



Final Revised Environmental Assessment

for Centers for Disease Control and Prevention Lawrenceville Campus Proposed Improvements 2015-2025

January 2018

PREPARED FOR

Centers for Disease Control and Prevention (CDC)
U.S. Department of Health and Human Services
Atlanta, Georgia



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Executive Summary

Proposed Action

The Centers for Disease Control and Prevention (CDC) within the U.S. Department of Health and Human Services (HHS), has prepared a revised Environmental Assessment (EA), to assess the potential impacts associated with the undertaking of proposed improvements on the HHS/CDC's Lawrenceville Campus located at 602 Webb Gin House Road in Lawrenceville, Georgia. In February 2016, HHS/CDC completed a Final Environmental Assessment and issued a Finding of No Significant Impact (FONSI) for HHS/CDC's Lawrenceville Campus Proposed Improvements 2015-2025. Changes to the Proposed Action necessitated the preparation of a revised EA. HHS/CDC has revised the EA to include the installation of a photovoltaic system within the northern portion of the campus. The proposed improvements evaluated in this revised EA entail building demolition and new building construction, including an approximately 12,000 gross square feet (gsf) Science Support Building, a new Transshipping and Receiving Area at approximately 2,500 gsf and two new small Office Support Buildings at approximately 8,000 gsf and 6,000 gsf, as well as expansion and relocation of parking on campus, the creation of an additional point of access to the campus and the installation of a photovoltaic system. The HHS/CDC has prepared this EA in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. §4321 et seq.), the Council on Environmental Quality (CEQ) implementing regulations (40 CFR §1500-1508) and the HHS General Administration Manual (GAM) Part 30 Environmental Protection, dated February 25, 2000. The principal objectives of NEPA are to ensure the careful consideration of environmental aspects of proposed actions in the federal decision-making processes and to make information available to decision makers and the public before decisions are made and actions are taken.

Purpose and Need

HHS/CDC is dedicated to protecting health and promoting quality of life through the prevention and control of disease, injury, and disability. HHS/CDC is recognized as the lead Federal agency for protecting the health and safety of people, providing credible information to enhance health decisions, and promoting health through strong partnerships. HHS/CDC protects communities by controlling disease outbreaks; ensuring food and water are safe; preventing leading causes of death such as heart disease, cancer, stroke, and diabetes; and, working globally to reduce health threats. The Lawrenceville Campus primarily accommodates components of the Office of Infectious Disease (OID) and the Office of Public Health Scientific Services (OPHSS), as well as components of the Office of Safety, Security, and Asset Management (OSSAM).

The Lawrenceville Campus, developed in the 1960's, was originally used as a rabies laboratory, breeding, and animal holding facility. Today the campus provides office support space, laboratory, laboratory support space and animal holding for research and support staff. Since the original construction of the campus in the early 1960's, only minor changes to the Lawrenceville Campus have occurred, which have primarily focused on repairs or renovations to existing buildings. A collaborative and integrated planning process was undertaken by HHS/CDC staff in order to assess existing conditions on the Lawrenceville Campus and to identify any potential growth or shifts in program space use, based on long term scientific mission support and operational requirements. The planning process identified the need

for the proposed improvements on the campus including the new Science Support Building, new office buildings, the new Transshipping and Receiving Areas, additional parking and sidewalk improvements, a secondary point of access for the campus to provide emergency egress/ingress and the installation of a photovoltaic system.

The proposed improvements are needed in order to maintain an appropriate facilities quality level on the Lawrenceville Campus, in support of current program requirements. This includes the need for new research support and office support space to replace existing obsolete structures, expanded research support and office support space, and a new transshipping and receiving area to improve the movement of visitors and goods through the campus. Relocation and expansion of parking is needed to satisfy a current shortfall of parking during special events and to comply with security requirements. A secondary point of access to the campus would be developed in order to provide for an emergency egress and ingress for the campus and improvements to pedestrian infrastructure would provide a safe pedestrian environment. The installation of a photovoltaic system would provide the Lawrenceville Campus with a renewable energy source in order to comply with federal renewable energy mandates.

Alternatives Considered

The EA examines the environmental, social and economic resources of the Lawrenceville Campus and the surrounding area and evaluates the potential impacts of the No Build and the Build Alternatives. The No Build Alternative serves as a baseline, which allows decision makers to compare the environmental consequences of continuing to operate under current conditions against the consequences of the Build Alternative. The No Build Alternative represents the continued operation of the existing facilities at the Lawrenceville Campus without any new construction or any major renovations or infrastructure upgrades over the ten-year planning period from 2015 to 2025.

The Build Alternative consists of proposed improvements to the Lawrenceville Campus which entail building demolition and new building construction, including a new Science Support Building, a new Transshipping and Receiving Area, two new Office Support Buildings, expansion and relocation of parking on campus, creation of a secondary campus point of access for emergency egress/ingress and pedestrian improvements. The employee population is anticipated to increase by 26 full time employees for a total of 57 employees on the campus by 2025. The improvements associated with the Build Alternative include:

- Construction of a new approximately 12,000 gsf Science Support Building and demolition of an existing 3,421 gsf older research support building. The new building would replace an aging structure that has surpassed its operational life span.
- Construction of an approximately 2,500 gsf new Transshipping and Receiving Area to serve as the new shipping and receiving facility as well as a visitor receiving area for the campus.
- Construction of an approximately 6,000 gsf Office Support Building A to replace two existing obsolete office support buildings (1,426 gsf and 1,426 gsf, respectively) that would be demolished. The new building would provide office and support space and would be constructed on an existing parking lot.
- Construction of an approximately 8,000 gsf Office Support Building B is proposed. The new building would provide office support space for the campus.

- Construction and relocation of parking areas resulting in a net increase of approximately 81 new parking spaces. The parking areas will provide parking for employees and daily visitors to the campus as well as visitors during special events.
- Construction of a new emergency ingress/egress point of access off of Webb Gin House Road, forming an intersection with Timbercrest Drive, as well as construction of a new internal campus roadway to link the new entry point to the main campus core. The new access point would provide an alternative means of egress/ingress in the event of an emergency evacuation or should the main entrance be blocked.
- Construction of Architectural Barriers Act (ABA) -compliant sidewalks and enhancement of pedestrian environment.
- Construction of a photovoltaic system consisting of a 249.9-kilowatt (KW) ground-mounted solar array. The solar array would consist of approximately 748 modules covering an area of approximately 41,750 sf (0.99 acre), nine inverters, and a pad mounter transformer. A new chain link fence would surround the perimeter of the system along with a vegetative screening buffer.

The HHS/CDC undertook an extensive planning process to develop the proposed improvements identified under the Build Alternative. Development of the Build Alternative components took into account safety, security, and sustainability requirements, as well as the constraints of the Lawrenceville Campus. The planning process included an analysis of existing natural features, man-made structures, setbacks and local zoning requirements to develop alternatives to meet HHS/CDC program needs. Several alternatives to the proposed action were considered but not but were not carried forward for further analysis as they did not meet the purpose and need of the Proposed Action.

Environmental Consequences

The environmental assessment evaluated the potential impacts to socioeconomics and environmental justice, land use, zoning, public policy, community facilities and services, transportation, air quality, noise, cultural resources, urban design and visual resources, natural resources, utility service, hazardous materials, greenhouse gases and sustainability, and construction. HHS/CDC has assessed the potential impacts of the Build Alternative on the natural and human environment and determined that the proposed action would not result in significant adverse impacts. The Build Alternative would be undertaken in accordance with the best management practices (BMPs), minimization and mitigation measures presented in the EA and discussed below. The EA identified that the most notable changes from the Build Alternative would occur in the following areas:

Natural Resources. There are four jurisdictional streams and two jurisdictional wetlands located on the Lawrenceville Campus. The proposed emergency egress/ingress access road would require constructing a roadway crossing over a jurisdictional stream. Construction associated with parking and driveways for the new Transshipping and Receiving Area and the new Office Support Building A may occur in close proximity to a jurisdictional stream. HHS/CDC will comply with applicable state, federal and local laws, procedures and permits for stream crossing, erosion and sedimentation control and construction including but not limited to Section 404 of the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) General Permit, the Georgia Erosion and Sedimentation Act (Act), O.C.G.A. 12-7, and the Gwinnett County Stream Buffer Protection Ordinance.

Implementation of the Build Alternative would result in an increase in impervious surfaces on the campus. Stormwater control measures would be implemented on site to manage stormwater runoff and improve water quality in accordance with Gwinnett County and State of Georgia regulations and Section 438 of the Emergency Independence and Security Act (EISA) of 2007. Current stormwater control measures proposed include the use of pervious surfaces for the proposed new secondary access road. A pervious four-inch stone base or native vegetation would be installed under the solar array. An infiltration trench is also proposed along the eastern and northern edge of the solar array to capture stormwater runoff and allow infiltration into the surrounding soils. Additional stormwater management would be developed during final design and may include the use of green infrastructure/low impact development practices such as bioretention, bioswales, green roofs, revegetation, enhancement of riparian buffers, as well as detention facilities to control stormwater during large storm events.

Urban Design and Visual Resources. The new emergency egress/ingress point, the visitor parking area, Transshipping and Receiving Area and the photovoltaic system would be the most publicly visible changes to the campus landscape, as these would be located closer to the perimeter of the campus and Webb Gin House Road.

In order to obstruct visibility of the photovoltaic system from the surrounding residential land uses and from Webb Gin House Road, a perimeter screening buffer will be installed consisting of evergreen trees and/or native vegetation. The buffer would be planted along the east, west and north sides of the installation. The solar panels would stand approximately five to six feet tall at maximum height. The screening will be maintained at a height of five to six feet to ensure coverage of the solar array. Potential glare impacts are not anticipated as the solar array would be angled south and away from Webb Gin House Road and any residential property. In addition the solar array would be obstructed from view by the evergreen buffer.

Construction-Related Impacts. Construction activity would result in temporary air quality and noise impacts. Air quality impacts would be limited to short-term, increased fugitive dust and mobile source emissions that would cease with the conclusion of construction. Increased noise levels would be associated with the operation of construction equipment as well as construction and delivery vehicles traveling to and from the site. Potential noise impacts associated with construction activities would be short-term and of limited duration. The application of best management practices and control measures during construction activities will be employed to minimize short term air quality and noise impacts.

During the construction activities, soil and slope stabilization measures would be implemented to minimize potential erosion and soil movement during construction activities. As campus improvements related to the Build Alternative would involve the disturbance of more than one acre of soil disturbance, a National Pollutant Discharge Elimination System (NPDES) *General Permit for Storm Water Discharges Associated with Construction Activity* would be obtained. A Storm Water Pollution Prevention Plan (SWPPP) would be developed in compliance with the NPDES General Permit and would identify site specific erosion and sediment control practices.

Cultural Resources. Georgia Department of Natural Resources, Historic Preservation Division (GA HPD) determined that the Lawrenceville Campus is eligible for the National Register of Historic Places (NRHP). Based on HPD's recommendation, the CDC reassessed the Lawrenceville Campus as a NRHP-eligible historic district and concurs with GA HPD's determination that Lawrenceville Campus is eligible for listing on the NRHP. CDC is currently consulting with GA HPD to establish contributing and non-contributing resources to the district and to establish a NRHP boundary. Upon consensus between CDC and GA HPD

regarding the NRHP boundary, CDC will move forward to develop a programmatic agreement on the treatment of the historic property on the Lawrenceville Campus that addresses the need for CDC to develop its scientific facilities while honoring its legacy. Any future redevelopment of the Lawrenceville Campus would be undertaken in accordance with the stipulation of the programmatic agreement. CDC will continue to consult with GA HPD to ensure any future undertaking as the Lawrenceville Campus would comply with Section 106 of the National Historic Preservation Act of 1966.

NEPA

HHS/CDC has prepared this revised EA for proposed improvements on the HHS/CDC's Lawrenceville Campus in compliance with guidelines set forth in NEPA National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. §4321 et seq.), CEQ's implementing regulations (40 CFR §1500-1508) and the HHS GAM Part 30 Environmental Protection, dated February 25, 2000. The major objectives of NEPA are to ensure the careful consideration of environmental effects of proposed actions in the federal decision making process and to disclose the information to the public before decisions are made.

On February 16, 2016, HHS/CDC published a Notice of Availability (NOA) for the Final Environmental Assessment (2016 Final EA) and Finding of No Significant Impact (FONSI). Since the completion of the 2016 Final EA and FONSI, HHS/CDC proposed changes to the Proposed Action to include the installation of the photovoltaic system. HHS/CDC revised the EA in order to evaluate the potential environmental impacts associated with the new photovoltaic system. On September 22, 2017 HHS/CDC published a NOA in the Federal Register announcing the availability of the revised EA and requested public comment. Copies of the revised EA were made available at the following locations: Gwinnett County Public Library, Lawrenceville Branch, 1001 Lawrenceville Hwy, Lawrenceville, GA 30046, Gwinnett County Public Library, Five Forks Branch, 2780 Five Forks Trickum Road, Lawrenceville, GA 30044-5865, and Gwinnett County Public Library, Grayson Branch, 700 Grayson Parkway Grayson, GA 30017-1208. The revised EA was available electronically for review and comment at Federal eRulemaking Portal: <http://www.regulations.gov>, identified by Docket No. CDC -2017-0019. The comment period ended on October 23, 2017. At the end of the public review period, one comment was received regarding the revised EA.

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1 Introduction, Purpose and Need

1.1 Introduction

The Centers for Disease Control and Prevention (CDC), an Operating Division (OPDIV) of the Department of Health and Human Services (HHS) has prepared a revised Environmental Assessment (EA) to assess the potential impacts associated with the undertaking of proposed improvements on the HHS/CDC's Lawrenceville Campus located at 602 Webb Gin House Road in Lawrenceville, Georgia. In February 2016, HHS/CDC completed a Final Environmental Assessment and issued a Finding of No Significant Impact (FONSI) for HHS/CDC's Lawrenceville Campus Proposed Improvements 2015-2025. Changes to the Proposed Action necessitated the preparation of a revised EA. HHS/CDC has revised the EA to include the installation of a photovoltaic system within the northern portion of the campus. The proposed improvements evaluated in this revised EA entail building demolition and new building construction, including an approximately 12,000 gross square feet (gsf) Science Support Building, a new Transshipping and Receiving Area at approximately 2,500 gsf, and two new small Office Support Buildings at approximately 8,000 gsf and 6,000 gsf, as well as expansion and relocation of parking on campus, the creation of an additional point of access to the campus and the installation of a photovoltaic system. The HHS/CDC has prepared this EA in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. §4321 et seq.), the Council on Environmental Quality (CEQ) implementing regulations (40 CFR §1500-1508) and the HHS General Administration Manual (GAM) Part 30 Environmental Protection, dated February 25, 2000.

HHS/CDC is dedicated to protecting health and promoting quality of life through the prevention and control of disease, injury, and disability. HHS/CDC is recognized as the lead Federal agency for protecting the health and safety of people, providing credible information to enhance health decisions, and promoting health through strong partnerships. HHS/CDC protects communities by controlling disease outbreaks; ensuring food and water are safe; preventing leading causes of death such as heart disease, cancer, stroke, and diabetes; and, working globally to reduce health threats. The Lawrenceville Campus primarily accommodates components of the Office of Infectious Disease (OID) and the Office of Public Health Scientific Services (OPHSS), as well as components of the Office of Safety, Security, and Asset Management (OSSAM).

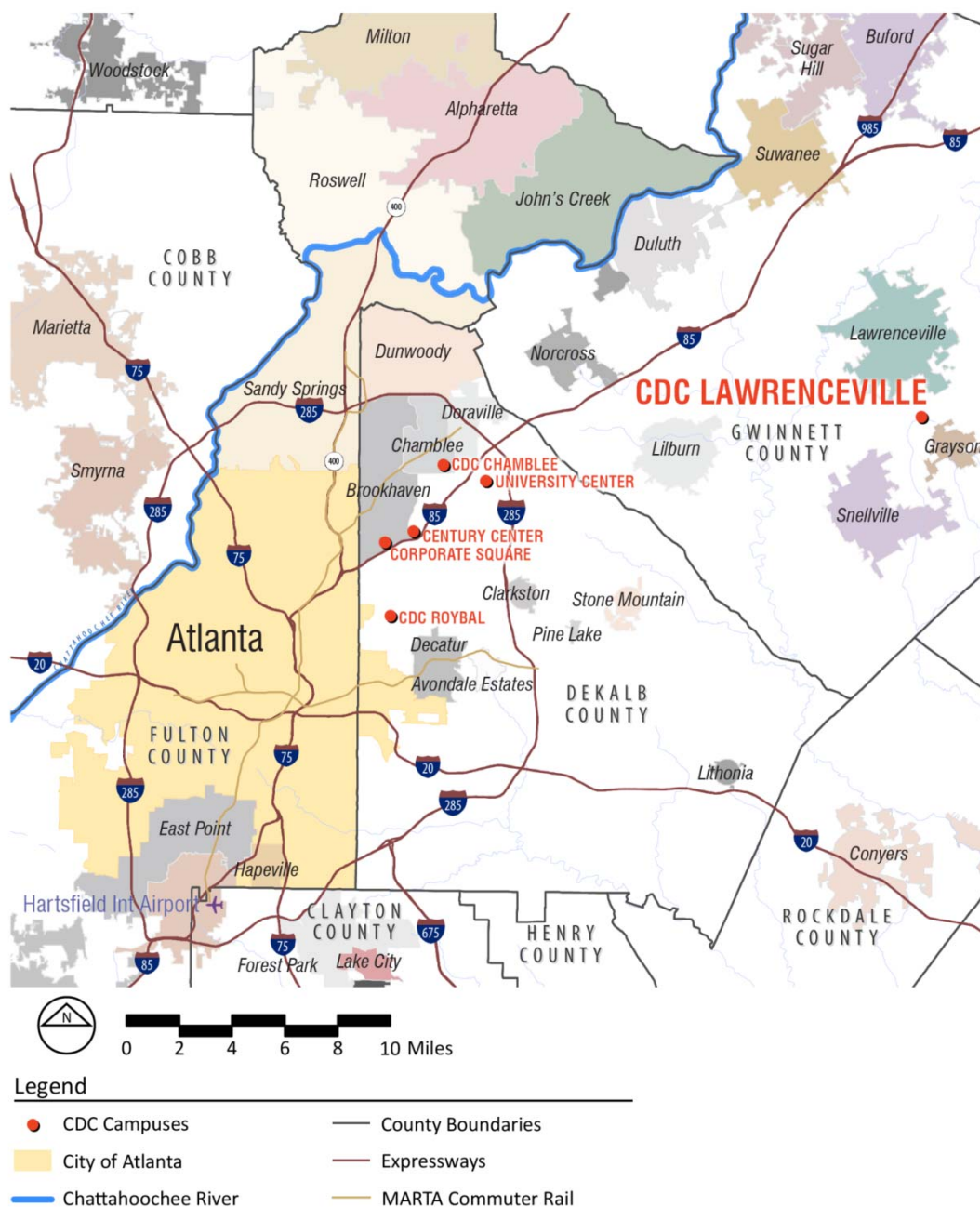
The Lawrenceville Campus is situated on 80.64 acres within unincorporated Gwinnett County (Refer to Figure 1: Project Vicinity). The Lawrenceville Campus is located off of Webb Gin House Road, west of Grayson Highway/State Route 20, east of Scenic Highway/State Route 124, and approximately three miles south of downtown Lawrenceville. The property was developed in the early 1960's as a rabies laboratory, breeding, and animal holding facility in what was originally a rural area in Gwinnett County. Currently, the area is mostly suburban, with residential developments surrounding the campus. Refer to Figure 2: Project Location and Study Area for the location of the Lawrenceville Campus.

