1.9 Utility Infrastructure

The following section describes water, sewer, stormwater, and electrical power/HVAC on the FRC campus.

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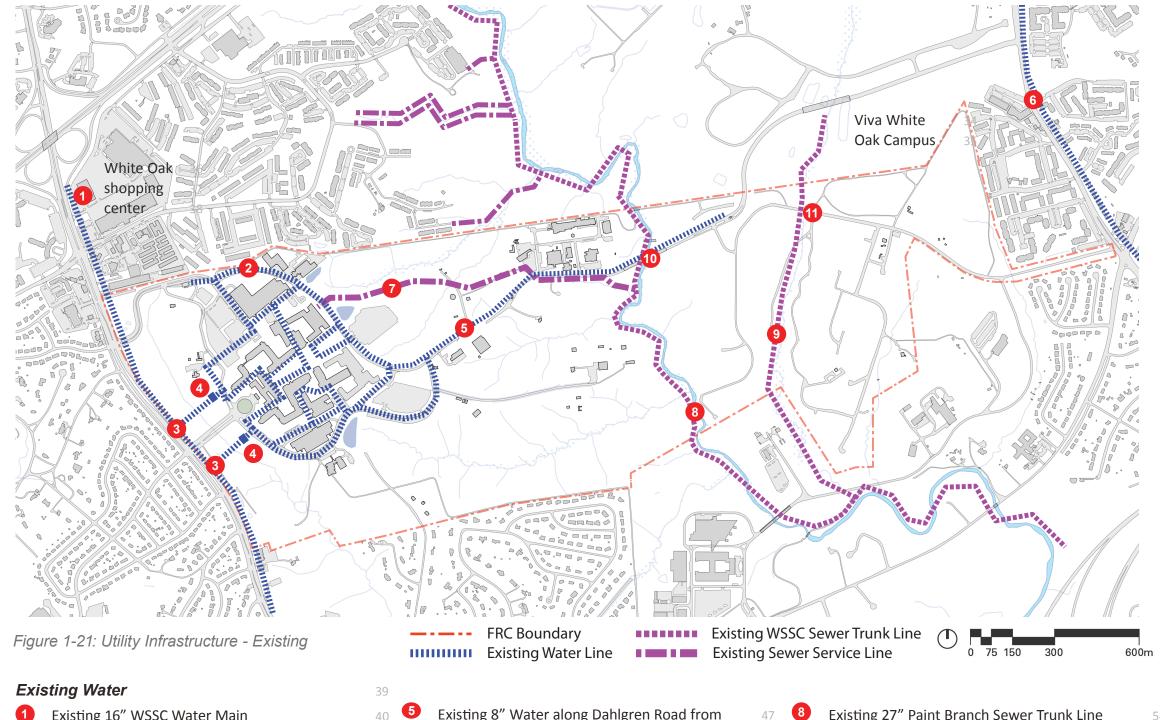
Refer to Figure 1-21 for a depiction of existing domestic water and sewer features and characteristics.

1.9.1 Domestic Water

The Washington Suburban Sanitary Commission (WSSC) provides potable water to the FDA Headquarters via two 12-inch connections to the 16-inch WSSC water main under New Hampshire Avenue. A system of mostly 12-inch water lines, with some 8-inch lines, serves the existing site through redundant loops around the buildings. There is a duplex pump station with a backflow preventer located on each of the two supply lines. These variable speed pumps can boost water pressures as needed on site during peak times, during periods when WSSC's system has low pressure, or during a fire event.

1.9.2 Sewer

WSSC provides sanitary sewer service to the FDA Headquarters. The campus is within WSSC's Blue Plains Wastewater Treatment Area (Mini-Basins 02-050, 02-014). Sewer lines from the campus drain 29 to a 15-inch outfall pipe running east from the East Loop Road and ultimately connecting to the existing 27-inch sewer trunk line running along Paint Branch to the east.



