



Mandatory Referral, MR2013010: NIH Animal Center

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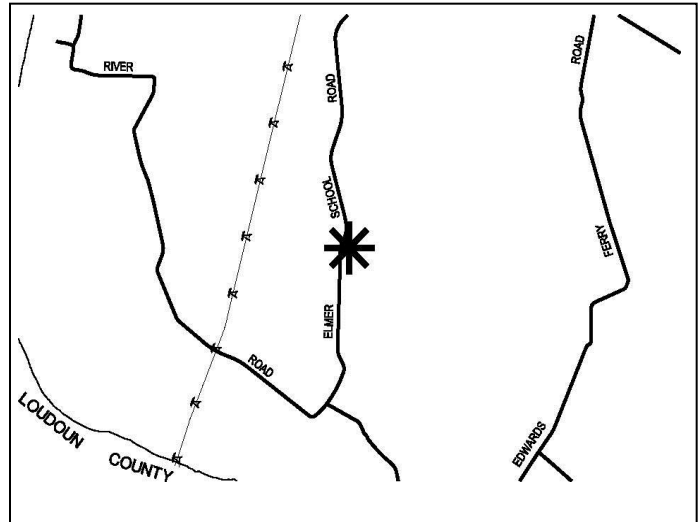
Description

NIH Animal Center is a 513-acre campus zoned Rural Density Transfer (RDT) located in the Agricultural Reserve and to the west of Poolesville on Elmer School Road and Club Hollow Road. The Property is located in the Preservation of Agriculture and Rural Open Space Functional Master Plan and the Rustic Roads Functional Master Plan.

Staff Recommendation: Approval with comments

Submittal Date: October 24, 2012

Applicant: NIH Animal Center



Summary

The Planning Board’s action is to transmit advisory comments to the National Institutes of Health Animal Center (NIHAC) concerning the Draft Master Plan and the Draft Environmental Impact Statement. These are exceptionally large documents and are not included as part of this staff report. The NIHAC master plan was last updated in 1996 for the entire campus. This proposal has a timeframe of 20 years. Staff focused their review efforts towards master plan compliance, parkland, environment, and transportation. The Broad Run Stream Valley runs through this Property and is designated as potential parkland in an effort to protect the water quality of the Broad Run. Dom Quattrocchi of the Parks Department, Scott Whipple of Historic Preservation, Ki Kim and Katherine Nelson of Planning Area 3 contributed to this staff report.

The National Institute of Health Animal Center (NIHAC) Master Plan was last adopted in 1996 and no longer reflects the vision for the physical development of the campus. The NIHAC completed a new Draft Master Plan March of 2012 and a Draft Environmental Impact Statement (DEIS) September 2012. These documents have been submitted to the M-NCPPC for comment.

SITE DESCRIPTION

The NIHAC is 513-acre campus zoned Rural Density Transfer (RDT) located in the Agricultural Reserve and to the west of Poolesville. The Property is covered by the Preservation of Agriculture and Rural Open Space Functional Master Plan (“AROS”). The Property is bounded by Elmer School Road to the west and Club Hollow Road to the north. To the east Broad Run Stream meanders close to the property boundary. The Property has a collection of surface parking lots, roads, a water tower, and 30 buildings of varied styles totally 361,607 square feet, in a rolling pastoral landscape with trees and streams as depicted in Figure 4. The Property has 120 acres of pasture, 127 acres of open space, and 217 acres of forest¹. The buildings are served by well water and an on-site water treatment plant. There are 199 employees. The animal population is comprised of 3,023 primates, 1,010 mice, and 226 other large animals.

As depicted in Figures 1, 2, and 3 below, the Property is surrounded by farmland in the RDT zone.

The Property is located in the Broad Run Watershed. A small cluster of one-family dwellings is located at the intersection of Club Hollow and Elmer School roads and there is a second cluster along the eastern boundary of the NIHAC on Club Hollow Road. To the east and south are farms, a section of the Chesapeake and Ohio National Historic Park, and the Broad Run Stream Valley Park. To the west is the Montgomery County Firearms Training Facility.