1.2 Purpose and Need of the Proposed Action

HHS/CDC's mission is to serve as the national focus for developing and applying disease prevention and control, environmental health, and health promotion and health education activities designed to improve the health of the people of the United States.

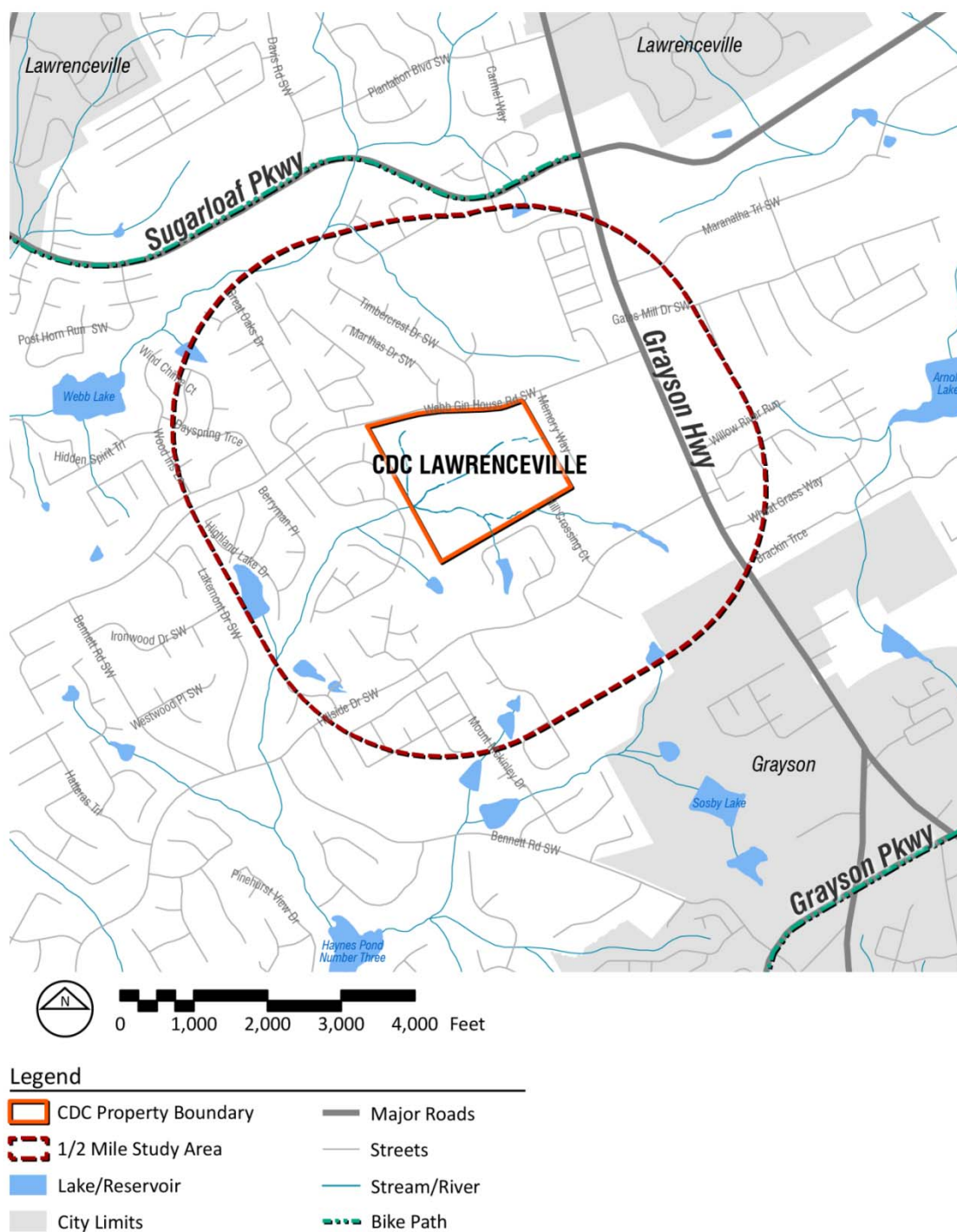
To accomplish its mission, HHS/CDC identifies and defines preventable health problems and maintains active surveillance of diseases through epidemiologic and laboratory investigations and data collection,

Figure 1: Project Vicinity



Sources: Atlanta Regional Commission

Figure 2: Project Location and Study Area



Sources: Atlanta Regional Commission

analysis and distribution. HHS/CDC is the U.S. Public Health Service's (PHS) lead agency in developing and implementing programs relating to environmental health problems and conducts operational research aimed at developing and testing effective disease prevention, control, and health promotion. It administers a national program to develop recommended occupational safety and health standards and to conduct research, training, and technical assistance to assure safe and healthful working conditions for every working person; develops and implements a program to sustain a strong national workforce in disease prevention and control; and conducts a national program for improving the performance of clinical laboratories. HHS/CDC is responsible for controlling the introduction and spread of infectious diseases, and provides consultation and assistance to other nations and international agencies to help them improve their disease prevention and control, environmental health, and health promotion activities.

The Lawrenceville Campus, developed in the 1960's, was originally used as a rabies laboratory, breeding, and animal holding facility. Today the campus provides office support space, laboratory, laboratory support space, and animal holding for research and support staff. Since the original construction of the campus in the early 1960's, only minor changes to the Lawrenceville Campus have occurred, which have primarily focused on repairs or renovations to existing buildings. A collaborative and integrated planning process was undertaken by HHS/CDC staff in order to assess existing conditions on the Lawrenceville Campus and to identify any potential growth or shifts in program space use, based on long term scientific mission support and operational requirements.

The planning process identified the need for the proposed improvements on the campus including the new Science Support Building, new Office Support Buildings, the new Transshipping and Receiving Area, additional parking and sidewalk improvements, a secondary point of access for the campus to provide emergency egress/ingress and the installation of a photovoltaic system.

The proposed improvements are needed in order to maintain an appropriate facilities quality level on the Lawrenceville Campus, in support of current program requirements. This includes the need for new research support and office support space to replace existing obsolete structures, expanded research support and office support space, and a new transshipping and receiving area to improve the movement of visitors and goods through the campus. Relocation and expansion of parking is needed to satisfy a current shortfall of parking during special events and to comply with security requirements. A secondary point of access to the campus would be developed in order to provide for an emergency egress and ingress for the campus and improvements to pedestrian infrastructure would provide a safer, pedestrian environment. The installation of a photovoltaic system would provide the Lawrenceville Campus with a renewable energy source in order to comply with federal renewable energy mandates.

1.3 NEPA

The National Environmental Policy Act (NEPA) of 1969 establishes national policy for the protection of the environment. In 1978, the Council on Environmental Quality (CEQ) issued *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act* (40 CFR § 1500-1508) to assist federal agencies in complying with the provisions of NEPA. The major objectives of NEPA are to ensure the careful consideration of environmental effects of proposed actions in the federal decision making process and to disclose the information to the public. Furthermore, NEPA procedures require federal agencies to evaluate reasonable alternatives that would avoid or minimize adverse impacts prior to making a decision and before proceeding with the action. The principal objectives of NEPA are to

ensure the careful consideration of environmental aspect of proposed action in the federal decision-making processes and to make information available to decision makers and the public before decisions are made and actions are taken.

On February 16, 2016 HHS/CDC published a Notice of Availability for the Final Environmental Assessment (2016 Final EA) and Finding of No Significant Impact (FONSI). Since the completion of the 2016 Final EA and FONSI, HHS/CDC proposed changes to the Proposed Action to include the installation of the photovoltaic system. HHS/CDC revised the EA in order to evaluate the potential environmental impacts associated with the new photovoltaic system. On September 22, 2017 HHS/CDC published a NOA in the Federal Register announcing the availability of the revised EA and requested public comment. Copies of the revised EA were made available at the following locations: Gwinnett County Public Library, Lawrenceville Branch, 1001 Lawrenceville Hwy, Lawrenceville, GA 30046, Gwinnett County Public Library, Five Forks Branch, 2780 Five Forks Trickum Road, Lawrenceville, GA 30044-5865, and Gwinnett County Public Library, Grayson Branch, 700 Grayson Parkway Grayson, GA 30017-1208. The revised EA was available electronically for review and comment at Federal eRulemaking Portal: <http://www.regulations.gov>, identified by Docket No. CDC -2017-0019. The comment period ended on October 23, 2017. At the end of the public review period, one comment was received regarding the revised EA. The public comment and CDC's response are included in Appendix A.

2 Alternatives

The following section describes the alternatives evaluated by the HHS/CDC to implement the Proposed Action.

2.1 No Build Alternative

The No Build Alternative serves as a baseline, which allows decision makers to compare the environmental consequences of continuing to operate under current conditions against the consequences of the Build Alternative. The No Build Alternative represents the continued operation of the existing facilities at the Lawrenceville Campus without any new construction or any major renovations or infrastructure upgrades over the ten-year planning period from 2015 to 2025 (Refer to Figure 3: Existing Lawrenceville Campus).

2.2 Build Alternative (Proposed Action)

The Build Alternative consists of proposed improvements to the Lawrenceville Campus which entail building demolition and new building construction, including an approximately 12,000 gsf Science Support Building, a new Transshipping and Receiving Area at approximately 2,500 gsf, two new Office Support Buildings at 8,000 gsf and 6,000 gsf, expansion and relocation of parking on campus, creation of a secondary campus point of access for emergency egress/ingress and pedestrian improvements and installation of a photovoltaic system (Refer to Figure 4: Build Alternative). The employee population is anticipated to increase by 26 full time employees for a total of 57 employees on the campus by 2025. The HHS/CDC currently houses a variety of animal species on campus. Although the variety of animal species on campus may change in the 2015 to 2025 planning period, the level of activity is anticipated to remain at similar levels. The Build Alternative improvements took into consideration Federal regulations in which the HHS/CDC must be compliant and address areas of safety, security, and sustainability, as well as infrastructure reliability, aesthetic continuity, cost effectiveness/best values, productivity, accessibility, health and wellness. The various improvements associated with the Build Alternative are described below:

Science Support Building Construction. A new approximately 12,000 gsf Science Support Building is proposed to replace an existing 3,421 gsf older research support building. The new building would replace an aging structure that has surpassed its operational life span. The new building would also consolidate functions currently housed in two existing separate buildings. The new Science Support Building would serve as a research support area. The new building would be constructed approximately 250 feet south of the existing science support building on what is currently existing pasture land. The existing 3,421 gsf building would be demolished.

New Transshipping and Receiving Area Construction. The HHS/CDC is proposing to construct an approximately 2,500 gsf new Transshipping and Receiving Area. The building would serve as the new shipping and receiving facility as well as a visitor receiving area for the campus.

Figure 3: Existing Lawrenceville Campus



Legend

- | | |
|---|---|
|  Buildings |  CDC Property Boundary |
| |  Roadways |

Figure 4: Build Alternative



New Office Support Building A Construction. A new approximately 6,000 gsf Office Support Building is proposed to replace two existing obsolete office support buildings (1,426 gsf and 1,426 gsf respectively) that would be demolished. The new Office Support Building A would provide office and support space and would be constructed on an existing parking lot.

New Office Support Building B Construction. A new approximately 8,000 gsf Office Support Building is proposed. The new Office Support Building B would provide office support space for the campus.

Parking Expansion and Relocation. A net increase of approximately 81 new parking spaces is proposed as part of the Build Alternative. A new 20-space, paved visitor parking lot would be constructed north of the Transshipping and Receiving Area outside the secure fenced perimeter. The new visitor parking lot will accommodate daily visitors to the campus as well as visitors during special events.

A new 139-space, paved employee parking lot would be constructed along the eastern edge of the campus for added parking capacity during temporary surges in campus population and enhanced security. The parking lot would be accessed by the existing main entry drive from Webb Gin House Road. The new parking area would relocate the existing parking spaces on campus and would provide additional spaces for special events parking. The existing parking areas would be demolished.

New Emergency Ingress/Egress Campus Entrance. A new campus entry point would be constructed off of Webb Gin House Road, forming an intersection with Timbercrest Drive. A new internal campus roadway would be constructed on current pasture land and would link the new entry point to the main campus core. The new access point would provide an alternate means of egress/ingress in the event of an emergency evacuation or should the main entrance be blocked.

ABA-Compliant Sidewalk Connectivity. Sidewalks would be constructed to connect newly developed and modified areas of the campus to the existing main campus core area. All sidewalks would be Architectural Barriers Act (ABA) compliant, measuring approximately 6-feet in width, and span roadway crossings with appropriate curb-cuts, pavement markings, and signage. In addition, shade trees and seating areas will complement the expanded pedestrian network.

New Photovoltaic System. A photovoltaic system consisting of a 249.9-kilowatt (KW) ground-mounted solar array would be constructed on current pasture land. The solar array would consist of approximately 748 modules covering an area of approximately 41,750 sf (0.99 acre), nine inverters, and a pad mounter transformer. A new chain link fence would surround the perimeter of the system along with a screening buffer. The screening buffer would consist of evergreen trees and/or native vegetation and surround the solar array on three sides. The power generated would tie into the existing campus distribution system.

2.3 Alternatives Considered

The HHS/CDC undertook an extensive planning process to develop the proposed improvements identified under the Build Alternative. Development of the Build Alternative components took into account safety, security, and sustainability requirements, as well as the constraints of the Lawrenceville Campus. The planning process included an analysis of existing natural features, man-made structures, setbacks and local zoning requirements to develop alternatives to meet HHS/CDC program needs. The

following alternatives were considered by the HHS/CDC but were not carried forward for further analysis:

- In order to provide a secondary point of access for emergency ingress/egress, the HHS/CDC considered several siting options for the roadway including utilizing the existing perimeter road and various alignments from Webb Gin House Road. The existing perimeter roadway did not provide the most effective emergency ingress/egress option for the campus due to the presence of the adjacent fence lines and trees. A new roadway through the northern pasture fields provided the most direct and obstacle free secondary access to the campus. The proposed roadway alignment utilizes the existing stream crossing and minimizes impacts to the riparian vegetation. Other roadway alignments would have resulted in greater impacts to the existing stream and greater disturbance to woodland areas.
- HHS/CDC considered several options for the location of the Science Support Building within the campus, including the current location of science support building and in the northern portion of the campus core. The proposed location of the Science Support Building provides the most efficient access for vehicle loading and unloading.
- HHS/CDC considered several alternatives for employee parking including maintaining the current parking lots and constructing new employee parking in the northern edge of the campus. Maintaining the existing parking does not comply with security guidelines and setback standards. Locating the employee parking in the northern edge of the campus would have resulted in additional loss of pasture lands and would be located a significant distance from the campus core.
- HHS/CDC considered several locations for the photovoltaic system within the campus. The proposed location avoids impact to existing streams, stream buffers and riparian vegetation.

3 Affected Environment & Environmental Consequences

This section describes the environmental, social and economic resources within the Study Area and the potential impacts resulting from the No Build Alternative and the Build Alternative on these resources. The Study Area for the EA consists of a one-half mile boundary around the Lawrenceville Campus border. The existing conditions for each resource category are detailed. The potential impacts of the Build Alternative are then evaluated against these existing baseline conditions.

3.1 Socioeconomics

Existing Conditions

Population/Housing

The Lawrenceville Campus is located in unincorporated Gwinnett County, Georgia. The campus lies within Census Tracts 505.43, 507.24, and 507.27. In order to obtain the most accurate estimate of Study Area populations and households, the population distribution across each census tract was assumed to be uniform. Each census tract was then clipped to the borders of the Study Area. The percentage of land area of each census tract was then used to calculate the population within each census tract. These numbers were then aggregated into the Study Area population and housing figures.

The total population within the Study Area as identified by the 2010 US Census was 3,743, as shown in Table 1: Population. The population of the Study Area increased by approximately 155 percent between 2000 and 2010. Gwinnett County, the Atlanta region, and Georgia have experienced strong growth rates in the last decade, although to a much lesser degree than the Study Area. This population growth was fueled by the rapid suburban development of the area around the campus. Gwinnett County, as a whole, experienced a similar growth in suburban development.

Table 1: Population

	Georgia	Atlanta MSA*	Gwinnett County	Study Area
2010	9,687,653	5,268,860	805,321	3,743
2000	8,186,453	4,247,981	588,448	1,468
% Change	18.3%	24.0%	36.9%	155.0%
Source: 2000 US Census and 2010 US Census				
*The 2010 28-county Atlanta Metropolitan Statistical Area (MSA) is used for both 2010 and 2000 population figures				

As shown in Table 2: Household Data, there were approximately 1,013 households in the Study Area with an average household size of 3.05 persons. The average household size of the Study Area is larger than Gwinnett County (2.98), the Atlanta MSA (2.68), and the State of Georgia (2.63), respectively.

Table 2: Household Data

	Households	Average Household Size
Study Area	1,013	3.05
Gwinnett County	268,519	2.98
Atlanta MSA	1,937,225	2.68
Georgia	3,585,584	2.63
Source: 2010 US Census		

As shown in Table 3: Housing Characteristics, there were 1,100 housing units within the Study Area with an occupancy rate of approximately 92.1 percent. This rate was the same as the countywide (92.1 percent) rate. This rate was also slightly higher than both the Atlanta MSA (89.5 percent) and statewide (87.7 percent) occupancy rates. Approximately 75.7 percent of the total housing inventory within the Study Area is owner occupied. The prevalence of owner occupied housing is consistent with the suburban nature of the Study Area, which consists primarily of single family homes.

The median house value of \$208,333 within the Study Area was somewhat higher than the median values of homes in the county (\$190,100) and the region (\$193,175). The gross median rent of \$1,332 within the Study Area was considerably higher than that of the county (\$980), region (\$936), and state (\$835), respectively.

Table 3: Housing Characteristics

	Total Housing Units	Occupied Units	Occupancy Rate	Owner Occupied	Median House Value	Median Gross Monthly Rent
Study Area	1,100	1,013	92.1%	833	\$208,333	\$1,332
Gwinnett County	291,547	268,519	92.1%	189,167	\$190,100	\$980
Atlanta MSA	2,165,495	1,937,225	89.5%	1,279,941	\$193,175	\$936
Georgia	4,088,801	3,585,584	87.7%	2,354,402	\$160,200	\$835
Source: 2010 US Census and 2011 ACS 5-Year Estimates						

Environmental Justice

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” signed on February 11, 1994, requires that federal agencies, to the greatest extent allowed by law, administer and implement programs, policies, and activities that affect human health or the environment so as to identify and avoid “disproportionately high and adverse” effects on minority and low-income populations. Additionally, Title VI of the Civil Rights Act of 1964 and related statutes assure that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination on the basis of race, age, color, national origin, sex, disability, or religion as part of any federally-funded program.