- Existing 16" WSSC Water Main
- Existing FDA Headquarters Water System (Primarily 12" Pipes)
- Two Existing Connections to Existing 16" WSSC Water Main in New Hampshire Ave.
- Two Existing Duplex Pumping Stations Increase Water Pressures on FDA Site
- Existing 8" Water along Dahlgren Road from Campus Loop Road to East Guard House
- Existing 12" WSSC Water Main in Cherry Hill Road

Existing Sewer

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Existing 15" Sewer Outfall Pipe from FDA Headquarters

- Existing 27" Paint Branch Sewer Trunk Line
- Existing 20" West Farm Branch Sewer Trunk

Existing Other

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- Existing Bridge over Paint Branch
- Existing Bridge over West Farm Branch

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1.9.3 Stormwater

Please refer to Figure 1-22 for stream valley buffer and Figure 1-23 for a depiction of stormwater management facilities.

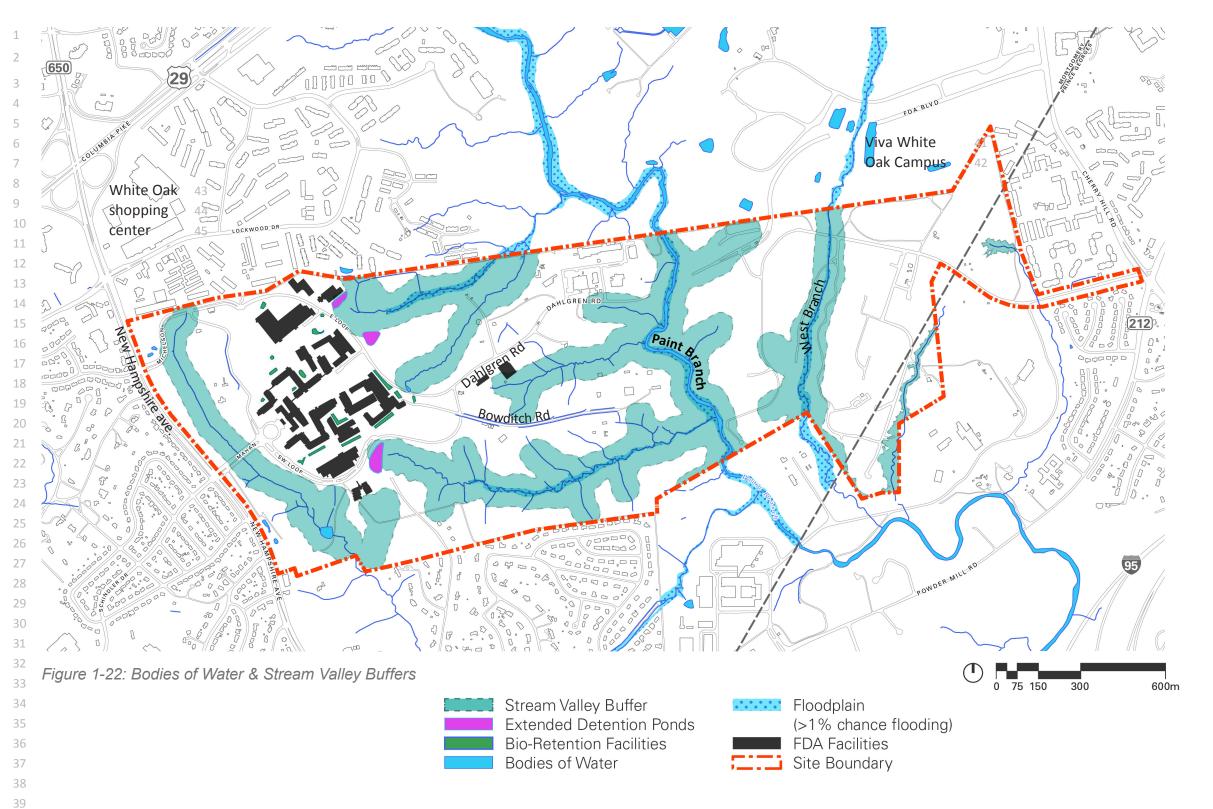
The FDA Headquarters is served by a system of open swales and closed piped storm drains that convey storm runoff water. There are three existing detention ponds on the campus that provide stormwater quantity control. There are also numerous bio-retention areas, grass channels, green roofs, rooftop disconnects, and sand filters scattered around the campus that provide water quality treatment for specific buildings and roadways (see Figure 1-22). These existing stormwater management facilities on campus do not have available additional capacity to serve new development.