¹ DEIS p. 3-62

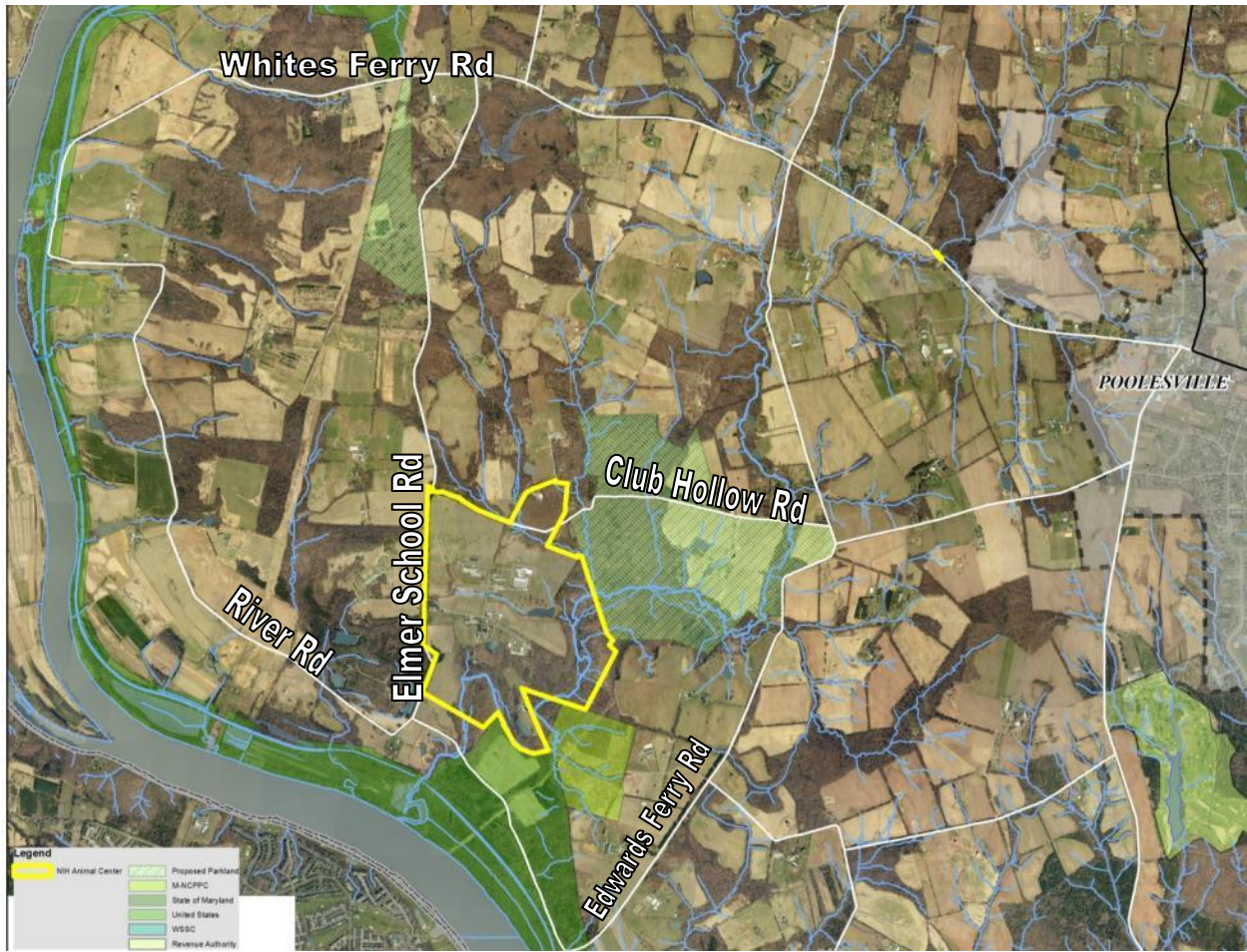


Figure 1 – Vicinity Map



Figure 2 - Property

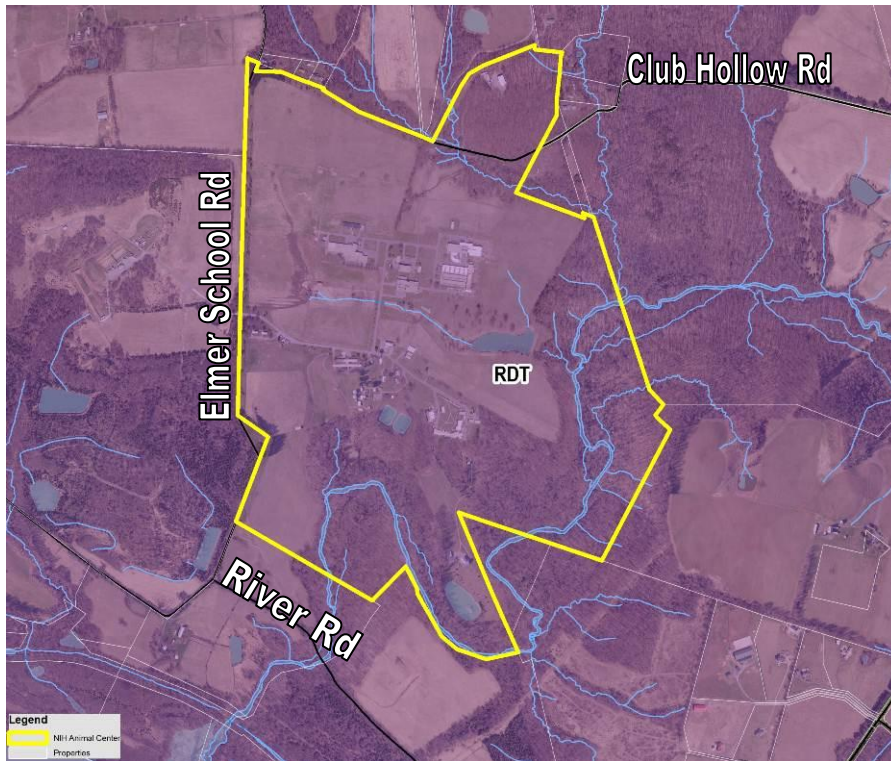


Figure 3 - Zoning Map

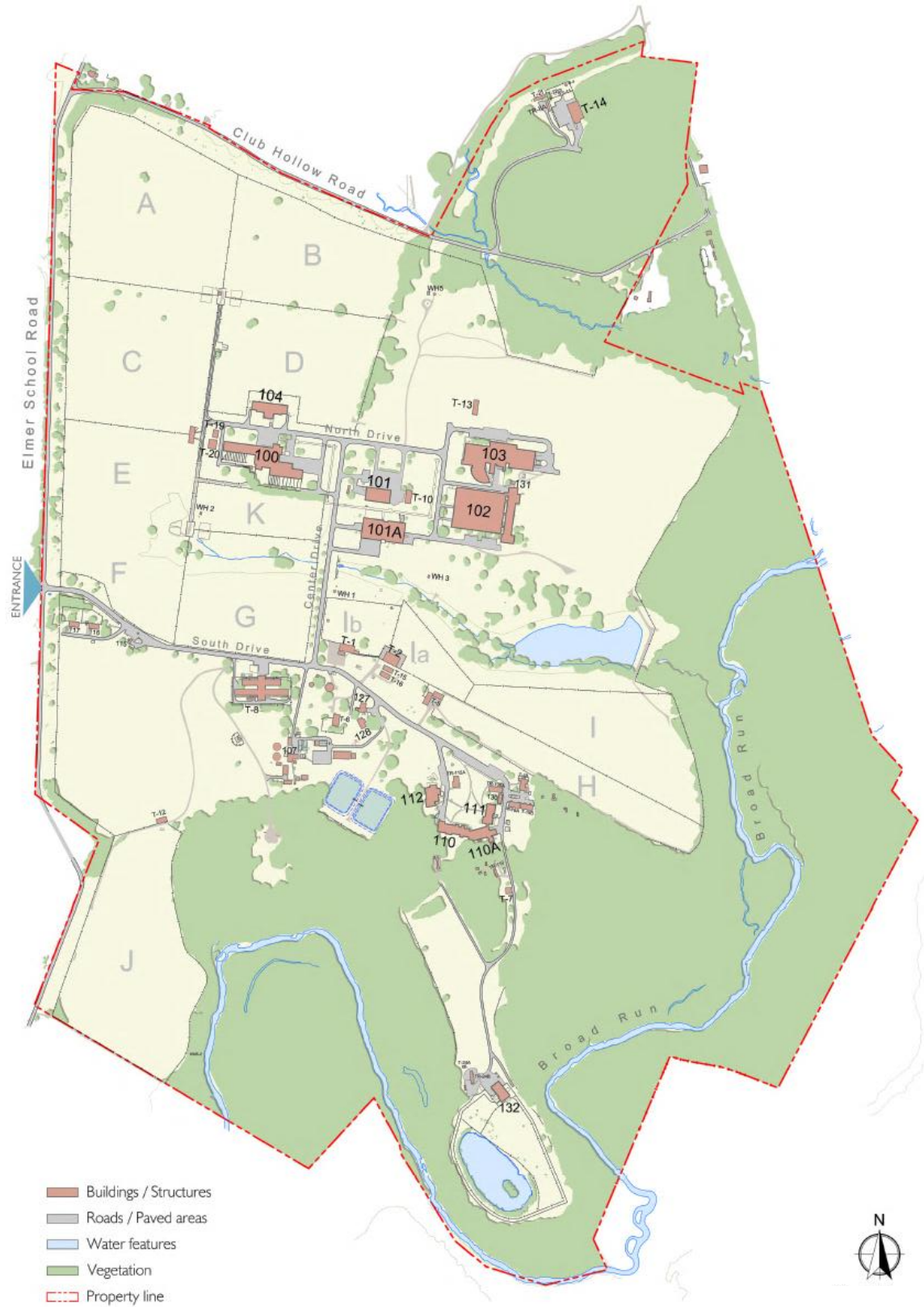


Figure 4 - Existing Campus Design

PROJECT DESCRIPTION

The Draft Master Plan creates a twenty year vision for phased campus development that allows flexible interior spaces adapted to the dynamic nature of NIHAC research, responding to changes in technology, procedures and regulations. The Draft Master Plan proposes to upgrade physical facilities by replacing aging and deteriorating buildings and infrastructure with more functional, energy efficient buildings. The Draft Master Plan accommodates the anticipated growth in animal populations and provides appropriate facilities for research, animal care needs, and employee amenities.

The Draft Master Plan objectives are as follows:

- A. *Enhance the Campus Organization*
- B. *Provide Appropriate Facilities for Animal and Scientific Needs*
- C. *Build-in Flexibility to Respond to Changing Research*
- D. *Increase Employee Support Areas on Campus*
- E. *Address Aging Buildings and Inadequate Infrastructure*
- F. *Create a More Sustainable Campus*
- G. *Be a Good Property Steward²*

This Draft Master Plan proposes to demolition of 29 buildings throughout the campus due to aging, inefficiency, and underutilization. This would remove about 131,564³ gross square feet (GSF). It proposes to add or renovate about seven buildings, adding 245,100 GSF for a total of 475,688 GSF at build out as depicted in Figure 5.

The number of employees would increase from 199 to 212 by 2030. The number of primates would increase from 3,023 to 3,795 by 2030⁴, while the number of large animals will decrease to 100⁵. The rodent program will be phased out in the next year and was not considered in future animal projects⁶.

² Draft Master Plan p. 71

³ DEIS p. S-3

⁴ DEIS p. 1-6

⁵ Draft Master Plan p. 63

⁶ Draft Master Plan p. 63



Figure 5 - Proposed Campus Design

ANALYSIS AND FINDINGS

Conformance to the M-NCPPC Master Plans

The Property is located in the Agricultural Reserve and is controlled by the Functional Master Plan for the Preservation of Agriculture and Rural Open Space and the Legacy Open Space Functional Master Plan. Guidance is also provided by the Rustic Roads Functional Master Plan.

Functional Master Plan for the Preservation of Agricultural and Rural Open Space (AROS, 1980)

The AROS Plan “focuses on the preservation of farmland but it also tries to establish a policy framework that will contribute to the continuation of farming in the County” (p. i, emphasis original). This Property falls within the Western Sector of the master plan area. Plan recommendations and guidance is excerpted below, with staff comments after each:

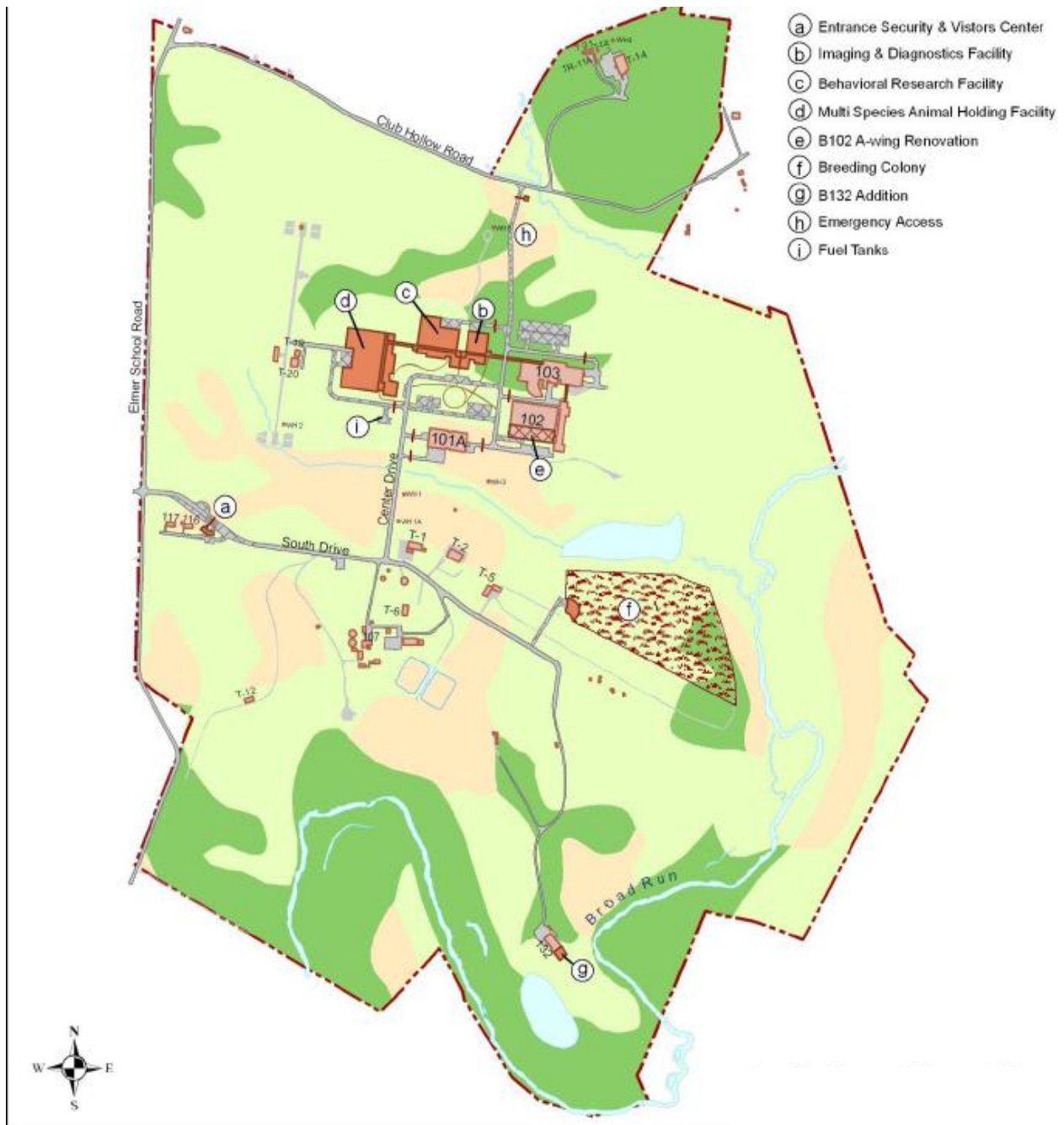
This Plan recommends...

- *Preservation of critical masses of farmland and rural open space.*
- *Application of specific innovative preservation techniques such as the Rural Density Transfer Zone, Rural Cluster Zone, and County Development Rights Fund.*
- *Support of a rural sanitation policy that does not encourage development within the critical mass of active farmland (p. iv).*

The NIH Property consists of 513-acres with 120 acres of pasture, 127 acres of open space, and 217 acres of forest per the DEIS. This comprises a large contiguous mass of farmland and open space. The Property consists of Prime Farmland as well as Farmland of State Significance. The proposed buildings will avoid most of the prime farmland except for the imaging and diagnostics facility as depicted in Figure 6. The proposal would result in a potential net loss of less than five acres of prime farmland and farmland of state significance.

Staff recommends that NIHAC minimize the impacts as much as possible to the prime farmland soils during construction and at final build out of the Draft Master Plan. Staff recommends moving building b depicted in Figure 6 to the west to avoid the prime farmland.

The Property uses ground water for its own water treatment plant, which is nearing capacity. The capacity to produce potable water, together with proposed water conservation measures will be a limiting factor when determining the amount of future growth the site can absorb.



- (a) Entrance Security & Visitors Center
- (b) Imaging & Diagnostics Facility
- (c) Behavioral Research Facility
- (d) Multi Species Animal Holding Facility
- (e) B102 A-wing Renovation
- (f) Breeding Colony
- (g) B132 Addition
- (h) Emergency Access
- (i) Fuel Tanks

Master Plan Features

- Buildings to Construct
- Buildings to Renovate
- Buildings to Retain
- Gates to Install
- Sidewalks to Construct
- Roads/Parking to Construct
- Paved Roads/Parking to Retain
- Unpaved Roads/Parking to Retain
- New Breeding Habitat
- Lagoons

Farmland Resources

- Prime or Unique Farmland
- Farmland of State Significance
- Not Prime, Unique, or State Significant Farmland
- Surface Water

Figure 6 - NIH p. A-6 (Appendix). Source NIH, 1996

Since one of the most serious threats to the Agricultural Reserve and Rural Open Space Areas is development, the recommendations focus on policies that a) stabilize land values; b) minimize development pressures; c) avoid premature and fragmented subdivision; d) protect agricultural

practices; e) improve agricultural support services; f) maintain a critical mass of agricultural land; g) relate County farmland preservation efforts to those of neighboring counties; and h) channel growth into Clarksburg, Damascus, Olney Town Center, and Poolesville as recommended in the General Plan (p. 39).

Agricultural land, forest, and open space are preserved by locating and new construction within the central portion of the campus and avoiding the sensitive environmental assets.

For those areas designated as Agricultural Reserve, the Rural Density Transfer Zone (RDT) is recommended. These areas contain a critical mass of productive farmland worthy of protection, as well as other non-farmland uses which serve to support and define the critical mass (p. 41, emphasis original).

The Property is in the Agricultural Reserve and zoned RDT. This zone allows large contiguous areas to be maintained and used as farmland. The Draft Master Plan recognizes the need to integrate the facility's operations into an agricultural setting. The Draft Master Plan objectives state:

G. Be a Good Property Steward

Preserve the site's natural features and consider its environmental characteristics when adding buildings or changing land use. The site has stands or hardwood trees, streams, wetlands, steep slopes and prime farmland that should be protected⁷.

The Draft Master Plan protects approximately 70-acres⁸ of pastures with the remaining existing pastures converted to meadows. They are not needed for projected animal requirements. In addition, the center's major function – breeding, holding and conditioning of a variety of animals – is consistent with agriculture.

Deny public water and sewer service to areas designated for agricultural preservation that utilize the Rural Density Transfer Zone (RDT) (p. 59).

