

WI 464-96 Kensington Woods Subdivision  
SUB c/o R. Messick

11-140-Response made

JUDGE JOHN C. NORTH, II  
CHAIRMAN  
410-822-9047 OR 410-974-2418  
410-820-5093 FAX

REN SEREY  
EXECUTIVE DIRECTOR  
410-974-2418 /26  
410-974-5338 FAX



WESTERN SHORE OFFICE  
45 CALVERT ST., 2<sup>ND</sup> FLOOR  
ANNAPOLIS, MARYLAND 21401

EASTERN SHORE OFFICE  
31 CREAMERY LANE  
EASTON, MARYLAND 21601

**STATE OF MARYLAND  
CHESAPEAKE BAY CRITICAL AREA COMMISSION**

November 22, 1996

Mr. Rick Dwyer  
Salisbury-Wicomico County  
Department of Planning, Zoning  
and Community Development  
Government Office Building  
P O Box 870  
Salisbury, Maryland 21803-0870

**RE: Kensington Woods Subdivision  
WI 464-96**

Dear Mr. Dwyer:

Thank you for providing information on the referenced project and growth allocation request. As you know, the Critical Area Commission approved the growth allocation request on November 6, 1996. I have reviewed the Kensington Woods Subdivision project, and I have the following comments:

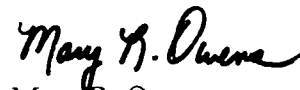
1. The subdivision plan does not include topography. It is my understanding that the 100-Foot Buffer has been expanded where there are contiguous steep slopes; however, this can not be verified from the information submitted. Please provide a site plan showing topography in 2 foot contour intervals.
2. Soil types are not shown on the subdivision plan, but are discussed in the Environmental Report. It appears that there are areas of hydric soils on lots 23, 24 and 25. Based on my conversations with Mr. Frank McKenzie and Mr. Ron Gatton, it is my understanding that County staff has determined that disturbance to these areas will be minimal and should not impact aquatic environments.
3. The presence of Forest Interior Dwelling Birds (FIDS) on the site has been documented, and the proposed development plan will significantly diminish the value of the property as FIDS habitat. The applicant has purchased a 47.2 acre forested tract within the Critical Area to serve as a mitigation site. Please submit a copy of the FIDS management plan and conservation easement for this property.

Mr. Dwyer  
November 22, 1996  
Page Two

4. County staff are encouraged to continue to work with the developer to ensure protection of Forest Interior Dwelling Species (FIDS). Clearing of the site during the breeding and nesting season of FIDS (April through August) should be prohibited in order to allow the birds to move to other forested tracts.
5. The proposed project will involve clearing approximately 7.33 acres of forest. For this project only, the conservation easement placed on the FIDS mitigation site may be used to mitigate for clearing. Please be advised that the Critical Area Criteria require that all forests that are allowed to be cleared or developed shall be replaced in the Critical Area on not less than an equal area basis. Reforestation will be required for all future projects, regardless of whether or not a FIDS mitigation site is part of the project.

I want to thank you and Frank McKenzie for visiting the site with me and for your patience in resolving the FIDS mitigation issue. As you are aware, mitigation should only be considered as a last resort; however, on this project it proved to be a workable solution to a difficult problem. If you have any questions, please feel free to call me at (410) 974-2426.

Sincerely yours,



Mary R. Owens  
Natural Resources Planner

MRO/jjd

cc: Mr. Ron Gatton  
File WI 464-96

P:\CAC\PLAN\RMARY\KENSIN#2

# *Chesapeake Bay Critical Area Commission*

## **STAFF REPORT**

**November 6, 1996**

**APPLICANT:** Wicomico County Council

**PROPOSAL:** Kensington Woods Growth Allocation project

**JURISDICTION:** Wicomico County

**COMMISSION ACTION:** Concurrence with Determination of Refinement

**STAFF RECOMMENDATION:** Concurrence

**STAFF:** Mary R. Owens

**APPLICABLE LAW/  
REGULATIONS:**

Annotated Code of Maryland §8-1808.1 - Growth Allocation in Resource Conservation Areas, COMAR 27.01.02.06 - Location and Extent of Future Intensely Developed and Limited Development Areas

**DISCUSSION:**

The Wicomico County Council is requesting approval of a request for growth allocation in order to change the designation of 37.72 acres of land from Resource Conservation Area (RCA) to Limited Development Area (LDA). This applicant is making this request to accommodate 17 residential lots in the Kensington Woods Subdivision which is located west of Salisbury, off of Pemberton Drive. The property has frontage on Moore's Creek. The property is adjacent to a Limited Development Area (LDA) to the south and an Intensely Developed Area (IDA) across Moore Creek to the west.

This growth allocation request has been determined to be a program refinement because the request is consistent with Wicomico County's Critical Area Program and the Critical Area Commission's policies.

This project will involve clearing of approximately 7.33 acres of mature forest. The applicant is still addressing reforestation.

No proposed development will take place within the 100-Foot Buffer; however, there are hydric soils that are contiguous with the Buffer. Wicomico County staff have determined that the proposed development in these areas will not adversely affect aquatic environments. There are

also slopes greater than 15% on the site; however, they are located along Moore's Creek and are within the 100-Foot Buffer. There are both tidal and nontidal wetlands on the project site; however, proposed development associated with this growth allocation should not adversely impact these areas.

There are no known threatened or endangered plant or animal species on the site that will be affected by the proposed construction. A survey of the property has been performed to establish the presence of Forest Interior Dwelling Birds. Six species of FIDS were found on the property. The development of the property will significantly diminish its value as FIDS habitat; therefore the applicant has worked with Jim McCann of the Heritage and Biodiversity Conservation Program and Claudia Jones to develop a mitigation plan. A 47.2 acre forested tract within the Critical Area has been purchased by the applicant, and a management plan for the site has been developed. A conservation easement will be placed on this property that will prohibit new development.

Sediment and erosion control measures will be submitted to the Maryland Department of the Environment for approval. The design of the stormwater management system for the proposed project is being finalized.

The proposed request for growth allocation is consistent with Wicomico County's Critical Area Program, the Critical Area Law and Criteria, and the Critical Area Commission's policies regarding growth allocation.

CHESAPEAKE BAY CRITICAL AREA COMMISSION  
45 CALVERT STREET, 2nd FLOOR  
ANNAPOLIS, MD 21401

WI 464-96

NOTIFICATION OF PROJECT APPLICATION

Jurisdiction: WICOMICO

Date: SEPT. 30, 1996

Name of project (site name, subdivision name, or other):  
KENSINGTON WOODS SUBDIVISION -- GROWTH ALLOCATION PROJECT

Name of applicant (landowner, developer, or other):  
HAMPSHIRE, HAMPSHIRE, & ANDREWS % ROBERT MESSICK

Local case number N/A

**Project Location:**

Address or location description CORNER OF PEMBERTON DRIVE AND  
UPPER FERRY ROAD

Tax Map 46 Block — Lot — Parcel 81

**Type of application (check one and describe, if necessary):**

Site plan	<u>—</u>	Number of lots created	<u>17</u>
Subdivision	<u>X</u>	Type	<u>—</u>
Variance	<u>—</u>	Existing	<u>—</u>
Rezoning	<u>—</u>	Proposed	<u>—</u>
Special Exception or Conditional Use	<u>—</u>		
Proposed Use	<u>—</u>		
Grading Permit	<u>—</u>		
Other	<u>—</u>		

**Description of project and site:**

Proposed Use 17 lot SUBDIVISION, GROWTH ALLOCATION PROJECT

Current Use FOREST, SUBDIVISION OUTSIDE CRITICAL AREA PORTION OF SITE.

**Acreage(s) of Development Area(s):**

Total acreage of property 126 AC

Total acreage in Critical Area 37.72 AC.

Acreage In: IDA —  
 LDA —  
 RCA 37.72

17 lots  
103 → 731

**RECEIVED**

OCT 1 1996

**SALISBURY-WICOMICO PLANNING DEPARTMENT:**

Contact person RICK DWYER

Telephone number (410) 548-4860

Response from Commission required by ASAP

CHESAPEAKE BAY  
CRITICAL AREA COMMISSION



410-548-4860

**SALISBURY - WICOMICO COUNTY  
DEPARTMENT OF PLANNING, ZONING  
and COMMUNITY DEVELOPMENT**

**GOVERNMENT OFFICE BUILDING  
ROOM 203 P.O. BOX 870  
SALISBURY, MARYLAND 21803-0870**



410-548-4861

October 16, 1996

Chesapeake Bay Critical Area Commission  
ATTN: Mary Owens  
45 Calvert Street, 2nd floor  
Annapolis, Maryland 21401

RE: Kensington Woods Growth Allocation Project

Dear Mary;

Enclosed, please find copies of the decision letters and staff reports for the Planning Commission and County Council meetings where Kensington Woods, Section Two has received approval at the local level. These meetings include the Concept Plan approval, reservation of acreage and lottery meeting, and the Preliminary Growth Allocation meeting. Also enclosed is the most current correspondence with the Maryland Department of Natural Resources Wildlife Division regarding the Forest Interior Dwelling Specifies (FIDS) issue and the Environmental Consultant who has been handling this project for the developer. A few weeks ago, I sent you the most recent Environmental Assessment along with the most current Subdivision Plat which shows a change in the number of lots from 22 to 17 proposed. However, the acreage figures will remain consistent with those in the attached reports. All changes in calculations are addressed in the Environmental Assessment dated 9/18/96.

This letter is to serve as an official request from Wicomico County to the Chesapeake Bay Critical Area Commission for review, and to render a decision on the above referenced project. The applicant has submitted the Final Environmental Assessment and Subdivision Plat to the Wicomico County Critical Area Staff and we believe they have met all applicable County Codes in regards to the Growth Allocation project. The Wicomico County Council has granted a reservation for 37.72 acres to be deducted from the County-wide RCA Growth Allocation Pool.

If you have any questions, please do not hesitate to give me a call at (410) 548-4860.

Sincerely,

Rick Dwyer, Planner

**RECEIVED**

OCT 17 1996

**CHESAPEAKE BAY  
CRITICAL AREA COMMISSION**



WI 464-96

Parris N. Glendening  
Governor

Torrey C. Brown, M.D.  
Secretary

MARYLAND DEPARTMENT OF NATURAL RESOURCES  
Wildlife Division  
Post Office Box 68  
Wye Mills, Maryland 21679  
410-827-8612

February 21, 1995

Ronald D. Gatton  
Environmental Consultants, Inc.  
28712 Island Creek Road  
P.O. Box 438  
Trappe, MD 21673

RE: Conservation of Forest Interior Dwelling Bird (FIDS) habitat within Critical Area at Kensington Woods subdivision, Wicomico Co. (tax map 46, parcel 81)

Dear Mr. Gatton,

Surveys conducted by Mr. Jan Reese in 1994 confirm that FIDS habitat exists within the Critical Area portion of the proposed Kensington Woods subdivision. Conservation of FIDS habitat at this site is mandated in the Critical Area (COMAR 14.15.09.04).

The extent of development (planned and existing) outside of the Critical Area will functionally eliminate all but 36 acres of FIDS habitat on the site - the Critical Area portion of the subdivision. The small size and high degree of isolation of this remaining habitat make it extremely sensitive to any additional disturbance. Expansion of the subdivision into the Critical Area will render the remaining habitat unsuitable for FIDS.

Should you have any questions, please feel free to contact me or Glenn Therres.

Sincerely,

James M. McCann  
Neotropical Migratory Bird Project Mgr.  
Wildlife Diversity Program

cc: Glenn Therres

36 acres  
48





410-548-4860

**SALISBURY - WICOMICO COUNTY  
DEPARTMENT OF PLANNING, ZONING  
and COMMUNITY DEVELOPMENT**

**GOVERNMENT OFFICE BUILDING  
ROOM 203 P.O. BOX 870  
SALISBURY, MARYLAND 21803-0870**



410-548-4861

January 19, 1995

Hampshire, Hampshire, & Andrews  
c/o John Andrews  
226 North Division Street  
Salisbury, MD 21801

RE: Kensington Woods, Sec. II; Growth Allocation Lottery

Dear John;

This is to advise you that the Wicomico County Council, at its meeting held on January 17, 1995, reviewed your request for 37.72 acres of Growth Allocation for Kensington Woods, Sec. II. According to the Critical Area Criteria and the Wicomico County Ordinance, a "Lottery" must be held by the County Council to select projects which will proceed with the Growth Allocation process. Since Kensington Woods, Sec. II was the only proposed project scheduled for the "Lottery", it was granted approval to proceed with Growth Allocation. The next step for the proposed project will be a public meeting held by the Wicomico County Planning Commission to review and comment on the Preliminary Plat. As soon as a date has been determined for this meeting, you will be notified by this office. If you have any further questions, please do not hesitate to give me a call at 548-4860.