Additionally, seven existing parking lots on the FDA Headquarters currently do not have MDE-approved stormwater treatment facilities. GSA is currently working with MDE to resolve this issue prior to any future development.

All areas of the FDA Headquarters drain to Paint Branch. Paint Branch and all its tributaries upstream of the Capital Beltway are classified as Use III waters. No in-stream work is allowed between October 1 and April 30. Streams on the FRC site are subject to County Stream Valley Buffers. In addition, the presence of steep slopes and potentially erodible soils could increase the width of these buffers.

The FRC site is subject to the NPDES MS4 Discharge Permit (General Permit) requirements. The emphasis of this permit is on efforts that will help achieve the Chesapeake Bay total maximum daily load (TMDL) goals established under the authority of the Clean Water Act.

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1.9.4 Electrical/HVAC

Electrical power and HVAC on the existing FDA Headquarters is provided by Honeywell by way of an on-site Central Utility Plant (CUP). The CUP currently generates electricity, chilled water, and hot water for heating and cooling the FDA Headquarters. The CUP is a combined heat and power and a cogeneration facility where natural gas is burned in an engine that turns a generator to produce electricity. Natural gas to power the engine is provided by Washington Gas. A photovoltaic array provides additional electricity depending on weather. Cooling at the CUP is provided by electric centrifugal and absorption chillers. Heating at the CUP is provided by dualfueled water boilers and heat recovery boilers. Hot and cold water are distributed to each building 18 via an underground hydronic distribution system. Electrical power is distributed to all the buildings on the headquarters via underground duct banks. Backup electric power to the FDA Headquarters is provided by Potomac Electric Power Company (PEPCO) via two transmission lines leading to a substation that feeds the FDA Headquarters and Air Force/AEDC. The substation is managed by GSA.

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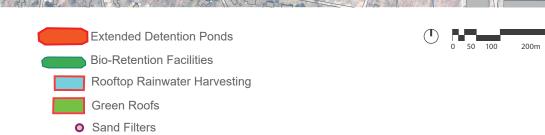
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OUTREACH AND COORDINATION



2. OUTREACH AND **COORDINATION**

2.1 Public Engagement

2.1.1 Introduction and Identified Issues

Public engagement is an important part of the Master Plan process. By involving citizens, stakeholder groups, and local, state, and Federal agencies, the Federal Government can make better informed decisions. GSA and FDA have continued to meet with the public, area neighborhood groups, special interest groups, and government agencies throughout the Master Plan process. Key issues identified during meetings with the public and agencies are outlined in the Environmental Impact Statement (EIS) Document. The key issues included the need for the Master Plan Action, the design review of the Development Alternatives, the impact on views and natural resources, review of community amenities, economic impacts and transportation impacts.

2.1.2 Public Review

GSA issued a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) on August 18, 2017. The letters included information on the public scoping meeting and asked for the public's comments on the proposed FDA Master Plan. The NOI was published in the Federal Register, as well as The Washington Post, the Montgomery Sentinel, and the Prince George's Sentinel. NOI letters were mailed to approximately 125 federal, state, and local agencies, public officials, community groups, special interest groups, and area residents.

GSA held a public scoping period on the EIS/ Master Plan from August 21, 2017 through September 25, 2017. GSA also held an Open House for the public on September 12, 2017 from 6:30 to 8:30 pm. Approximately 50 people attended the public meeting, including FDA employees and staff from the following offices:

- Senator Van Hollen and Congressman Sarbanes'
- Montgomery and Prince George's County Councils,
- Maryland Department of Commerce,
- Montgomery and Prince George's County,
- Prince George's County Police Department, and,
- Maryland Park Police.