The water treatment plant building was built between 1971 and 1980⁹, which pre-dates the recommendations of the AROS Master Plan.

Encourage use of Scenic Setback Regulations in area master plans. These regulations permit a setback greater than 50' from the front lot line to conserve the scenic value of a roadway if indicated in an adopted and approved master plan (p. 63).

There are no Scenic Setbacks on the Property. The buildings are setback a minimum of 50 feet from the rustic roads, Elmer School Road and Club Hollow Road. The only buildings close to the road are the security building and building 117. The security building is located 50 feet from Club Hollow Road and building 117 is located 150 feet from Elmer School Road. Figure 7 illustrates the views from the roadways and the overall character of the existing campus.

⁷ Draft Master Plan p. 71

⁸ Draft Master Plan p. 82

⁹ Draft Master Plan p. 21

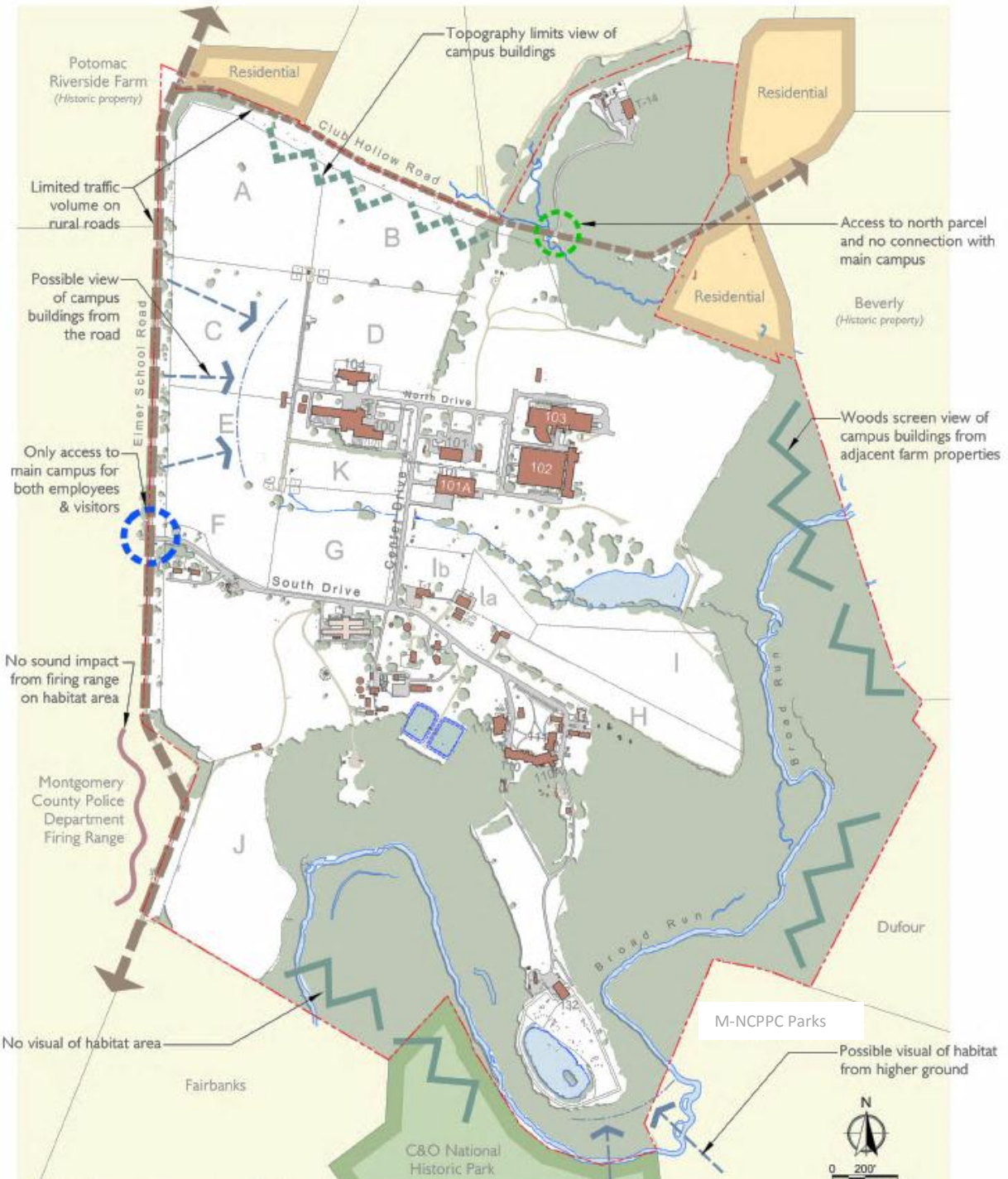


Figure 7 - Views from Roadways of the Existing Campus

The Draft Master Plan supports the AROS Master Plan in preserving farm land and open spaces.

Legacy Open Space Functional Master Plan (LOS, 2001)

The Legacy Open Space Functional Master Plan establishes a program to conserve “...most significant open space as a means of protecting the County’s environment, quality of life, and economic vitality” (p. 1). This Property falls within the Broad Run section of the functional master plan. The Plan divides sites into three classes, Class I, Class II, and Class III. Class I and II sites are those that clearly meet the criteria and are considered appropriate for Legacy funding. Class III sites require further study to determine whether they meet the criteria and to delineate the size and configuration of those portions of the properties that are most suitable for inclusion in the Legacy Open Space¹⁰. Plan recommendations and guidance are excerpted below, with staff comments after each:

Class II – Sites included in the Master Plan

All other sites not included in Class I and listed in the tables on pages 43 (the Broad Run Stream System only)...are considered part of the plan, but will not be considered for placement in reservation.

- *If development is proposed, the proposed development will be evaluated for the extent of resources protection provided through development design and various regulatory tools.*
- *If the determination is made that the site would be adequately protected by the development review process and resulting dedication or easements, the site may continue through the development process.*
- *If the determination is made that the site would not be adequately protected by the development review process, the entire site or a portion of the site will be identified for acquisition or easement.*
- *The site of a portion thereof may be targeted for legacy funding or protection according to the process for setting priorities.*
- *Available funding and the process for setting priorities may not necessarily result in acquisition of or easements on every property identified.*
- *If necessary, condemnation power may be used to complete the acquisition.*
- *If the County does not proceed with acquisition of the site, the property may be developed according the applicable land use master plans and zoning (p. 24).*

The Department of Parks is interested in acquisition of approximately 133 acres of the Property to be designated as Legacy Open Space and to serve as future Stream Valley Parkland. This Property contains exemplary natural resources that are of paramount importance for creating a logical stream valley park.

b. Broad Run

Broad Run offers an opportunity to acquire headwaters of a major stream system that lies entirely on Triassic sedimentary bedrock derived soils. Limited inventories and measurement of Broad Run have revealed it to have good quality water and a diversity of aquatic life. Legacy Open Space is a good opportunity, therefore, to begin protecting property along this stream system (p. 39).

Approximately 133 acres of the Property are ideal for Legacy Open Space designation to continue to preserve good quality water, unique geology and plant communities, and a diverse aquatic life.

¹⁰ LOS p. 23

Rustic Roads Functional Master Plan (RRFMP, 1996)

This Property is adjacent to Club Hollow Road, a rustic road, and Elmer Road, a rustic road. Access to the site is from Elmer School Road and a new emergency access road would be located from Club Hollow Road to the main campus. The RRFMP discusses the history of the Club Hollow Road from Edwards Ferry Road to Elmer School Road.

The NIH property on the south side of the road is marked by mowed grass lawn and a seven-foot-high chain link fence. Opposite NIH are houses and pastureland (p. 72).

NIHAC does not propose to change the character of the road with the grass lawn, trees, and screening of the Property. The proposed emergency access road should be as narrow and as unobtrusive as possible to limit the change to the road. The proposed location for the road should be staked and reviewed by Montgomery County Department of Transportation (MCDOT) and the Rustic Roads Advisory Committee.

Elmer School Road is another rustic road. The road was surveyed in 1871 to provide access to the Oak Hill schoolhouse, later known as Elmer school. The RRFMP describes NIHAC as,

South of this intersection, the NIH Animal Center facility on the left, with manicured lawns, and chain link fence, interrupts the rustic character of the road (p. 80).

The Draft Master Plan proposes additional hedgerows internal to the campus to buffer buildings from the views of the roads. Evergreens will be planted between hedgerows and new facilities to screen structures from adjacent roadways to reduce the “suburban campus” appearance from the rustic road. Staff recommends adding hedgerows around the external fence to create additional screening.

Parks

The following information was provided by the Department of Parks, on November 6, 2012. The Maryland-National Park and Planning Commission (M-NCPPC), Department of Parks, as an adjacent land owner to the NIH Poolesville Animal Center, appreciates the opportunity to comment on the National Institutes of Health Draft Master Plan (March 2012) for the 513 acre Animal Center Facility in Dickerson, Maryland.

The NIHAC is part of the Broad Run Watershed and Montgomery County’s Agricultural Reserve. The M-NCPPC is committed to preserving the Broad Run Stream Valley and maintaining the bucolic nature and economic integrity of the Montgomery County’s Agricultural Reserve.

The Broad Run Watershed is entirely within Montgomery County and represents a logical resource for protection and enhancement. The Broad Run originates west of Poolesville near Wasche Road and West Hunter Road. Flowing south toward the Potomac River, the Broad Run passes through a part of Montgomery County that has changed little in 100 years. The watershed is characterized by rolling topography, prominent red Triassic sandstone, good water quality, and areas of exceptional natural resources. The Broad Run watershed is considered an important natural area in the county because of its unique geology and plant communities, overall rural character and high recreational value.

The Commission currently owns and maintains the 106 acre Broad Run Stream Valley Park, directly abutting the NIHAC. The Broad Run Stream Valley Park is the first acquisition of what is planned as long-term future acquisitions to complete a contiguous stream valley park system from the Chesapeake and

Ohio (C+O) Canal from near Edwards Ferry to Woodstock Special Park with connection to the C+O Canal near Dickerson. Long term, upon acquiring an assemblage of key properties in the Broad Run drainage, a larger stream valley park and public natural surface trail is master planned and envisioned. A key resource of acquisition interest to a future assemblage is approximately 500 acres of mature forest, currently part of 4 separate properties near Club Hollow Road and the mainstem of Broad Run.