Sincerely

Rick Dwyer, CBCA

RECEIVED  
FILE  
JAN 20 1995  
PLANNING OFFICE

Phone Home 410-822-5643  
Office/Fax 410-476-5331

Ronald D. Gatton  
*Environmental Consultants, Inc.*  
28712 Island Creek Road  
P.O. Box 438  
Trappe, Maryland 21673

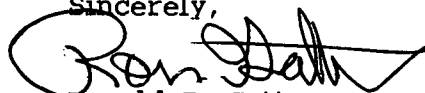
Jan. 19, 1995  
~~July 18, 1994~~

Mr. Glenn Therres  
Maryland Department of Natural Resources  
Resource Conservation Service  
P.O. Box 68  
Main Street  
Wye Mills, MD 21679

Dear Mr. Therres:

As per our conversation today, I have attached the results of the Forest Interior Dwelling Bird Survey by Mr. Jan Reese. I have also attached the concept plan and preliminary environmental assessment for development of Chesapeake Bay Critical Area within the Kensington Woods Subdivision. After your review I would like to meet with you to discuss the your finding's and recommendations. Please call to schedule a meeting. Thanks

Sincerely,

  
Ronald D. Gatton  
President

cc. John Andrews



410-548-4860

**SALISBURY - WICOMICO COUNTY  
DEPARTMENT OF PLANNING, ZONING  
and COMMUNITY DEVELOPMENT**

**GOVERNMENT OFFICE BUILDING  
ROOM 203 P.O. BOX 870  
SALISBURY, MARYLAND 21803-0870**



410-548-4861

November 21, 1994

John Andrews  
226 North Division Street  
Salisbury, MD 21801

RE: Kensington Woods Section II; Growth Allocation

Dear John:

This is to advise you that the Wicomico County Planning Commission, at its meeting held on November 17, 1994, reviewed your request for 37.72 acres of Growth Allocation regarding the above-noted project. It was the decision of the Planning Commission to forward a favorable recommendation to the Wicomico County Council. Our schedule indicates inclusion of the above referenced project on the Council's agenda for January, 1994 lottery for Growth Allocation. You will be notified of the date, time, and location of that meeting when it becomes available. Once the County Council has reviewed the above referenced project, a Public Hearing will be held by the Planning Commission to review the Preliminary Plat. The Chesapeake Bay Critical Area Commission will also be notified of the above referenced project and will hold a Public Hearing in Wicomico County on Growth Allocation Plan Amendment.

Any recommended revisions to the Concept Plan by the Planning Commission should be received by the Planning Office no later than two weeks before the County Council meeting.

Sincerely,

Rick Dwyer  
CBCA

**RECEIVED**

OCT 17 1996

**CHESAPEAKE BAY  
CRITICAL AREA COMMISSION**



William Donald Schaefer  
Governor

Maryland Department of Natural Resources  
Tawes State Office Building  
Fish, Heritage and Wildlife Administration  
580 Taylor Avenue  
Annapolis, Maryland 21401

Torrey C. Brown, M.D.  
Secretary

June 17, 1994

Mr. Ronald Gatton  
28712 Island Creek Road  
P.O. Box 438  
Trappe, MD 21673

RE: Kensington Woods subdivision, Moore's Creek and Pemberton  
Drive, Wicomico County

Dear Mr. Ronald Gatton:

This is in regards to the above referenced project. The Fish Heritage and Wildlife Administration has no records for Federal or State listed rare, threatened or endangered plants or animals within this project site. This statement should not be interpreted as meaning that no rare, threatened or endangered species are present. Such species could be present but have not been documented because an adequate survey has not been conducted or because survey results have not been reported to us.

The forested areas on the project site are part of a contiguously forested area approximately equal to or greater than 100 acres in size. The conservation of these forested areas within the Critical Area, which may be utilized as breeding areas by Forest Interior Dwelling Birds, must be addressed by the proposed project development plan. Contact Glenn Therres of the Wildlife Division at (410) 827-8612 for technical assistance.

Sincerely,

Janet S. McKegg, Director  
Natural Heritage Program

JM:cs

cc: Cynthia Sibrel, Ren Serey, William C. Livingston,  
Glenn Therres  
ER# 94554.WI

MARYLAND  
HISTORICAL



TRUST

William Donald Schaefer  
Governor

Jacqueline H. Rogers  
Secretary, DHCD

July 20, 1994

Office of Preservation Services

Mr. Ronald D. Gatton, President  
Environmental Consultants, Inc.  
28712 Island Creek Road  
P.O. Box 438  
Trappe, Maryland 21673

Re: Kensington Woods Subdivision  
Historic Properties Information  
Wicomico County, Maryland

Dear Mr. Gatton:

Thank you for your recent letter, dated 1 June 1994 and received by the Trust on 6 June 1994, requesting information on historic properties located within or adjacent to the above-referenced project area.

The Maryland Inventory of Historic Properties does not presently record any archeological sites or standing historic structures located within or adjacent to the project area. We believe the property has a low potential for containing significant archeological resources that have not yet been identified, given the parcel's poorly drained soils, distance from water sources, and lack of cartographic evidence of historical occupation for this tract.

If you have questions or require additional information, please call Ms. Elizabeth Hannold (for structures) or me (for archeology) at (410) 514-7631. Thank you for providing us this opportunity to comment.

Sincerely

  
Elizabeth J. Cole  
Administrator, Archeological Services

EJC/EAH/DCB  
9401454

cc: Mrs. Howard F. Yerges  
Ms. Ann Wilmer  
Mr. Richard Schaub



Division of Historical and Cultural Programs  
Department of Housing and Community Development  
100 Community Place, Crownsville, Maryland 21032-2023 (410) 514-7600

LAND USE  
MANAGEMENT  
DENOTED AS I.D.A.

IDA

MOORE'S CREEK  
WETLANDS FOR  
FISHING AREA

GROWTH ALLOCATION PARCEL  
(RCA TO LDA)

LAND USE  
LDA

PEMBERTON DRIVE

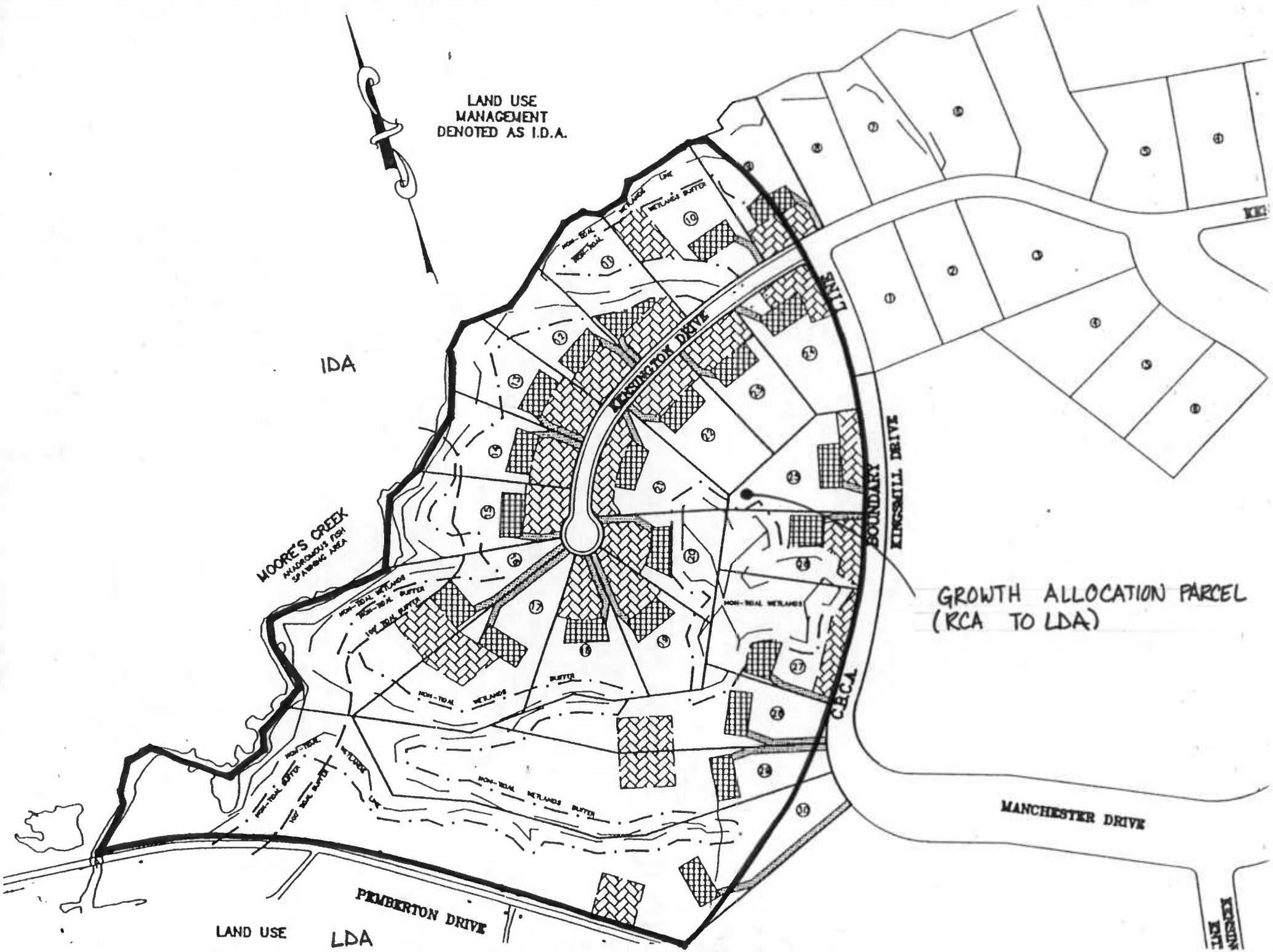
MANCHESTER DRIVE

BOUNDARY  
KINGSMILL DRIVE

MANCHESTER DRIVE

CECA

KENSINGTON  
ENT



W1-464-96

SALISBURY-WICOMICO  
Planning Office  
Received  
Date 9/18/96 By ESP

*Get a copy of consultation assessment  
Expanded Buffer?*

**Kensington Woods Subdivision**

Criteria Area Environmental Assessment

Wicomico County, Maryland

July 9, 1996

Ronald D. Gatton  
Environmental Consultants, Inc.  
P.O. Box 438  
Trappe, MD 21673

**RECEIVED**

OCT 1 1996

CHESAPEAKE BAY  
CRITICAL AREA COMMISSION

## Introduction

The proposed Kensington Woods Subdivision consists of 126 acres, and 37.72 acres are located in the Chesapeake Bay Critical Area (CBCA). The site is located at the corner of Pemberton Drive and Upper Ferry Road near Salisbury, Wicomico County, Maryland (See Figure 1). The lands within the CBCA are proposed to be subdivided into 17 lots. The total site encompasses approximately 40.33 acres. Of the 37.72 acres within the in CBCA 31.2 acres of upland forest and 5.46 acres of forested nontidal wetlands, and 1.06 acres of tidal wetlands.

The subdivision is located on property designated by the Critical Area Program as a Resource Conservation Area (R.C.A.). This site lies between an existing Intensely Developed Area (IDA) and an existing Limited Development Area (LDA). Thus approval of this area for growth allotment would represent a in-fill between two desinagated development areas (See Figure 2).

Lot sizes range from a minimum of 1.03 to a maximum of 7.31 acres (6.73 within CBCA). Each lot will be served by individual septic systems. Portions of soils on the property have been tested for septic suitability by the Wicomico County Health Department. Wetlands on the site have been delineated and their boundaries located. Because of the wetland survey, the approximate areas of hydric soils have also been identified.

Conversion of this property to residential use will not have a significant adverse affect on anadromous fish, colonial nesting water birds, or historic waterfowl staging and concentration areas. In regard to forest interior dwelling birds, a survey conducted in 1994 found six species of FIDS on the site. Three species, the red-eyed vireo, scarlet tanager, and worm-eating warbler probably nest in the area. Therefore the applicant has purchased an offsite property and developed a management plan to mitigate impacts to these birds. No endangered species are known to exist on the site. The project has been designed to minimize environmental impacts and meet the requirements of the Chesapeake Bay Critical Area Protection Act by:

(1) Minimizing pollutant discharges to the Chesapeake Bay. While at the concept stage, it is probable the area can be developed without increasing pollutant loading from upland runoff.



(2) The applicant has identified fish, wildlife, and plant habitat which may be adversely affected by the proposed development and has made provisions to protect, conserve, or mitigate this habitat. The location of all wetlands and their buffers (As defined by the State and Federal Governments) has been delineated and is to be preserved.

Table I Summary Data and Compliance with Maryland Critical Area Requirements.