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In addition, several organizations (Strengthen FDA, Labquest, North White Oak Civic Association, Percontee, Inc., Eyes of Paint Branch, Greater Colesville Civic Association, Whitehall Square Homeowner's Association, and the Alliance for a Stronger FDA) and members of the local communities were in attendance.

Poster boards were displayed showing the site

plan; a history of the FDA consolidation; the 31 Environmental Impact Statement (EIS) and National 32 Historic Preservation Act (NHPA) processes; the Area 61 of Potential Effect (APE); preliminary Development 34 Alternatives; and environmental features. In addition, a continuously running slide presentation 36 was shown.

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38 A public comment period on the Draft EIS was held from March 2, 2018 through April 16, 2018. GSA 40 also held a public hearing on the Draft EIS during 41 the public comment period on March 22, 2018. 42 Approximately seven people attended the hearing.

Public comments can be found in the EIS.

2.2 Coordination with Federal, State, and Local **Jurisdictions**

Consultation with federal, state, and local agencies has been conducted throughout the preparation of the Master Plan and EIS. The following table, shown in figure 2-1, provides a list of the meetings held with federal, state, and local agencies during the development of the Master Plan and EIS.

Meeting Date	Organization	
February 15, 2017	Early coordination meeting with NCPC	
February 27, 2017	Informational Scoping meeting with M- NCPPC – Montgomery & Prince George's counties	
July 27, 2017	Informational Meeting/Tour of FRC with NCPC	
August 28, 2017	Informational Meeting/Tour of FRC with NCPC, M-NCPPC – Montgomery & Prince George's counties, MHT, ACHP	
September 1, 2017	Informational Meeting with Labquest	
September 12, 2017	Scoping Meeting	
September 21, 2017	Master Plan Briefing Meeting with Montgomery County Executive staff	
October 5, 2017	Informational Briefing – NCPC	
October 11, 2017	Informational Meeting with Hillandale & North White Oak Citizens Associations	
October 24, 2017	Consulting Party Meeting 1	
November 14, 2017	Consulting Party Informational Meeting at FRC	
December 7, 2017	Master Plan update meeting with NCPC	
January 22,2018	Master plan update meeting with M-NCPPC – Montgomery County	
January 23, 2018	Meeting with Montgomery County – BRT/Purple Line update	
February 21, 2018	Meeting MD DOT SHA	
February 22, 2018	Public Hearing presentation to Montgomery County on Draft Master Plan	
March 22, 2018	Public Hearing on EIS	
April 4, 2018	Consulting Party Meeting 2	
May 16, 2018	Public Hearing Presentation to Montgomery & Prince George's counties on Draft MP	
May 21, 2018	Consulting Party 3	
June 7, 2018	NCPC Draft Master Plan Approval Hearing	

