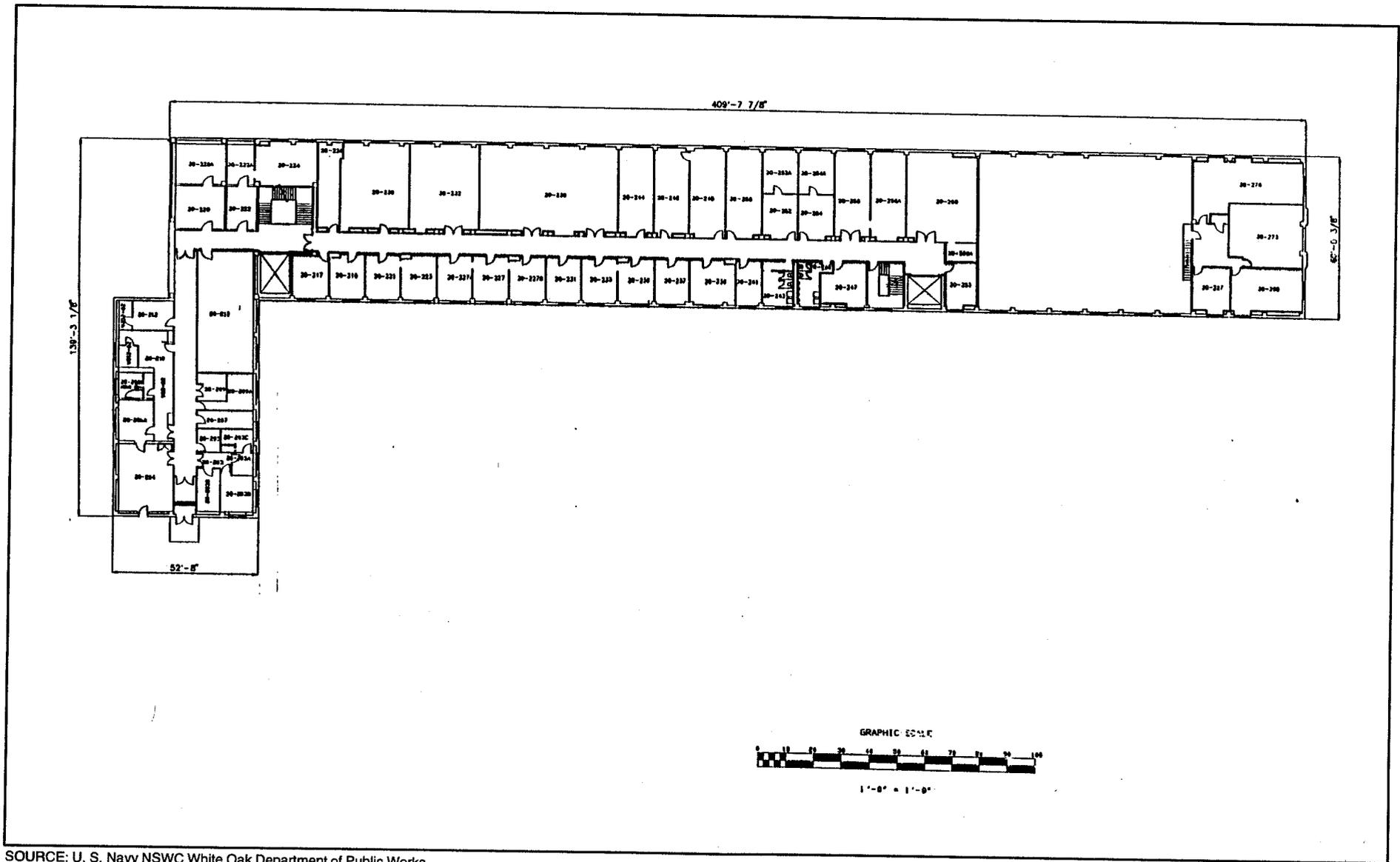
return to: Maryland Historical Trust  
DHCP/DHCD  
100 Community Place  
Crownsville, MD 21032-2023  
514-7600