Existing Conditions

Total Area	40.33 acres
Within Critical Area	37.72 acres
Woodlands, upland	31.2 acres
Wetlands	
tidal vegetated	.54 acres
open water	.52 acres
nontidal (wooded)	5.46 acres
Total Wooded	36.66 acres
Area development classification R.C.A.	37.72 acres <sup>2</sup>

Proposed Conditions

Proposed Housing Density      Av. 1 per 2.15 acres

Impervious Area

Building floor area	.78 acres	Av. 2,000 sq. ft./unit
Decks, Patios, walkways, etc.	.12 acres	(300 sq. ft. X 17)
Pool and deck, storage building	.47 acres	(1,200 sq.ft. X 17)
Total Building area	1.37	acres
Driveway area	.55	acres
Access road (paved area)	.7	(.95 acre total area cleared)
Total Impervious Surface	2.62	acres

Stormwater      While final design is not complete, it is highly probable that the development can be designed to have a post pollutant loading rate which will be similar to the predevelopment rate.

Buffers

The 100 Buffer from the tidal wetlands boundary will be maintained throughout the site. A 25 ft or greater buffer will be maintained from all nontidal wetlands.

Areas with 15% or greater slopes

While steep banks occur along Moore Creek, the top of the slope generally is within the standard Buffers. In areas where the top of slope extended beyond the normal Buffer, the Buffer was expanded.

Temporary and Permanently and Disturbed Land

Assuming the building envelopes, driveways, paved road area, and sewage areas are considered permanently altered land, a total of 7.33 acres will be classified as permanently disturbed within the RCA. Since the habitat type will be changed by development. All disturbance will be considered permanent.

Forest Mitigation

As currently proposed 20% of the woodland on site will be converted to urban use. Since forest conservation could not be accomplished on site, 7.33 acres of mature woodlands will be placed in an conservation easement on property located within the CBCA Area near Nanticoke, MD.

*- all existing forest in the C.A. - is protected. New forest must be created*

Fish and Wildlife Habitats

No significant fisheries habitat will be affected by the project. In general, the project will reduce the quality of habitat for interior dwelling bird species, while increasing habitat for species which require "edge" habitat. However these impacts will be mitigated by conservation of other forests area within the CBCA.

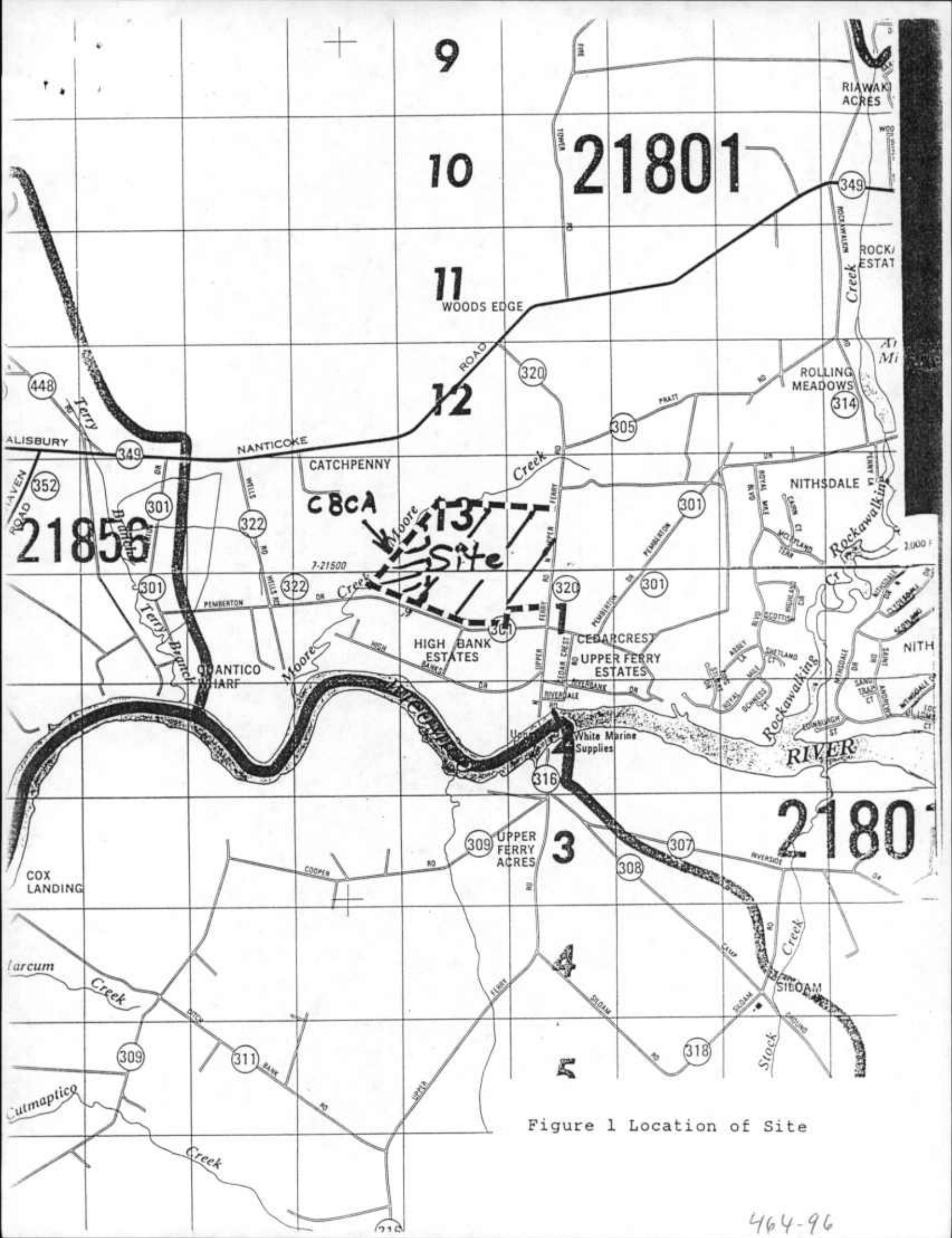


Figure 1 Location of Site

Wicomico County  
Chesapeake Bay Critical Area Program  
LAND USE MANAGEMENT AREAS

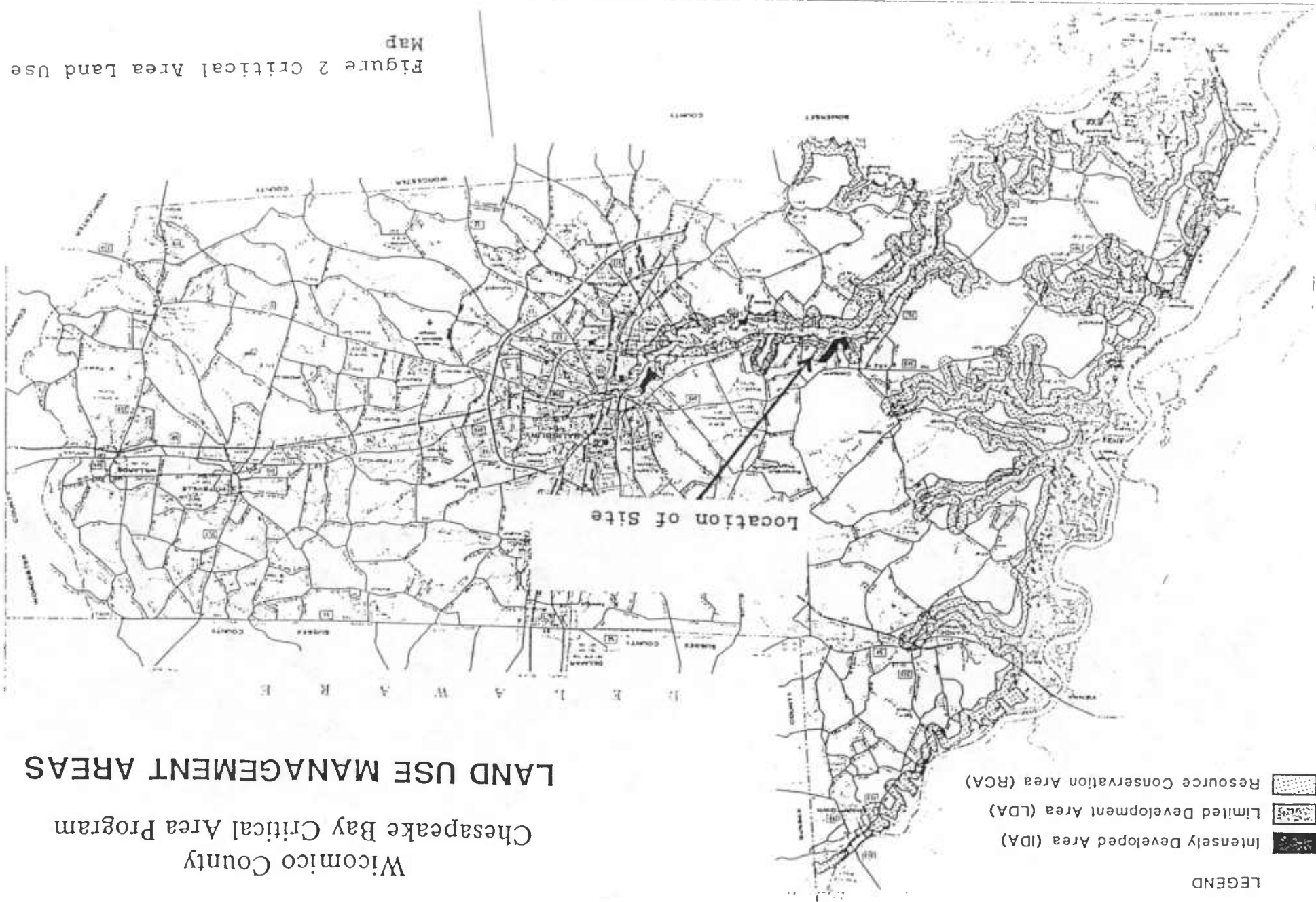


Figure 2 Critical Area Land Use  
Map

LEGEND

## Project Description

The project site consists of 37.72 acres within the CBCA, 36.6 acres of woodlands, (5.46 acres of forested nontidal wetlands and 31.14 acres of uplands) and 1.06 acres of tidal wetlands. These lands are proposed to be subdivided into 17 lots. Lot sizes range from a minimum of 1.03 to a maximum of 7.31 acres (See subdivision plat). To provide access, a 900' long by 46' wide road is proposed. Each lot will be served by an individual septic system. Portions of the soils on the property have been tested by the Wicomico County Health Department, but further testing will be required.

Stormwater from the new road will be collected by roadside culverts, treated by an extended Dry detention pond, infiltration trench or basin, and discharged into the existing forested nontidal wetland. To retain the wildlife value of the property, the total area cleared on each lot is to be at or below 15,000 square feet. Protective covenants will be placed on all lot deeds to preserve all forested areas outside the building envelopes, driveways, and sewage area. Driveways are designed so they can be shared, and the stormwater management facility will, to the extent possible, be designed to minimize fracturing the forest canopy (long & narrow).

The 100 Buffer from the tidal wetlands boundary will be maintained throughout the site. A 25 ft or greater buffer will be maintained from all nontidal wetlands. In areas with 15% or greater slopes where the top of slope extended beyond the normal Buffer, the buffer was expanded. In the tidal wetland area the Buffer was extended to 10 feet beyond the top of slope, and in the nontidal wetland areas, the buffer was extended to the top of slope.

No  
}

## Existing Conditions

### Topography and Hydrology

The 37.72 acre site consists of woodland, and tidal marsh. It is located adjacent to Moore Creek (See attachment 1 photo 1). Slopes within the site are generally 2 to 5%, however along several swales and along the bank of Moore Creek slopes can exceed 15%. The Creek bank varies in steepness, but can have as much as 35% slopes. The open water area of Moore Creek is very narrow and shallow. Depths are generally less than one foot deep. The area near Pemberton Drive is considered tidal.

The topographic map (Figure 3) of the site indicates the elevations range from a high of 22' to a low of 2' NGVD. Stormwater runoff from the property appears to be collected in several small drainage areas and is discharged into Moore Creek. Moore Creek is a tributary of the Wicomico River.

#### Existing Land Use

Presently, 36.6 acres (97%) of the site is in woodland use. Tidal wetlands (1.1 acres) make up three percent of the site. Data collected by the MDE (1985 MAGI Land Use Summary) found that the land area within drainage of the lower Wicomico River to be 74,815 acres. Of that, 6,792 acres (9%) are developed, 29,100 acres (39%) are in agricultural use, 31,212 acres (42%) are forested uplands and nontidal wetlands, and 7,711 acres (10%) are tidal wetlands.