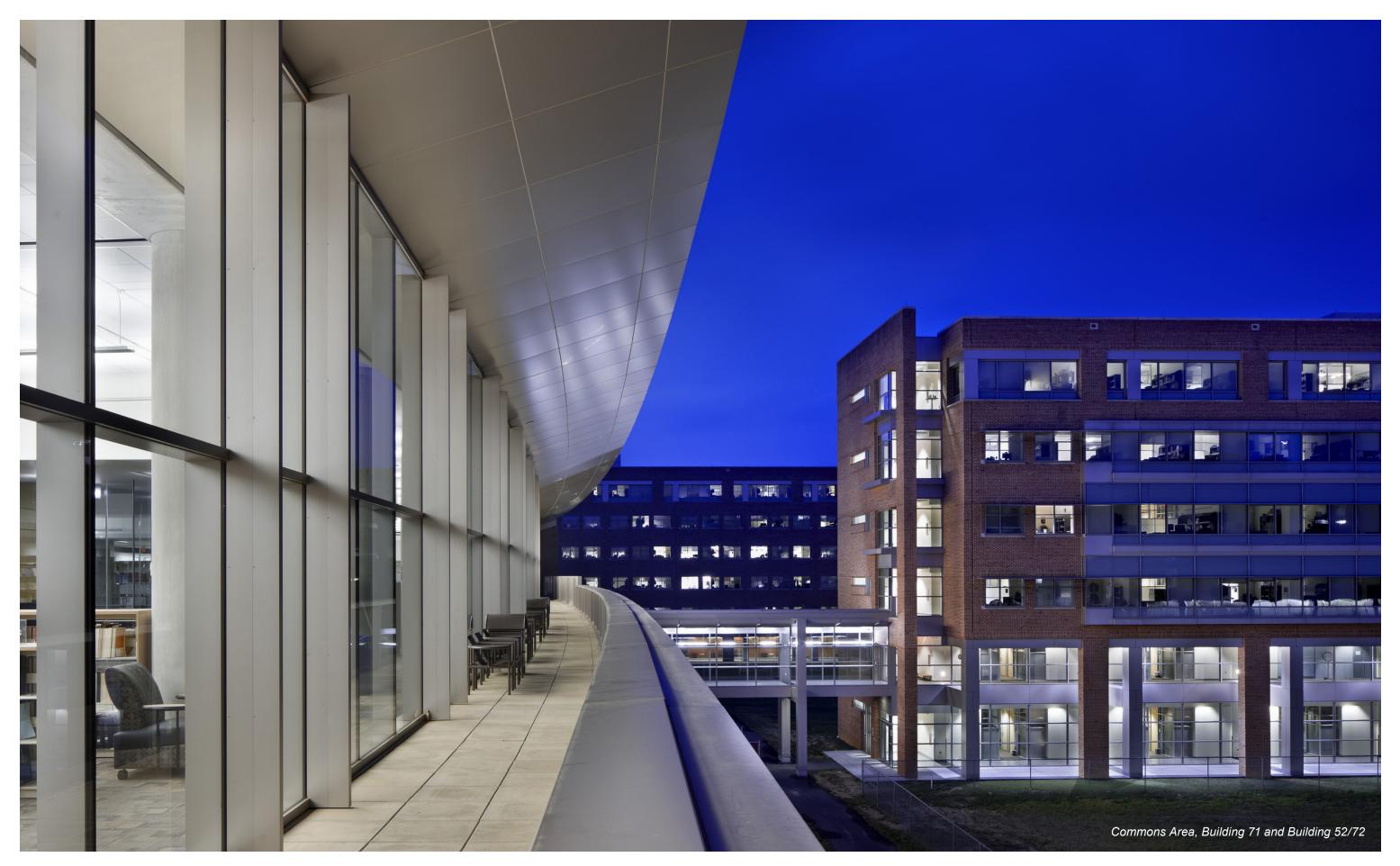
Figure 2-1: Public Outreach/Coordination Meetings

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MASTER PLAN DEVELOPMENT ALTERNATIVES



3. MASTER PLAN **DEVELOPMENT ALTERNATIVES**

Land Use Feasibility Study

3.1.1 Land Use Strategies

Prior to the Master Plan development, a series of land use feasibility development strategies and scenarios were developed to test the feasibility of fulfilling the FDA program requirements on the FRC site, based upon the site analyses and capacity study. The purpose of the Land Use Feasibility Study 8 (LUFS) was to study and demonstrate the feasibility of accommodating the proposed program on the FRC site. Based upon analyses of the constraints on the site, including stream valley buffers and steep slopes, the Land Use Feasibility Study demonstrated that it is feasible to accommodate the full program on the FRC site. In fact there is ample developable land on the 662 acre FRC site to allow for a variety of configurations of the program. Further, there is capacity on site to accommodate FDA growth beyond the current 18,000 employee planning parameters of this master plan.

Four fundamental land use strategies were examined in developing the land use feasibility development scenarios. The land use analyses demonstrated that there is sufficient land to allow for the implementation of each strategy, and each approach would yield their own set of advantages

and disadvantages which are further described in the evaluation portion of this report.