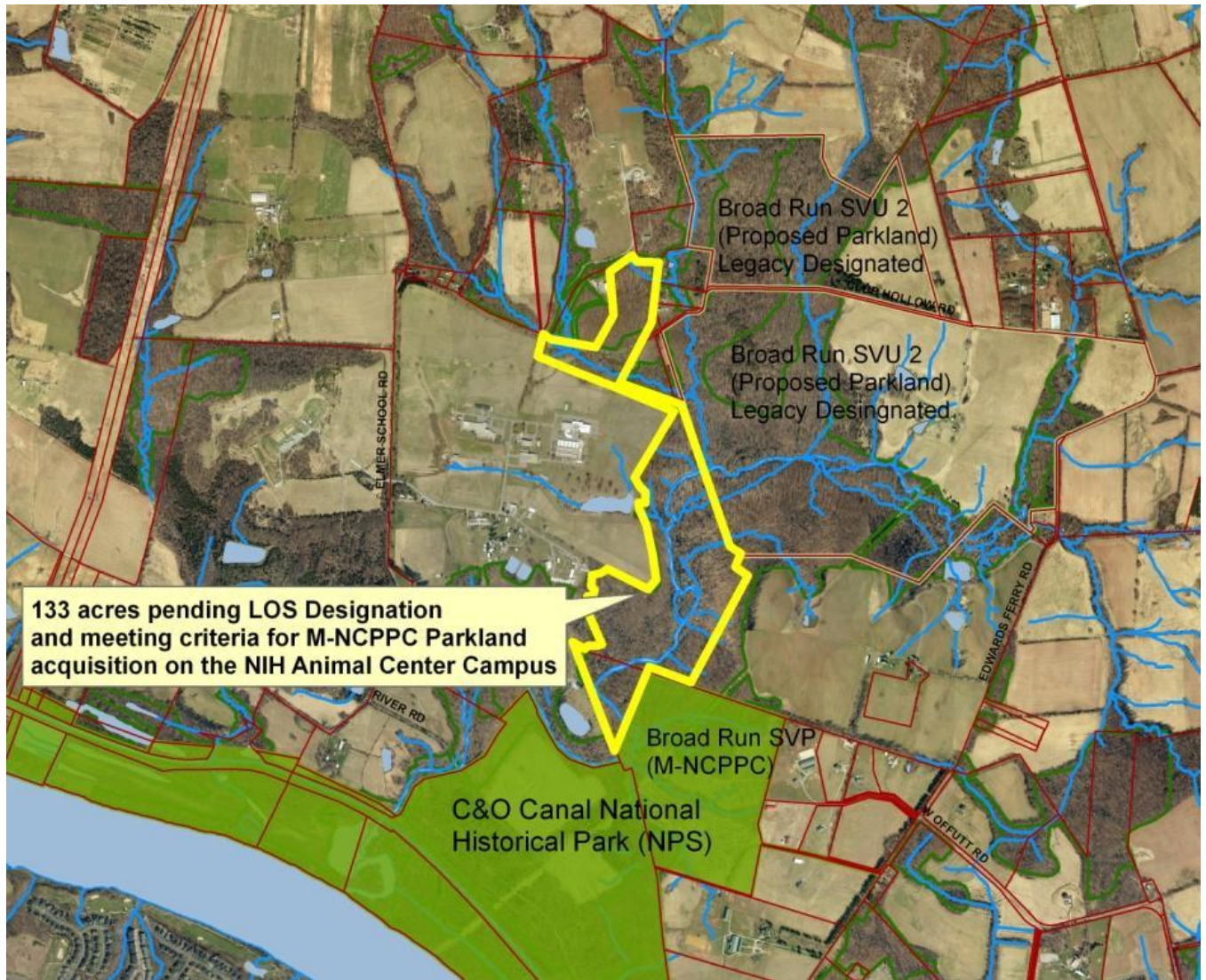


Figure 8 - Broad Run Stream Valley

The NIHAC contains approximately 133 acres of high quality riparian forest adjacent to the Broad Run that M-NCPPC would like to acquire as an addition to the Broad Run Stream Valley Park as depicted in Figure 8. Almost entirely forested and largely encumbered by stream valley, wetlands and floodplain to Broad Run, none of this area is currently improved or planned for development as part of the NIH Draft Master Plan, March 2012. This forest extends from east of Building 132- Outdoor Habitat Facility, north along the Broad Run, and extends north of Club Hollow Road. These woods meet criteria for designation as a master planned Legacy Open Space Natural Resource.

M-NCPPC staff met with NIH staff and officers from the Public Health Service in April of 2007 to discuss an assortment of issues associated with long range planning of the area including the master planned trail system along the Broad Run Stream Valley, the quality and uniqueness of woods and hydrologic features on the NIHAC, parkland acquisition, and the condition of security fencing along NIHAC and M-NCPPC property boundary. NIH staff appeared amenable to a current and future trail system provided trails stay on the east side of the Broad Run (south of Club Hollow Road), so as to reduce potential public contact with the research facility. NIH also wished to have all deer management on the Property coordinated with NIH due to the concern for noise conflicts with active animal research, particularly the Primate Facility.

Specific to March 2012 Draft EIS Master Plan for the NIHAC:

Section 3.1.4 Parks and Recreation should include a statement that approximately 133 acres of NIHAC property merits the M-NCPPC Department of Parks acquisition interest as future Stream Valley Parkland. Per the Approved and Adopted Legacy Open Space Master Plan (Montgomery County Council, 2001), properties within the Broad Run Watershed are designated Legacy Open Space properties. Those areas with exemplary natural resources that are of paramount importance for creating a logical stream valley park are eligible for acquisition as public Parkland.

Security fence along the border of NIH with Park Property:

Existing fencing is not maintained and poses a potential hazard to the public. In general, the Department of Parks staff prefers security fencing be located outside of wooded areas when feasible, due to the maintenance and clearing needs that impact forest and create pathways for invasive plant species.

As a general comment, the Department of Parks is in support of the vision of the NIHAC Draft Master Plan, March 2012. Expansion of facilities and staffing appears to be at a level that will not adversely affect the integrity of Montgomery County's Agricultural Reserve, and will not impair potential future park acquisitions associated with exceptional natural resources on the NIHAC campus.

Public Facilities

Roads and Transportation Facilities

Transportation is evaluated based on the level-of-service (LOS) of roads, focusing on road capacity and speed against a national standard. The LOS for all roads in the vicinity of the NIHAC is LOS A, which is a passing rating. A traffic study was conducted in 2011 showing 51 morning and 18 evening peak hour vehicle trips to and from the Property. The low volume of peak hour vehicle trips is due to staggered eight-hour work cycles of 199 people that require a portion of staff to be on site 24 hours a day and traveling during off-peak periods.

Staff agrees with the analysis and that roads will have sufficient capacity to handle additional employees. The pedestrian circulation in the build out portion of the Draft Master Plan shows connectivity between buildings located in the central portion of campus. Sidewalks are not needed in the rural area as the roads external to the Property do not have sidewalks for pedestrians. Employees can utilize the internal road network to walk around the campus. The pedestrian and vehicular circulation systems are adequate, safe, and efficient.

The Property is bounded by Elmer School Road and Club Hollow Road, which are classified as rustic roads in the Rustic Roads Functional Master Plan. The Property can be accessed by a single access point from Elmer School Road. The Draft Master Plan proposes a secondary emergency access gravel road

from Club Hollow Road to the interior campus, but would not be operable unless in an emergency. This gravel road will be a minimum of 12 feet wide.



Figure 9 – Photograph of Suspected Wetland in Vicinity of Proposed Emergency Access Road¹¹

The proposed emergency access road passes through a 150-foot wide forested wetland complex located near the proposed entrance on Club Hollow Road depicted above. It will run parallel to a tributary to Broad Run within the stream valley buffer, 70 feet from the stream bank. Soils in this vicinity (Bowmansville-Melvin silt loam) are described as “poorly drained soils that are on floodplains that are commonly dissected by small streams and ponded areas.” The Soil Survey of Montgomery County Maryland¹² goes on to describe the soil conditions: “The high water table and long periods of ponding are the main management concerns. The areas of marsh remain wet or ponded into the growing season.” Finally the survey describes “severe limitations” for construction, “The high water table, the flooding, low strength and the potential for frost action are the main limitations on sites for local roads and streets.” The emergency road entrance to Club Hollow Road should avoid this wide, low area which, in certain types of emergencies, will likely be flooded. The road entrance should be relocated 300 feet west of the proposed location, and outside the stream valley buffer. This will avoid forest and wetland impacts and eliminate the need for the stream crossings. In addition it will eliminate the need for constant maintenance associated with construction on this type of soil and be a more reliable access in emergency situations. NIHAC’s prefers a flat topography for the roadway, but this rationale is not a justification for placing roadways in stream valleys. Modern regulations require that options for

¹¹ DEIS p. 3-76

¹² July 1995

reducing environmental impact be evaluated. Since NIHAC has viable options for the emergency road access, even if those options have reduced gradients, the impact to stream buffers, wetlands and mature forest in the proposed location is not justified.

A gravel road is not considered a permeable surface as the road will become compacted overtime and structurally become a hard surface. Staff suggests that the road surface be added to the overall impervious calculations as a separate line item as discussed in later sections of this report. Coordination should occur with the Rustic Roads Advisory Committee when the proposed emergency gravel road is designed as this Committee comments on proposed changes along the edge of a rustic road. The proposed location of the driveway should be staked and the Rustic Roads Advisory Committee notified of the staking prior to review of the driveway entrance. Staff suggests that the emergency access road be a maximum, instead of a minimum, of 12 feet.

Parking

The campus has several internal roadways including South Drive, Center Drive, and minor collector roads. There are 120 striped parking spaces and 21 un-striped paved or grassed spaces throughout the campus. These spaces are not well distributed as some parking areas are underutilized and others are overutilized near buildings 102, 110 Complex, and Security¹³. There are 134 parking spaces that are in demand in the peak period. The proposal would create a total of 217 spaces that are distributed in four new parking lots located near the consolidated buildings and maintain the existing lots.

Staff recommends that at the end of construction of the new parking facilities the underutilized parking spaces should be removed.

It is unclear whether the amount of parking proposed maximizes. A reduction in parking would meet the County's goal to limit impervious areas. As part of being innovative and flexible, staff recommends installing charging stations for electric vehicles as part of the Draft Master Plan.

Potable Water Supply

NIHAC is located in the Poolesville area aquifer system, an EPA –designated sole source aquifer. NIHAC has a permit that restricts water extraction from wells up to a daily average of 90,000 gallons per day (gpd) on a yearly basis and up to 120,000 gpd for a month of maximum use. The NIHAC has four wells that are located on the main campus that supply the onsite water tower and a fifth well on the north parcel (on the opposite side of Club Hollow Road). Currently daily consumption of water is less than 60,000 gpd.

Per the DEIS and the Draft Master Plan, water consumption will continue to decrease as federal agencies are mandated to reduce potable water use by 26 percent by fiscal year 2020. NIHAC predicts that it will meet this requirement by repairing additional system leaks, maintaining a monitoring system, water conservation and utilizing rainwater, and reduction of future steam loads through energy conservation and heat recovery. The steam loads seem to be the largest use of potable water and has the greatest impact on reducing the usage.

Staff recommends that NIHAC continue to reduce the use of potable water and go beyond the required 26 percent reduction as technology improves as this Property is utilizing well water from a sole source aquifer.

¹³ Draft Master Plan p. 50

Wastewater Treatment Plant and Gray Water

The Wastewater Treatment Plan is capable of collecting and treating 120,000 gpd, but exceeds this capacity during rain events and when the cooling towers are operating near peak. This wastewater is diverted to one of two 1,400,000-gallon lagoons for temporary storage. The wastewater treatment plant is 40 years old and should be upgraded or replaced in the next 10 to 20 years.

Staff suggests installation of green roofs and cisterns to hold the roof leader¹⁴ water instead of going to the wastewater treatment plant.

It appears that implementation of the proposed changes to the NIHAC on-site water/wastewater systems will first require amendments to the Montgomery County 10 year Water and Sewerage Systems Plan. Staff recommends that NIHAC consult with the Montgomery County Department of Permitting Services at an early date. Staff also recommends that NIHAC consult the Maryland Department of the Environment regarding effluent discharge to the Potomac River, unless they have already done so.

Energy

The Property is served by Allegheny Power Company and the onsite infrastructure of the campus has capacity for a 50-percent increase in peak load. There are four emergency generators on the Property varying in size and an additional 16 generators for individual buildings. NIHAC proposes solar panels on the breeding colony and the entrance security and visitors center, which would reduce the amount of electricity from the grid. The Draft Master Plan recommends a solar panel field located in the northeast quadrant of the campus to provide additional electricity to the north campus buildings. The DEIS suggests that geothermal systems be installed to meet the heating and cooling needs of the campus, and for the breeding colony.

Staff supports the geothermal suggestions and recommends that the solar panel field use existing structures. This would minimize impervious surfaces and preserve potential farmland or grazing areas. As part of a redesign, staff recommends that placing the solar panels on NIH buildings, over parking facilities, and as a walkway cover from parking lots to the buildings.

Environment

The Property is comprised of 120 acres of pasture, 127 acres of open space, and 217 acres of forest. Grassy vegetation surrounds existing facilities and covers the natural swale in the center of the Property. Forested areas can be found on the steep slopes and lower elevations of the campus. Large deciduous hardwoods surround Broad Run. Evergreens are confined to a few locations and appear to have been planted for screening. Ornamental trees are placed between buildings, parking areas, vehicular drives, clustered as a hedgerow along Elmer School Road and Club Hollow Road, and are scattered throughout the campus.