In regard to the total county area (256,015 acres including open water), approximately 14% (18,469 acres) is developed, 37% (94,697 acres) is in agricultural use, and 44% (112,576 acres) is forested, .14 (352 acres) is barren, and 6% (15,445 acres) is wetlands (dominantly tidal), Wicomico County, 1991. In 1990 Wicomico County had a land area of approximately 241,440 acres.

#### Wetlands

The area of tidal wetlands was determined by use of the Maryland Tidal Wetlands Maps. The routine method described in the current (January 1987) Corps of Engineers Wetland Delineation Manual was used to determine if any nontidal wetlands occur on the property. This manual uses three parameters to determine if an area is a nontidal wetland; the presence of wetland vegetation, hydric soils, and the presence of ground water within 12 inches of the surface for a period of 11 to 21 days during the growing season. In order to be classified as a wetland, all three parameters must be present.

Nontidal wetlands on the site were delineated in the spring of 1994. Transits were made through the woodlands, wetlands found there were delineated by making short transits along the probable boundary area. Transits along this interface area were sampled of soils, vegetation and hydrology. The boundary of wetland area was then determined by the type of soil, vegetation, and probable hydrological conditions. Location of the boundary was marked by tying a wetland delineation ribbon on a tree or shrub. Flags were spaced as needed, but generally 40 to 50 feet apart. Each wetland flag was numbered in consecutive order. Each flag was surveyed and plotted to show the location of the boundary.

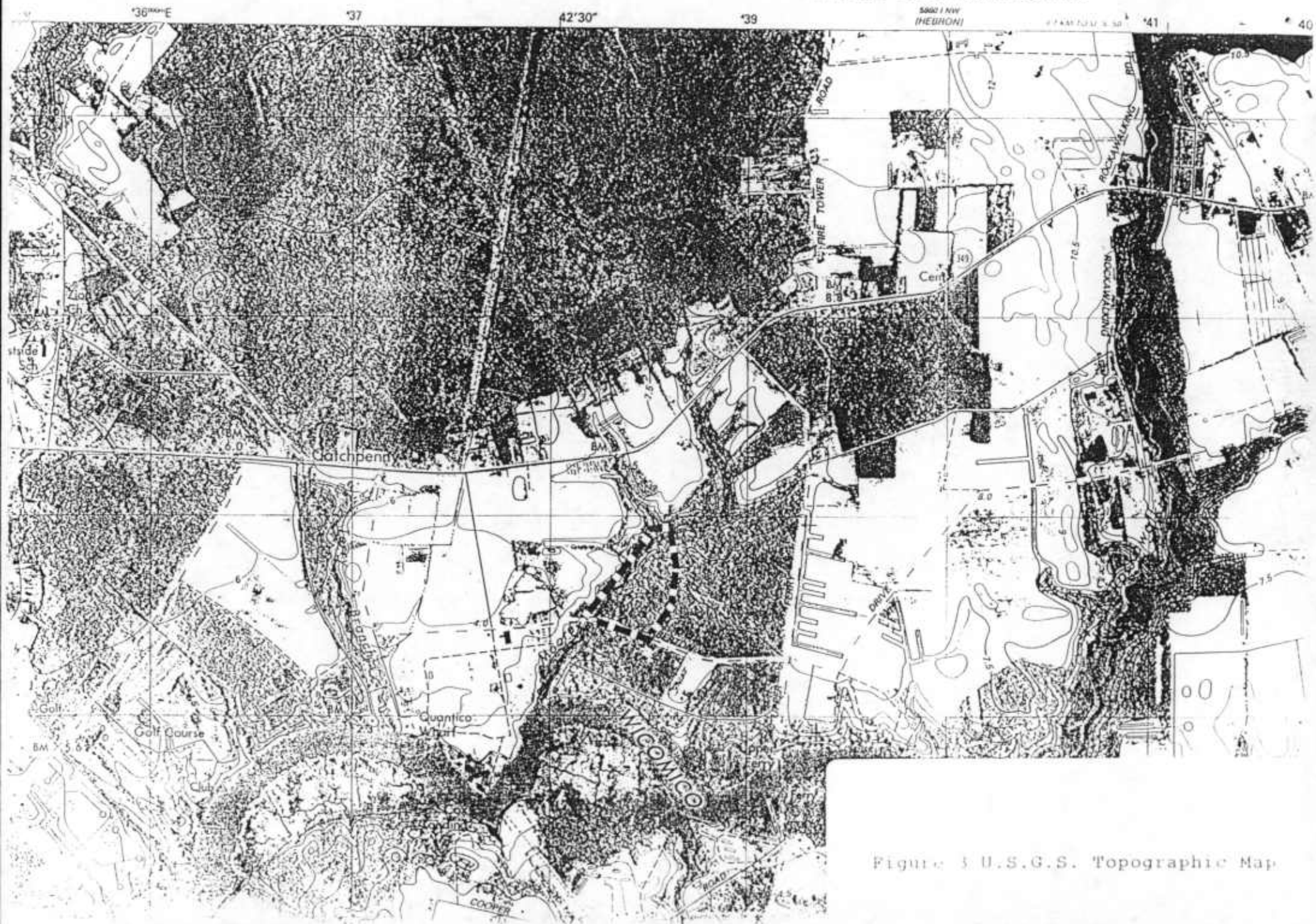


Figure 3 U.S.G.S. Topographic Map



### Tidal Fresh Wetland

The tidal marsh is vegetated by arrow arum (*Peltandra virginica*), Pickrelweed (*Pontederia cordata*), jewel weed (*Impatiens capensis*) cattail (*Typha augustifolia*), smartweed (*Polygonum* spp.), rose mallow (*Hibiscus moscheutos*), halberd leaved tearthumb (*Polygonum arifolium*), smooth alder (*Alnus serrulata*), swamp rose (*Rosa palustris*) poison ivy (*Toxicodendron radicans*), and some common reed (*Phragmites australis*).

### Wooded Wetland

The wooded wetland plant community was generally made up of red maple (*Acer rubrum*), sweet gum (*Liquidambar styraciflua*), black gum (*Nyssa sylvatica*), American holly (*Ilex opaca*), and water oak (*Quercus nigra*). The understory is predominately vegetated with sweet bay (*Magnolia virginiana*), sweet pepper bush (*Clethra alnifolia*), high bush blue berry (*Vaccinium amoenum*), fetter bush (*Leucothoe racemosa*), swamp azalea (*Rhododendron viscosum*), common greenbrier (*Smilax rotundifolia*) and several ferns (*Onoclea senibilis*, *Osmunda regalis*, and *Osmunda cinnamomea*).

### Upland Forest

The upland plant community is vegetated predominately by red (*Quercus falcata*), and white oak, (*Q. alba*), lob-lolly pine (*Pinus taeda*), Virginia Pine (*Pinus virginiana*), mockernut hickory (*Carya tomentosa*), sweet gum (*Liquidambar styraciflua*), a few American Beech (*Fagus grandifolia*) and water oak. The average size of dominate species is 10-18 inches. With an understory of mountain laurel (*Kalmia latifolia*), sassafras trees (*Sassafras albidum*) American holly (*Ilex opaca*), young red and white oak, dogwood (*Cornus florida*), hercules' club (*Aralia spinosa*), green brier (*Smilax rotundifolia*), sweet pepper bush (*Clethra alnifolia*), with lesser amounts of groundpine (*Lycopodium obscurum*), Virginia creeper (*Parthenocissus quinquefolia*), tapering fern (*Thelypteris palustris*), bracken fern (*Pteridium aquilinum*), and partridge berry (*Mitchella repens*).

## Soils

Uplands were generally found to be as described on the Wicomico County soil survey maps, Evesboro-Galestown-Downer sands, Woodstown sandy loam and Fallsington sandy loam. The Evesboro-Galestown-Downer sands are the predominate series in which the proposed development should take place (See Figure 4).

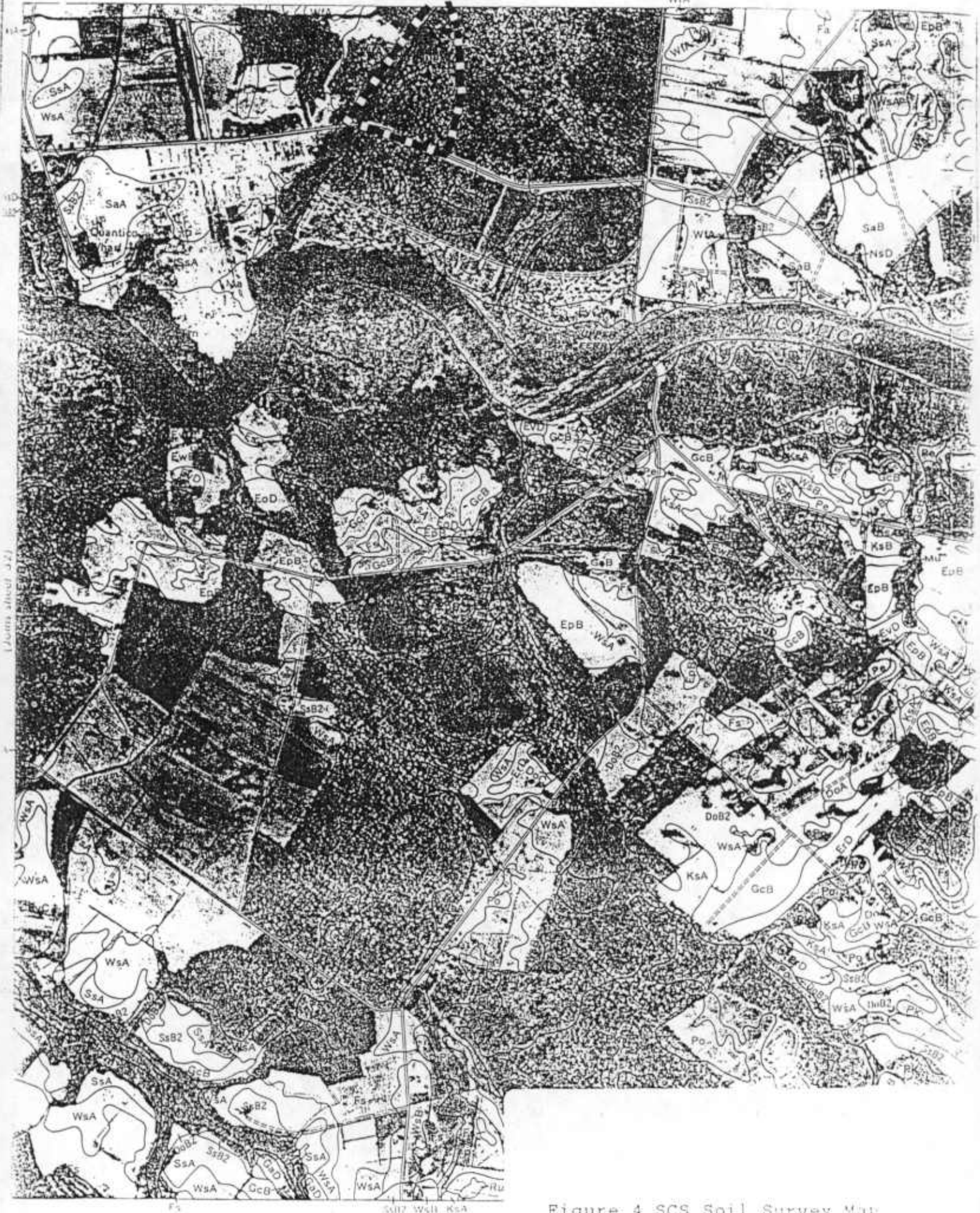
The Evesboro soils are nearly level to steep, sandy and somewhat excessively drained or excessively drained upland soils. They occur mainly on upland deposits of sand, some of which are dune like. These soils formed in beds of sandy marine sediments or very river sediments, and are generally underlain by finer textured material.

The native vegetation is scrub hardwoods, dominantly oaks, but many of the more nearly level areas have been invaded by loblolly pine. Where the soils occupy dry, dune like areas of sand ridges, plant cover is mainly shortleaf and Virginia pines with little understory. Cactus may also occur on these dry ridges.

The Galestown series consists of deep, sandy, level to somewhat rolling or hilly, excessively drained and somewhat excessively drained upland soils that have a brown, sandy subsoil and commonly, a finer textured moisture-retaining substratum. These soils occur on uplands, or on old terraces along major streams. They are formed in deep beds of sand deposited over older beds of finer textured material.

The SCS Survey describes the Woodstown series as a level to gently sloping, moderately well drained upland soil. These soils occupy small areas within larger areas of well drained soils or poorly drained soils. They have a subsoil of mottled heavy sandy loam or sandy clay loam. The native trees in wooded areas are oaks, red maple, gum, beech, loblolly pine, dogwood, and sassafras. In places where the soils were cleared and cultivated, loblolly pine now grows in almost pure stands. These soils can have a seasonally high water table, and may or may not be suitable for septic systems.