The fundamental principles related to Environmental Justice (EJ), as defined by the federal government, are as follows:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations
- To ensure the full and fair public participation by all potentially affected in the project decision-making process
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations

Existing Minority Populations. The President’s Council on Environmental Quality (CEQ) Environmental Justice Guidelines under the National Environmental Policy Act, suggest that areas with a high concentration of minority populations may be present in areas where the minority population exceeds 50 percent or where the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population. EJ guidelines define a minority individual as African American, Asian American, American Indian and Alaskan Native, and Native Hawaiian or Other Pacific Islander and Hispanic. It is important to note that the US Census Bureau defines Hispanic as an ethnic rather than racial characteristic. As such, people who identify as Hispanic may belong to any racial group.

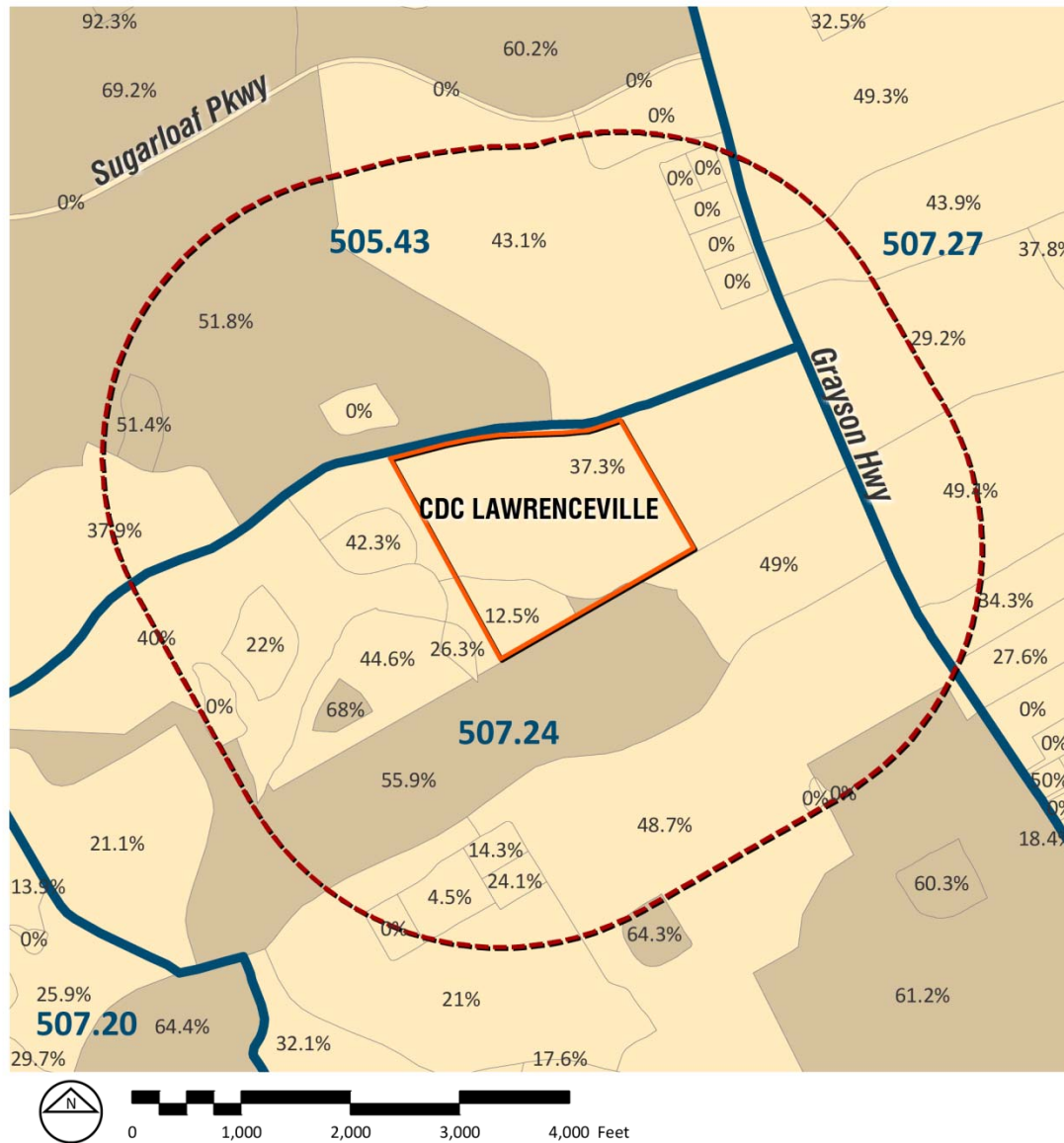
As shown in Table 4: Race and Ethnic Composition, non-Hispanic Caucasians comprise 55.0 percent of the Study Area. The minority population of the Study Area was approximately 45.0 percent, with 27.8 percent identifying themselves as African American. The Hispanic population makes up nearly 8 percent of the total population with 6.8 percent of the population identifying themselves as Asian. The Study Area exhibits a lower minority population (45.0 percent) than the county (56.0 percent) and the region (49.3 percent).

The minority population of the entire Study Area at 45.0 percent does not exceed CEQ’s 50 percent minority population as a whole. However, US Census data was evaluated in further detail at the block level to identify any localized areas of minority populations within the Study Area. As shown in Figure 5: Minority Populations, two census blocks within the Study Area exhibit minority populations greater than 50 percent. These areas qualify as a minority population of concern for the purposes of the EJ analysis. Due to the presence of an EJ population, the EA must evaluate whether these areas of high minority populations would experience disproportionately greater impacts in comparison with other populations.

Table 4: Race and Ethnic Composition

	Georgia	Atlanta MSA	Gwinnett County	Study Area
Total Population	9,687,653	5,268,860	805,321	3,743
Caucasian*	5,413,920 (55.9%)	2,671,757 (50.7%)	354,316 (44.0%)	2,058 (55.0%)
African American*	2,910,800 (30.0%)	1,679,979 (31.9%)	184,122 (22.9%)	1,042 (27.8%)
Asian*	311,692 (3.2%)	252,510 (4.8%)	84,763 (10.5%)	256 (6.8%)
Other*	197,552 (2.0%)	117,214 (2.2%)	20,085 (2.5%)	90 (2.4%)
Hispanic	853,689 (8.8%)	547,400 (10.4%)	162,035 (20.1%)	297 (7.9%)
Total Minority	4,273,733 (44.1%)	2,597,103 (49.3%)	451,005 (56.0%)	1,685 (45.0%)
Source: 2010 US Census				
* Population totals shown are for non-Hispanic populations				

Figure 5: Minority Populations



Legend

- | | |
|------------------------------|---|
| CDC Property Boundary | Census Blocks (2010) Minority Population >50% |
| 1/2 Mile Study Area Boundary | Census Blocks (2010) Minority Population <50% |
| Census Tracts (2010) | |

Sources: US Census Bureau; Atlanta Regional Commission

Low-Income Populations. Low-income populations were identified using economic and statistical income/poverty data from the US Census Bureau's American Community Survey. The 2013 Department of Health and Human Services (HHS) poverty threshold of \$23,550 for a family of four was utilized to establish a guideline for low-income households.¹ Low-income populations were identified by examining the percentage of families living below the US Census poverty level for each census tract within the Study Area. These percentages were compared against Gwinnett County, Atlanta MSA, and statewide averages.

As shown in Table 5: Employment/Income/Occupation, the percentage of families living below the poverty level within the Study Area is approximately 5.6 percent. This is markedly lower than the county, region, and state percentages of 9.6 percent, 10.4 percent, and 12.6 percent, respectively. The median household income of the Study Area ranges between \$66,512 and \$88,286, and is well above the HHS poverty threshold for 2013. As a result, the Study Area does not qualify as a low income population that would be subject to an Environmental Justice analysis.

Economy/Employment/Income

Unemployment Rate. As identified in Table 5: Employment/Income/Occupation, the unemployment rate for the Study Area is 6 percent. The Study Area has a significantly lower unemployment rate when compared with the county (9.2 percent), region (10.1 percent), and state (9.9 percent). The per capita income for the Study Area at \$31,992 is marginally higher than that of the county (\$26,712), region (\$29,051), and the state (\$25,383).

Occupation of Residents. The primary occupation of the Study Area's residents is in the Management, Business, Science, and Arts sectors with approximately 41.4 percent of the residents employed in this field, followed by the Sales and Office Occupations (26.1 percent), Service (13.7 percent), and Production, Transportation, and Material Moving (10.0 percent). As show in Figure 6: Occupation of Residents and Table 5: Employment/Income/Occupation, the occupational makeup of the Study Area resembles that of the county, region, and state.

¹ US Department of Health and Human Services. *2013 Poverty Guidelines*.
<http://aspe.hhs.gov/poverty/13poverty.cfm#thresholds> (Accessed on October 22, 2013).

Figure 6: Occupation of Residents

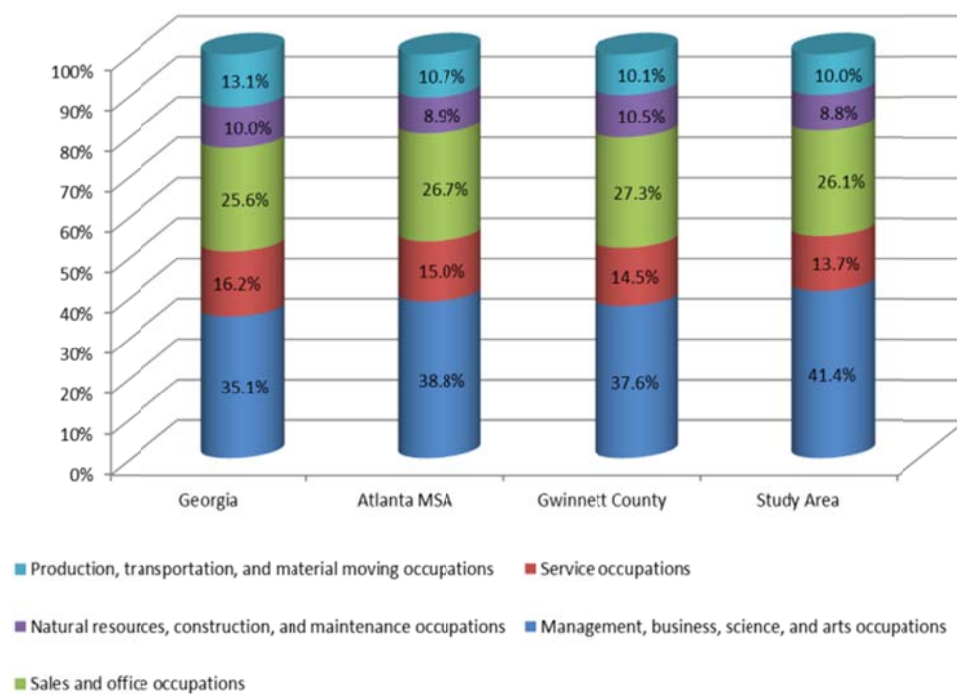


Table 5: Employment/Income/Occupation

	Georgia	Atlanta MSA	Gwinnett County	Study Area
Employment				
Civilian Labor Force	4,758,240	2,768,396	426,209	1,605
Employed	4,288,924	2,488,056	387,109	1,508
Unemployed	469,316	280,340	39,100	97
Unemployment Rate	9.9%	10.1%	9.2%	6.0%
Income				
Median Household Income	\$49,736	\$57,783	\$63,076	\$66,512 - \$88,286
Median Family Income	\$59,262	\$67,819	\$70,258	\$82,560 - \$94,844
Per Capita Income	\$25,383	\$29,051	\$26,712	\$31,992
Families Below Poverty Level (%)	12.6%	10.4%	9.6%	5.6%
Occupation of Residents				
Management, business, science, and arts occupations	1,503,863 (35.1%)	965,089 (38.8%)	145,703 (37.6%)	624 (41.4%)
Service occupations	693,740 (16.2%)	372,069 (15.0%)	56,206 (14.5%)	206 (13.7%)
Sales and office occupations	1,099,346 (25.6%)	664,239 (26.7%)	105,726 (27.3%)	394 (26.1%)
Natural resources, construction, and maintenance occupations	430,635 (10.0%)	220,807 (8.9%)	40,488 (10.5%)	133 (8.8%)
Production, transportation, and material moving occupations	561,340 (13.1%)	265,852 (10.7%)	38,986 (10.1%)	151 (10%)
Source: 2011 American Community Survey, 5-Year Estimates				

No Build Alternative

Under the No Build Alternative, population and housing conditions would continue to change in accordance with dynamics of existing economic and social forces in the Study Area and region. There would be no substantial changes to the Lawrenceville Campus or its use, in addition staffing at the Lawrenceville Campus is anticipated to remain at similar levels. As a result, the introduction of a new non-residential population is not anticipated. Under the No Build Alternative, no new construction, major renovations, or infrastructure improvements would occur on campus, as a result there would be no influx of capital to the local and regional economy resulting from campus improvements.

Build Alternative

The Build Alternative would not result in the displacement of residents, businesses, or employees. The Build Alternative would result in an increase in the full time employee population of the campus from 31 employees to 57 employees. Although the Build Alternative would increase the campus population by

26 new employees, this new increase is not anticipated to adversely impact socioeconomic characteristics within the Study Area.

The Build Alternative would entail improvements within a self-contained campus setting and would not induce changes to real estate conditions or cause harm to any businesses within the Study Area. Minimal short-term benefits to Gwinnett County and the Atlanta metropolitan region would occur during the construction phase of the project in the form of increased demand for local materials, services, and labor. The extent of short-term benefits related to construction depends on the magnitude of expenditures and the ability of local suppliers and the local labor pool to fulfill demand for construction goods and services.

As indicated previously, the Study Area contains minority populations of concern. Areas of minority populations exceeding CEQ's 50 percent threshold levels are found north and south of the Lawrenceville Campus. The potential adverse impacts of the Build Alternative were evaluated to determine whether they would disproportionately affect minority populations in comparison to other populations. The Build Alternative would not result in high or adverse impacts to the surrounding community and therefore would not result in disproportionate impacts on minority populations in comparison to other populations within the Study Area.

3.2 Land Use, Zoning, and Public Policy

Existing Conditions

Land Use

The Lawrenceville Campus is located within unincorporated Gwinnett County, just outside the southern limits of the City of Lawrenceville and the northern limits of the City of Grayson. The Lawrenceville Campus is located approximately 25 miles east of HHS/CDC's Edward R. Roybal Campus and approximately 30 miles northeast of the Atlanta Central Business District. The campus is bordered by Webb Gin House Road to the north and residential subdivisions to the east, south and west. A security fence and gravel service road surround the entire perimeter of the campus and physically separates the campus from the surrounding residential land uses.

The Lawrenceville Campus encompasses approximately 80.64 acres and contains a mix of pasture lands, wooded areas, campus buildings, surface parking and roadways. The developed portion of the campus totals approximately 14 acres and includes 17 buildings, totaling approximately 124,820 gsf and associated parking areas and roadways.² These buildings include office, laboratory and support space for animal science and research are generally grouped within the eastern portion of the campus and represent the science/office core of the campus. The remaining approximately 66.6 acre portion of the campus outside of the science/office core consists of pasture land, wooded areas, and riparian areas.

The land uses surrounding the Lawrenceville Campus are primarily residential and suburban in character (Refer to Figure 7: Land Use). Low-to-medium density, single-family residential subdivisions surround the campus to the west and south, and are also found north of Webb Gin House Road. Low to medium-density, single-family residential and multi-family residential units are found to the east of the campus. When the campus was developed in the early 1960's the surrounding land uses were primarily farm fields, woodlands, and pastures. Most of the surrounding residential development has been constructed since the 1990's. A new residential subdivision is currently under construction at the southern boundary of the campus on Paton Lane.

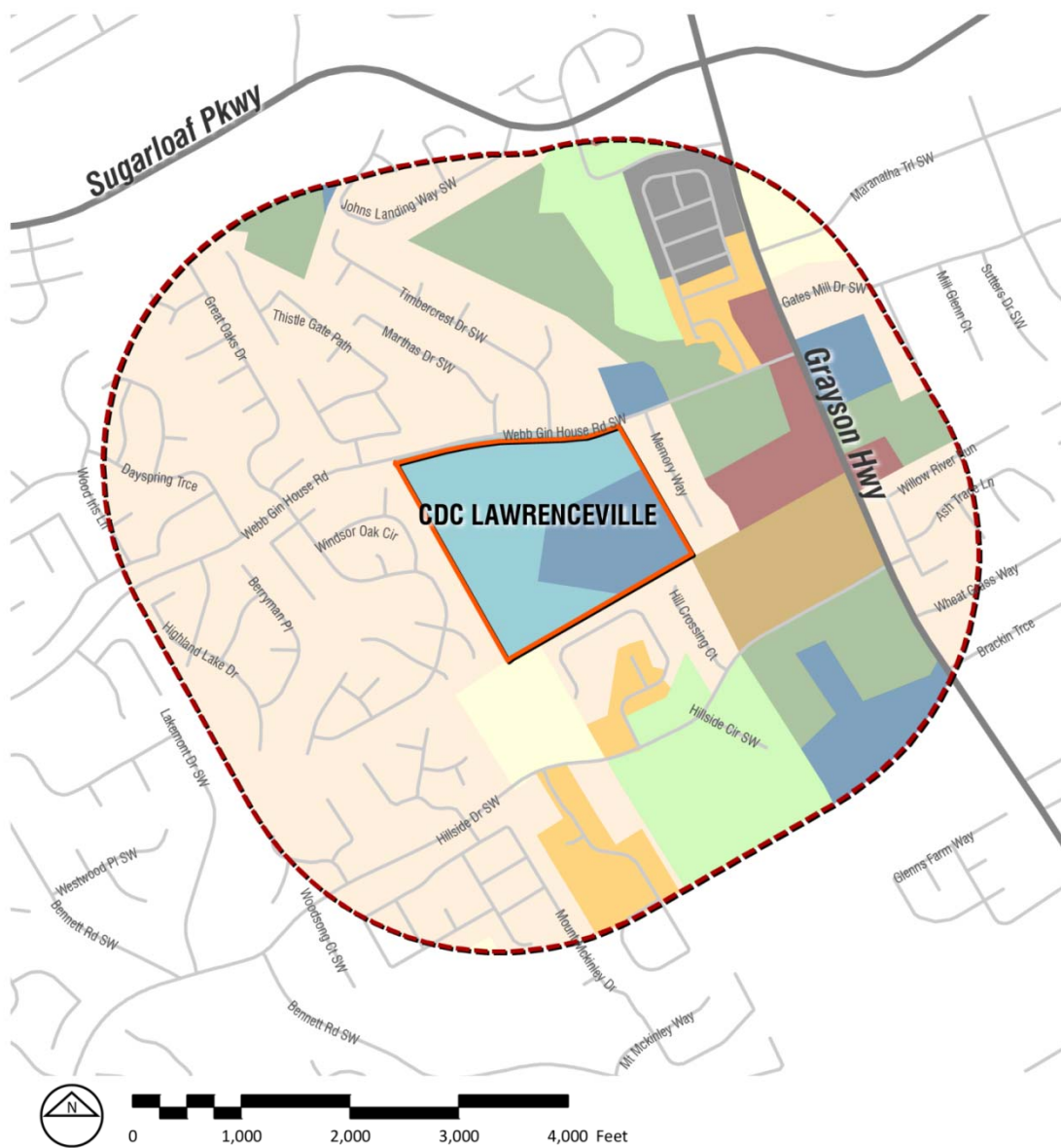
Commercial development is limited within the Study Area and is primarily concentrated along Grayson Highway to the east of the Lawrenceville Campus. This commercial development consists of strip-style retail centers found at the corner of Grayson Highway and Webb Gin House Road and along Grayson Highway. Commercial uses found along Grayson Highway within the Study Area include gas stations, office, barber shop, dry cleaner, retail shops and restaurants. In addition to the Lawrenceville Campus, there are several institutional land uses found within the Study Area, including two Gwinnett County public schools and three religious institutions.

