Photos of Paint Branch Stream

4.2.3 Vegetation

A variety of pine and hardwood forested areas, wooded stream valleys, and grassy meadow areas define areas around the campus.

Urban or Built-up Land

FDA's Headquarters is comprised of area of intensive use with much of the land covered by structure and parking lots. Urban land within the FDA Headquarters includes green buffer zones, the FDA development, roads, and parking lots. Landscaped areas comprise most of the vegetation within the urban and developed land of the FDA Headquarters.

Deciduous Forest Land

All forested areas have a predominance of trees that lose their leaves at the end of the frost-free season or at the beginning of the dry season. There are approximately 26.8 acres of forest within the study area and delineated into seven forest stands. Forests within the study area are defined as mid-successional. A mid-successional forest is a transitional stage between a young and mature forest.

A Forest Conservation Plan will be developed in compliance with Montgomery County's Forest Conservation Law and the MD State Forest Conservation Act. The plan will outline compensatory mitigation, if needed to offset the loss of forest and vegetation.

4.2.4 Wildlife

The large wooded land areas and aquatic features on the FRC support numerous wildlife species. The Paint Branch bisects the FRC. The Paint Branch and its tributaries are home to aquatic wildlife. Numerous animal species, amphibians, avian and aquatic species are potentially in the FRC. There are no known protected species, federally listed threatened or endangered species.

Minimization of impacts to wildlife will be obtained by maintaining areas of forest that provide habitat and movement corridors for wildlife. Signage for deer crossing would be placed along the roadway through the FRC to mitigate for the risk of deer being struck by vehicles. Time-of-year restrictions of construction activities may be used to protect species most sensitive to human activities. Compliance with the approved erosion and sediment control plan would minimize impacts to aquatic biota by controlling sedimentation.

4.3 Public Realm and Viewsheds

4.3.1 Addition & Removal of Trees

Tree Protection

Trees are a valuable resource in the National Capital region. They reduce temperatures, reduce air pollution, mitigate climate change by storing carbon, and improve soil and water quality through retention of stormwater and controlling erosion. An essential strategy of the Master Plan was to avoid existing mature forests and consequently, the removal of large stands of trees. The Preferred Development Alternative successfully limits most of the disturbance to areas that have been previously disturbed and avoids tree removal as much as possible. In areas where trees need to be removed, proper measures such as root spading and tree protection fencing should be taken to protect mature trees adjacent to the limits of work.

Tree Replacement Requirements

In alignment with the Comprehensive Plan for the National Capital, when tree removal is unavoidable, trees should be replaced to prevent a net loss of trees to the project area, according to the following process:

- An evaluation of potential tree loss should be made prior to any tree removal
- Trees 10 inches in diameter or less should be replaced on a one to one basis
- Trees larger than 10 inches in diameter should be surveyed by a professional arborist to establish the replacement ratio in alignment to the ISA (International Society of Arboriculture)
- Replacements should be located within the property

In impacted areas that are very densely forested, it may prove impossible to professionally survey and evaluate each individual tree. As an alternative, the local jurisdiction of Montgomery County has a tree replacement program that calculates tree replacements based on tree canopy cover. In accordance with the Forest Conservation Law, analysis of the tree canopy and the replacement rate per acre should be met. After review of this law, assumptions were made for planning purposes to propose two acres planted for every one acre of trees removed. This ratio should be reevaluated during design development and a representative from Montgomery County should review to assure that the most current requirements are being met.

Tree Planting Framework

A tree replacement framework proposes appropriate areas in which to plant new trees on the property. While the exact quantity of new trees will be determined later, a large amount of space is designated to meet requirements. While coordinating the tree replacement ratios with the local jurisdiction, it is recommended that GSA share their current practice of tree planting. Recent plantings of new trees on the campus may work toward the replacements required if Montgomery County is made aware of the improvements that FDA has already made.

This plan defines three zones of tree replacement: Stream Restoration, Naturalized Edge, and Loop Road. These design guidelines are framework to be followed in future design phases. Refer to figure 4.7. Specific design guidelines for the Front Lawn of the FDA Headquarters are shown in figure 4.8.

Within the stream valley buffers, replacement trees should be planted to support the health of the waterways. Water-loving species of trees should be planted in organic groupings and protected according to plant establishment practices. Bare root trees may be a cost-effective option for this area. Refer to Figure 4.9- Stream Restoration Photo.

Trees are proposed along the edges of stormwater management ponds setback 15' from the base of the slope and avoiding the dam embankments.