The Draft Master Plan proposes to remove landscape, grassy areas, and forested area for construction. This would require removal of approximately 0.49 acres of mature, hardwood forest due to the construction of the emergency access road and the Behavioral Research Facility¹⁵.

¹⁴ DEIS p. 3-19

¹⁵ DEIS p. 3-63



Staff recommends increasing the current 40 percent forest cover in strategic locations as noted.

- Denuded stream valleys and wetlands such as the one that bisects the campus from west to east
- Areas near ponds that currently open to full sun
- Areas near Broad Run mainstem where the forested buffer is less than 100 feet to the stream edge
-
- On soils that indicate frequent inundation, poor drainage and high water table such as:
 - 51A, Bowmansville
 - 23A Croton Silt Loam
 - 50A Rowland Silt Loam
- On slopes greater than 15 percent

Environmental Buffers

Buffers include, floodplains, wetlands and adjacent steep slopes. These sensitive riparian areas should be kept in a natural condition to protect stream water quality.

- Stream buffer areas of at least 100-feet from the edge of the stream and 50-feet from the edge of wetlands should be re-naturalized.
- Pond areas should be shaded as much as possible to reduce thermal pollution.
- Relocate, or at a minimum, confine the staging/fill area in the forest southwest of the treatment facility and lagoons. It appears to be located in the buffer of two small streams and encroaching into the Broad Run mainstem floodplain. In addition, this area fragments an otherwise large contiguous forest.



Stormwater Management

The Property is located in the Broad Run watershed. Approximately 1,012,000 sf of existing buildings, sidewalks, and paved or gravel roads and parking lots exist on the Property, which is equivalent to 4.5 percent of the entire campus¹⁶. Most of the runoff is collected in various drainage swales that lead to the Broad Run.

The Draft Master Plan at total build out proposes to increase the total impervious area by 101,000 sf. The new construction would follow the Environmental Site Design and Low Impact Development (ESD/LID) standards such as vegetated swales with check dams, vernal pools, permeable paving, and curbless parking lots.

Staff recommends that the permeable paving should be added as a line item into *Table 3-5. Total Impervious Area Changes under the Master Plan*¹⁷ as M-NCPPC does not count permeable paving as a pervious surface due to compression over time, which causes it to become impervious. The RDT zone does not have an impervious cap, but minimization of imperviousness is recommended.

According to the Natural Resource section of the Draft Master Plan, there is a spring fed intermittent stream with associated wetlands and floodplain bisecting the NIH campus. The proposed vernal pools and other ESD/Stormwater management facilities should not disturb the buffers of this stream valley. The Draft Master Plan proposes, “. . . runoff of animal waste from the proposed NHP breeding colony, where NHP’s would be free roaming [will have] no excrement cleanup . . .” This will result in significant nutrient loading in the receiving surface waters. Staff recommends that rather than allowing animal waste to be washed directly into ponds, streams and wetlands, that an animal waste management plan be developed to adequately address this issue.

Historic Preservation¹⁸

Federally sponsored undertakings on the National Institutes of Health Animal Center campus are not subject to regulation under Montgomery County’s Historic Preservation Ordinance (Chapter 24A of the County Code). These undertakings are subject to Section 106 of the National Historic Preservation Act. Section 106 requires that federal agencies consider the effects their projects may have on National Register-listed and -eligible resources through a consultation process with the State Historic Preservation Office and consulting parties. Efforts must be made to avoid, reduce or mitigate adverse effects on historic resources.

The National Institutes of Health has prepared a Draft Environmental Impact Statement, which identifies several potentially historic resources within an area of potential effect and identifies potential adverse impacts on these resources if the proposed action is undertaken: two potentially historic buildings (T-7 and 101) are identified among a list of 29 “aging and inefficient” structures proposed for demolition in the Master Plan. As part of their obligations under the National Historic Preservation Act, NIH is evaluating these resources and the campus landscape to determine whether or not they are eligible for listing in the National Register. This evaluation will be submitted to Maryland’s State Historic Preservation Office (SHPO) for review.

Staff recommends that the Planning Board transmit comments requesting that NIH include the Board as a consulting party, should NIH and the SHPO determine that Section 106 consultation is required.

¹⁶ DEIS p. 3-21

¹⁷ DEIS p. 3-23

¹⁸ Historic Preservation Staff memo is attached.

Compliance with the Subdivision Regulations and Zoning Ordinance

The Draft Master Plan and the DEIS were reviewed for compliance with the Montgomery County Code, Chapter 50 in the Subdivision Regulations and the Zoning Ordinance. The Property is located in the Rural Density Transfer Zone. Per the Montgomery County Zoning Ordinance,

The intent of this zone is to promote agriculture as the primary land use in sections of the County designated for agricultural preservation in the General Plan, the Functional Master Plan for Preservation of Agriculture and Rural Open Space, and other master plans. This is to be accomplished by providing large areas of generally contiguous properties suitable for agricultural and related uses and permitting the transfer of development rights from properties in this zone to properties in designated receiving areas.

NIH purchased 499-acres in 1960 and the remaining 13-acres in 1967 to create the NIHAC campus of 513-acres. The RDT zone was applied in 1981 following approval of the AROS Master Plan.

The campus predates the RDT zone, and the uses and scale of activities compatible. This Property will house 3,895 number of animals, and will maintain 120 acres of pasture land. About 127 acres will be open space and 217 acres of forest. While the majority of the Property will not be in farming, a large portion (about 464 acres) of the Property remains as undeveloped land, which also meets the intent of the zone. All of the buildings meet the setback requirements of the RDT zone as well as the height and coverage requirements.

The Draft Master Plan consolidates large buildings into one central location on the campus minus the Breeding Facility, the Entrance and Security and Visitors Center, and building 132 used for animal holding rooms. This consolidation allows topography and vegetation to conceal the existing and proposed development viewed from the rustic roads. The central campus concept is also reminiscent of traditional dairy or livestock farms in the county, with the farmhouse, barns and outbuildings surrounded by pastures.

As described previously, the Property is surrounded by one-family homes, agriculture, forest, and the Montgomery County Firearms Training Facility. While the NIHAC's activities are more intense than those in the area, they are in keeping both with the agricultural nature of this part of the county and with the activities in its immediate vicinity.

The Draft Master Plan is consistent with the intent and the requirements of the RDT zone. It is compatible with the surrounding neighborhood and properties based on the size, shape, scale, height, arrangement and design of structures.

Citizen Correspondence

The NIHAC had a public hearing on October 25, 2011 at the Town Hall in Poolesville, Maryland, regarding the Draft Master Plan. Seven people attended the meeting. The public comment period was open for 45-days and closed on November 18, 2011. Two people submitted comments via phone and email. The Department of Parks from the M-NCPPC submitted various comments regarding the Broad Run Stream Valley and the potential for future parkland acquisitions. The Montgomery Countryside Alliance submitted comments pertaining to increased impervious surfaces and water usage¹⁹. The

¹⁹ DEIS p. 1-7

NIHAC had another public hearing on October 24, 2012 at the Town Hall in Poolesville, Maryland, regarding the DEIS. The public comment period will end on December 4, 2012. To date, staff has not received any comments regarding the Draft Master Plan or the DEIS.

Miscellaneous

In the Draft Master Plan, Exhibit 11.8: Parking Demand on page 84 states a total of 239 employees for all shifts. In previous sections as well as the DEIS, the total number of employees projected for 2030 is 212. This number conflicts with the parking number. The assumption is that the numbers should match as it encompasses the total number of employees for the site, which includes all of the shifts.

Attached are previous comments submitted to NIHAC from staff.

CONCLUSION

The Draft Master Plan proposes to keep 21 buildings and demolish 29 buildings throughout the campus and construct or renovate seven buildings. The campus is designed to be in a more centralized location in the Property with very few buildings outside of the center. The new buildings and renovations would accommodate 13 additional employees and 772 additional primates over the next 20 years. This proposal will have minimal impact on the existing open space.

Staff recommends approval of the Draft Master Plan and the DEIS for the NIHAC with recommendations and suggestions for improvements to these plans noted within the Staff Report.

Attached

Attachment A – Historic Preservation Staff Memo, November 9, 2012

Attachment B – Memorandum to Bob Rosenbush, MDP, August 1, 2012

Attachment C – 1996 Staff Report



MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

To: Katherine Holt, Area Three
From: Scott Whipple, Supervisor, Historic Preservation Section
Re: Mandatory Referral, National Institutes of Health Animal Center Master Plan
Date: November 9, 2012

Historic Resources:

The National Institutes of Health Animal Center has **not** been identified in the *Locational Atlas and Index of Historic Sites in Montgomery County* or designation in the *Master Plan for Historic Preservation*, nor has the property been listed in the National Register of Historic Places.

The Draft Environmental Impact Statement prepared for the NIH Animal Center Draft Master Plan identifies several resources that may be eligible for listing in the National Register.

Discussion:

Federally sponsored undertakings on the National Institutes of Health Animal Center campus are not subject to regulation under Montgomery County's Historic Preservation Ordinance (Chapter 24A of the County Code). These undertakings are subject to Section 106 of the National Historic Preservation Act.

Section 106 requires that federal agencies consider the effects their projects may have on National Register-listed and -eligible resources through a consultation process with the State Historic Preservation Office and consulting parties. Efforts must be made to avoid, reduce or mitigate adverse effects on historic resources.

The National Institutes of Health has prepared a Draft Environmental Impact Statement, which identifies several potentially historic resources within an area of potential effect and identifies potential adverse impacts on these resources if the proposed action is undertaken: two potentially historic buildings (T-7 and 101) are identified among a list of 29 "aging and inefficient" structures proposed for demolition in the Master Plan. As part of their obligations under the National Historic Preservation Act, NIH is evaluating these resources and the campus landscape to determine whether or not they are eligible for listing in the National Register. This evaluation will be submitted to Maryland's State Historic Preservation Office (SHPO) for review.

Recommendation:

Historic Preservation staff recommends that the Planning Board transmit comments requesting that NIH include the Board as a consulting party, should NIH and the SHPO determine that Section 106 consultation is required.



MEMORANDUM

DATE: August 1, 2012
TO: Bob Rosenbush, MDP
FROM: Katherine Holt, 301-495-4549, Katherine.Holt@montgomeryplanning.org
FACILITY: National Institutes of Health Animal Center, Poolesville
CASE NUMBER: MD20120503-0313
REVIEW TYPE: Maryland Intergovernmental Review and Coordination (MIRC)

Thank you for submitting the National Institutes of Health (NIH) Animal Center Draft Master Plan for our review. We also appreciate receiving an extension past your July 15 deadline; we only belatedly realized that our spam filter had intercepted your report.

Overall, staff considers the Plan to be very clear, thoughtful, and sensitive to its location. Our overall questions and comments on the Draft Master Plan are below, with comments from Environmental and Department of Parks staff following. Last, our 1996 report is attached.

The Montgomery County Planning Board is currently on recess. The Board last reviewed the Animal Center Master Plan in October 1996, so staff recommends that the Master Plan be presented to the Planning Board so that the Mandatory Referral submissions that will follow are understood by the Board members within the context of the campus master plan. Staff would be pleased to help schedule a presentation.

- p. 2 Will there be conference facilities? If yes, how many people, will they stay overnight, and is this included in the transportation calculations?
The map shows the majority of the buildings, but not all of the buildings are identified on the map. Does B = building, TR = trailer, and T = temporary?
- p. 3 What is meant by a Visitor Center under A. a.? Is this a place for exhibits or is it a place to wait until you are escorted onto the site?
- p. 8 Section 2.3 last sentence should state "M-NCPPC".
Sections 2.4, second and third bullets, private initiatives even on public properties go through the development review process rather than a mandatory referral. Permitted land uses may be more constrained.
- p. 9 Section 2.6 a, can we have a copy of the report? Please note that our currently commercial energy production is only allowed as an accessory to a farm.
- p. 11 In the regional overview, please note the facility is in the Agricultural Reserve for Montgomery County which covers 93,000 acres.
- p. 13 The variables that are excluded in the chart are available from the 2010 American Community Survey 1 year data.