Zoning

The Lawrenceville Campus is exempt from the *Gwinnett County Zoning Resolution* as it is Federally-owned property. As a Federal agency, the HHS/CDC must consider local regulations to the maximum

² CDC. *CDC Lawrenceville Campus 2025 Master Plan (Draft)*.

Figure 7: Land Use



Legend

	CDC Property Boundary		Commercial		Low Density Residential
	1/2 Mile Study Area		Forest		Medium Density Residential
	Major Roads		Agriculture		High Density Residential
	Streets		Institutional/Extensive		Multi-Family Residential
			Institutional/Intensive		Transitional

Sources: Atlanta Regional Commission

extent practicable but is not required to adhere to local zoning requirements.³ As such, the HHS/CDC generally adheres to local zoning requirements to the maximum extent feasible as a guiding principal and as a good neighbor policy. However, in some instances, in order to fit the desired program requirements on a specific site, the HHS/CDC may choose not to comply with local codes and requirements (i.e., building heights). For informational purposes, existing zoning designations for the Lawrenceville Campus and Study Area are described below.

The current zoning for the campus is R-100 Single-Family Residence District (Refer to Figure 8: Zoning). According to the *Gwinnett County Unified Development Ordinance* the R-100 zoning district is intended for single-family residences and related uses, but also permits a number of uses including private schools, raising and keeping of livestock, existing cemeteries and places of worship.⁴ Public building and land uses were permitted as-of-right in the 1985 Gwinnett County Zoning Resolution which was replaced by the Unified Development Ordinance in 2014. The district identified building setbacks from the property lines at 35 feet from a local street or front yard property line or 50 feet from a major thoroughfare, 10 feet from a side yard (1 yard) property line and 40 feet from a rear yard property line.⁵ The maximum height for buildings in the R-100 district is 35 feet, however structures such as water towers, flag poles, smokestacks, transmission towers are exempt from the 35 feet height requirement.

The *Gwinnett County Unified Development Ordinance* requires a minimum of 1 parking space per 1,000 square feet for a laboratory/scientific research center or 118 parking spaces for the Lawrenceville Campus.⁶ There are currently 78 parking spaces on campus. With the exception of the parking requirement, the Lawrenceville Campus generally complies with existing zoning requirements of the R-100, Single-Family Residence District. Public buildings and land uses were permitted as-of-right per the 1985 Zoning Resolution and the campus complies with building setback requirements and height requirements for the R-100 zoning district. The *Gwinnett County Unified Development Ordinance Design Guidelines* requires solar panels, and other appurtenances that are ground or roof mounted to be screened from public view.⁷

The majority of the Study Area is zoned residential, specifically the R-100 Single-Family Residence District, which immediately surrounds the campus to the north, east and west. Zoning districts immediately to the south of the campus include the R-100 CSO Conservation Single-Family Residence

³ Title 40, Chapter 12, § 619(b) of the United States Code. In carrying out its federal functions, neither the United States nor its agencies are subject to state or local regulations absent a clear statutory waiver to the contrary. This concept is based upon the Supremacy Clause of the U.S. Constitution which states, in part, that it and the laws of the U.S. are the supreme law of the land. (U.S. Constitution, Article VI, cl.2.)

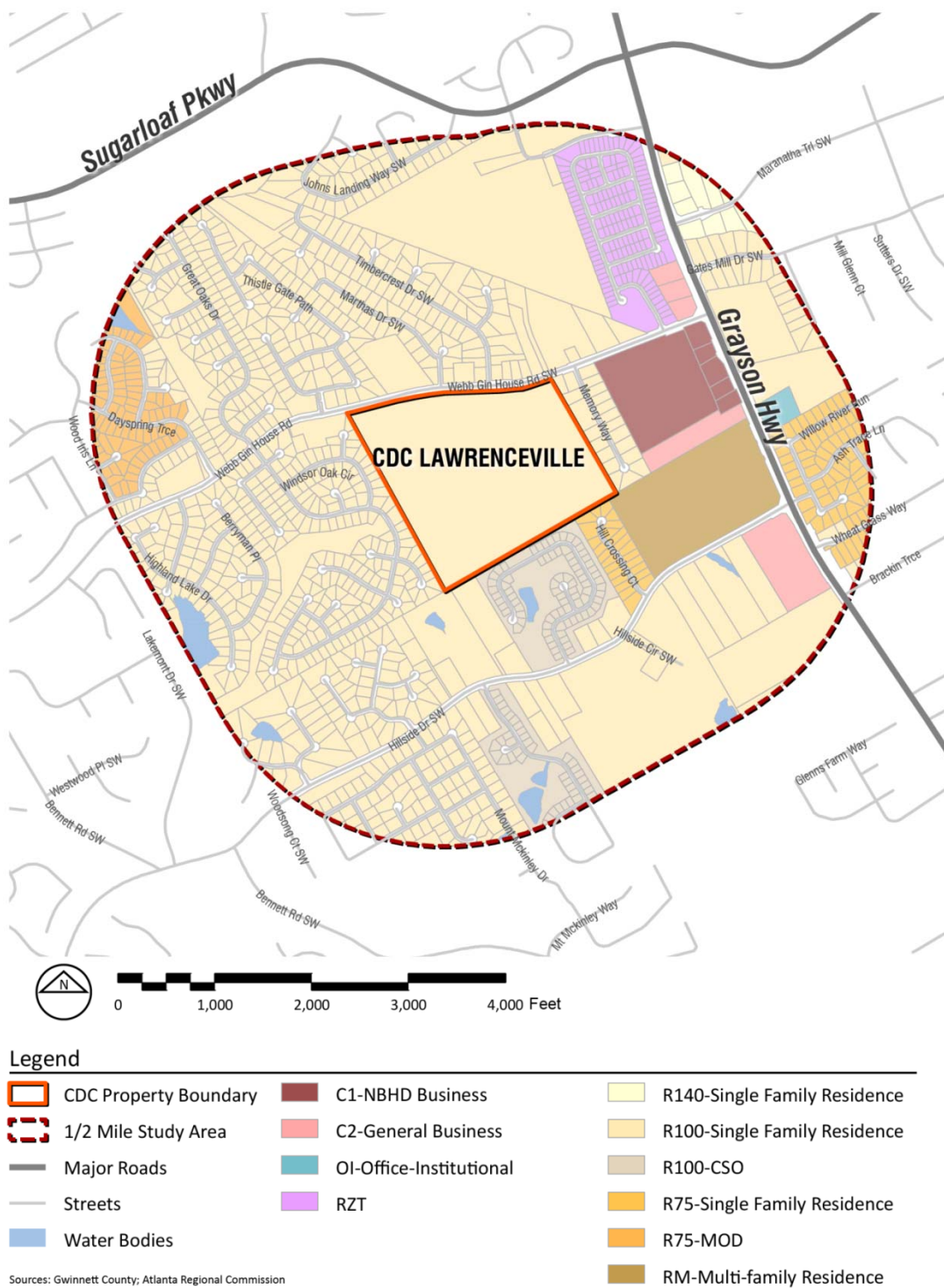
⁴ Gwinnett County Department of Planning and Development. *Gwinnett County Unified Development Ordinance Updated October 2016*. Chapter 210. Section 210-30. https://www.gwinnettcountry.com/static/departments/planning/unified_development_ordinance/pdf/unified_development_ordinance.pdf

⁵ Gwinnett County Department of Planning and Development. *Gwinnett County Unified Development Ordinance Updated October 2016*. Chapter 230. Section 230-10. https://www.gwinnettcountry.com/static/departments/planning/unified_development_ordinance/pdf/unified_development_ordinance.pdf Accessed on August 10, 2017).

⁶ Gwinnett County Unified Development Ordinance Updated October 2016. Chapter 240. Section 210-20.3. https://www.gwinnettcountry.com/static/departments/planning/unified_development_ordinance/pdf/unified_development_ordinance.pdf

⁷ Gwinnett County Unified Development Ordinance Updated October 2016. Appendix Section 3.0. https://www.gwinnettcountry.com/static/departments/planning/unified_development_ordinance/pdf/unified_development_ordinance.pdf

Figure 8: Zoning



Overlay, R-75 Single-Family Residence and RM Multi-Family Residence District. Commercial zoning within the Study Area is limited to several properties along Grayson Highway, which are zoned C-1 Neighborhood Business and C-2 General Business.

Public Policy

Atlanta Regional Commission PLAN 2040. The Atlanta Regional Commission (ARC) functions as the regional planning and intergovernmental coordination agency for the greater Atlanta region, a ten-county area inclusive of Gwinnett County as well as the City of Atlanta. ARC offers a variety of planning resources, and programming addressing crucial regional issues ranging from sustainable community initiatives to public outreach. ARC also serves as the federally-designated Metropolitan Planning Organization (MPO) for the 18-county Atlanta Region and is responsible for developing a multi-modal transportation plan that meets all federal guidelines.⁸

ARC's *PLAN 2040*, adopted on July 27, 2011, is a comprehensive long-range blueprint to sustain metro Atlanta's livability through the next thirty years. Objectives of the regional comprehensive plan include: Serving People, Building Community, Enhancing Mobility, Preserving the Environment and Growing the Economy. *PLAN 2040* addresses the built environment, infrastructure, economy and sustainability. The Lawrenceville Campus is located in an area termed the "Innovation Crescent", a 13-county area situated between Athens and metro Atlanta. The Innovation Crescent contains a concentration of businesses and research institutions focusing on the life science industries. Industry sectors include therapeutics, diagnostics, agriculture, environmental, and research and development.⁹

ARC PLAN 2040 Regional Transportation Plan/Transportation Improvement Program. ARC, the MPO for the Atlanta region, is required by the United States Department of Transportation (USDOT) to develop a long-range Regional Transportation Plan (RTP), which helps to guide the prioritization and funding of transportation investments for the region. The RTP, a component of ARC's *PLAN 2040*, examines the region's transportation needs and provides a blueprint to deal with anticipated growth through systems and policies. The RTP provides a comprehensive statement of the regional future transportation needs as identified by local jurisdictions, the state, as well as other stakeholders. It contains strategies aimed at improving mobility and access, and defines both short- and long-term transportation strategies and investments to improve the region's transportation system.¹⁰

The Lawrenceville Campus is situated within an area that has been identified in the RTP as an Established Suburb. Transportation implementation priorities for Established Suburbs include but are not limited to the following:

- Maintain a state of good repair and maintenance of the existing transportation network
- Maintain and expand access to regional transit services, including bus rapid transit (BRT), light rail and heavy rail
- Establish strategies for improved road design, such as establishing minimum connections to existing road networks

⁸ Atlanta Regional Commission. *Transportation Planning*. <http://www.atlantaregional.com/transportation/overview/> (Accessed on October 22, 2013).

⁹ Atlanta Regional Commission. *PLAN 2040 ARC Implementation Program*. p. 24. http://documents.atlantaregional.com/plan2040/docs/lu_plan2040_implementation_program_0711.pdf (Accessed on October 22, 2013).

¹⁰ Atlanta Regional Commission. *PLAN 2040 RTP – Chapter 1: Introduction*. p. 1-5.

- Promote programs that encourage safe walking and biking while reducing traffic congestion such as Safe Routes to School
- Improve sidewalk connectivity along arterials, collectors and local streets throughout Established Suburbs

The Transportation Improvement Plan (TIP) allocates federal funds for use in construction of the highest priority transportation projects in the short term of the RTP (Fiscal Years 2012 through 2017). The TIP must be consistent with the long-range objectives identified in the RTP and must be financially balanced.¹¹ There are not any TIP projects located or extending within or immediately adjacent to the Study Area.

Gwinnett County Comprehensive Transportation Plan (CTP). The CTP is a 25-year long range plan that would provide transportation choices, improved air quality, and coordinated land use in an effort to improve the quality of life of Gwinnett County residents. The CTP documents detail existing travel conditions and projects future transportation conditions within the county. The only improvement that the CTP recommends within the Study Area is the widening of Grayson Highway. The Georgia Department of Transportation has recently completed this improvement.

Gwinnett County 2030 Unified Plan. This document is a comprehensive plan developed by the County to establish county-wide policy to guide future land use and infrastructure decisions. This document provides an inventory of existing land use and development, transportation infrastructure, natural resources, and community services as well as a demographic profile of Gwinnett County. The plan also provides guidance for the future development of the county focusing on quality of life issues, environmental sustainability and smart growth. The Lawrenceville Campus is located in the Existing/Emerging Suburban sector, which promotes open spaces and parks, single family residential development and recreation and conservation type land uses. This sector will consider commercial/retail uses located at intersections which are adequately buffered from surrounding residential uses. The Campus is directly adjacent to the Community and Corridor Mixed Use sector along Grayson Highway which promotes mixed uses, offices, high density residential, public open spaces, institutional uses and commercial/retail.¹²

No Build Alternative

Under the No Build Alternative, no new construction, major renovations or major infrastructure improvements would occur on campus. The employee population would be anticipated to remain at similar levels. The Study Area has experienced extensive residential development over the last twenty years. Some vacant parcels still remain and are zoned for residential and commercial uses. According to the Gwinnett County Planning and Development Department there are no new residential or commercial development proposed at this time or potential rezoning within the Study Area.¹³ Based on historical development trends and market conditions, these vacant parcels could be under consideration for future residential or commercial development.

¹¹ Atlanta Regional Commission. *Regional Transportation Plan*. <http://www.atlantaregional.com/transportation/regional-transportation-plan> (Accessed on April 2, 2013).

¹² Gwinnett County. *Gwinnett County 2030 Unified Plan*. http://www.gwinnettcountry.com/static/departments/planning/pdf/2030_unified_plan_final_part3.pdf (Accessed on June 28, 2014).

¹³ Email correspondence with Thuy Hotle, *Gwinnett County Planning and Development Department*, September 11, 2013.

Build Alternative

The Build Alternative would result in the demolition of three existing buildings and the construction of four new structures and additional parking on campus, resulting in a net increase of approximately 22,200 gsf of office, storage, and support space. In addition, the Build Alternative would install a photovoltaic system consisting of ground-mounted solar array on approximately 1 acre of campus property. A new secondary access drive would provide secondary emergency egress/ingress to the campus. The primary science/office core of the campus would be maintained and the outer ring of support space would expand with the addition of the new parking, the Science Support Building, Office Support Buildings A and B, and the Transshipping and Receiving Area. The proposed new parking would result in a net increase of 81 parking spaces. The Build Alternative would slightly increase the building density on campus and would introduce a renewable energy system on the campus. The new construction would result in a decrease of approximately 9.3 acres of pasture lands and lawn areas.

All construction would occur on existing HHS/CDC property and direct impacts to adjacent land uses would not occur. Although a curb cut would be required on Webb Gin House Road, the new access road is an internal campus road that would serve HHS/CDC purposes only. The proposed improvements to the campus would not induce any commercial or residential land use changes within the Study Area. The Build Alternative is not anticipated to result in significant adverse impacts on land use.

As previously mentioned, HHS/CDC is exempt from the *Gwinnett County Unified Development Ordinance*. With the exception of the parking requirement, the Lawrenceville Campus generally complies with existing zoning requirements of the R-100, Single-Family Residence District. The proposed improvements associated with the Build Alternative would function as complementary uses to the existing facilities on the Lawrenceville Campus and are consistent with the permitted uses of the R-100 zoning district. The proposed new buildings would comply with the height requirements and building setback requirements of the R-100 zoning district. Approximately 81 net new parking spaces would be added, which would bring the campus in compliance with the zoning requirements. A perimeter screening buffer would be constructed to minimize visibility of the photovoltaic system from public view in compliance with design guidelines. The Build Alternative is not anticipated to result in significant adverse impacts to zoning or public policy.

3.3 Community Facilities and Services

Existing Conditions

Police and Fire Protection

The Gwinnett County Police Department (GCPD) provides police services to the residents and businesses within the Study Area. The GCPD employs approximately 758 officers supported by 307 personnel.¹⁴ The GCPD is headquartered at 770 Hi Hope Road in Lawrenceville. The Lawrenceville Campus is located in the South Precinct which covers the southern quarter of the county. The South Precinct is located at 2180 Stone Drive in Lilburn, Georgia approximately 9.8 miles to the southeast of the campus. This law enforcement coverage is supplemented by the Gwinnett County Sheriff's Office (GCSO), headquartered at 2900 University Parkway NE in Lawrenceville. Primary responsibilities of the GCSO include the processing of warrants, court services, and management of the county jail facility.

Gwinnett County Department of Fire and Emergency Services (GCDRES) provide fire protection and emergency medical services within the Study Area and throughout Gwinnett County. The GCDRES is staffed by 844 sworn personnel in 30 fire stations across Gwinnett County.¹⁵ Engine 8 (Station 8) located at 2295 Brannan Road in Grayson (approximately 1.7 miles southeast of the Lawrenceville Campus) and Truck 15 (Station 15) located at 275 South Perry Street in Lawrenceville (approximately 3.3 miles north of the Lawrenceville Campus) would provide fire and emergency response. Basic life support would be provided by Medic 8, also housed at Station 8. These units would be the first to respond to a fire or emergency in the vicinity of the Study Area.

Gwinnett Medical Center (GMC) is the closest hospital to the Study Area. The facility has 491 beds and provides a full range of patient care services. The facility is located at 1000 Medical Center Boulevard in Lawrenceville, approximately 4.5 miles northwest of the Lawrenceville Campus.