A-32



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

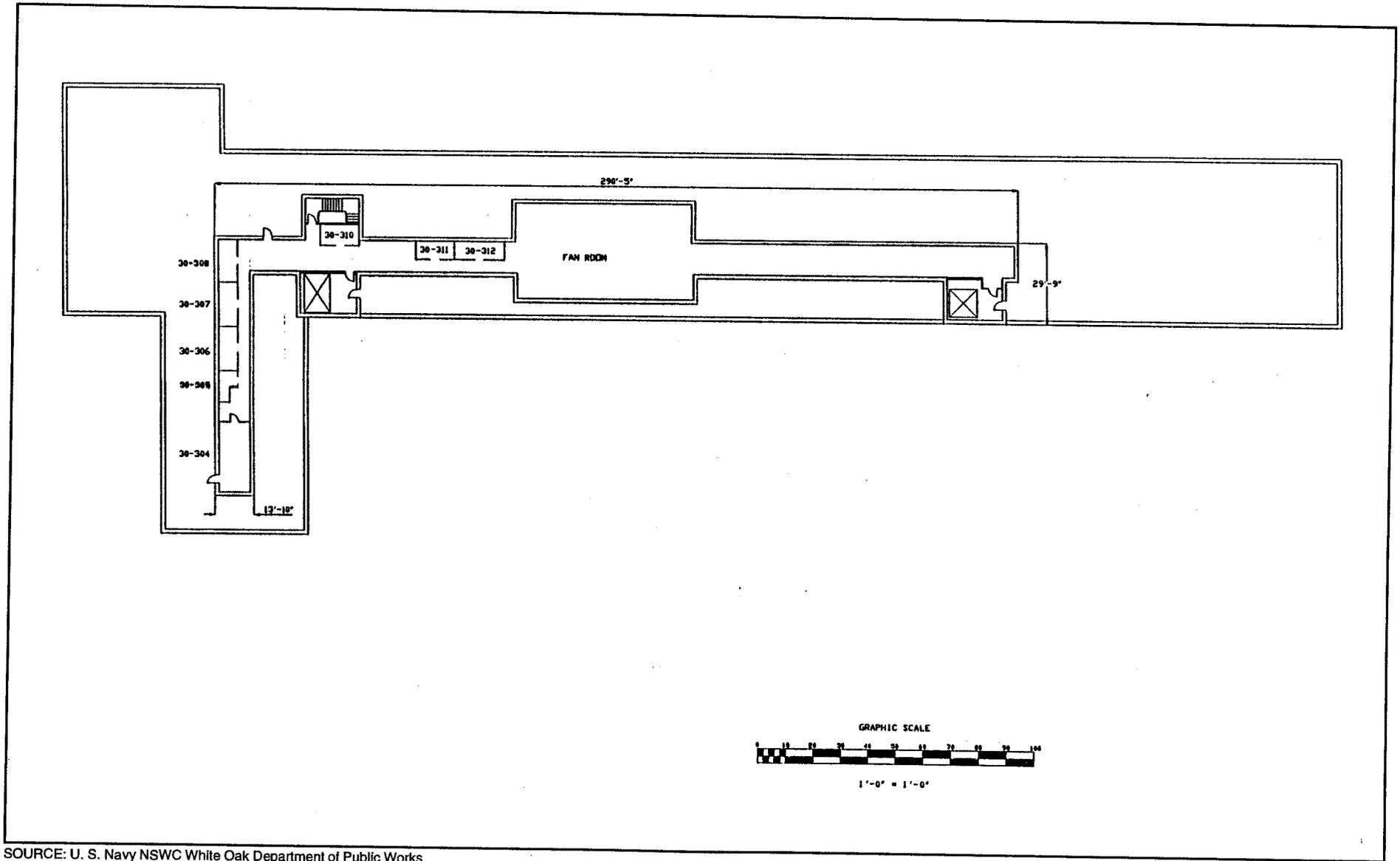
**SURVEY NO. M:33-16, BUILDING 20 (FIRST FLOOR)  
NSWC WHITE OAK, SILVER SPRING, MONTGOMERY COUNTY, MARYLAND**