- p. 14 Exhibit 3.3, it is unclear what the data source is for this exhibit. Table 3.4 and 3.5 are the same tables. The graph for 3.5 shows housing counts.
- p. 16 C: Maryland-National Capital Park and Planning Commission – Make sure to include the hyphen and remove the s from Parks. In the last sentence of this section, it states, “The Master Plan is subject to the mandatory referral and approval by the Montgomery County Planning Board.” When will this master plan be submitted to our office for our review?
- p. 17 Section B, second paragraph, the last sentence should state, “Prices today are at \$22,000 per excess TDR based on a sale in June 2012”. Please expand on this statement, “deemed considerably less attractive”.
Footnote 17 misspelled M-NCPPC as it is missing a “C”.
- p. 18 Exhibit 3.9 footnote should be number 22 and not number 23.
- p. 19 Section E, last sentence is missing a period.
- p. 48 Section D, you may want to verify that parking is legally allowed on the Virginia side of Whites Ferry.
- p. 49 A local map would be helpful in this section showing the rustic roads as well as neighboring roads.
Section G, Rustic Roads Advisory Committee comments on purposed changes such as new driveways and tree cutting along the edge of the road.
Section H, the second paragraph first sentence misspelled Prince Georges County as it should read Prince George’s.
- p. 51 You may want to clarify that staff will stay on-site or overnight and people telework, which has kept your trips low in the a.m. and p.m. peak periods.
- Chapter 8 has strange typos throughout the chapter such as p. 56 second paragraph, second line the word current is typed like cur~rent.
- p. 64 Exhibit 9.10 – The rodent number on the graph is double of what is shown in the table.
- p. 65 Section 2, third bullet, you may want to state how much hay will be produced on-site for the animals’ consumption.
- p. 67 Last sentence, first paragraph has a typo. It should state two “for” the shared programs.
- p. 79 6. To minimize adding impervious surfaces, we would recommend placing solar panels on the roofs of buildings, over parking facilities, or as a walkway cover from the parking lot to the building?
9. Please coordinate with MCDOT and the Rustic Roads Advisory Committee on the emergency access to Club Hollow Road. M-NCPPC staff prefers the road be kept as gravel with a gravel driveway apron onto Club Hollow Road.
- p. 84 Will parking be removed where is it not needed? Is parking being configured to maximize shared parking with overlapping shifts? Can shifts be adjusted to minimize impervious parking areas? In 1996, M-NCPPC staff made a comment, which is attached, to reduce parking which would meet the County’s goal to limit impervious areas.
- p. 85 Section 5, please coordinate with MCDOT, Fire and Rescue Service, and the Rustic Roads Advisory Committee

- p. 86 Section C, you may want to reiterate that staff will stay on-site or overnight and people telework, which will keep your trips low in the a.m. and p.m. peak periods.
- p. 93 Section C, Please describe how Labs21 evaluation will allow the lab to meet the LEED Silver Certification.
- p. 106 Section 13.4 A, second bullet should be complement and not compliment. This same section should state Carolina and not Carolins Sumac.

Overarching comments

- After each of the buildings is demolished, will this area be restored to be pervious? Reuse and recycling of demolished materials is recommended.
- Have you considered installing charging stations for electric vehicles as part of your Master Plan?
- How will garbage be handled? Is there an on-site incinerator?
- The potential solar panels located on the ground. Could these panels be located on the roof of the existing and proposed buildings or be used to create a walkway from the parking lot to the buildings? It would be great to minimize the impervious surface for the site and maintain future grazing areas for animals.
- Will the parking lots be lit? If so, you will need to use cut-off fixtures as stated on page 105.
- The NIH should coordinate with the County's facility across Elmer School Road. They are interest in expanding, their facilities, but is in the beginning process of determine what they want to do.

Comments from Department of Parks

Dom Quattrocchi, AICP, 301-650-4361, Dominic.Quattricchi@montgomeryparks.org

The Maryland-National Park and Planning Commission (M-NCPPC), Department of Parks, as an adjacent land owner to the NIH Poolesville Animal Center, appreciates the opportunity to comment on the National Institutes of Health Draft Master Plan (March 2012) for the 513 acre Animal Center Facility in Dickerson, Maryland.

The NIH Animal Center is part of the Broad Run Watershed and Montgomery County's Agricultural Reserve. M-NCPPC is committed to preserving the Broad Run Stream Valley and maintaining the bucolic nature and economic integrity of the Montgomery County's Agricultural Reserve.

The Broad Run Watershed is entirely within Montgomery County and represents a logical resource for protection and enhancement. The Broad Run originates west of Poolesville near Wasche Road and West Hunter Road. Flowing south toward the Potomac River, the Broad Run passes through a part of Montgomery County that has changed little in 100 years. The watershed is characterized by rolling topography, prominent red Triassic sandstone, good water quality, and areas of exceptional natural resources. The Broad Run watershed is considered an important natural area in the county because of its unique geology and plant communities, overall rural character and high recreational value.

The Commission currently owns and maintains the 106 acre Broad Run Stream Valley Park, directly abutting the NIH Animal Center. The Broad Run Stream Valley Park is the first acquisition of what is planned as long-term future acquisitions to complete a contiguous stream valley park system from the Chesapeake and Ohio Canal from near Edwards Ferry to Woodstock Special Park with connection to the C+O Canal near Dickerson. Long term, upon acquiring an assemblage of key properties in the Broad Run drainage, a larger stream valley park and public natural surface trail is master planned and envisioned. A key resource of acquisition interest to a future assemblage is approximately 500 acres of mature forest, currently part of 4 separate properties near Club Hollow Road and the mainstem of Broad Run.

The NIH Animal Center contains approximately 133 acres of high quality riparian forest adjacent to the Broad Run that M-NCPPC would like to acquire as an addition to the Broad Run Stream Valley Park if the area is considered for surplussing. Almost entirely forested and largely encumbered by stream valley, wetlands and floodplain to Broad Run, none of this area is currently improved or planned for development as part of the NIH Draft Master Plan, March 2012. This forest extends from east of Building 132- Outdoor Habitat Facility, north along the Broad Run, and extends north of Club Hollow Road. These woods meet criteria for designation as a master planned Legacy Open Space Natural Resource.

M-NCPPC staff met with NIH staff and officers from the Public Health Service in April of 2007 at the NIH Animal Center to discuss issues associated with long range planning of the area including

- the master planned trail system along the Broad Run Stream Valley,
- quality and uniqueness of woods and hydrologic features on the NIH Animal Center
- potential future parkland acquisitions.
- condition of security fencing along NIH and M-NCPPC property.

NIH staff appeared amenable to a current proposed and future trail system provided trails stay on the east side of the Broad Run (south of Club Hollow Road), so as to reduce potential public contact with the research facility. NIH also wished to have all deer management on the property coordinated with NIH due to the concern for noise conflicts with active animal research, particularly the No- Human Primate Facility on the NIH facility.

Parks staff also expressed concerns over security fence along the border of NIH with Park Property. Existing fencing is not maintained and poses a potential hazard to the public. In general, the Department of Parks and Planning staff prefers security fencing be located outside of wooded areas when feasible, due to the maintenance and clearing needs that impact forest and create pathways for invasive plant species.

As an overall comment, the Department of Parks is in support of the overall vision of the NIHAC Draft Master Plan, March 2012. Expansion of facilities and staffing appears to be at a level that will not adversely affect the integrity of Montgomery County's Agricultural Reserve, and will not impair potential future park acquisitions associated with exceptional natural resources on the NIHAC campus.

Comments from Environmental staff

Katherine Nelson, 301-495-4622, Katherine.Nelson@montgomeryplanning.org

Increase the current 40% forest cover in strategic locations:

- Denuded stream valleys/ wetlands such as the one that bisects the campus from west to east



- Near ponds that are currently open to full sun
- Areas near Broad Run mainstem where the forested buffer is less 100 feet to the stream edge
- Soils that indicate frequent inundation, poor drainage and high water table such as:
 - 51A, Bowmanville
 - 23A Croton Silt loam
 - 50A Rowland silt loam
- Slopes greater that 15%

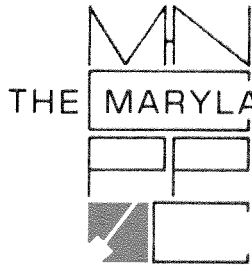


Environmental Buffers

- Stream buffer areas of at least 100-feet from the edge of the stream and 50-feet from the edge of wetlands should be re-naturalized
- Pond areas should be shaded as much as possible to reduce thermal pollution
- Relocate, or at a minimum, confine the staging/fill area in the forest southwest of the treatment facility and lagoons. It appears to be located in the buffer of two small streams and encroaching into the Broad Run mainstem floodplain. In addition, this area fragments an otherwise large contiguous forest.



- According to the Natural Resource section of the master plan, there is a spring fed intermittent stream with associated wetlands and floodplain bisecting the NIH campus. The proposed vernal pools appear located in this stream. Permits will be required to disturb waters of the US.




THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

September 10, 1996

MEMORANDUM

TO: Fred Boyd, Planner
Community Planning Division

FROM: Katherine E. Nelson, Planner 
Environmental Planning Division

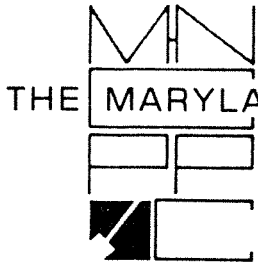
SUBJECT: NIH Animal Center Draft Master Plan/Environmental Impact Statement

Staff of the environmental Planning Division has review the above mentioned documents. As part of the long range plan for the NIH Animal Center, we concur with goal of protecting the natural resources, environmental qualities of the NIH campus and the region; the criteria of accommodating topography and natural attributes; and the planning principle of protecting the environmentally sensitive areas of the Broad Run stream valley and the central stream swale, as well as areas with steep slopes. These are all consistent with the goals of the Department of Park and Planning.

The other issues are related to streams, wetlands and forest conservation. Staff agrees with renaturalization of the central wetland area as a riparian forest. The Beltsville Silt Loams (59A, 59B) are also wetland indicator soils. Since the 59A soils are associated with a delineated spring and hydrologically connected to the central wetland, staff recommends that the renaturalization area be expanded to include both the spring and any wetland and buffers in the far northwest quadrant of the site. The soils map also shows areas of Readington Silt Loam (22A) which usually have hydric inclusions making them possible indicators for wetlands. Since these soils are also associated with a delineated spring and a smaller wetland, staff recommends that the area just to the south of the stream crossing at Club Hollow also be explored as an option for renaturalization. This additional revegetation together with the current proposal for reforestation and forest enhancement would bring the forested area of the property close the 50% range which is the standard recommendation for developments in rural areas.

Where stream and wetland crossings are necessary for roads trails and utilities staff recommends that they be done in accordance with current standard practices for minimizing disturbance in both the long and the short term.

Staff recommends that the issues of stormwater management, waste disposal, water supply and sanitary sewer continue to be handled in conformance with MD Department of Environment and other state and local agency regulations. In addition, the issue of water supply should be closely coordinated with officials from the Town of Poolesville.



MCPB
10/24/96
Item #9

blg a / tower

MEMORANDUM

DATE: October 18, 1996
TO: Montgomery County Planning Board
FROM: Frederick Vernon Boyd for the Department of Park and Planning
(495-4654)

CASE NUMBER: 96019
REVIEW TYPE: Mandatory Referral
APPLYING FOR: Review of National Institutes of Health Animal Center Master Plan
REVIEW BASIS: Article 28, Chapter 7-112 of the Regional District Act

ZONE: Rural Density Transfer
LOCATION: Elmer School Road, Poolesville
MASTER PLAN: Functional Master Plan for the Preservation of Agriculture and Rural Open Space

PLANNING BOARD REVIEW: October 24, 1996

STAFF RECOMMENDATION: **Approval** with conditions

1. NIH will undergo mandatory referral for each building proposed in this master plan prior to release of building permits.