Schools

Couch Middle School is located southeast of the Lawrenceville Campus at 1777 Grayson Highway, in Grayson (Refer to Figure 9: Community Facilities). The middle school is part of the Gwinnett County Public School District and has an enrollment of approximately 985 students in grades 6 through 8.¹⁶ Starling Elementary is located adjacent to the Couch Middle School at 1725 Grayson Highway, in Grayson. The elementary school has an enrollment of approximately 977 students in kindergarten through 5th grade.¹⁷ Kids "R" Kids, a private preschool is located at 1486 Grayson Highway, east of the Lawrenceville Campus.

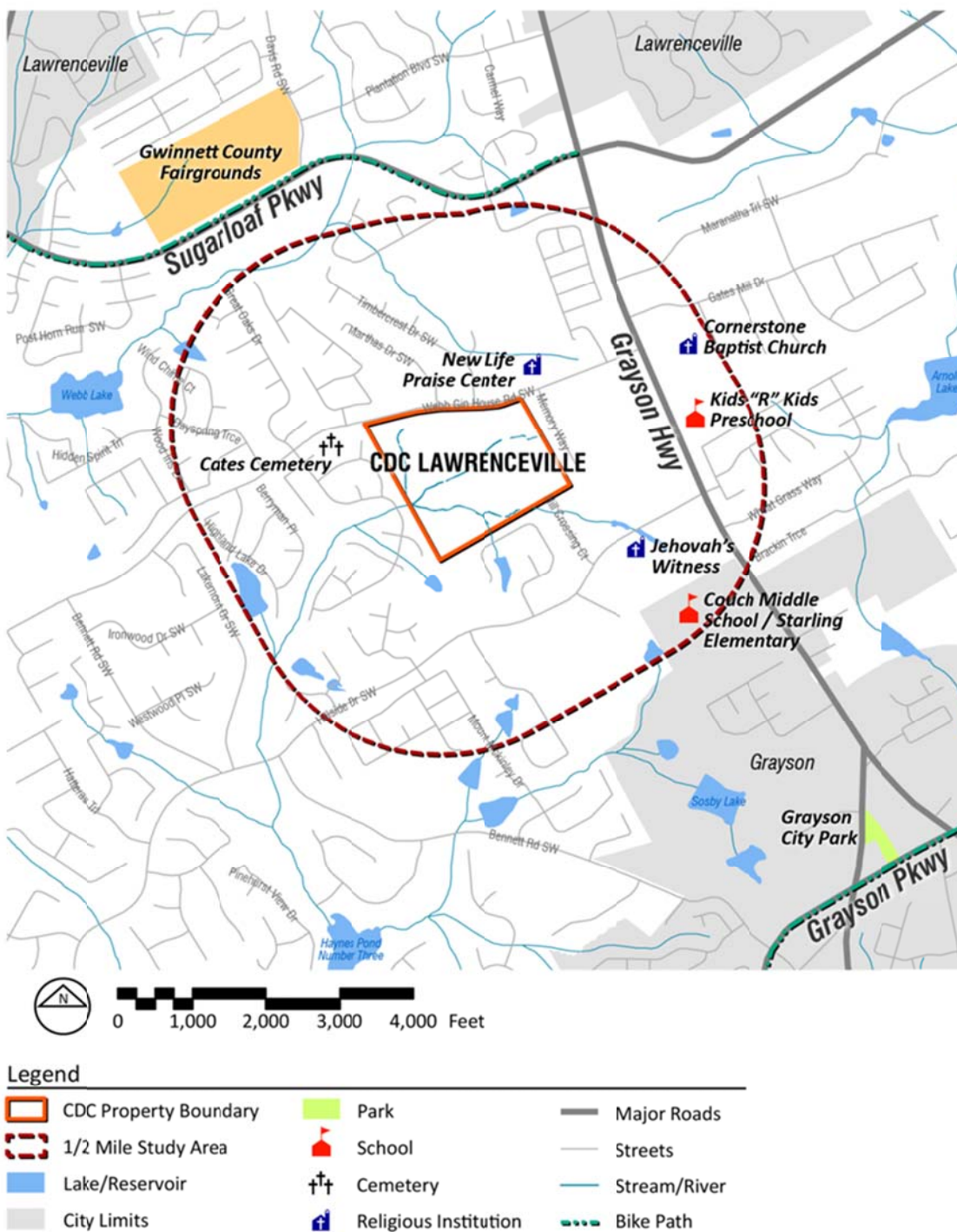
¹⁴ Gwinnett County. *Departments: Police*. <http://www.gwinnettcountry.com/portal/gwinnett/Departments/Police> (Accessed on October 10, 2013)

¹⁵ Gwinnett County. *Fire and Emergency Services: About Us*. <http://www.gwinnettcountry.com/portal/gwinnett/Departments/FireandEmergencyServices/Organization/AboutUs> (Accessed on October 10, 2013)

¹⁶ Gwinnett County Public Schools. *Couch Middle School*. <http://publish.gwinnett.k12.ga.us/gcps/home/public/schools> (Accessed on October 10, 2013)

¹⁷ Gwinnett County Public Schools. *Starling Middle School*. <http://publish.gwinnett.k12.ga.us/gcps/home/public/schools> (Accessed on October 10, 2013)

Figure 9: Community Facilities



Sources: Atlanta Regional Commission

Religious Institutions

There are three religious institutions within the Study Area: the New Life Praise Center located at 587 Webb Gin House Road in Lawrenceville; the Cornerstone Baptist Church at 1400 Grayson Highway in Lawrenceville; and Jehovah's Witness Center at 540 Hillside Drive in Grayson.

No Build Alternative

Under the Build Alternative, community facilities and services within the Study Area would remain similar to those described for existing conditions. There would be no substantial changes to the campus or its use. Employee populations and research activity would remain at similar levels, as such there would be no additional demand for community facilities and services. Development within the Study Area would continue to reflect similar patterns and may increase the demand for community facilities and services, irrespective of the campus.

Build Alternative

Implementation of the Build Alternative would not physically displace or alter any community facilities within the Study Area. The Build Alternative would result in minor changes to the campus layout however no substantial changes to campus function or use would occur. Although the employee population is anticipated to increase by 26 employees, the demand on community services would be minimal and unlikely to overburden existing community facilities.

3.4 Transportation

This section describes transportation conditions in the vicinity of the Lawrenceville Campus and discusses the effects relating to traffic, parking, transit, and pedestrian impacts. The Build Alternative would construct a new Transshipping and Receiving Area adjacent to the existing guardhouse, construct a new Science Support Building and two new Office Support Buildings, create a new secondary emergency egress/ingress point of access, and provide additional parking for visitors and employees and to comply with security requirements. This new configuration would provide improved security and reduce vehicle traffic within the campus' secured areas by relocating visitor parking to a location just north of the Transshipping and Receiving Area.

A transportation screening assessment was conducted to estimate the number of new trips generated by the Build Alternative and to determine the need to further assess the potential for transportation and parking related impacts resulting from the implementation of the Build Alternative. The Traffic Study Area was extended beyond the one-half mile EA Study Area in order to encompass key roadways and intersections that are typically utilized to access the Lawrenceville Campus. Under the Build Alternative the employee population would increase by 26 employees and the visitor population is anticipated to remain at similar levels. Although the Build Alternative would roughly double the number of vehicle trips traveling to and from the Lawrenceville Campus, overall campus traffic would remain relatively low and would appear not to impact transportation conditions within the Traffic Study Area. A discussion of the trip generation analysis and a qualitative discussion of traffic, transit, pedestrian and parking conditions are provided below.

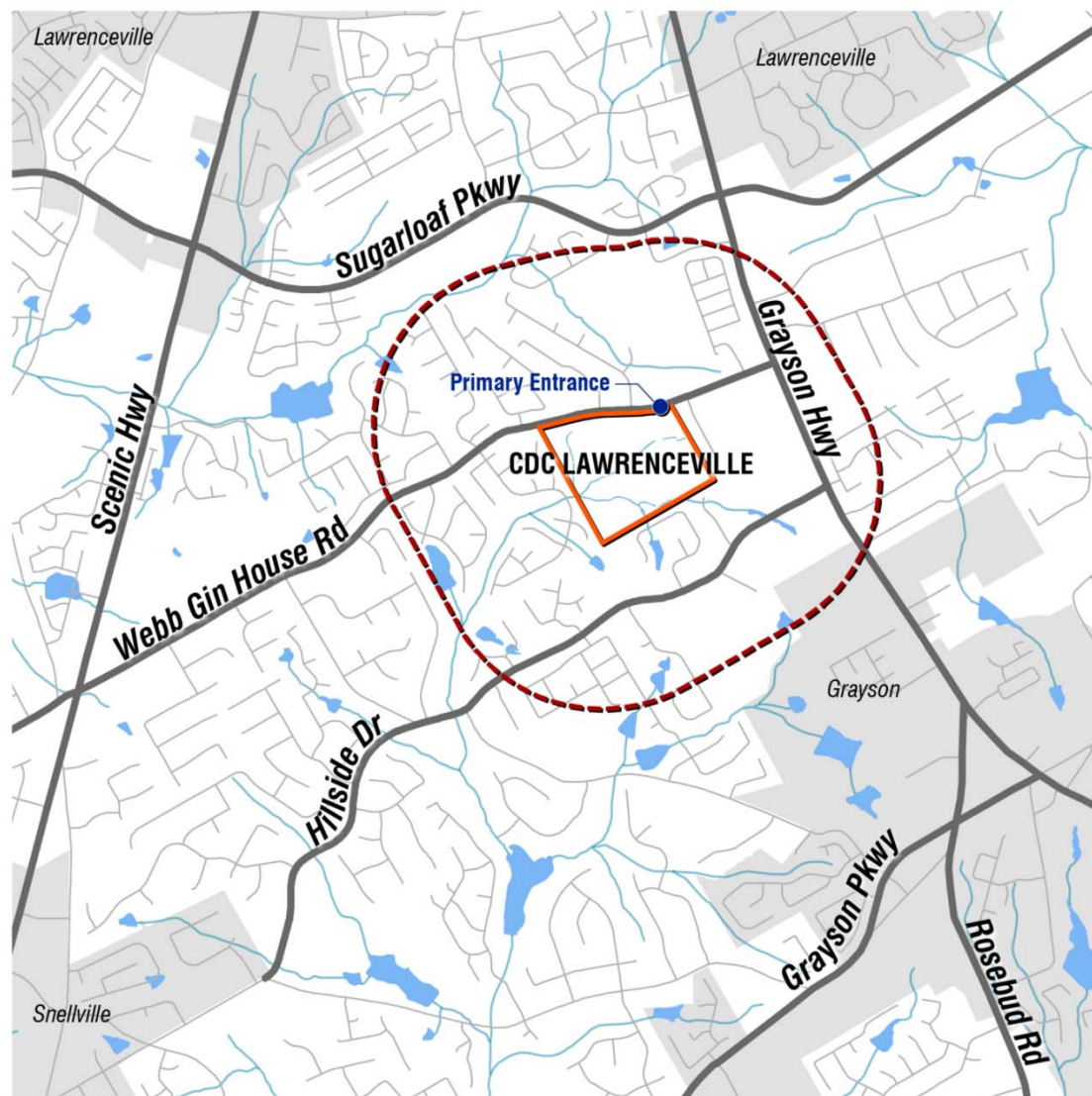
EXISTING CONDITIONS

Roadway Network

The Lawrenceville Campus is located off of Webb Gin House Road, west of Grayson Highway (State Route 20), east of Scenic Highway (State Route 124), and approximately three miles south of downtown Lawrenceville in Gwinnett County. The Traffic Study Area is situated in a suburban area consisting primarily of local residential roads (Refer to Figure 10. Lawrenceville Campus Traffic Study Area). The Lawrenceville Campus is accessible through a secured two-lane driveway located on Webb Gin House Road, west of Grayson Highway. Key roadways providing access to the Traffic Study Area are described below:

- *Webb Gin House Road* is an east-west, bi-directional urban local street that functions as the primary access road for the Lawrenceville Campus main entrance. Webb Gin House Road extends from Ronald Reagan Parkway to the west, eastward through Scenic Highway and the Lawrenceville Campus Main Entrance to where it terminates at Grayson Highway (State Route 20). Proximate to the Lawrenceville Campus, Webb Gin House Road provides a single lane in each direction and experiences moderate traffic volumes during typical commuter peak hours. Based on field observations, moderate queuing was observed on Webb Gin House Road in the eastbound direction at the intersection with Grayson Highway.

Figure 10: Lawrenceville Campus Traffic Study Area



Legend

- | | |
|-----------------------|--------------|
| CDC Property Boundary | Major Roads |
| 1/2 Mile Buffer | Streets |
| Primary Entrance | Stream/River |
| Lake/Reservoir | |
| City Limits | |

Sources: Atlanta Regional Commission

- *Grayson Highway/State Route 20* is a north-south state route that runs through portions of Floyd, Bartow, Cherokee, Forsyth, Gwinnett, Walton, Rockdale, Newton and Henry Counties in northwestern and north-central Georgia. In Gwinnett County, within the Study Area, State Route 20 is known as Grayson Highway. Recent improvements completed on Grayson Highway expanded the number of lanes/turn-lanes which resulted in increased capacity, reduced congestion, and improved traffic flow. Within the Traffic Study Area, Grayson Highway provides for two lanes of traffic in each direction and carries roughly 36,000 vehicles per day.¹⁸ Grayson Highway functions as a primary access route for HHS/CDC employees originating from downtown Lawrenceville and other points located to the east and southeast of the Traffic Study Area.
- *Hillside Drive SW* is an east-west road that runs parallel to Webb Gin House Road south of the Lawrenceville Campus. Similar to Webb Gin House Road, Hillside Drive connects Scenic Highway to Grayson Highway and serves both local residential and through traffic. Proximate to the Lawrenceville Campus, Hillside Drive provides a single lane in each direction with limited sidewalk availability and no shoulder.
- *Scenic Highway SW/State Route 124(SR-124)* is a state highway that runs southwest-to-northeast and carries traffic through portions of DeKalb, Gwinnett, Barrow, and Jackson counties. Proximate to the Traffic Study Area, SR-124 is known as Scenic Highway SW and provides one to two lanes in each direction with designated sidewalks and marked crosswalks throughout. Scenic Highway carries roughly 38,000 vehicles per day.¹⁹
- *Timbercrest Drive SW* is a north-south/northwest-southeast unstriped local road that primarily serves local residents. Timbercrest Drive SW provides a single lane in each direction and terminates at Webb Gin House Road SW, across from the Lawrenceville Campus property. Observations indicate low traffic volumes with minimal vehicle delays experienced at the stop controlled intersection with Webb Gin House Road SW.

Traffic Conditions

Overall, the Traffic Study Area experiences low to moderate traffic volumes, particularly on local residential roadway segments proximate to the Lawrenceville Campus. Heavier volumes and some queuing were observed on intersections with major roadways including Grayson Highway. School bus pickup/drop-off activity was observed during the morning and afternoon peak periods as there are several schools nearby. The absence of shoulders within the residential neighborhood minimizes available space for traffic flow when school buses perform student pickups and drop-offs. In addition, the absence of sidewalks and other pedestrian elements contribute to the area's lack of pedestrians and low walkability characteristics.

¹⁸ Georgia Department of Transportation (2012). *Georgia's State Traffic and Report Statistics (STARS)*. <http://www.dot.ga.gov/informationcenter/statistics/stars/Pages/default.aspx> (Accessed in October 2013).

¹⁹ Ibid.

Transit

Private automobile is the primary mode of travel in the Traffic Study Area as public transit service is not easily accessible. The nearest transit bus stop (Gwinnett County Local Bus System Route 40) is located approximately 3.5 miles west of the Lawrenceville Campus at the intersection of Sugarloaf Parkway and Five Forks Trickum Road. Gwinnett County Transit (GCT) provides limited service from 6 AM to 9 PM Monday through Friday. The Route 40 bus line does not operate on the weekends. Bus service operates primarily on 30 minute headways and provides service to destinations west of the Lawrenceville Campus including Sugarloaf Mills Mall and the Gwinnett Transit Center.

Pedestrian Conditions

Observations indicate minimal pedestrian activity in the Traffic Study Area. Local streets lack pedestrian safety features such as sidewalks and crosswalks. In addition, many of the areas nearby commercial and retail destinations are outside of what is typically considered to be acceptable walking distance. Within the Lawrenceville Campus, separate walkways/sidewalks for internal pedestrian circulation are limited to locations around existing campus buildings. As a result, pedestrian activity outside of these areas requires the use of campus roads and lawns since no formal internal pedestrian network exists. Limited campus vehicle activity minimizes potential pedestrian and vehicle conflicts that may otherwise result in pedestrian safety issues.

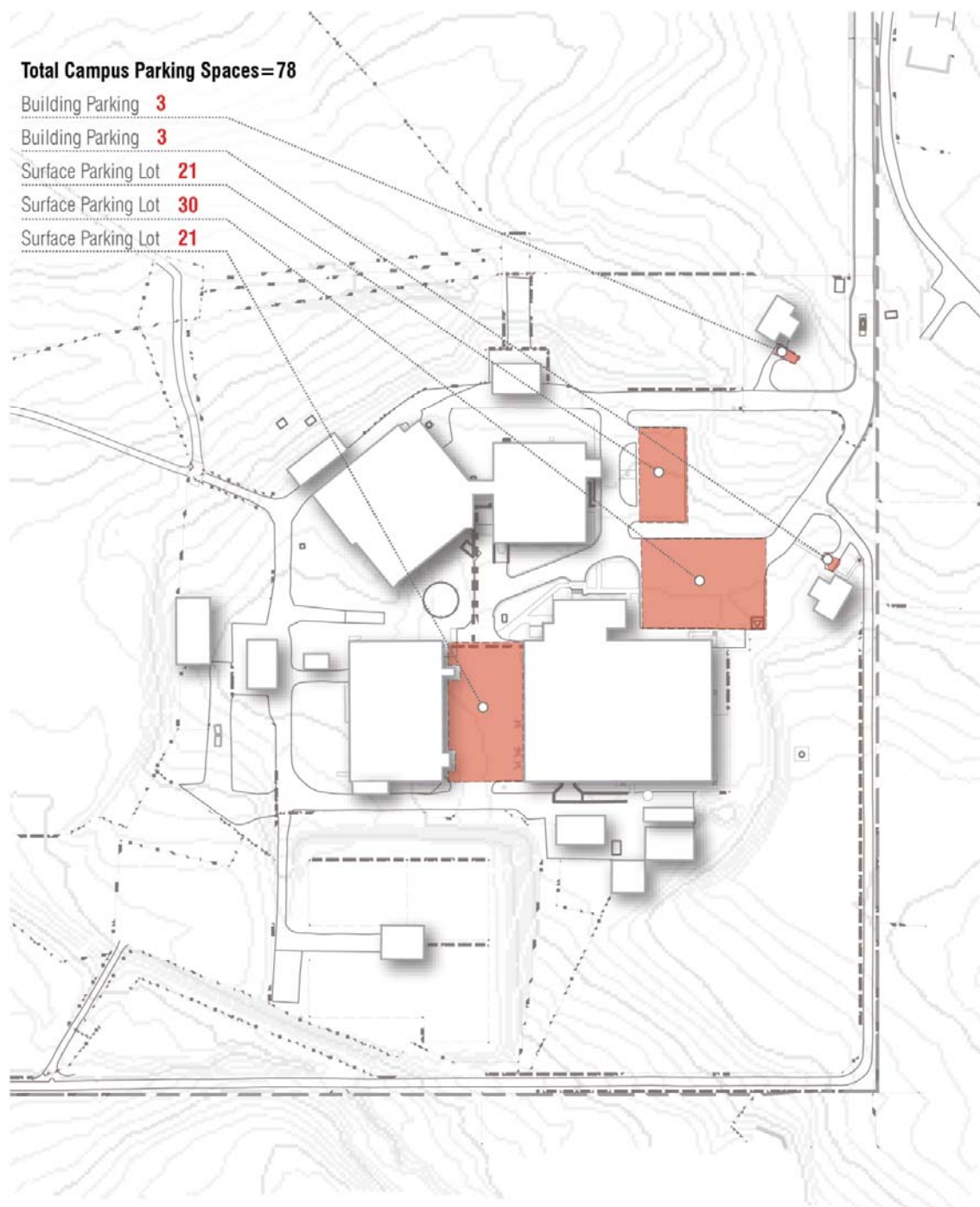
Lawrenceville Campus Activity

Based on information provided by the HHS/CDC, the current daily campus population consists of a maximum of 50 people including HHS/CDC staff, visitors, and campus security. Although the Lawrenceville Campus is operated 24-hours per day, the majority of the campus population follows the standard 8-hour work schedule of 9 AM to 5 PM typical of most commercial operations. Given the low volume of on-campus personnel and infrequent deliveries spread throughout the day, the Lawrenceville Campus is considered to be a low volume traffic generator. However, special events hosted throughout the year generate up to an additional 100 to 150 visitors to the Lawrenceville Campus. These types of special events are usually infrequent with no more than 12 occurrences per year.