Fallsington soils are poorly drained and considered a hydric soil or wetland soil. This series consists of level or nearly level soils on upland flats or at the base of gentle slopes. These soils formed in old moderately coarse textured material that contains moderate amounts of silt and clay and is underlain by coarse-textured material. Generally, these soils have a seasonally high water table, and are not suitable for septic systems. The native trees are red maple, water tolerant oaks, sweetgum, blackgum, and to a lesser extent, loblolly pine. The understory in wooded areas is holly, pepper bush, high bush blue berry, sweetbay, and green brier.



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Figure 4 SCS Soil Survey Map

## Buffer Vegetation

The vegetation within the tidal and nontidal wetland buffers is generally the same as that of the forested upland.

## Fish and Wildlife

Fish and wildlife are expected to be diverse, but not uncommon to the eastern shore. No endangered plants, fish or wildlife are known to exist on the site.

As with all estuarine rivers, the headwaters are fresh and as you proceed downstream, the waters increase in salinity. While the River is tidal in the project area, the water is essentially fresh. Thus, most of the resident fish are freshwater species such as largemouth bass, crappie, brown bullhead, white catfish, and sunfish. In addition to the local freshwater species, the area is also used as a nursery area for ocean spawning fish such as spot, croaker, weakfish, and menhaden. Their upstream distribution will vary from year to year, but young of some of these species can be found as far upstream as Shad Point. Their occurrence varies throughout the year, and some such as the croaker overwinter in the River. The most abundant species on the River is the estuarine species white perch.

Anadromous species such as alewife, blueback, herring, and striped bass spawn in the upper reaches of the River and tributaries. After spawning, the young use the river as a nursery and as winter nears, migrate towards more saline waters.

Most of these species will move out of the area or to deeper water during the first two weeks in October. Resident species such as killifish will overwinter in the tidal guts of the marshes and protected nearshore areas of tidal creeks.

The American oyster (*Crassostrea virginica*) or the soft-calm (*Mya arenaria*) do not occur in the project area (Figure 5). Some common benthic species which might be expected to occur in the area are:

<i>Macoma balthica</i>	<i>Mulinia lateralis</i>
<i>Leptocheirus plumulosus</i>	<i>Streblospio benedicti</i>
<i>Scolecopides viridis</i>	<i>Heteromastus filiformis</i>
<i>Podon polyphemoides</i>	

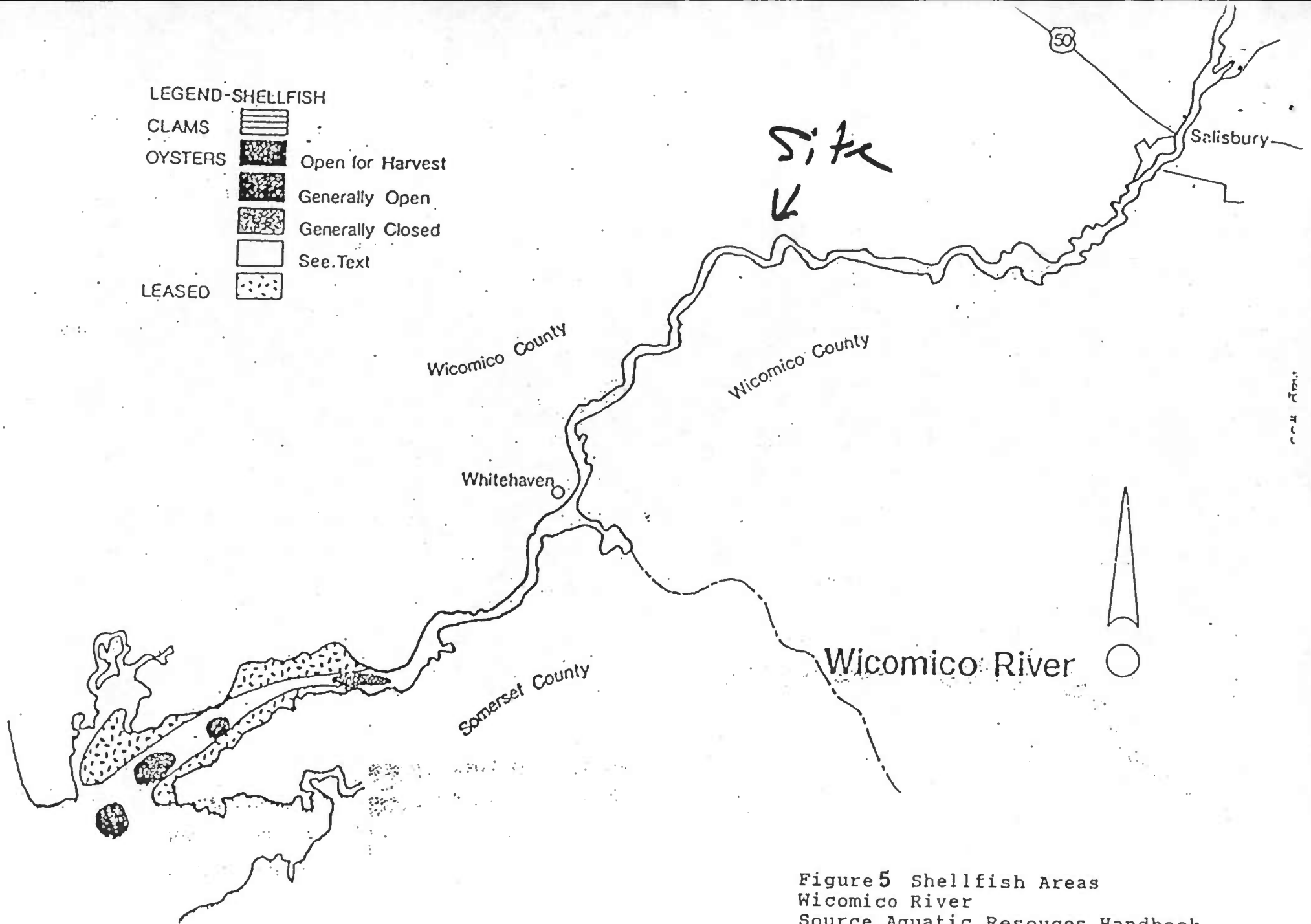


Figure 5 Shellfish Areas  
 Wicomico River  
 Source Aquatic Resources Handbook

McCormick, 1982, states that freshwater marshes can be composed of more than sixty species of flowering plants, and are floristically the most diverse of all of the tidal wetlands. The aerial portions of cattail and common reed die in autumn, but the plants remain erect and provide cover throughout most of the winter. In contrast, the leaves and stems of most other herbaceous plants of the freshwater wetlands decompose rapidly, and most of the wetland area is devoid of cover from November through March.

Seed production is at a peak in the freshwater tidal marshes from mid-August through mid-September, and these wetlands become extensive granaries for wildlife. Redwings, bobolinks, rails and teal and other ducks flock to the marshes to feed. Smartweeds, wild rice, the tearthumbs, and water millet are the prime sources of seed. Wood ducks feed most intensively on the seeds of arrow-arum, but these weeds do not seem to be particularly attractive to other waterfowl or marsh birds.

Mammals which can be expected to be found in the uplands of the site are muskrats, whitetail deer, cottontail rabbits, grey squirrels, striped skunks, raccoons, opossums, whitefooted mice, shorttailed shrews, possibly flying squirrels, and river otter.

#### Endangered Species, Colonial Bird Nesting Areas, and Critical Habitat

No endangered species, colonial bird nesting areas and critical habitat are known to be in the area (See attached DNR letter).

#### Forest Interior Dwelling Birds

Tracts of woodlands which are 100 acres or more, such as what occurs in this area are generally utilized by forest interior dwelling species (FIDS). A survey of the site in the summer of 1994 found that six species of interior dwelling birds. These species are as follows: hairy woodpecker (*Picoides villosus*), pileated woodpecker (*Dryocopus pileatus*), acadian flycatcher (*Empidonas virescens*), red-eyed vireo (*Vireo olivaceus*), scarlet tanager (*Piranga olivacea*), and worm-eating warbler (*Helmitheros vermivorus*) (See attached report).

The red-eyed vireo, scarlet tanager, and worm-eating warbler was heard singing in the same location on three consecutive site visits, is therefore considered a probable nesters. The results of the census indicates the site supports one pair of each species, except the scarlet tanager, for which three pairs were heard.

For the most part, the following brief description of the life history and habitat requirements, the nesting FIDS was taken from Bushman & Therres 1988. With additional information of species range taken from Robbins et al. 1966.

#### Red-eyed vireo

The red-eyed vireo is an abundant species inhabiting various types of moist deciduous forests or mixed forests with a deciduous understory. It can occur in a wide range of forest ages, from early through mature, but is most abundant in mature forest stands.

This vireo prefers shady oak forests with a high, well-developed closed canopy, intermediate levels of tree density, with an average basal area of 90ft<sup>2</sup>/acre, and a fairly open understory with scanty ground cover. This bird is a canopy specialist insectivore, and gleans insects from the high deciduous foliage, but nests low (5' to 35'). The nesting season in Maryland runs from mid-May to mid-August, with a peak from late May to mid-July.

The red-eyed vireo occurs wherever trees grow even in isolated prairie groves. It breeds and nests through most of north America. However it does not occur in the northern part of Canada, in Alaska, or the southwestern United States. The population winters from Venezuela, and Colombia south to Brazil and Ecuador.

Being one of the most abundant bird species in North America, the red-eyed vireo is not as vulnerable to forest fragmentation as most other forest bird species. The smallest woods reported to contain red-eyed vireos were less than 12 acres on Maryland's Coastal Plain, 7 acres in New Jersey, 7 to 17 acres in western Maryland, and 4 acres in Illinois. Red-eyed vireos have been found in nearly all woodlots over 50 acres, but it has been estimated the critical forest size to maintain a viable breeding population at 250 acres. However it has been reported to breed in forest islands smaller than 38 acres. Apparently it also breeds in both interior and edge forest habitats.

Although it prefers a closed canopy, this vireo will tolerate a wide range of canopy closures, and thus, timber harvesting techniques. It has been reported that after a number of years, any level of timber harvesting had no effect upon populations of the vireo. A Maryland study (Whitcomb, 1977) found that selective logging had no significant effect on the population of red-eyed vireo.

### Scarlet tanager

The scarlet tanager is found in deciduous and mixed swamp or floodplain forests, or rich, moist upland forests, and has a preference for oak trees. This species inhabits a wide range of forest stages, from early successional through mature, but is most abundant in mature woods. This species over winters in Colombia to Bolivia and Peru, but breeds and nests through out the northeastern portion of the United States (Virginia to Missouri north). The scarlet tanager nests in Maryland from early May to early August, with a peak from late May to mid-July. It builds an open nest high in a deciduous tree. This tanager gleans insects from foliage high in the canopy, or chases aerial insects.

Perhaps, because it nests high in the canopy, rather than on or near the ground as do many other forest interior birds, the scarlet tanager often breeds successfully in smaller forests. It is estimated the minimum area needed to sustain a viable breeding population at only 25 acres, although the optimal size is 250 acres. In Maryland scarlet tanagers have been found in woods as small as 2.5 acres. Although the scarlet tanager is not as greatly affected by forest fragmentation as some other forest interior birds, larger tracts of forest appear to support higher densities of birds than smaller tracts. Since the species can tolerate a wide range of forest conditions, a fairly broad range of forest management practices are acceptable.

### Worm-eating warbler

The worm-eating warbler is a bird of well-drained upland deciduous forests usually with an understory of mountain laurel (*Kalmia latifolia*) or other shrubs, or in the drier portion of river or stream swamps with an understory of mountain laurel. A dense understory of saplings and shrubs is important habitat requirement. The warbler is most abundant in mature woods, but is also common in young and medium aged stands (including young lob-lolly pine).

This species over winters in the Bahamas, West Indies and Central America from Chiapas to Panama, but breeds and nests through out most of the northeastern portion of the United States (Virginia to Missouri north). In Maryland this bird nests from mid-May to mid-July. It build an open nest on the ground, and conceals it under dead leaves. The worm-eating warbler does not eat worms, but gleans insects from understory foliage and dead leaves.



Some biologists considered the worm-eating warbler to be one of the most fragmentation-sensitive birds in Maryland. It is estimated the critical size necessary to maintain a viable population is 750 to 2500 acres. However, it has been reported in Maryland forests of 50 to 55 acres.

The impact of various forestry practices on this warbler has not been reported in the literature. The worm-eating warbler's preference for a dense understory and low basal area, and its use of a wide range of stand ages, however, suggests that it may tolerate many different forest management and logging practices. Selective logging and thinning over mature trees may create favorable conditions by opening the canopy and reducing basal area. Clearcutting and group selection should also be tolerated, and the worm-eating warbler was found nesting in clearcuts as young as 7 years old where several hardwoods were left standing in the clearcuts.