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

**SURVEY NO. M:33-16, BUILDING 20 (SECOND FLOOR)  
NSWC WHITE OAK, SILVER SPRING, MONTGOMERY COUNTY, MARYLAND**

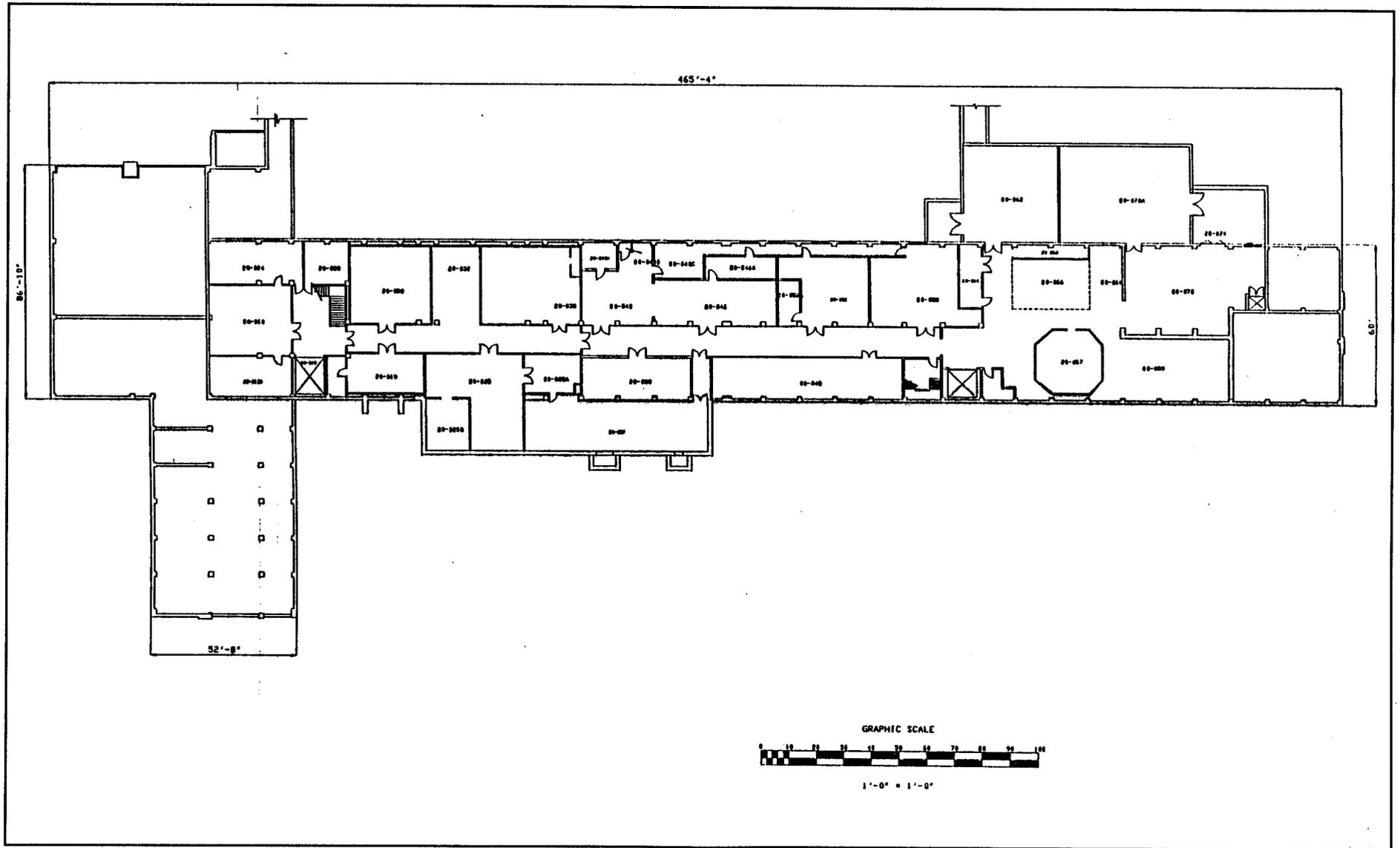
A-34



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

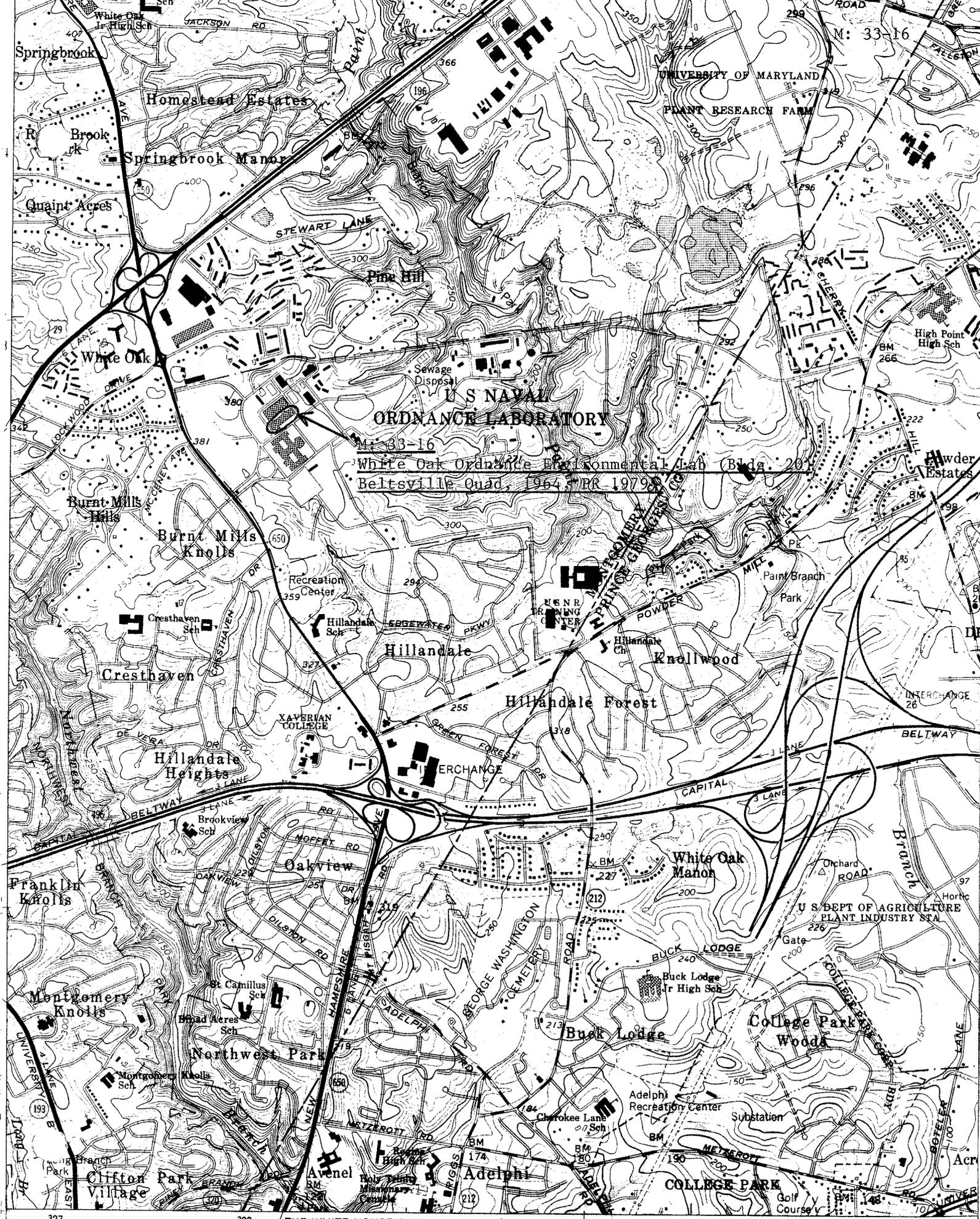
**SURVEY NO. M:33-16, BUILDING 20 (THIRD FLOOR)  
NSWC WHITE OAK, SILVER SPRING, MONTGOMERY COUNTY, MARYLAND**

A-35



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

**SURVEY NO. M:33-16, BUILDING 20 (BASEMENT)  
NSWC WHITE OAK, SILVER SPRING, MONTGOMERY COUNTY, MARYLAND**





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M: 33 - 16

USWC White Oak Laboratory

ORDNANCE/Environmental Lab

Building 20

Montgomery Co. MD

Ecology & Environment Inc

Jan 1994

US Navy - EFA - Chesapeake

Looking NNW at S elevation

"Drapary" entrance



15

ELEVATOR  
20

SUPPLY  
DEPARTMENT

(2)

M: 33-16  
NSWC White Oak Laboratory  
ORDNANCE/Environmental LAB

Building 20

Montgomery Co. MD.

Ecology & Environment Inc.

Nov 1993

US NAVY - EFA Chesapeake

Looking SE w elevation of  
Docking Bay area Western end  
of Building 20