Parking

The Lawrenceville Campus provides a total of approximately 78 parking spaces for HHS/CDC employees and visitors (Refer to Figure 11. Existing Parking). Based on information provided by the HHS/CDC, campus parking is currently underutilized with a maximum of 50 people requiring parking on a typical peak day. However, special events which are hosted on-campus roughly 12 times per year may attract up to 150 HHS/CDC employees and visitors. The existing parking capacity on-campus does not fully satisfy parking demand during special events. Additional space for parking is made available outside designated parking locations on-campus. Special event traffic and parking plans are typically created in order to help facilitate safe ingress and egress for vehicles as well as provide for additional parking.

Figure 11: Existing Parking



No Build Alternative

In order to determine on-going and/or potential projects planned for the future within the Traffic Study Area, Georgia Department of Transportation (GDOT) and the Gwinnett County Department of Planning and Development were consulted to obtain planned development information. Table 6: Potential Development within the Traffic Study Area identifies the potential projects that have been submitted without an estimated completion date.

Table 6: Potential Development within the Traffic Study Area

Project	Type of Use	Size	Address
Sola Fide Evangelical Lutheran Church	Place of Worship	92,000 Sq.ft.	1367 Webb Gin House Road
Dream Team Real Estate	Commercial	17,006 Sq.ft.	1449 Scenic Highway
Snellville Exchange	Commercial	175,028 Sq.ft.	1160 Scenic Highway
Source: GDOT; Gwinnett County Department of Planning and Development			

In addition, a maintenance/roadway improvement project is currently underway on Grayson Highway between Webb Gin House Road and Sugarloaf Parkway. These improvements include turning lane modifications and other roadway geometrical improvements.

No Build Traffic Conditions

The Gwinnet Unified Plan, Comprehensive Transportation Plan (CTP) was reviewed in order to understand future conditions for the area's transportation network. Overall, it is predicted that Gwinnett County would experience steady growth and increased congestion through the year 2030. More specific to our area, based on information contained in the CTP, Webb Gin House Road in the vicinity of Scenic Highway/SR-124 is projected to operate at an unacceptable level of service (LOS)²⁰ within the next 15 years.²¹ In addition, the Atlanta Regional Commission (ARC) identifies both Scenic Highway/SR-124 and Grayson Highway/SR-20 as part of the Congestion Management System (CMS) congested roadway database. Through the congestion management process (CMP) ARC identifies and attempts to mitigate roadway congestion through increased efficiency by promoting alternatives to single occupancy vehicle (SOV) mode of travel.

No Build Campus Activity

Under the No Build Alternative, the Lawrenceville Campus would operate similar to current conditions with little to no expected growth. There would be no changes to internal transportation circulation, and no expansion in parking or overall campus capacity. The maximum on-campus population is not anticipated to exceed 50 employees and visitors. The campus would also continue to host special events limited to a maximum of approximately 150 employees and visitors several times per year.

²⁰ Level of Service, (LOS) is indicative of traffic delay measured through LOS A (no vehicle delay) to LOS F (heavy delay frequently accompanied by high traffic congestion).

²¹ Gwinnet County. *Gwinnet Unified Plan, Comprehensive Transportation Plan*. September 2008.

Build Alternative

Under the Build Alternative, a new approximately 12,000 gsf Science Support Building, and two new Office Support Buildings would be constructed to replace existing functionally obsolete buildings with no major changes to on-campus activity. Under the Build Alternative, the employee population is anticipated to increase by 26 employees increasing the total campus population to 57. In addition, a new Transshipping and Receiving Area would be constructed adjacent to the existing guardhouse. This new configuration would provide improved security and reduce vehicle traffic within the secured areas of the campus by relocating the visitor parking to a location just north of the Transshipping and Receiving Area. Emergency ingress/egress and internal circulation would also be improved under the Build Alternative. A new access point and driveway located off of Webb Gin House Road across from Timbercrest Drive would be constructed to improve vehicle egress/ingress, and internal circulation during emergencies (See Figure 12: Build Alternative Campus Access and Driveway). This new access point would be available during emergency evacuation only.

It is anticipated that the addition of 26 new employees would roughly double the number of vehicle trips currently generated by the Lawrenceville Campus, particularly during the morning and afternoon commuter peak hours as well as during the typical lunchtime hour. However, field observations indicate that intersections and roadways adjacent to the campus appear to have sufficient capacity required to service the additional traffic generated as a result of the Build Alternative. Traffic conditions are not anticipated to change significantly as the number of campus-generated trips would remain relatively low.

Build Traffic Conditions

As previously indicated, the Build Alternative is anticipated to result in an increase in vehicle trips to and from the Lawrenceville Campus. However, the total number of trips projected under the Build Alternative would remain relatively low. Since intersections and roadways within the study area appear to have sufficient capacity, and the Build Alternative would not change vehicle circulation within the Traffic Study Area, significant traffic impacts are not expected.

Parking

Under the Build Alternative, designated on-campus parking would be expanded to allow for parking of up to 159 vehicles for employees and visitors (a net increase of 81 parking spaces). A new employee parking lot with space for 139 vehicles would also be constructed in the southeast corner of the Lawrenceville Campus. In addition, a 20-space visitor parking area would be situated near the main entrance. Figure 13: Build Alternative Campus Parking shows parking lot capacity and locations under the Build Alternative.

Pedestrian Conditions

The internal campus pedestrian circulation network would be improved under the Build Alternative. Currently, as discussed in Existing Conditions, the campus pedestrian network is limited to areas around existing buildings and is not interconnected. New ABA-compliant pedestrian sidewalks would be constructed to connect the visitor parking area to the Transshipping and Receiving Area and the main

Figure 12: Build Alternative Campus Access and Driveway

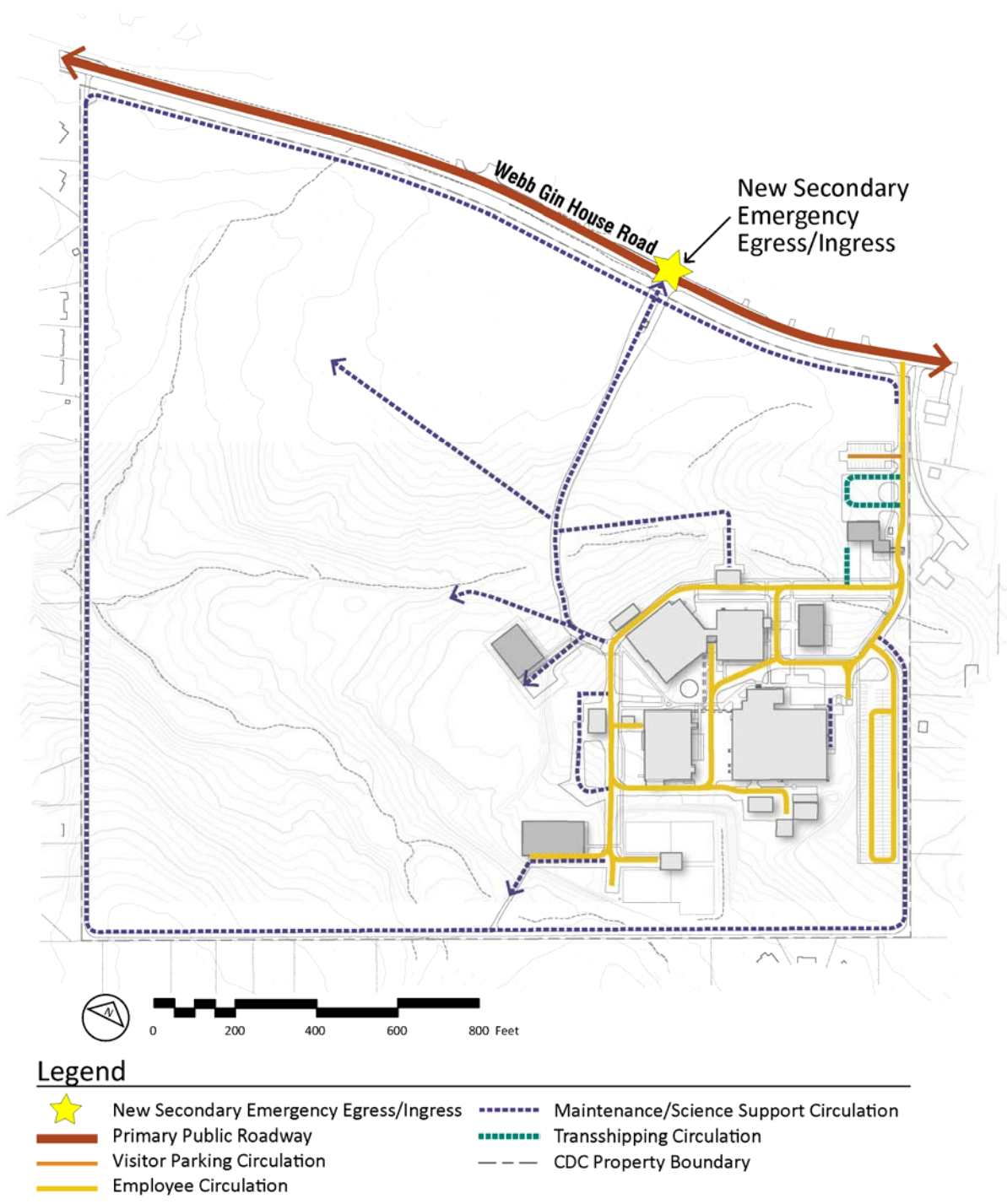
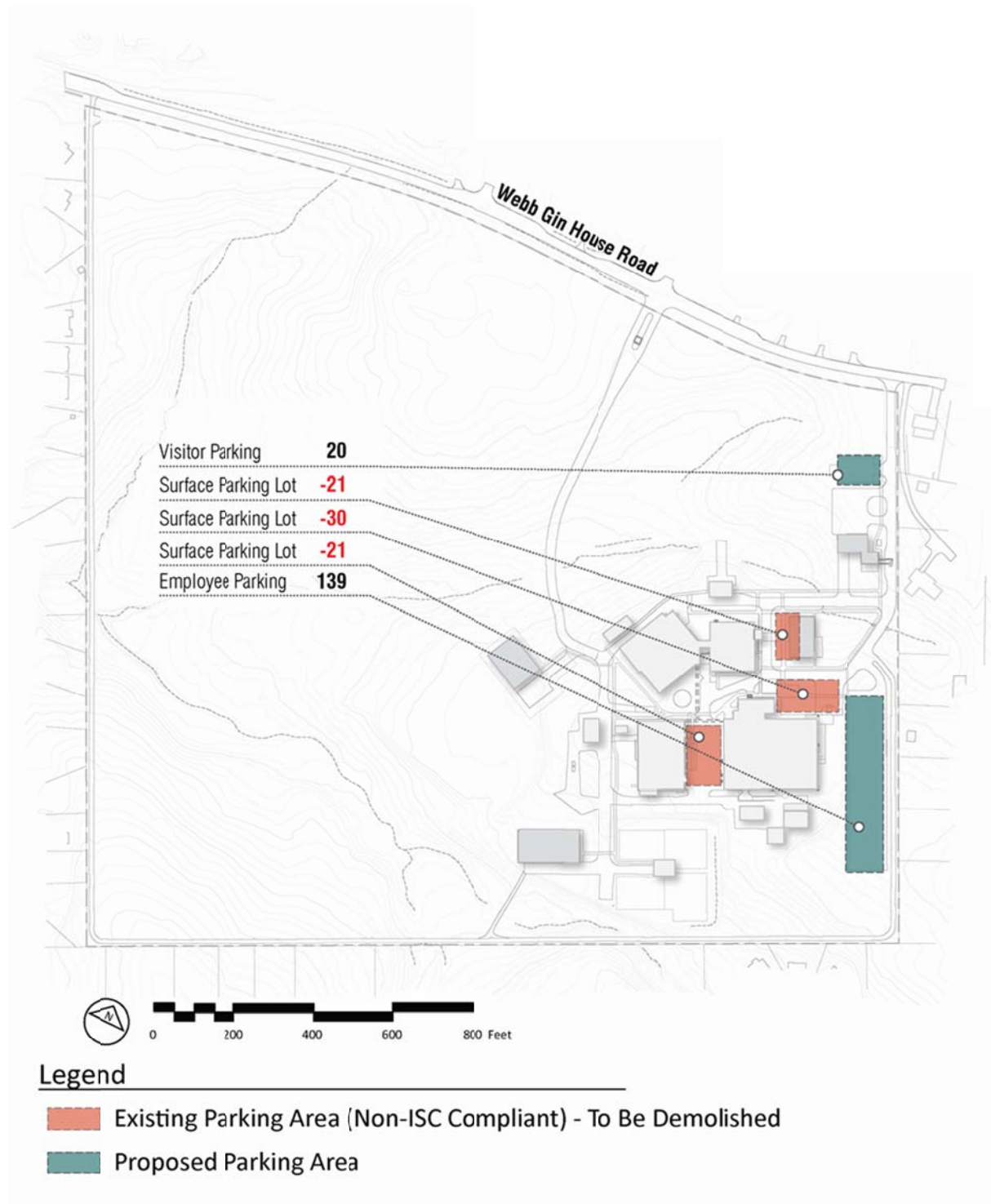


Figure 13: Build Alternative Campus Parking



campus core area, as well as to the new Office Support Building A and Office Support Building B. In addition, an ABA-compliant sidewalk would provide a pedestrian connection between the new employee parking lot and the campus core area. The upgrades to the campus' pedestrian facilities would result in improved safety by providing additional designated pedestrian facilities which would reduce pedestrian/vehicular conflicts internal to the campus and improve wayfinding on campus.

Conclusion

Overall, the Build Alternative would provide improvements to the Lawrenceville Campus facilities and internal transportation network. Although the Build Alternative would roughly double the number of vehicle trips traveling to and from the Lawrenceville Campus, overall campus traffic would remain relatively low and would appear not to impact transportation conditions within the Traffic Study Area. Therefore, the Build Alternative is not expected to result in transportation related impacts. Furthermore, the proposed new egress/ingress point on Webb Gin House Road is expected to be used in the event that the main access point is blocked or during emergency evacuation only. As a result, the new access would not alter traffic patterns on a regular basis. However, given the projected background growth and traffic conditions anticipated in the future (as identified in the CTP), further transportation analyses may be necessary if the Lawrenceville Campus population/activity expands beyond what is documented in this Environmental Assessment.

3.5 Air Quality

Existing Conditions

The regulation of air pollution was enabled by the Clean Air Act (CAA) of 1970, a federal law further amended in 1977 and 1990 to improve its definition and scope of compliance. This law directs the US Environmental Protection Agency (EPA) to protect public health and welfare by establishing National Ambient Air Quality Standards (NAAQS) for a critical set of hazardous air pollutants known as “criteria” pollutants. These standards accompany a mandate for each state to continually demonstrate attainment of, or progress toward attainment of the NAAQS.

The NAAQS regulates six criteria pollutants, namely: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), sulfur dioxide (SO₂), and particulate matter (PM) in two size varieties (PM_{2.5} and PM₁₀). Two sets of standards govern the emission of these criteria pollutants, with primary standards aimed at protecting the public health of sensitive populations such as asthmatics, children, and the elderly, while secondary standards protect such public welfare matters as visibility, damage to animals, crops, vegetation, and buildings. To be in attainment of the NAAQS is to demonstrate criteria pollutant concentrations below the levels set by the current NAAQS as shown in Table 7: National Ambient Air Quality Standards.

Table 7: National Ambient Air Quality Standards (NAAQS)

Pollutant	Primary/ Secondary		Averaging Time	NAAQS
Carbon Monoxide	Primary		8-hour ⁽¹⁾	9 ppm
			1-hour ⁽¹⁾	35 ppm
Lead ⁽²⁾	Primary and Secondary		Rolling 3-month average	0.15 µg/m ³
Nitrogen Dioxide	Primary		1-hour ⁽³⁾	100 ppb
	Primary and Secondary		Annual	53 ppb ⁽⁴⁾
Ozone ⁽⁵⁾	Primary and Secondary		8-hour ⁽⁶⁾	0.075 ppm ⁽⁷⁾
Particle Pollution	PM_{2.5}	Primary	Annual ⁽⁸⁾	12 µg/m ³
		Secondary	Annual ⁽⁸⁾	15 µg/m ³
		Primary and Secondary	24-hour ⁽³⁾	35 µg/m ³
	PM₁₀	Primary and Secondary	24-hour ⁽⁹⁾	150 µg/m ³
Sulfur Dioxide	Primary		1-hour ⁽¹⁰⁾	75 ppb

	Secondary	3-hour ⁽¹⁾	0.5 ppm
(1)	Not to be exceeded more than once per year.		
(2)	Final rule signed October 15, 2008. The 1978 lead standard (1.5 µg/m ³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.		
(3)	3-year average of the 98 th percentile.		
(4)	The official level of the annual NO ₂ standard is 0.053ppm, equal to 53 ppb, which is shown here for the purpose of clearer comparison to the 1-hour standard.-year		
(5)	EPA revoked the 1-hour ozone standard of 0.12 ppm; however some areas have continuing obligations under that standard (anti-backsliding).		
(6)	3-year average of the 4 th highest daily maximum 8-hour average.		
(7)	In 2008 this standard was changed from 0.08 (the 1997 standard) to 0.075. The 1997 standard and its implementation rules remain in place as EPA addresses the transition between the 1997 and 2008 standards.		
(8)	3-year average. New annual standard effective as of March 18, 2013.		
(9)	Not to be exceeded more than once per year on average over 3 years.		
(10)	3-year average of the 99 th percentile of the maximum 1-hour average.		
Note: ppm = parts per million, ppb = parts per billion, µg/m ³ = micrograms per cubic meter			
Source: EPA: National Ambient Air Quality Standards, as of October 2011. http://www.epa.gov/air/criteria.html . (Accessed September 30, 2013).			