#### Existing Pollution Sources

As stated previously, agricultural and urban runoff, failing septic systems, and municipal and industrial discharges are sources of pollutants. Air pollution is also a major source of certain pollutants. For instance, the major source of zinc entering the Chesapeake is thought to come from power plants burning coal in the Ohio Valley. Since air born pollutants enter the drainage area in rainfall, this pollutant would be classified as originating from stormwater runoff.

#### Existing Water Quality of Wicomico River

The Maryland Department of Environment (MDE) classified the waters adjacent to the site as Class I for water contact recreation and supporting aquatic life. Water quality in the River adjacent to the site is fair. Nutrients, bacterial levels and organic enrichment in the upper estuary occur as a result of agricultural and urban runoff, failing septic systems, and municipal and industrial discharges. Lower portions of the River are classified as Class II for shellfish harvesting.

## Environmental Consequences

In regard to water quality, the adverse environmental impacts of the proposed project will be insignificant. The discharge of nonpoint source runoff pollutants will be similar to that of the predevelopment conditions. If one was to consider the reduction of pollutants which will result from afforestation required, the net effect will to reduce the amount of pollutants discharged by stormwater runoff to the Wicomico River and Chesapeake Bay.

## Land Use

The greatest change in land use will be the conversion of 9.5 acres of woodland to residential use. However, the applicant will place 39.9 acres of existing mature woodland which could have been converted into an agricultural field, into a conservation easement.

## Wetland

No wetlands will be altered or lost as a result of the proposed development.

## Upland Forest

As stated above, the project will cause a net loss but will preserve other forest area within the Wicomico River watershed which may have been cleared at some future time. The County requires that that forest losses which are less than 20% of the site (7.3 acres) be mitigated at on a 1 to 1 ratio. Since the clearing will be limited to 7.3 acres or less, the total mitigation area required is 7.3 acres.

## Water Quality

If we estimate the existing loading based upon the actual land use conditions (forest), and an average surface impervious area expected, we would have essentially the same pre and postdevelopment discharges (6.2 lbs to 6.15 lbs of phosphorus)<sup>1</sup>.

## Buffer Width and Vegetation

No alterations to buffers is expected.

## Fisheries and Wildlife

Fisheries habitat and/or resources will not be adversely affected by the project. Pollutants from stormwater runoff and groundwater discharge are expected to be similar to predevelopment conditions. In addition, offsite mitigation will result in 39.9 acres of an existing woodland being placed in a permanent conservation easement. FIDS habitat will be reduced by 11.6 acres but a greater amount of existing interior deciduous woodland will be placed into a permanent conservation easement.

## Endangered Species, Colonial Bird Nesting Areas and Critical Habitat

No endangered species, colonial bird nesting areas, or critical habitat will be adversely affected by the project.

## Forest Interior Dwelling Birds

In general, the project will reduce the quality of habitat for interior dwelling bird species, while increasing habitat for bird species which require "edge" habitat. In general the first 300 feet of woodland occurring along the edge of a forested tract of land is not considered FIDS habitat. This edge woodland is not considered good habitat for FIDS, since these birds are generally subjected to increased competition with resident and short-distance migrants, higher predation rates, nest parasitism by brown-headed cowbirds and greater human disturbance.

\* \* \* \* \*

<sup>1</sup> Note loadings are based upon the data given in Figure 3 of guidance paper #5 prepared for the Maryland Critical Areas Commission (A Framework for Evaluating Compliance with the 10% Rule in the Critical Area).

Thus to determine the impact of the development upon the amount of FIDS habitat, one must subtract the 300 foot edge from the forest area. After subtracting this edge area it can be seen that the proposed project will affect the FIDS habitat by approximately 11.6 acres (See figure 6).

As stated above, a survey of the site in the summer of 1994 found that six species of interior dwelling birds utilize the site to some degree. These species are as follows: hairy woodpecker, pileated woodpecker, acadian flycatcher, red-eyed vireo, scarlet tanager, and worm-eating warbler. Of course birds which appear to nest in the area would be most likely to be significantly effected by the proposed subdivision.

The hairy woodpecker, pileated woodpecker, and acadian flycatcher do not appear to nest in the area, and may still utilize the area for feeding after development. The one pair of red-eyed vireo, and three pairs scarlet tanager have small forest area requirements but because of the small size of the FIDS habitat existing on the site could be displaced from the site. The worm-eating warbler is reported to be very sensitive to disturbance and thus it is likely the pair of birds nesting on this site will be displaced. Given that the development outside the CBCA is currently under construction and considering the sensitivity of this species to disturbance the birds may site regardless of whether not the CBCA area is developed.

### Alternatives

Adverse impacts associated with the proposed project appear to be confined to FIDS habitat. Thus alternative designs considered were directed at avoiding, minimizing and/or compensating for unavoidable adverse impacts to FIDS. The topographic conditions of the site, including the location of tidal and nontidal wetlands, and the location of suitable soils of sewage disposal severely limited development alternatives. In addition the Maryland Department of Natural Resources, Wildlife Division has informed us that any expansion of the subdivision into the Critical Area will render the habitat unsuitable for FIDS.

Considering the above, it appears only two alternatives are viable: (1) the proposed project, with measures taken to compensate habitat impacts so the net result will be not adversely affect FIDS; and (2) the no action or development alternative. Considering the low numbers of birds effected in relation to the amount of habitat within the Wicomico County, and the ability to compensate for adverse effects, the applicant in consultation with County Planning

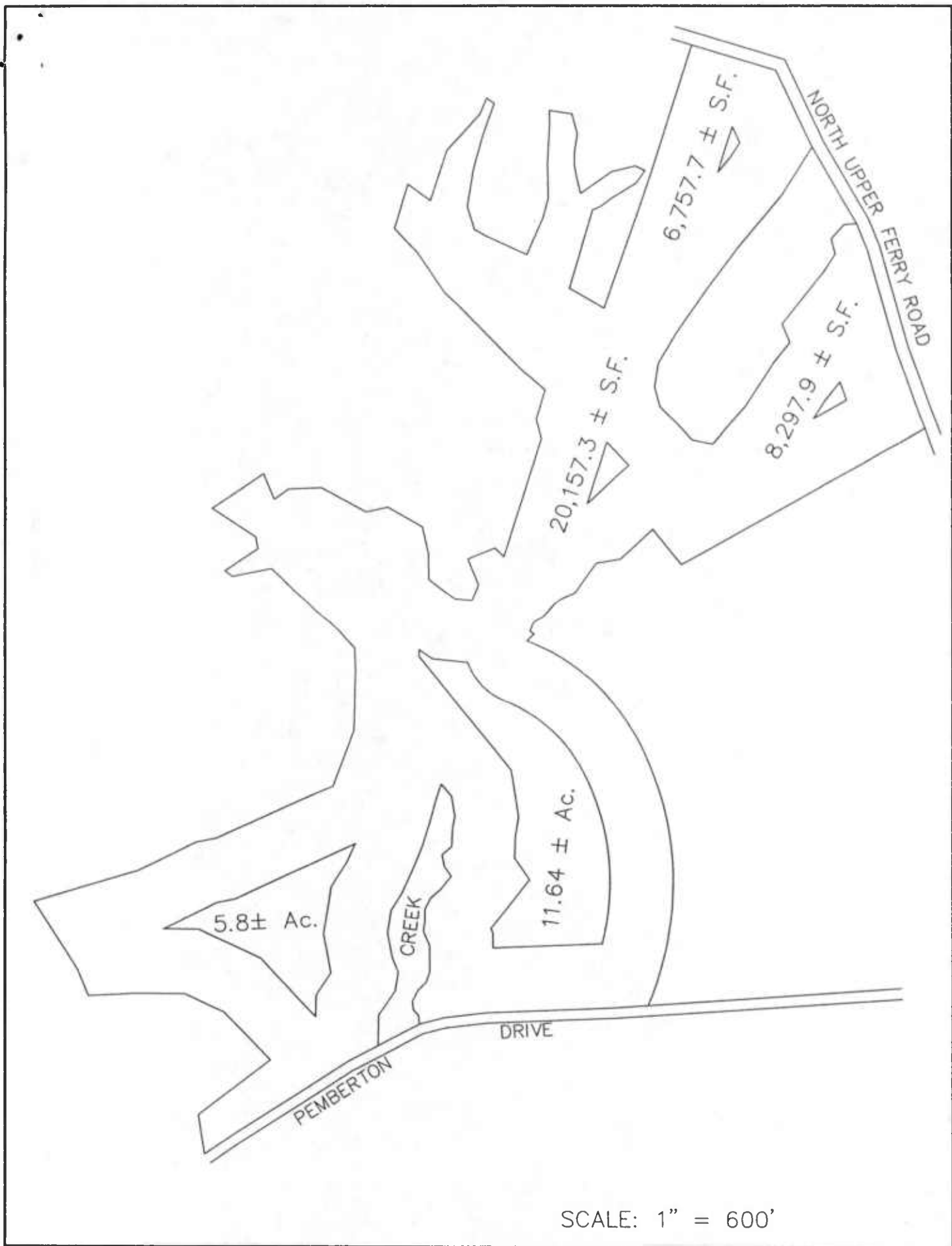


Figure 6 Total Forest Tract showing Interior Bird Habitat.

and Zoning staff decided to pursue the first alternative.

#### Forest Interior Dwelling Bird Mitigation

To mitigate the effects of the proposed development, the applicant proposes to place 39.9 acres of mature mixed forest into a permanent conservation easement. In addition, the applicant proposes to manage the woodland in a way to improve and diversify the habitat for wildlife and in particular for the worm-eating warbler.

The mitigation site is located within the CBCA near Nanticoke, Maryland (See Figure 7). The property in compasses 47.2 acres. It is located adjacent to the Wicomico River. The site has gentle slopes, with the highest elevation being approximately 6' and the lowest approximately 3 feet NGVD. Drainage from the site enters the tidal wetlands which occur along the Wicomico River.

It is vegetated with mature lob-lolly pine, red maple, red & white oak, American beech, American holly, black cherry, and water oak. These tree appear to be 40 to 70 years old. The understory is relatively open and vegetated with american holly, sassafras, young black & sweet gum trees, common green briar, high bush blue berry, and scattered partridge berry plants. The Fallsington Silt Loam soils occur on the majority the property, lesser amount of Woodstown Loam occurring on the higher portion of the site (See figure 8).

This woodland lies within a forest tract which is approximately 930 acres in size. A preliminary nontidal wetland delineation indicated the majority of the site is considered uplands. Lying within the CBCA, the upland area lying outside the 100'buffer, which is 39.9 acres, could be cleared for agricultural use. Rather than clear these woodlands the applicant proposes to place them in a permanent conservation easements. The purpose of this easements is to insure the area remains in a forested state. Selective timber harvesting will be allowed but will be done in a matter as to increase the plant diversity and improve the habitat for FIDS which will be displaced at the Kensington CBCA site. Clear cutting will not be allowed.