- Strategy 1: Expansion immediately adjacent to the existing campus
- Strategy 2: Development of a new campus central 33 to the overall FRC property
- Strategy 3: Development of a new satellite campus on the Eastern portion of the FRC property

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Strategy 4: No new development, other than providing required parking spaces to maximize existing capacity

3.1.2 Preferred Land Use Strategy One

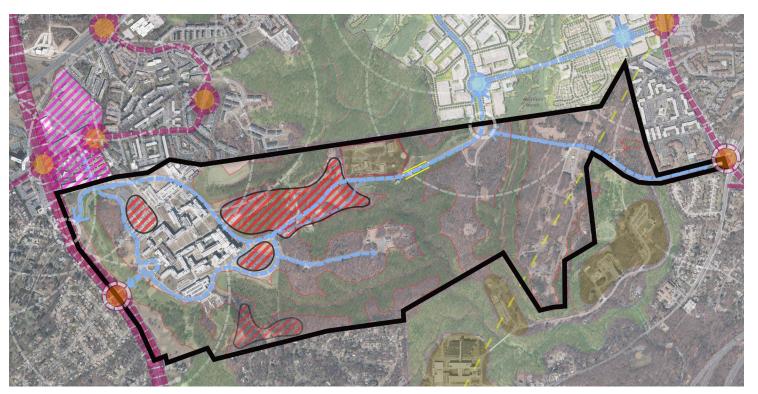
Based on consultation between GSA, FDA and the consultants, Strategy 1 was selected to test three master plan options and a no-action option. Strategy 1 embodies the following important principals:

- Creates a walkable campus promoting collaboration,
- Maintains the tree canopy and biodiversity of the site, and
- Converts surface parking lots into building pads thereby minimizing additional impervious surface.



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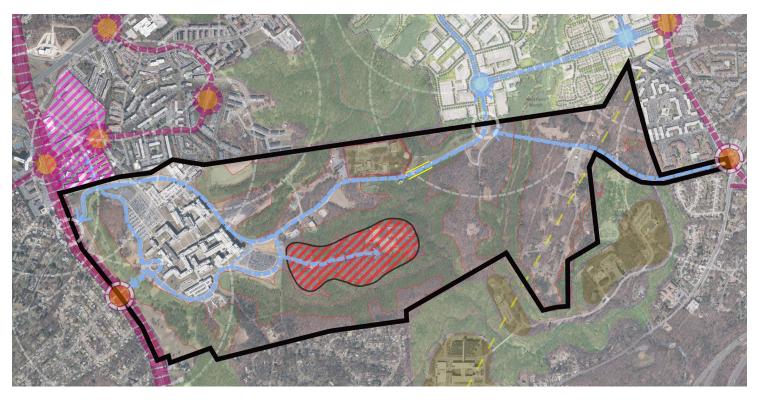
3.1.3 Land Use Strategy Diagrams



STRATEGY 1:	
DEVELOPMENT ADJACENT TO EXISTIN	IG
FACILITIES	

_			c · · ·
Focuses new	development of	n peripher	y of existing campus

- Proximity to main campus promotes connectivity and collaboration
- Potential to link into SE,E, and NW portions of campus
- May link into existing utility infrastructure and CUP
- May require increasing capacity of CUP
- Construction may disrupt some main campus operations/traffic
- Potential advantage to distribute some traffic between East/West sides of site, capture traffic from East and North sides of site



STRATEGY 2: DEVELOPMENT IN CENTER OF PROPERTY 16

•	Focuses new development in center of the
	campus

- Takes advantage of large land bay in center portion of site
- Expansion may be constrained by slopes and stream valley buffers
- Potential to link into SE portion of campus
- Potential to link into existing utility infrastructure

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May require independent or secondary utility plant