Gwinnett County falls within the Atlanta Metropolitan Area (AMA) air quality region which includes an extensive network of air monitoring sites which detect criteria pollutant levels to ensure compliance with, and monitor progress towards NAAQS attainment. The AMA air quality region which includes Gwinnett County and the project area met the NAAQS for inhalable particulate matter (PM₁₀), carbon monoxide (CO), nitrogen dioxide, sulfur dioxide (SO₂), and lead; the region is in attainment for these NAAQS.

The region is designated as not in attainment for the following two pollutants:

- PM_{2.5} – Gwinnett County is designated as a moderate non-attainment area for PM_{2.5} (1997) under the NAAQS.
- Ozone – Gwinnett County is designated as a moderate non-attainment area for the 1997 eight-hour ozone (O₃) standard of 0.08 ppm, and marginal non-attainment for the revised 2008 standard of 0.075 ppm.²²

Operating Permit

The Lawrenceville Campus has been issued a Synthetic Minor Operating Permit (SMOP) by the Georgia Department of Natural Resources (GADNR) for the operation of three natural gas and distillate fuel oil fired boilers, two emergency generators and a pathological waste incinerator. A SMOP is issued to facilities that have the potential to emit air pollutants in quantities at or above major source threshold levels but have chosen to restrict the emissions to below major source thresholds levels. The SMOP establishes enforceable emission limits so that the facility can operate without the need for a Title V permit.

The operation of the Lawrenceville Campus generates air emission from onsite stationary sources as well as mobile sources. Stationary sources of air emissions include the operation of on-site boilers, generators, and an incinerator. As identified previously, the campus currently operates three natural

²² USEPA. *Green Book: Designated Non-Attainment Areas of All Criteria Pollutants, Gwinnett County*. <http://www.epa.gov/oagps001/greenbk/ancl.html#GEORGIA> (Accessed on September 30, 2015).

gas and distillate fuel fired boilers with a capacity of 12.247 MMBtu/hr. Natural gas is burned in the boilers and diesel is utilized in emergency situations and for testing of generators. The boilers serve the main buildings on campus, while smaller buildings on campus are served by gas-fired package units. Boilers produce emissions such as PM, NO_x, SO₂, CO, and volatile organic compounds (VOCs) during operation. The Lawrenceville Campus also includes two 1,250 kW emergency generators with 1,676 Hp engines used for emergency power and powered by distillate fuel oils. Generators produce emissions such as NO_x, CO, VOCs and SO₂ and PM during testing and emergency operations. The campus also operates one pathological waste incinerator. Mobile emission sources for the campus are related to employees travelling to and from work in passenger vehicles, as well as visitors and delivery vehicles travelling to the campus.

No Build Alternative

Local and regional vehicle use would be anticipated to grow between 2015 and 2025, likely increasing mobile air emissions in the area. Under the No Build Alternative, the existing employee and visitor population is anticipated to remain at similar levels. As such, the Lawrenceville Campus would not contribute to an increase in emissions related to mobile sources. Under the No Build Alternative, no changes to the operation of the facility are expected and stationary source emissions are not anticipated to increase.

Build Alternative

Typically air quality emissions from mobile sources are assessed when a project would increase the vehicles on roads or change the traffic patterns. The Build Alternative is anticipated to result in an increase of approximately 26 employees. Although the Build Alternative is anticipated to result in an increase in vehicle trips to and from the Lawrenceville Campus, the total number of trips projected under the Build Alternative would remain relatively low based on the traffic screening data in Section 3.4: Transportation. The Build Alternative would not change vehicle circulation within the Traffic Study Area. The overall low number of new vehicle trips generated by the Build Alternative is not expected to generate significant vehicular emissions that would affect air quality in the area.

The Build Alternative would result in an increase in energy demand on the Lawrenceville Campus, however the net increase in air emissions from stationary sources for the new buildings would be minimized by the installation of the photovoltaic system, which would reduce the energy demand for electricity generated by fossil fuel combustion. The new buildings would be heated by electric heat pumps, or be tied to the existing campus steam heating system and would result in a minor increase in gas consumption on campus. This increase would be partially offset by removal of existing individual gas-fired heating units in buildings to be demolished. Campus research and support activities are anticipated to remain similar to existing conditions and as such the incineration rates would remain at similar levels. The minor increase in emissions is not anticipated to exceed the SMOP emission threshold levels. In addition, future design of new buildings will incorporate required energy efficiency, explore additional on-site renewable energy alternatives, and implement zero-net Federal energy performance targets. The Build Alternative would not create new stationary sources of air emissions that could affect air quality in the surrounding community.

3.6 Noise

Environmental noise is defined as the sound in a community emanating from man-made sources such as automobiles, trucks, buses, aircraft, trains, and fixed industrial sources, or from natural sources such as animals or wind. Sound levels are measured in logarithmic units called decibels (dB). An overall measurement of sound results in a single decibel value that describes the sound environment, taking all frequencies (pitches) into account. The human ear, however, does not sense all frequencies in the same manner. The “A”-weighted scale (expressed in dBA units) was developed to closely approximate the human sensory response from noise.

Usually, public reaction to noise levels is a function of location (urban, suburban, rural), time of day, fluctuation of noise levels, duration, and individual judgment of the listener. Under normal conditions, a change in noise level of 3 dBA is required for the average person to perceive a difference. A decrease of 10 dBA appears to the listener to be a halving of noise levels, while an increase of 10 dBA appears to be a doubling of the noise. A list of common noise sources and their associated sound levels are shown in Table 8: Noise Levels of Common Sources.

Table 8: Noise Level of Common Sources

Sound Source	Noise Level (dBA)
On sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk BY Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0
Source: Cowan, James P., Handbook of Environmental Acoustics, 1994 and Egan, M. David, Architectural Acoustics, 1998.	

Noise standards are typically established by state and local government agencies. The *Gwinnett County Noise Ordinance* prohibits loud, unnecessary, or unusual sound or noise which unreasonably annoys, disturbs, injures or endangers the comfort, repose, health, peace or safety of others in the County; however, the County does not establish maximum allowable noise standards.²³ The *Gwinnett County Noise Ordinance* also limits construction work to the hours of 7 AM to 10 PM. Permits or special variances could be obtained should it be deemed necessary to work beyond those hours.

²³ Gwinnet County Code of Ordinance. *Chapter 4 Environment, Article III. Noise.*
<http://library.municode.com/index.aspx?clientId=10878> (Accessed on October 9, 2013).

The Lawrenceville Campus is located within a suburban area with relatively low ambient noise levels. The campus is surrounded by low-density, single-family residences and residential subdivisions. Background noise levels in this type of suburban area generally range between 50 and 60 dBA during the daytime and between 40 and 50 dBA at nighttime. Vehicular traffic along Webb Gin House Road generates noise levels which can intermittently exceed the typical suburban range. On-site campus noise sources include stationary sources related to the operation of boilers, generators, chillers and ventilation, as well as noise related to grounds and facility maintenance, intra-campus vehicles, animal holding areas and animal husbandry.

No Build Alternative

Under the No Build Alternative no foreseeable changes are proposed that would affect the noise levels on the Lawrenceville Campus. Additionally, there are no proposed changes to the surrounding land uses that would affect the noise levels adjacent to the campus property. Local and regional vehicle use would be anticipated to grow between 2015 and 2025, likely increasing vehicle related noise on Webb Gin House Road.

Build Alternative

Under the Build Alternative the change in the noise levels on the Lawrenceville Campus are anticipated to be negligible. Although the new buildings would generate some minor new noises associated with HVAC systems, noise associated with the operation of the four new buildings and the photovoltaic system would be minimal. Research activities are anticipated to remain at similar levels, therefore no new sources or an increase in existing noise levels is anticipated. The Build Alternative would result in an increase in new vehicles to the site, however vehicle-related noise associated with the new employee population is not anticipated to be significant.

3.7 Cultural Resources

The potential for cultural resources at the Lawrenceville Campus was previously assessed in the last five years by a 2009 Cultural Resource Assessment (CRA) and a 2012 CRA update. In 2009, New South Associates prepared an initial CRA titled *Atlanta's Temple of Public Health, Centers for Disease Control Cultural Resource Assessment* for all of HHS/CDC's Atlanta facilities to assist the HHS/CDC in complying with the National Historic Preservation Act (NHPA) of 1966 (16 U.S.C. 470), as amended, Executive Orders 11593 and 13287, as well as pertinent state and federal regulations. The CRA was conducted to identify and assess the potential for National Register eligible structures or those that may possess exceptional historical significance.²⁴

This initial 2009 CRA concluded that the Lawrenceville Campus buildings should be reevaluated when they reach 50 years of age in 2013, and a Phase I Archaeological Survey was recommended for certain areas at the Lawrenceville Campus.²⁵ In a letter dated April 15, 2009, the Georgia State Historic Preservation Division (HPD) agreed with all of the findings except for the architectural evaluation of the Lawrenceville Campus, which it recommended eligible for the National Register of Historic Places (NRHP).

In 2012, New South Associates prepared an update to the 2009 CRA titled *Cultural Resources Assessment 2007-2012* (2012 CRA Update) to provide a more complete National Register evaluation of the Lawrenceville Campus. A comprehensive evaluation of the Lawrenceville Campus was not previously provided in the 2009 CRA as the property had not reached 50 years of age. The 2012 CRA Update included additional information about all of the buildings and their alterations and an evaluation of the complex as a district. The 2012 CRA Update evaluation concluded that the campus has been shown to have historic significance for its supporting role for the HHS/CDC, but it no longer retains the integrity necessary to convey this significance. HPD reviewed the 2012 CRA Update and determined that the campus does retain integrity of location, setting (within the campus proper), design, materials, workmanship, feeling, and association, as such, HPD finds the Lawrenceville Campus eligible for the NRHP under criteria A and C (refer to Appendix B: HPD letters dated June 22, 2015 and July 15, 2015).

Based on HPD's recommendation, the CDC reassessed the Lawrenceville Campus as a NRHP-eligible historic district and concurs with HPD's determination that Lawrenceville Campus is eligible for listing on the NRHP. CDC is currently coordinating with SHPO to establish contributing and non-contributing resources to the district and to establish a NRHP boundary (Refer to Appendix B: CDC letter dated October 3, 2017 and November 1, 2017).

²⁴ Districts, buildings, structures and objects are eligible for the National Register if they possess integrity of location, design, setting, materials, workmanship, feeling and association and are associated with events that have made a significant contribution to the broad patterns of our history; or are associated with significant persons of our past; or embody distinctive characteristics of a type, period, method of construction or that represent the work of a master, possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction; or that have yielded or may be likely to yield information important in prehistory or history (National Register of Historic Places, 36 Code of Federal Regulation (CFR) Parts 60 and 63 (1994)). Properties that are less than 50 years old are generally not eligible for listing unless they have achieved exceptional significance. Determinations of eligibility are made by Georgia's Department of Natural Resources Historic Preservation Division (HPD).

²⁵ New South Associates. *Atlanta's Temple of Public Health Centers for Disease Control Cultural Resource Assessment DeKalb and Gwinnett Counties, Georgia*. August 28, 2009

An archaeological field reconnaissance was completed on September 17, 2013, as recommended in both the 2009 CRA and 2012 CRA Update. The archaeological field reconnaissance included subsurface testing on three preliminary development areas and other areas of archaeological potential including an area associated with a previously recorder archaeological site falling within the campus boundary, an area in the northeastern corner of the property near the current entrance, an area in the center of the campus and an area in the southwestern corner of the campus. The subsurface testing yielded no artifacts. A second archaeological field survey was completed on March 19, 2014 in order to investigate additional development areas not covered by the September 17, 2013 field reconnaissance. Subsurface testing was conducted in areas identified for the proposed new emergency ingress/egress point of access, the Science Support Building, the Transshipping and Receiving Area and new employee parking lot. The subsurface testing yielded no additional artifacts.²⁶

Historic Resources within the Study Area

An inventory of historically-significant properties within the Study Area was compiled based on a review of NRHP listings for Gwinnett County and Georgia's Natural, Archaeological and Historic Resources Geographic Information System (GNAHRGIS). This database review indicated that there are two state-listed historic properties within the Study Area. These resources are briefly described as follows (see Figure 14: Cultural/Historic Resources):²⁷

Cates Cemetery (ID 201151). This site, off of Webb Gin House Road, is generally located behind a playground and tennis courts in an area of the Great Oaks Landing residential subdivision. According to GNAHR data, this cemetery, constructed circa 1874, contains between 10 and 12, mostly unmarked graves.

Farmhouse (ID 201150). This structure, located on the south side of Hillside Drive, was originally built circa 1890 with subsequent additions also considered historic. This structure, which once served as the main farmhouse on site, was designed in the Gabled Wing Cottage style. The original floor plan featured a central hallway with rooms on either side. Currently, there is a newer house on the property with the original outbuildings intact.

No Build Alternative

Under the No Build Alternative, no new construction, major renovations or major infrastructure improvements would occur on campus. Historic resources within the Study Area would remain similar to existing conditions. No disturbance to existing cultural or historic resources within the Study Area would occur.

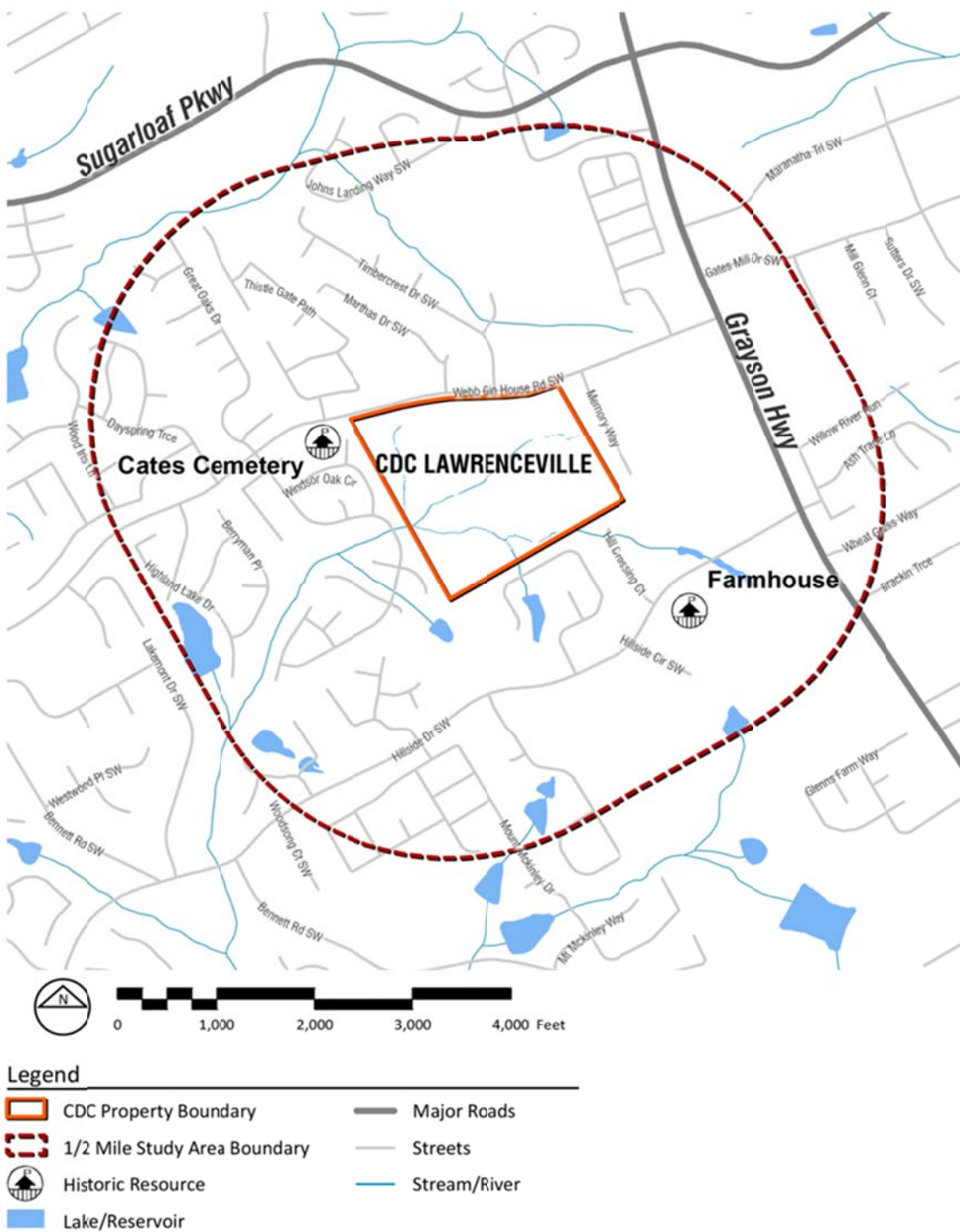
Build Alternative

The archaeological field investigations, completed on September 17, 2013 and March 19, 2014, which included subsurface testing on the proposed development areas and other areas of archaeological

²⁶ New South Associates. *2013/2014 Planning Study: Archaeological and Architectural Resources at the Centers for Disease Control (CDC) Lawrenceville Campus Gwinnett County, Georgia (Draft)*. July 2014.

²⁷ Georgia's Natural, Archaeological, and Historic Resources GIS (GNAHRGIS). <http://www.gnahrgis.org/> (Accessed on December 16, 2013).

Figure 14: Cultural/Historic Resources



Sources: Atlanta Regional Commission

potential did not yield any artifacts. The surveys concluded that there is minimal potential for significant archaeological deposits at the Lawrenceville Campus.

The proposed findings of the 2012 CRA Update and the archaeological field investigations were submitted for review and comment to SHPO. In letters dated June 22, 2015 and July 15, 2015, HPD determined that the Lawrenceville Campus is eligible for the NRHP. As noted above, based on HPD's recommendation, the CDC reassessed the Lawrenceville Campus as a NRHP-eligible historic district and concurs with HPD's determination that Lawrenceville Campus is eligible for listing on the NRHP. CDC is currently consulting with GA HPD to establish contributing and non-contributing resources to the district and to establish a NRHP boundary. Upon consensus between CDC and GA HPD regarding the NRHP boundary, CDC will move forward to develop a programmatic agreement on the treatment of the historic property on the Lawrenceville Campus that addresses the need for CDC to develop its scientific facilities while honoring its legacy. Any future redevelopment of the Lawrenceville Campus would be undertaken in accordance with the stipulation of the programmatic agreement. CDC will continue to consult with GA HPD to ensure any future undertaking as the Lawrenceville Campus would comply with Section 106 of the National Historic Preservation Act of 1966.