The selective harvesting of the lob-lolly pine while preserving most of the existing hardwood trees will maintain a canopy habitat but allow enough sunlight into the understory area to stimulate a dense understory. It appears that preserving this woodland with the habitat enhancement measures proposed will more than adequately compensate for the FIDS habitat loss at Kensington Woods. Note: The Maryland Department of Natural Resources (DNR), Wildlife Division, has agreed that the offsite mitigation area proposed meets the

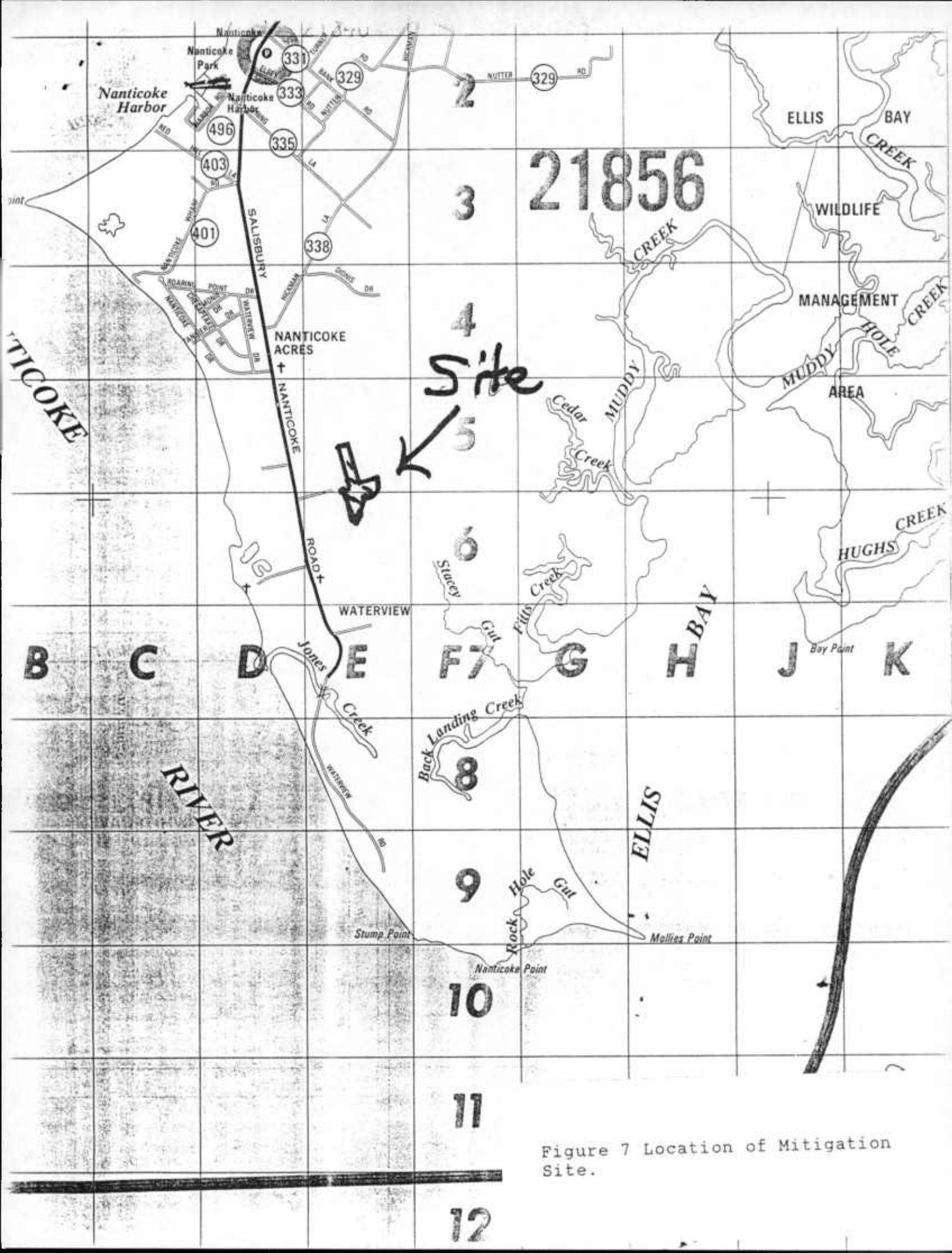
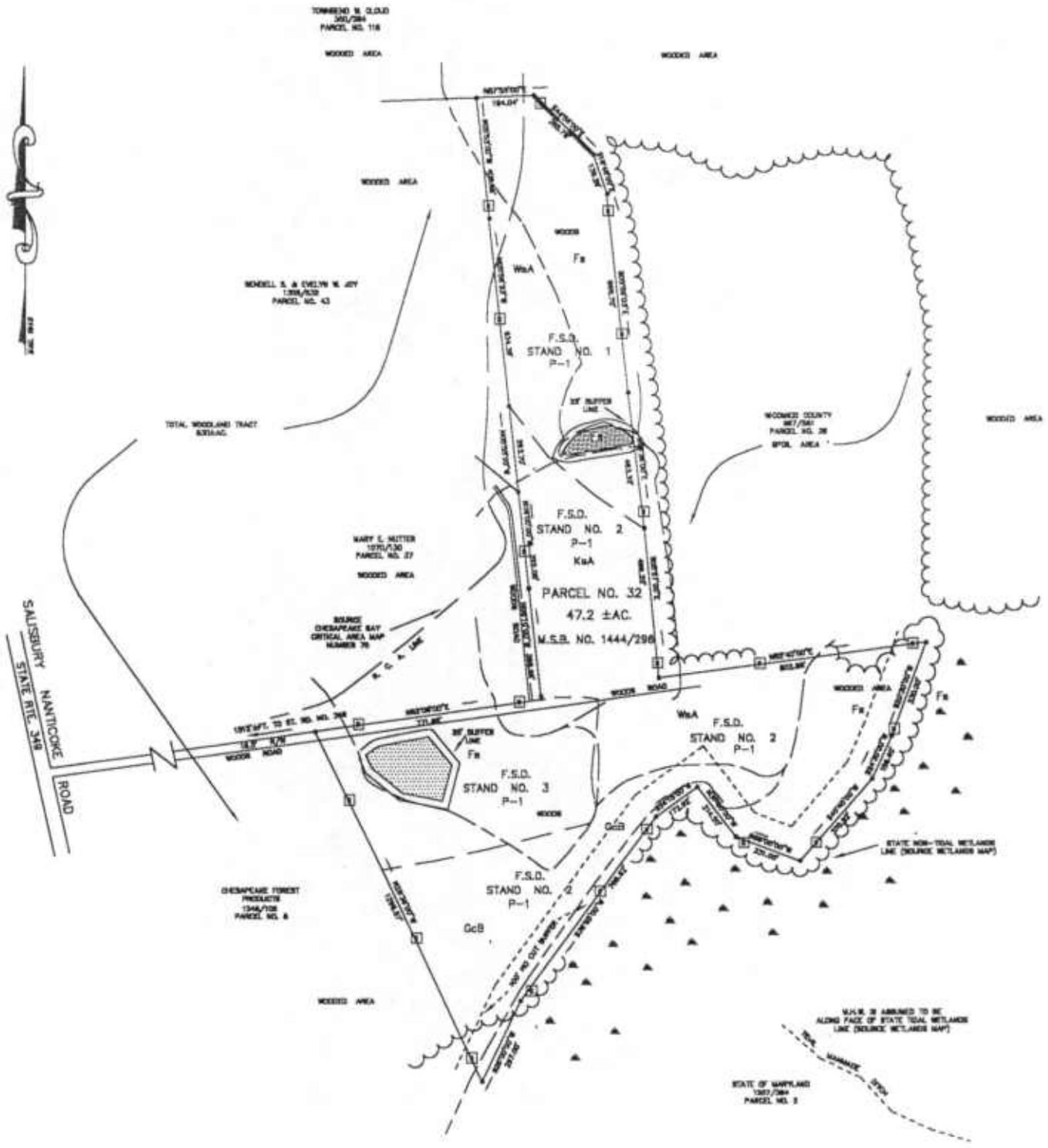


Figure 7 Location of Mitigation Site.

Figure 8 Forest Stand Delineation Plat of Mitigation Area showing CBCA boundary & 100' buffer.





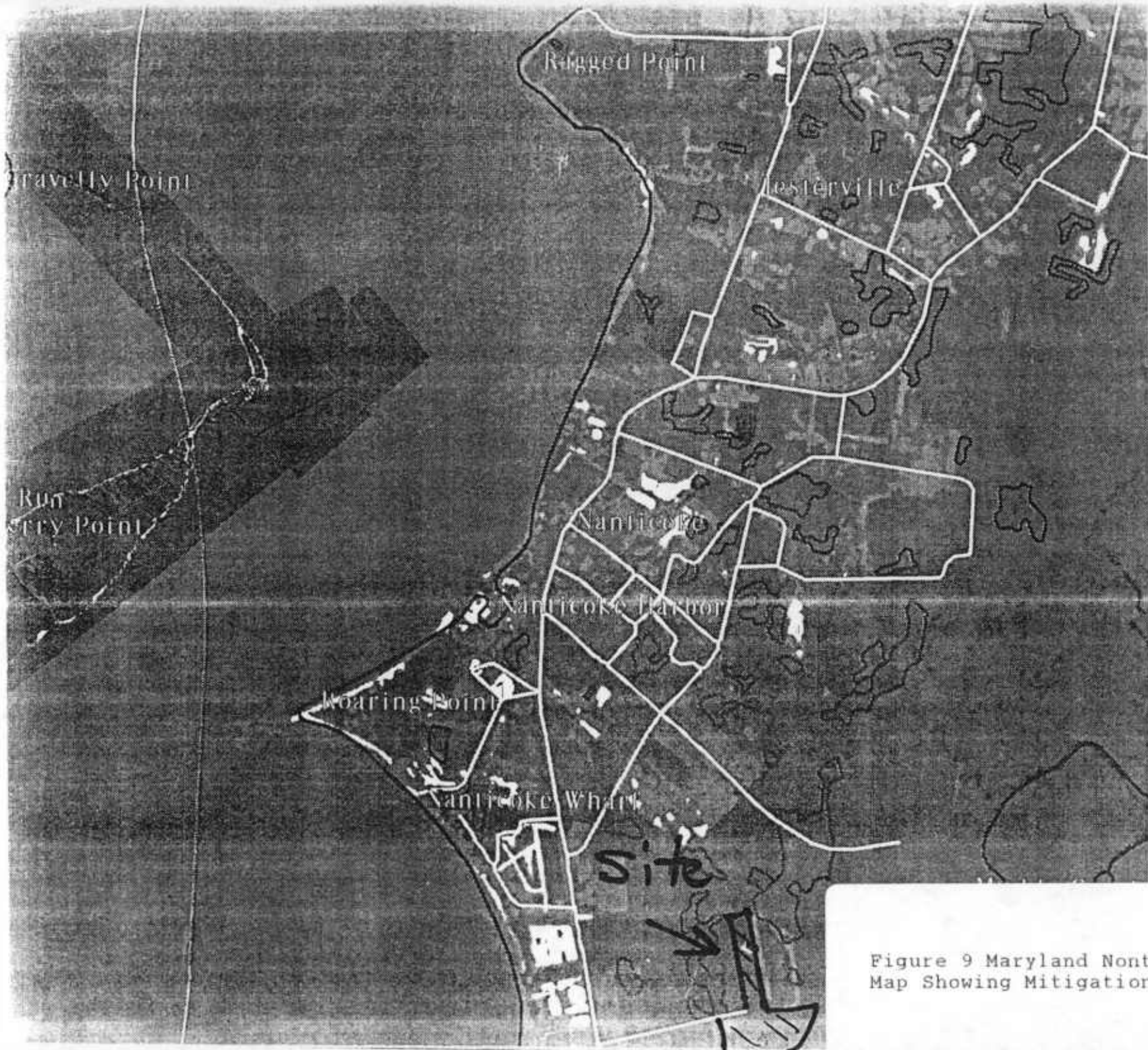


Figure 9 Maryland Nontidal Wetlands Map Showing Mitigation Site.

necessary conditions to mitigate the habitat losses.

In addition the Maryland DNR recommended several other measures to minimize forest loss for forest-nesting birds and other wildlife. Each of these alternative measures were considered and where possible incorporated into the proposed project. The recommendations and discussion of each alternative follows.



1. Limit construction to the period between and including September-April, the non-breeding season for most forest-nesting birds. The applicant has agreed to limit road construction to this time period.

2. Limit the removal of forest cover (including understory vegetation and mid-story vegetation) to the footprint of each house plus 10,000 square feet and to that which is absolutely needed for driveway and road construction. To minimize forest loss, and retain the wildlife value of the property, the total area cleared on each lot is to be at or below 15,000 square feet. Protective covenants will be placed on all lot deeds to preserve all forested areas outside the building envelopes, driveways, and sewage area. Driveways are designed so they can be shared, and the stormwater management facility will, to the extent possible, be designed to minimize fracturing the forest canopy (long & narrow).

3. Use a cluster design to minimize forest loss. To the extent possible houses have clustered.

4. Minimize road width (<25 feet) and allow forest canopy closure to become established over roadways. The minimum width for a road in Wicomico County is 26 feet.

5. Wherever possible, allow forest vegetation to occur up to the roadside edge and avoid establishing mowed grass roadside berm. The applicant proposes allow forest vegetation to occur along the road.

6. Place conservation easements on the remaining forested areas. As stated under item 2 remaining forested areas will be conserved.

#### Cumulative impacts to Forest Interior Dwelling Birds

In 1970 approximately 114,304 acres of woodlands existed in Wicomico County (SCS 1970). Land use data from the Maryland Office Planning indicated that in 1985 113,952 acres of forest existed in the County, and in 1990 this area was reduced to 112,576 acres. Thus the average loss of woodland between 1970 and 1985 was 23.5 acres per year. Assuming the method by which forest areas were determined

remained the same, between 1985 and 1990 the average loss was 275 acres per year. This was about .24% of the total forest area within the County per year. After the County assumed the Maryland Forest Conservation Act of 1991 the net loss has been reduced. For the period between July 1, 1994 to June 30, 1995 the net loss reported by Wicomico County was 53.11 acres.

At this time it is not known what portion of this acreage was deciduous forest, or if the losses caused increase fragmentation of larger wooded tracts. Data from Bushman & Therres 1988 indicated that 85,649 acres of deciduous forest existed within Wicomico County in 1985. Approximately 70,000 acres (81%) of this deciduous forest was in tracts greater than 400 acres. Indicating that approximately 30% of the total County land area was in forest areas which would be considered quality habitat for most FIDS.