THE SITE

The National Institutes of Health Animal Center is located on a 513-acre former dairy farm near the intersection of Elmer School and Club Hollow roads, about five miles from the center of Poolesville. About half the property is natural open space, made up of woodlands, unfenced pastures and the valley of Broad Run. Another third consists of fenced pastures. Only about four percent of the property is developed and it is devoted to the Animal Center's facilities and support structures. Attachment A shows existing land uses on the property.

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NIH is engaged primarily in behavioral and observational research involving animals at the center. The northern part of the property is used by the Veterinary Resources Program, which is responsible for breeding, holding and conditioning the animals. The southern part of the property is devoted to laboratories in which research projects are conducted. There is also an outdoor animal habitat on this portion of the property.

Residential, agricultural and institutional uses surround the Animal Center. A small cluster of single-family homes is located at the intersection of Club Hollow and Elmer School roads and there is a second cluster along the eastern boundary of the Animal Center on Club Hollow Road. To the east and south are farms and a section of the Chesapeake and Ohio National Historic Park. To the west is Site M-38, the former WSSC sludge composting facility, now used for firearms training. Attachment B shows land uses in the immediate vicinity of the Animal Center.

THE PROPOSAL

In preparing a new master plan for the Animal Center, NIH is responding to a requirement that its facilities meet regulatory and accreditation requirements of the monitoring body for laboratory animals, the American Association for Accreditation of Laboratory Animal Care. Recently completed and proposed projects have been designed to upgrade and modernize facilities so that they meet current standards.

NIH has completed or has under construction an addition to an existing primate habitat structure, a small ungulate facility that houses miniature swine, an expansion of cage washing facilities and replacement buildings to house dogs and cats. These new structures were built under the current Animal Center master plan. This master plan is proposing a new long-term animal holding facility that includes exterior exercise areas, renovation of buildings used to quarantine lab rodents, additions to buildings that will house magnetic resonance imaging machines and hormone assay laboratories used in animal research, and a new guard house. The new construction will add about 127,000 square feet of space to the Animal Center. The proposed total building area at buildout will be about 350,000 square feet. This represents about 1.5 percent of the total land area at the center. Attachment C shows the location of proposed new construction.

NIH expects to add about 25 workers to the Animal Center staff as a result of these additions, bringing the buildout total to approximately 160. The agency will add 18 parking spaces over the life of the master plan, for a total at buildout of 130.

FINDINGS

1. Is the request in accordance with the applicable requirements, purposes and intent of the applicable zone?

Montgomery County's Rural Density Transfer Zone is designed "to promote agriculture as the primary land use in sections of the county..." The zone allows large contiguous areas to be maintained and used as farmland. The NIH Animal Center Master Plan recognizes the need to integrate the facility's operations into an agricultural setting and its Planning Principles set as an objective the preservation of "the open space, agricultural land, and woodlands at the perimeter of the site." Proposed new buildings will "complement the 'farm' or 'institutional' character of existing structures." In addition, the center's major function--breeding, holding and conditioning of a variety of animals--is consistent with agriculture.

2. Is the request in accordance with the adopted master plan for the area?

The NIH Animal Center is located in the Western Sector of the Agricultural Preservation Study Area, for which land use recommendations appear in the *1980 Functional Master Plan for the Preservation of Agriculture and Rural Open Space* (the Ag Plan). The Ag Plan recognizes that agriculture has been the dominant land use in this portion of Montgomery County for decades and that the area remains agricultural in character. The center functions much as a working farm would and, as such, is consistent with land use policies adopted in the Agricultural Plan. The Ag Plan's policies include the assumptions that farming serves an important public purpose, that a critical mass of farmland exists in this portion of the county and that agricultural preservation enhances the objectives of the county's General Plan.

3. Is the request compatible with other existing or proposed uses in the area?

As noted above, a mixture of residential, agricultural and institutional uses are evident in the immediate neighborhood of the Animal Center. While the Animal Center's activities are somewhat more intense than those in the area, with the exception of the county's firearms training range, they are in keeping both with the agricultural nature of this part of the county and with the activities in its immediate vicinity.

4. Does the facility siting, configuration, and design provide a maximum of safety, convenience and amenities for the area?

The NIH Animal Center Master Plan proposes to maintain the existing building patterns, which consist of clusters located on two plateaus. These patterns allow activities related to animal care and activities related to research to be located together on one of the plateaus. The Master Plan also proposes to maintain significant areas of open space along the perimeters

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of the property. As a result, developed areas on the site at buildout will continue to represent a small fraction, about five percent, of the total tract. This arrangement enables the prevailing agricultural character to be maintained, provides convenience and ease of movement for animal workers and researchers and allows for the preservation of substantial amounts of open space.

NIH stores low-level radioactive waste at the Animal Center temporarily as it waits with other organizations for a permanent disposal site to become available. This waste, which consists largely of contaminated paper, plastics and glassware, liquids and some types of medical/pathological waste, is stored in a building off Club Hollow Road. The building is protected by a locked gate. NIH is a member of the Appalachian Compact, which covers several middle Atlantic states that expect to dispose permanently of radioactive waste at a facility in Barnwell, South Carolina. While permission to use Barnwell permanently may be granted some time in the future, NIH expects to have an opportunity to move its stocks of radioactive waste to Barnwell in 1997. It has received approval of funds to make the transfer as part of recent Congressional appropriations and hopes to move its radioactive waste from the Animal Center soon.

As part of its environmental impact study, NIH conducted an archeological assessment of the Animal Center property and concluded that prehistoric artifacts were likely to be found in several areas. One of these areas is the site of a future building. The Maryland Historical Trust has recommended that NIH include language in its Master Plan and Environmental Impact Statement indicating its willingness to consult with appropriate state historic preservation units on the need for further studies in connection with future construction.

5. Does the facility siting provide for the preservation of environmentally sensitive features and mitigation of adverse impacts?

NIH proposes little construction in sensitive areas, which are defined streams and their buffers, including the 100-year floodplain, nontidal wetlands and areas of steep slopes. To bring the facility into conformance with fire protection regulations, NIH must extend several water mains across sensitive areas. The agency must obtain a variety of permits before this work can be undertaken.

The Environmental Planning Division endorses NIH's proposal in its draft Environmental Impact Statement to allow natural regeneration of an existing floodplain between the two plateaus on the property. It also recommends exploration of an area south of Club Hollow Road's crossing of a Broad Run tributary for similar natural regeneration. This area has soils containing some characteristics of wetlands.

As noted above, the Master Plan proposes to maintain open space in the Broad Run stream valley. Soils at the Animal Center are of very high quality; all is classified either prime farmland, which has the physical and chemical characteristics for producing food, feed, forage, fiber and/or oil seed crops, or farmlands of statewide significance, which can produce yields approaching those of prime farmland when acceptable farming practices are employed. New construction proposed under the Master Plan will result in the loss of about 5.5 acres of prime farmland. This represents a loss of less than .0002 percent of the county's total amount of farmland.

6. How is the request in harmony with the general character of the neighborhood considering population density, design, scale and bulk of proposed new structures, intensity and character of activity, traffic and parking conditions and similar uses?

About 135 persons now work at the Animal Center; by 2015 NIH expects about 160 persons to be employed at the center. While this population density is somewhat higher than the prevailing density in this area, 0.3 persons per acre compared with 0.08 persons per acre, the proposed additions to the center will not appreciably increase the number of persons or the intensity of physical activity beyond that now occurring. Proposed new structures are concentrated in areas where buildings exist today and will not expand activities into new parts of the property. These proposed new structures are not oversized and their design is not out of character with agricultural activity.

The Maryland Department of Transportation has recommended that NIH "increase support for carpooling and vanpooling rather than increasing the number of employee parking spaces." NIH points out that its opportunities for such steps are limited in large measure because its employees work schedules based on the need to provide animal care or research monitoring 24 hours a day. Scheduling requirements reduce the need for workers to make peak hour work trips. NIH also notes that the location of the facility significantly limits ride sharing possibilities and that its workers live in widely scattered parts of the metropolitan area. These factors combine to put the Animal Center's proposed parking ratio of 0.76 above NCPC's recommended ratio of 0.67.

7. Will the request be served adequate public services and facilities including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage, stormwater management, and other public facilities?

NIH employs a private security force to patrol its grounds and control access to the site. It has determined that satisfactory protection from fire requires construction of a second water storage tank and it plans to add a 150,000 gallon tank as part of this master plan. There are five residences at the center; the impact of these homes on local schools is small and no added residences are planned. Although the public road network in this area is rural in character, the

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varying work schedules of Animal Center employees will not impose a burden to the existing roads. NIH estimates that the road network will continue to operate at Level of Service A over the life of the master plan.

The Animal Center, like the Town of Poolesville and western county residents, relies on groundwater. There are five wells on site, four of which are connected to the Animal Center's water system. NIH rotates operation among three of the five wells, to keep the time in operation of any one well to between 20 percent to 50 percent of the time in a given week. In 1995, NIH withdrew about 16 million gallons of water from these wells. The agency has a state permit allowing it to withdraw an average of 80,000 gallons per day annually and 105,000 gallons per day during the month of peak usage. Its average daily withdrawals range from 34,000 gallons per day to 46,000 gallons per day on an annual basis and 70,000 gallons per day during the peak month. Withdrawals for potable water will increase over the life of the master plan to about 67,000 gallons per day on an annual basis and 78,000 gallons per day during the peak month.

Potable water is only a portion of total water demand at the Animal Center. To meet total demand, NIH proposes to use recycled effluent from its wastewater treatment plant. Recycled water would be stored in a lagoon now used for treatment. Some of the recycled water would be used in the Animal Center's cooling towers and some would be used to wash down animal cages and other activities for which non-potable water can be used.

The Animal Center operates a wastewater treatment plant that uses a combination of gravity flow and pump stations to bring wastewater to the plant for treatment. Average flows to the plant total about 33,500 gallons per day, which can flow directly to the plant or held in lagoons if necessary. Sludge is treated and then put in a four acre disposal area on site. The treatment plant's capacity is now 58,000 gallons per day and will be increased to 100,000 gallons per day during the life of the master plan. NIH expects to release an average of 34,000 gallons per day of effluent into Broad Run following treatment.

NIH has received waivers for stormwater quality and quantity. Runoff from storms will flow overland through pastures or wooded areas to Broad Run. NIH expects additional buildings constructed during the master plan to add virtually no flows to existing levels of stormwater runoff.

Conclusion and Recommendation

NIH's Animal Center is a combination of working farm and research facility. While it has more workers and more sophisticated equipment than a typical western Montgomery County farm is likely to have, its size and the overall character of its operations are compatible with the agricultural activities that dominate this part of the county. The new buildings proposed in

MR 96019

this Master Plan will add about 25 workers to the staff over the next 20 years and will have no impact on the existing pattern of buildings and open space. As it proposed for its Bethesda campus master plan, NIH wishes to undergo individual mandatory referrals for new buildings as they near construction.

NIH has indicated that its water withdrawals will remain within limits set by its agreements with the State and that it plans to recycle a percentage of its water to help meet increased demand. The agency also has accelerated plans to end storage of low-level radioactive waste at the Animal Center. For these reasons, the Department recommends approval of this mandatory referral, with the conditions noted above.