Trees planted beyond the Loop Road are characterized as a naturalized edge. This area will be dominated by native trees and woodland species that can establish a less manicured look and help restore the previously disturbed areas. An un-mowed buffer should be setback from this area to allow for a natural transition from lawn to forest. Refer to Figure 4.9- Naturalized Edge.

Additional trees will be planted along the Loop road to increase the campus character of the grounds. Along this road today there is extensive mowing that new trees will help to limit. Street trees will also help to provide a buffer for bikers using the new bike trail that is proposed around the perimeter of the campus. Refer to Figure 4.9- Loop Road Photo.

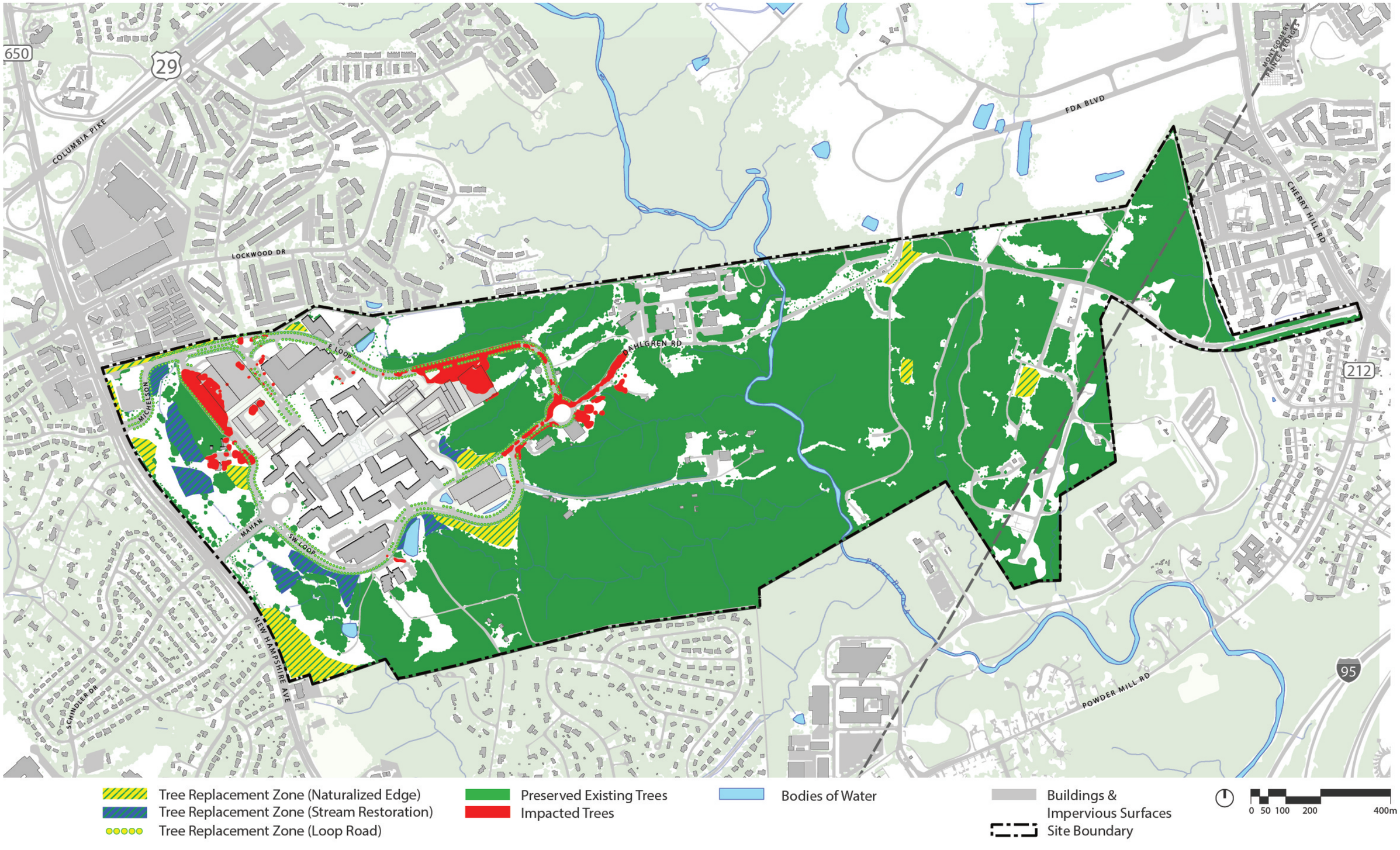


Figure 4-7: Preferred Development Alternative: Tree Removal Diagram

Figure 4-8: Preferred Development Alternative Front Lawn Diagram

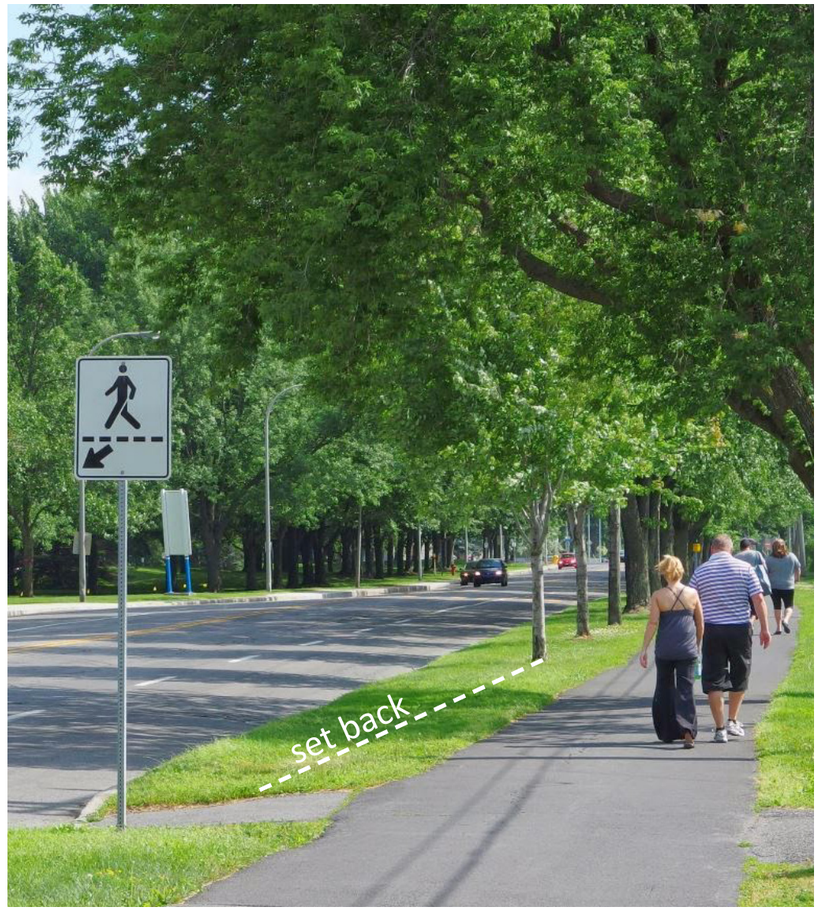
Naturalized Edge

- Un-mowed grasses
- Flowering perennials
- Native under-story Trees

Stream Restoration

- Un-mowed grasses/ reeds
- Native bare-root trees

Loop Road



- Buffer for trail users
- Provides Shade

Figure 4-9: Preferred Development Alternative Tree Planting Framework

Figure 4-10: Front Lawn, Flag pole, and Main Administration Building 1

Figure 4-11: Entrance from New Hampshire Avenue

4.3.2 Impact on Viewsheds

The 1997 determination of eligibility and 2002 MOA cited the historic buffer and the views from New Hampshire Avenue to the façade of Building 1 as important campus features but did not define a historic viewshed beyond the façade of Building 1. Because of the relative location and height east of Building 1, the high-rise buildings proposed in the Preferred Development Alternative would be visible behind Building 1 when viewed from some points along New Hampshire Avenue. This visibility would be mitigated by the relative distance of the high rises (about half a mile) from Building 1. While the tall buildings would not intrude on the view of the Building 1 façade across the buffer from New Hampshire Avenue, the broader visual setting of Building 1 from New Hampshire Avenue would include taller buildings behind and above the historic building. They may also be visible, depending on seasonal vegetative cover, from the northwest portion of the campus (area 400).

The new buildings at the east and north ends of the campus would be visible from the fire station (Building 100) but given their distance from the building and the already affected visual setting due to past construction, there is no anticipated effect from the construction of new facilities.

GSA initiated consultation under Section 106 of the National Historic Preservation Act to prepare a Memorandum of Agreement (MOA) for mitigation in the event of any adverse effects to historic views or visual settings as a result of the Preferred Development Alternative.

Figure 4-12: Preferred Development Alternative View from New Hampshire Ave.