Without information on the type of habitat affected by development, the quality of the remaining habitat, and information on FIDS populations within the County it is difficult to assess cumulative impacts. However, considering the amount of quality FIDS habitat existing in the County, the relative small size of the project area (.0008% of the Wicomico forest area) and the proposed habitat preservation, the cumulative effects of this project upon the species of concern will be insignificant.

### Conclusion

As stated earlier in this assessment, the proposed subdivision is located on a property designated by the Critical Area Program as a Resource Conservation Area (R.C.A.). However, the site occurs between an existing Intensely Developed Area (IDA) and an existing Limited Development Area (LDA). Thus, approval of this area for growth allotment would represent an infill between two development areas. The proposed project will provide a 17 country residences without significant adverse effects to the habitat or resources within the Maryland Critical Area or to the water quality of the Chesapeake Bay. While the project will reduce the available habitat for forest interior dwelling species of birds within Wicomico County, the proposed mitigation will adequately compensate for the FIDS habitat loss at Kensington Woods.



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October 13, 1995

Frank McKenzie  
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and Community Development  
P.O. Box 870  
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RE: Mitigation for the loss of Forest Interior Dwelling Bird (FIDS) habitat in the Critical Area at Kensington Woods subdivision, Wicomico Co. (tax map 46, parcel 81)

Dear Mr. McKenzie,

As proposed, development will render the Kensington Woods site unsuitable for FIDS. This letter describes recommendations to mitigate for this habitat loss and to minimize overall forest loss at Kensington Woods.

Mitigation

The amount of anticipated FIDS habitat loss at Kensington Woods is 36.7 acres. The recommended mitigation ratio for a tract of this size and habitat suitability is 1:1. Thus, the mitigation site should contain a total of 36.7 acres of contiguous forest that is currently capable of supporting FIDS. This acreage must be located adjacent to or within existing FIDS habitat. The forest conditions (age, composition, structure) also must approximate those at Kensington Woods.

The proposed mitigation site (i.e., the Robert L. Messick property in Wicomico Co.; tax map 70, parcel 32) meets all of the above conditions. To maximize protection for FIDS, the portion of the property to be used for FIDS mitigation should not include any areas within the 100 foot Critical Area Buffer. The mitigation area should be placed in a permanent conservation easement which clearly states that no development (roads, buildings, etc.) may occur. Existing roads should be allowed to succeed to native forest vegetation. Some timber harvesting is possible but, like any other proposed timber harvest in the Critical Area, the timber harvest plan must be reviewed by the Department of Natural Resources.

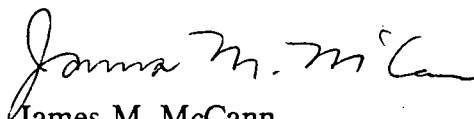
Minimizing forest loss and disturbance at Kensington Woods

Although FIDS habitat, as defined in Critical Area Guidance Paper No. 1, will no longer exist at Kensington Woods once the proposed development is completed, several measures can be taken to minimize forest loss and provide at least some habitat for forest-nesting birds and other wildlife. These recommendations are:

1. Limit construction to September-April, the non-breeding season for most forest-nesting birds.
2. Limit the removal of forest cover (including understory and mid-story vegetation) to the footprint of each house plus 10,000 square feet and to that which is absolutely needed for driveway and road construction.
3. Use a cluster design to minimize forest loss.
4. Minimize road width (< 25 feet) and allow forest canopy closure to become established over roadways.
5. Wherever possible, allow forest vegetation to occur up to the roadside edge and avoid establishing mowed grass roadside berms. The latter provide very little benefit to wildlife and reduce the nest success of those songbirds that do remain in the area.
6. Place conservation easements on the remaining forested areas. Timbering, removal of understory and mid-story vegetation, roads and the placement of additional building structures should be restricted from these areas. Consider establishing a nature trail in this open space.

If you have any questions, please don't hesitate to contact me or Glenn Therres.

Sincerely,



James M. McCann  
Neotropical Migratory Bird Project Manager

cc: Ron Gatton  
Claudia Jones  
Glenn Therres



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P.O. Box 438  
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September 29, 1995

Ms. Claudia Jones  
Chesapeake Bay Critical Area Commission  
45 Calvert Street 2nd Floor  
Annapolis, Maryland 21401

Dear Ms. Jones:

I want to thank you and Jim McCann for meeting with Robert Messick, Rick Dwier, John Andrews, and myself at the Kensington Woods Subdivision and proposed Forest Interior Dwelling Bird Species (FIDS) habitat mitigation site. As we discussed, we have been working with Wicomico County for the past two years, and have their preliminary growth allocation approval. After visiting the sites it is my understanding that: you and Jim agree to the mitigation site, but your initial opinion is that amount of mitigation should be based upon the total size of the site and be at a ratio of two to one. Since Kensington Woods project involves 36.66 acres of forest, you are suggesting that 73.32 acres of forest would be required for mitigation of the FIDS habitat. It is my understanding the reason for doubling the mitigation area is to provide an incentive not to use mitigation as a method of allowing all developments regardless of FIDS habitat impacts.

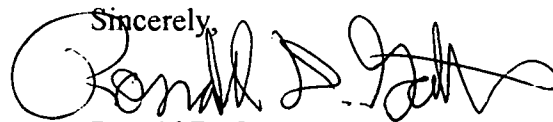
While I agree that the ability to mitigate habitat impacts should not be used as a method to avoid minimizing adverse impacts to FIDS. I believe basing the mitigation area upon the total size the development site is a mistake, and defeats the purpose to avoid and minimize adverse impacts. We all know the value of a tract of forest to FIDS varies greatly with forest type, age, size, and shape. The location of the development site within the larger forest tract would also be a significant factor in determining the impact upon FIDS habitat. For instance, a development site located in the middle of a forest tract or a site which would separate a forest tract into two smaller tracts, will have an impact area much greater than the size of the property. Utilizing a mitigation policy based upon the size of the development property would not adequately mitigate the adverse impacts. Should the required mitigation area be the same for property owner who proposes to develop forty acres within a small narrow forest tract, as a property owner who proposes to develop a forty acre area located within the center of the large mature deciduous forest tract? Of course not, the required mitigation should be balanced with the degree of impact.

Balancing the required mitigation with the degree of impact will not only be fair, but provides an incentive to avoid and minimize impacts. In addition, the beneficial impacts of mitigation will be considered. Assessing the beneficial impacts of mitigation will provide an incentive to select sites which provide the most benefits. If the mitigation required is based upon the total forest size what incentive will there be to select priority mitigation sites such as high cost agricultural or development land which lies between two small or moderate sized forest tracts.

As I stated at our meeting the proposed mitigation at Kensington woods was based upon the amount of interior forest affected by the proposed development. This was determined by subtracting the minimum edge effect area of 300 feet from the total forest area. Using this method it was determined that 11.64 acres of interior forest habitat would be lost as a result of the project. The mitigation site is forested with similar type and age of woodland to that of the development area. While all of the site will be placed in a forest conservation easement, only the interior forest would be used for FIDS mitigation requirements.

Also because of the small size and shape of the forest tract at Kensington Woods, and current development activity outside the critical area, the worm-eating warbler may leave the site. Under the proposed mitigation policy will property owners be required to mitigate for FIDS habitat which is only utilized by species which are considered to be common and have large populations?

I hope the above will help in your development of the FIDS mitigation policy and I look forward to your response.

Sincerely,  


Ronald D. Gatton  
President

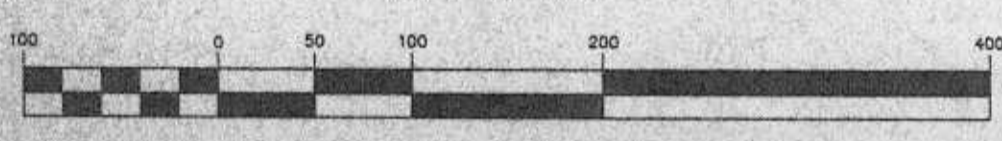
cc. John Andrews  
Robert Messick  
Bill Livingston  
Rick Dwier  
Jim McCann

LAND USE  
MANAGEMENT  
DENOTED AS I.D.A.

WETLANDS PLAT  
&  
C.B.C.A. CONCEPT PLAN

"KENSINGTON WOODS"  
ROBERT L. MESSICK, INC.

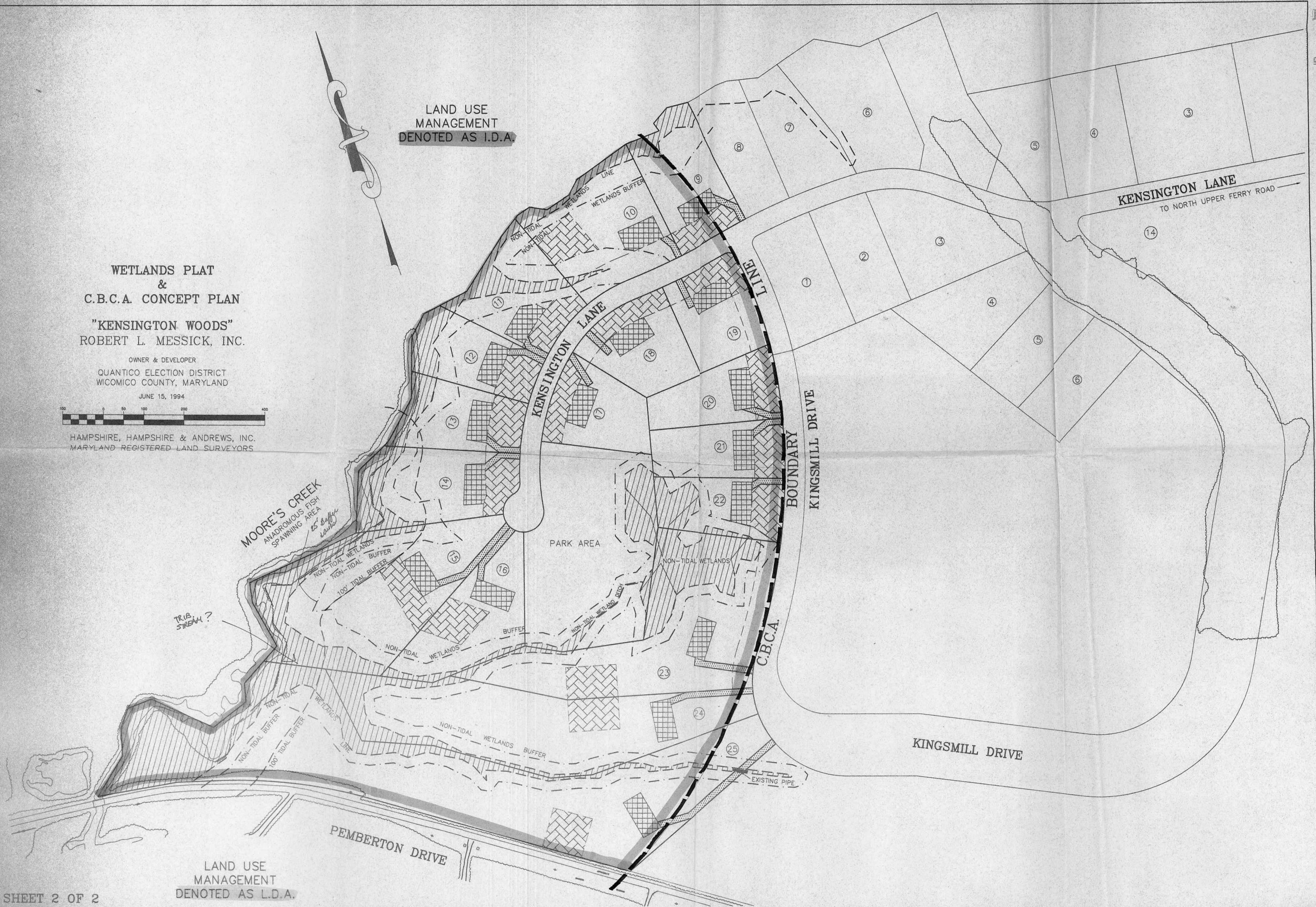
OWNER & DEVELOPER  
QUANTICO ELECTION DISTRICT  
WICOMICO COUNTY, MARYLAND  
JUNE 15, 1994



HAMPSHIRE, HAMPSHIRE & ANDREWS, INC.  
MARYLAND REGISTERED LAND SURVEYORS

MOORE'S CREEK  
ANADROMOUS FISH  
SPAWNING AREA  
*25' Buffer*

*TRIB. STREAM ?*



LAND USE  
MANAGEMENT  
DENOTED AS L.D.A.