FVB:sb

N:\divdzp\manrefer\mr96019.wpd

Attachments

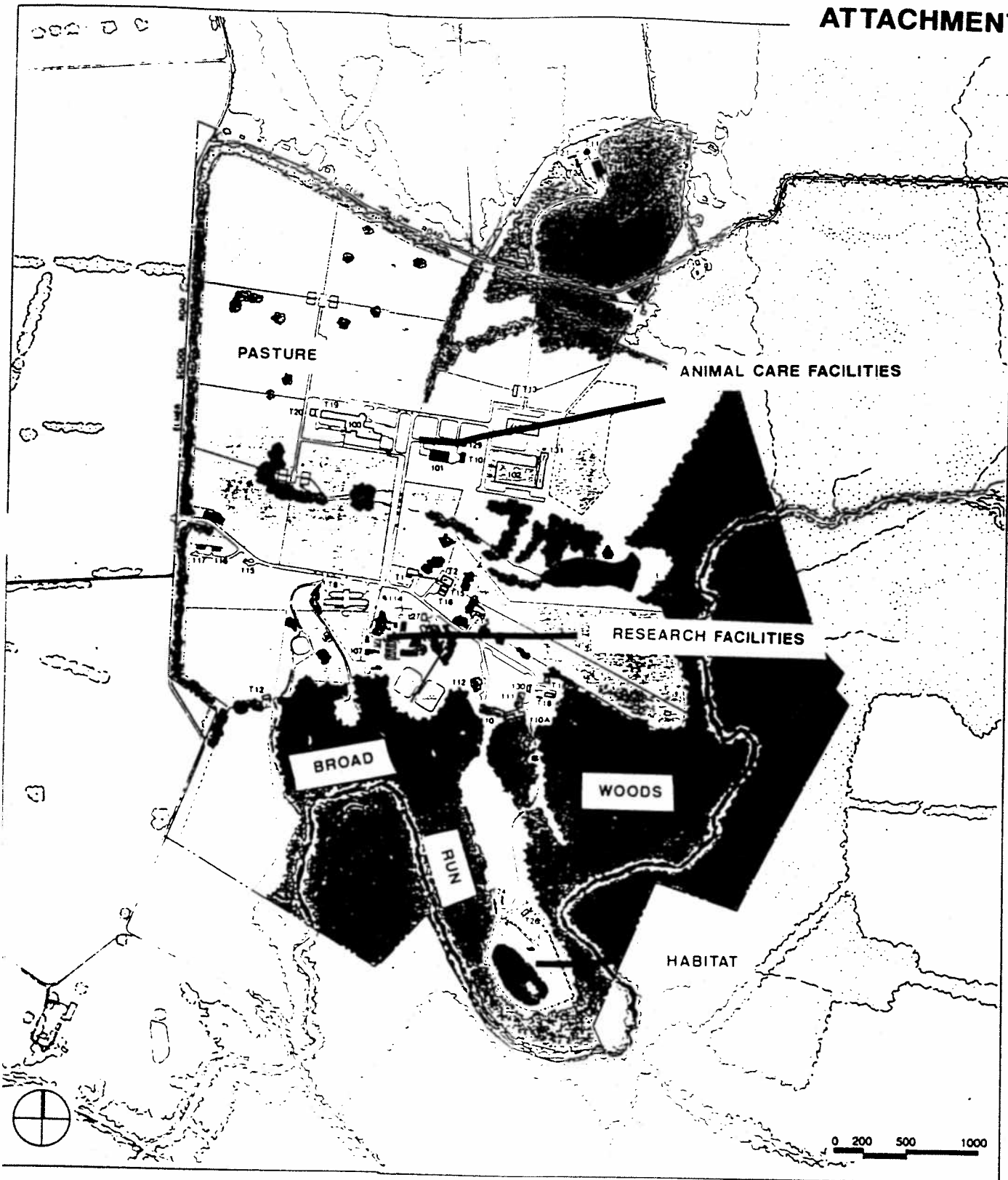













Figure 4.1.3

**NIHAC
Master Plan**
Boolesville Site

- | | |
|---|---|
|  LABORATORY |  PASTURE |
|  ANIMAL FACILITY |  OPEN LAND |
|  SERVICE SUPPORT |  WOODLAND |
|  UTILITIES |  WATER FEATURE |
|  RESIDENTIAL |  SLUDGE DISPOSAL |
|  OUTDOOR HABITAT | |

**Existing
Land Use**

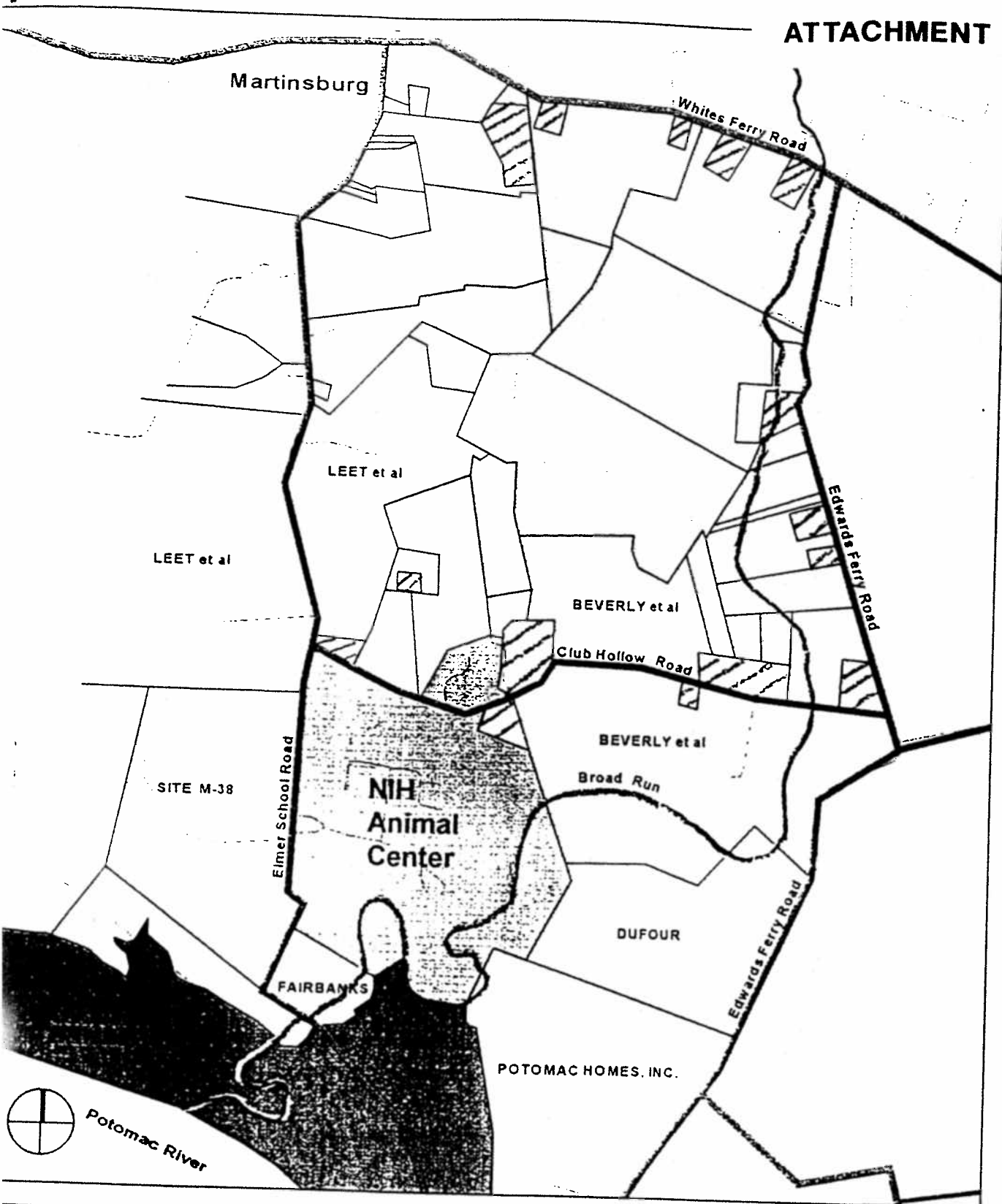


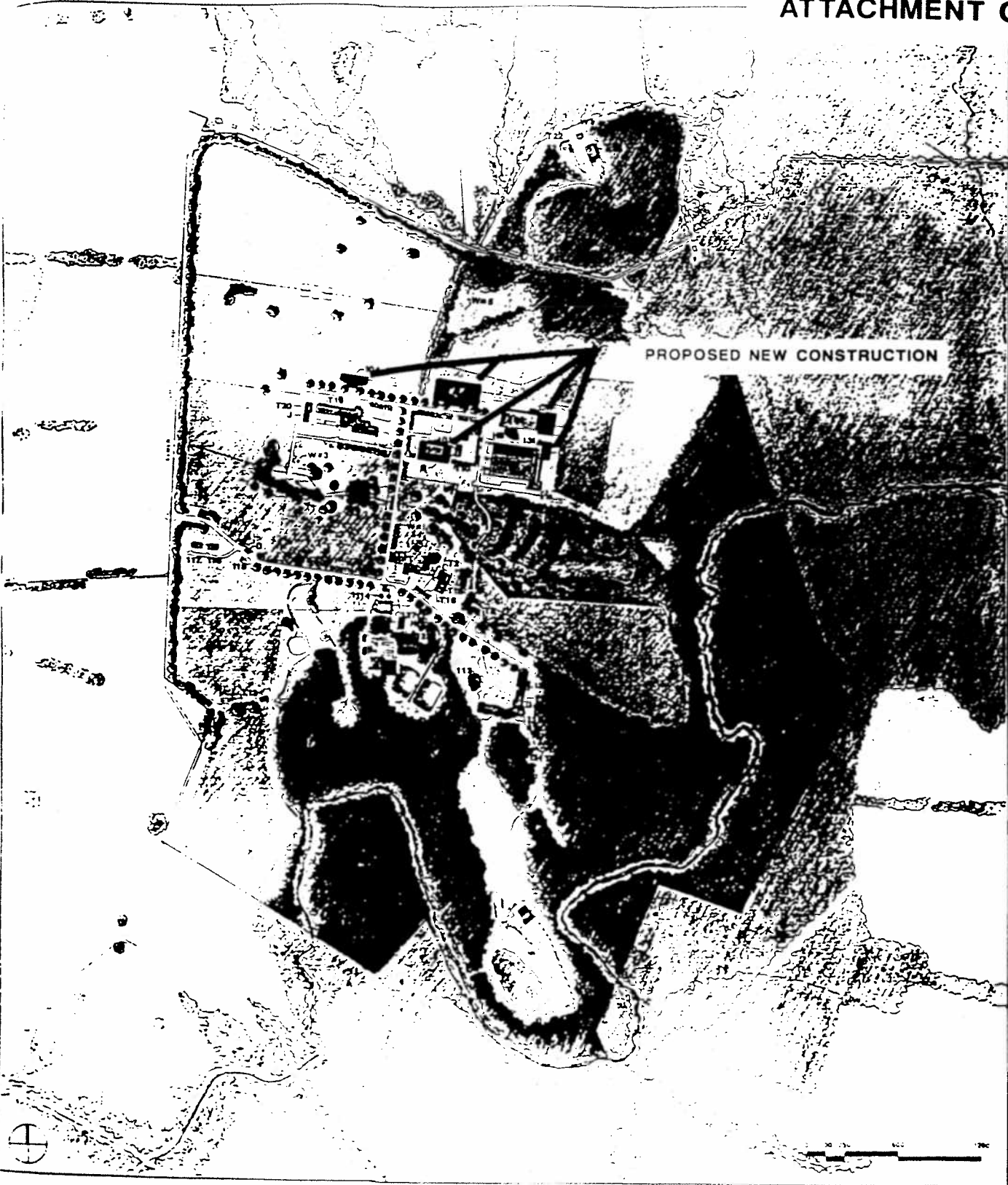


Figure 3.1.7

IAC
ster Plan
esville Site

-  Residential
-  Agriculture/Open Space



NIHAC
Master Plan
 Poolsville Site







-  EXISTING STRUCTURE
-  NEW PROPOSED STR.
-  OUTDOOR HABITAT
-  RECREATION
-  PASTURE
-  WOODS

Figure 1.1

Illustrative
Master Plan