98	May reduce construction disruption	n to	mair
19	campus		

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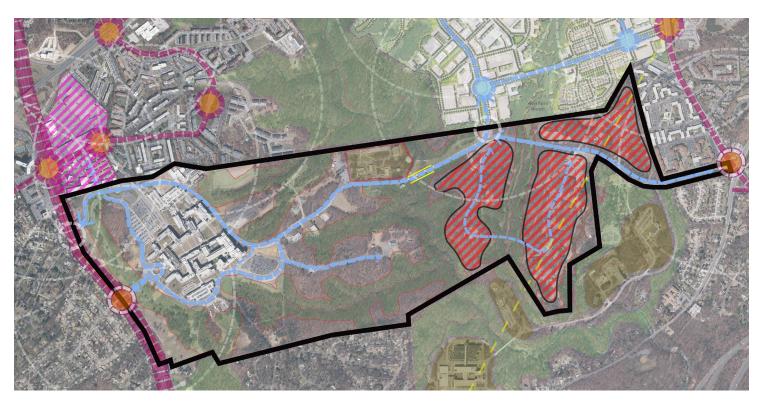
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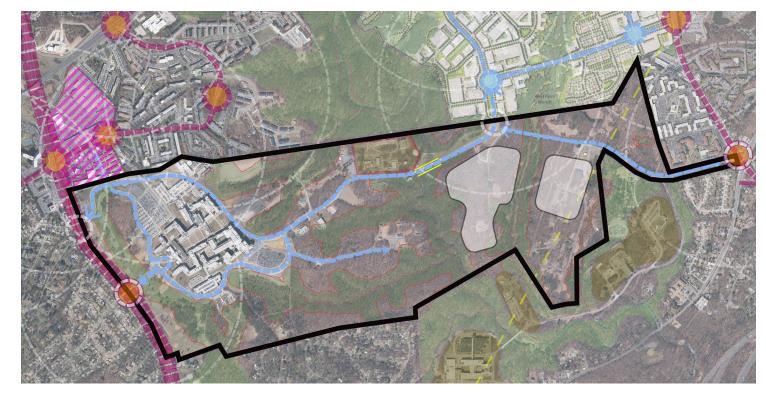
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- Distance from main campus may impedepedestrian connectivity/collaborationopportunities
- Potential advantage to distribute traffic
 between East/West sides of site, capture
 traffic from East and North sides of site
- Single road access may require construction of additional access road/bridge across Paint 38
 Branch Creek 39



STRATEGY 3: DEVELOPMENT TO EAST OF PROPERTY

- Focuses new development on the east side of the campus
- Potential to integrate with Viva White Oak Development
- Takes advantage of large land bays on eastern portion of site
- May require independent or secondary utility plant
- Potential to tie into utility corridors in Cherry Hill Road and/or Viva White Oak
- May minimize construction disruption to main campus
- Distance from main campus may impede pedestrian connectivity/collaboration opportunities
- Potential advantage to distribute traffic between East/West sides of site



STRATEGY 4: NO BUILD OPTION

• Provides for additional remote parking to allow existing campus to reach capacity, does not propose new buildings

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- Distance from main campus may impede pedestrian connectivity and create additional travel time from parking to offices
- New parking could be used to offset loss of parking in the event that existing surface lots surrounding campus are developed
- Potential to integrate with Viva White Oak Development in future
- Takes advantage of large land bays on eastern portion of site
- May minimize construction disruption to main campus
- Potential advantage to distribute traffic between East/West sides of site

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3.2 Master Plan Development Alternatives

Proceeding the Preferred Development Alternative, there were four alternatives in the Draft Master Plan: a No-Action Alternative, and Action Alternatives A, B and C they are briefly summarized on the following three pages.

At present, the campus includes:

- 10,987 assigned personnel to the FDA Headquarters with a current peak daily population of 7,793;
- 3,766,605 gsf with 60,438 gsf of bridges and tunnels and 996,975 gsf parking garages for a total of 4,824,018 gsf;
- 6,817 parking spaces (including visitor parking); and
- Child Care Center located on the south side of the FDA Headquarters.

3.2.1 No-Action Alternative

With a No-Action Alternative, FDA would continue its current operation at the FRC. Specifically, under the No-Action Alternative the number of employees and support staff would not increase and would remain at approximately 10,987 assigned personnel to the FDA Headquarters. (The peak daily population at the FDA Headquarters is 7,793). The additional employees would need to be in other government owned or leased space in the Washington, DC metropolitan area. Locating theses employees outside of the FDA Headquarters would result in inefficiencies in coordination of work products and in use of administrative, management, and technical support function.

NO-ACTION ALTERNATIVE



Figure 3-1: Existing Campus Aerial View - No-Action Alternative