3.8 Urban Design & Visual Resources

Existing Conditions

Urban design characteristics of an area often refer to building bulk, arrangement of buildings, street patterns, streetscape elements, and natural features. Visual resources usually include public spaces or natural and built features such as water features, public parks, landmarks, or natural resources. The combination of architectural design and visual resources produce a unique visual character that defines the area.

The Lawrenceville Campus is located within unincorporated Gwinnett County, just outside the southern limits of the City of Lawrenceville and the northern limits of the City of Grayson. Since the construction of the campus in the early 1960's, the area has transitioned from a rural landscape to a suburban setting. The campus is primarily surrounded by residential subdivisions, the majority of which were developed in the 1990's. These subdivisions share similar urban design features including single-family homes on medium to large lots, curved roads and dead-end streets. The homes range in architectural styles with the older subdivisions exhibiting ranch, split-level ranch style architectural and the new subdivisions exhibiting neocolonial and nontraditional styles. Commercial uses within the Study Area are limited and primarily concentrated along Grayson Highway. The commercial uses exhibit nondescript facades and styles typical of suburban commercial corridors. A strip shopping plaza consisting of multi-story rows of connected units, a gas station and associated street-fronting parking is located at the northwest corner of Webb Gin House Road and Grayson Highway.

The Lawrenceville Campus is bordered by residential uses to the south, east and west, and Webb Gin House Road to the north. The campus is physically and visually set apart from the adjacent uses by the presence of two rows of security fencing that surrounds the campus on all sides. This security fencing is a prominent visual feature of the campus, as the exterior fence is an approximately 8-foot chain-link fence and the interior chain-link fence ranges between 6 to 8 feet in height. The exterior and interior fence lines are separated by a service road. The 80.64-acre campus is primarily pasture lands and wooded or riparian areas. Three tributaries extend through the campus and are bordered by riparian vegetation. The campus is most publicly visible from Webb Gin House Road due to lack of natural or man-made buffer which allows views of the northern pasture lands. The developed portion of the campus encompasses approximately 14 acres and includes 17 buildings. The buildings are concentrated in the eastern portion of the campus and are partially buffered from the surrounding residences by existing vegetation and pasture lands. The pasture lands are subdivided by internal fencing.

The facility was designed by the architecture firm Heery & Heery and exhibits a common functional aesthetic and site layout based on the industrial or research facility campus concept. The original buildings are all one-story, flat or shed roofed, clad in concrete and red brick veneer with only minimal window and door articulation.²⁸ Although some of the buildings have undergone renovations, they still retain their common aesthetic. A steel ellipsoidal water tower on seven legs is located within this grouping of building and is approximately 100 feet tall.²⁹ Later additions to the campus include a barn,

²⁸ New South Associates. *Cultural Resource Assessment: Atlanta's Temple of Public Health Centers for Disease Control Cultural Resource Assessment DeKalb and Gwinnett Counties, Final Report*. August 28, 2009. p. 189.

²⁹ New South Associates. *Cultural Resource Assessment: Atlanta Facilities, 2007-2012, Draft Report*. November 30, 2012. p. 40.

storage buildings and animal holding areas. These buildings are constructed of metal panel roofs and exteriors, wood or concrete.

No Build Alternative

Under the No Build Alternative, no new construction, major renovations or major infrastructure improvements would occur on campus. There would be no physical changes to the campus. Some vacant parcels still remain and are zoned for residential and commercial uses within the Study Area. Although there are no new residential or commercial development or rezoning proposed at this time. Based on historical development trends and market conditions, these vacant parcels could be developed for residential and commercial purposes and are likely to be exhibit similar scale and style to existing development.

Build Alternative

The Build Alternative would demolish three existing buildings and introduce four new structures on the campus, along with new parking areas, a new emergency ingress/egress and a new photovoltaic system. The expansion of new campus buildings would be limited to the eastern portion of the Lawrenceville Campus, and would expand upon the existing layout of the campus which includes a science/office core surrounded by a ring of support structures. The photovoltaic system would be installed in the northern portion of the campus on existing pasture land. Approximately 9.3 acres of pasture land or open space would be lost to provide the surface area for the new construction. The addition of the four new buildings, the new Transshipping and Receiving Area, Science Support Building and Office Support Buildings A and B would only slightly increase building density on campus, as three existing buildings would be demolished. The new emergency egress/ingress point, the visitor parking area, the Transshipping and Receiving Area and the photovoltaic system would be the most publicly visible changes to the campus landscape, as these would be located closer to the perimeter of the campus and Webb Gin House Road.

In order to obstruct visibility of the photovoltaic system from the surrounding residential land uses and from Webb Gin House Road, a perimeter screening buffer will be installed consisting of evergreen trees and/or native vegetation. The buffer would be planted along the east, west and north sides of the installation. The solar panels would stand approximately five to six feet tall at maximum height. The screening will be maintained at a height of five to six feet to ensure coverage of the solar array. Potential glare impacts are not anticipated as the solar array would be angled south and away from Webb Gin House Road and any residential property. In addition the solar array would be obstructed from view by the evergreen buffer.

The new Science Support Building and Office Support Buildings A and B would be located more internally within the campus and would be less visible from the surrounding land uses. The height of the new structures would be consistent with the heights and scale of other campus buildings. The buildings would be designed in keeping with the context of the existing campus setting and surrounding neighborhood. Significant adverse impacts to urban design and visual resources are not anticipated.

3.9 Natural Resources

Existing Conditions

Natural resources include geology and soils, water resources, water quality, vegetation, floodplains, wildlife and protected species. This section provides an inventory of the existing natural resources present on the Lawrenceville Campus and within the vicinity of the Study Area. The potential for the Build Alternative to significantly impact natural resources is also evaluated below. As part of this evaluation, an ecological assessment was completed for the site to identify the presence of state and/or federal jurisdictional waters and the presence of state and/or federally listed species and their suitable habitat.

Topography, Geology and Soils

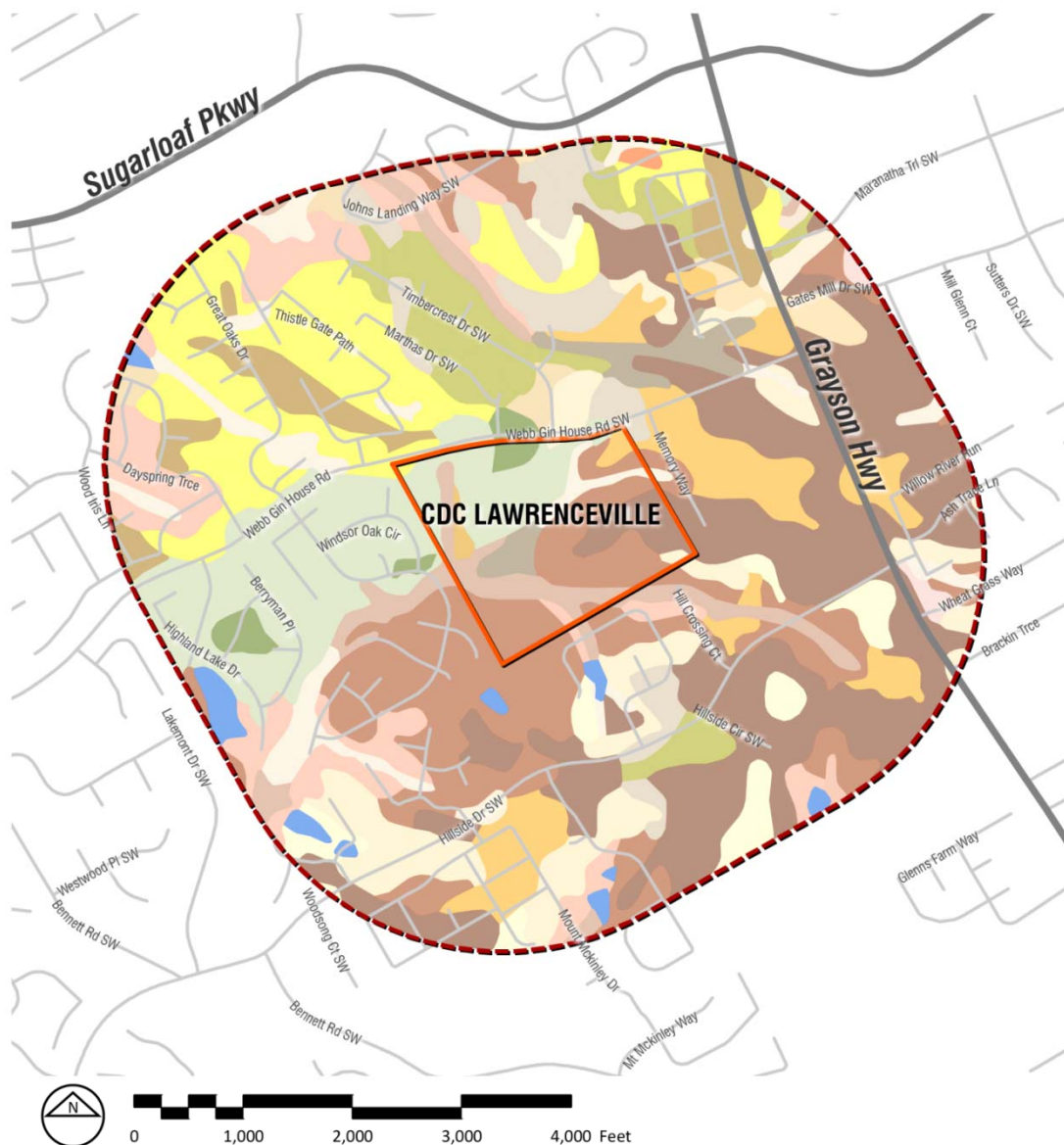
The Lawrenceville Campus is located in the Piedmont Plain Physiographic Province. The Piedmont Province is north of the fall line, and is composed of igneous and metamorphic rock overlain by saprolitic and residual soil formed by the in-place weathering of bedrock. According to the 1976 Geologic Map of Georgia, the primary unit name is Granitic Gneiss undifferentiated.³⁰ A very small portion of the campus is located within the Mica Schist/Amphibolite unit. These units are located in the Blue Ridge and Piedmont Province, and the age of both units is Precambrian-Paleozoic.

The topography of the Lawrenceville Campus generally slopes toward the west and southwest. The highest point of the campus, located at the southeastern edge of the campus, is approximately 1,070 feet above mean sea level (msl). The lowest point, at approximately 996 feet above msl, is located on the western edge of the campus at the confluence of three tributaries.

According to the United States Department of Agriculture - Natural Resources Conservation Service (USDA NRCS) eight dominant soil types were identified within the Lawrenceville Campus, consisting of approximately 31.9 percent of the Rawlings and Rion soils, 29.3 percent of the Gwinnett series, 13.3 percent of the Chewacla series, 12.5 percent of the Appling-Hard labor complex, 5.2 percent of the Worsham series, and 4.4 percent of the Toccoa series. The remaining five soil types comprise less than 2 percent each of the project area. Refer to Table 9: Soil Types for a brief description of the each soil types found within the Lawrenceville Campus and Figure 15: Soils for a depiction of the soil series occurring within the Study Area. A total of 13 soil types are present in the project area according to USDA NRCS.

³⁰ Lawton, D.E., et al. Georgia Geological Survey. *Geological Map of Georgia*. 1976.

Figure 15: Soils



Legend

CDC Property Boundary	Appling Sandy Clay Loam	Madison Gravelly Sandy Loam
1/2 Mile Study Area Boundary	Appling Sandy Loam	Madison Sandy Clay Loam
Major Roads	Appling-Hard Labor Complex	Muswilla Cobbly Loam
Streets	Ashlar and Wedowee Soils	Pacolet Sandy Clay Loam
	Ashlar, Ricon, and Wateree Soils	Pacolet Sandy Loam
	Bethlehem and Cecil Soils	Rawlings and Rion Soils
	Cecil Sandy Loam	Rock Outcrop-Wake Complex
	Chewacla Soils	Toccoa Fine Sandy Loam
	Gwinnett Clay Loam	Wedowee Sandy Loam
	Gwinnett Loam	Wehadkee Soils
	Hard Labor Sandy Loam	Worsham Sandy Loam
	Helena Sandy Loam	Water

Sources: USDA NRCS; Atlanta Regional Commission

Table 9: Soil Types within the Lawrenceville Campus

Series and Location	Slope Range	Erodibility (low, medium, high)	Use	Soil Characteristics
Appling (Campus and Study Area)	0-25%	medium	Cropland, pasture, forest	Very deep, well-drained soils on ridges and side slopes of the Piedmont uplands. Medium to rapid runoff, moderate permeability.
Ashlar (Campus and Study Area)	0-70%	medium to high	Primarily forest; small areas of cropland	Soils are moderately deep and well drained to excessively drained. Runoff is slow to very rapid, permeability is moderately rapid.
Chewacla (Campus and Study Area)	0-2%	low to medium	Pasture, cropland, some forest	Somewhat poorly drained soils located in the flood plains of Piedmont and Coastal Plain river valleys. Runoff is negligible to very low, permeability is moderate.
Gwinnett (Campus and Study Area)	2-60%	medium	Forest	Deep, well drained soils found on very gently sloping to very steep ridges of the Piedmont Plateau. Moderate permeability, medium to rapid runoff.
Hard labor (Campus and Study Area)	0-15%	Low to medium	Cropland, forest	Very deep, moderately well drained, slowly permeable soils. Runoff is medium to rapid; permeability is slow.
Helena (Campus)	0-15%	Low to medium	Cropland, some forest	Very deep, moderately well drained soils found on ridges and hill slopes of the Piedmont. Runoff is moderate to rapid, permeability is slow.
Madison (Campus and Study Area)	2-60%	medium	Pasture, cropland, forest	Well drained, moderately permeable soils, very deep to bedrock, found on gently sloping to steep uplands in the Piedmont. Runoff is medium to rapid; permeability is moderate.
Pacolet (Campus and Study Area)	2-60%	medium	Forest, cropland, pasture	Very deep, well drained, moderately permeable soils found on gently sloping to very steep Piedmont uplands. Runoff is medium to rapid; permeability is moderate.
Rawlings (Campus and Study Area)	6-45%	medium	Forest, some pasture	Moderately deep, well drained soils found on gently sloping to steep summits and side slopes of the Piedmont uplands. Runoff is medium to very rapid; permeability is moderate.
Rion (Campus and Study Area)	2-60%	medium	Forest, some cropland and pasture	Very deep, well drained soils found on gently sloping to very steep Piedmont Uplands. Runoff is medium to rapid; permeability is moderate.
Toccoa (Campus and Study Area)	0-4%	low to medium	Cropland, pasture	Very deep, well drained and moderately well drained soils in the flood plains and natural levees of the Piedmont and Upper Coastal Plain valleys. Moderately rapid permeability, runoff is very low.
Wateree (Campus and Study Area)	2-95%	medium	Primarily forest; small areas of cropland	Well drained, moderately deep soils on sloping to very steep side slopes of the Piedmont uplands. Runoff is medium, permeability is moderately rapid.
Worsham (Campus and Study Area)	0-8%	medium	Woodland, pasture, small amount of cropland	Found in depressions, at the heads of drains, at the base of slopes, and on upland flats in the Piedmont Plateau. Poorly drained, runoff is high, very slow permeability.
Source: USDA Natural Resources Conservation Service				

Water Resources and Water Quality

Watershed. The Lawrenceville Campus is located within the Ocmulgee River basin. The United States Geological Survey (USGS) has divided the Ocmulgee River basin into three sub basins, or Hydrologic Unit Codes (HUCs). The Lawrenceville Campus is in the Upper Ocmulgee River sub basin (HUC 03070103). The northernmost part of the Upper Ocmulgee River sub basin is within the Piedmont Province physiographic region where the headwaters of the Ocmulgee River are located, and the southernmost part of the sub basin crosses the Fall Line into the Upper Coastal Plain physiographic region. The Upper Ocmulgee basin drains approximately 2,973 square miles and encompasses all or parts of 20 Georgia counties.³¹ The sub basin is oriented in a general north-south direction from Gwinnett County to the north, through Bibb County, and into Houston and Twiggs Counties at the southernmost point. Approximately 85 percent of the sub basin is in the Southern Piedmont Major Land Resource Area (MLRA), and approximately 15 percent is in the Carolina and Georgia Sandhills MLRA.

Waters of the United States. Jurisdictional Waters of the United States are defined by 33 CFR Part 328.3(b) and are protected by Section 404 of the Clean Water Act (CWA) (33 USC 1344). These waters include rivers, streams (perennial, intermittent and ephemeral), bogs, sloughs, lakes, ponds, and wetlands. Implementation of the CWA is the responsibility of the Environmental Protection Agency (EPA) and the United States Army Corps of Engineers (USACE). The USACE oversees permitting for discharges of dredge and fill material into jurisdictional waters.

As part of the ecological assessment completed for the Lawrenceville Campus a field survey was conducted on the site on September 17, 2013 to determine the presence of any potential jurisdictional waters. Methodology for state and federal waters field determinations was based on guidance from the *Corps of Engineers Wetlands Delineation Manual 1987 (Manual)*, *Corps of Engineers Interim Regional Supplement to the Manual: Eastern Mountains and Piedmont Region*, July 2010 and the Georgia Environmental Protection Division's (GAEPD) *Field Guide for Determining the Presence of State Waters that Require a Buffer*.

The field survey identified six Waters of the United States within the Lawrenceville Campus consisting of four streams and two wetlands. All jurisdictional streams and wetlands are subject to the jurisdiction of the USACE and Section 404 of the CWA. In addition, all streams are subject to local and state-mandated buffer requirements. Buffered state waters are defined by the Georgia Erosion and Sedimentation Control Rules 391-3-7, promulgated under the Georgia Erosion and Sedimentation Act (Act), O.C.G.A. 12-7 as "any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the State, which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation." Buffered state waters in Georgia require a 25-foot protective buffer on warm-water resources and a 50-foot buffer on cold-water resources (trout streams). In addition, Gwinnett County's local buffer ordinance places a 75-foot buffer

³¹ USEPA. *Priority Watersheds for the Southeast*. <http://www.epa.gov/region4/water/watersheds/priority.html#GA>. (Accessed on September 18, 2013)

on all perennial and intermittent streams (50 feet undisturbed and an additional 25 feet for impervious materials).³²

A summary description of each resource identified within the Lawrenceville Campus is provided below in Table 10. Waters of the United States. Please refer Figure 16: Jurisdictional Waters for a detailed location of each resource. A detailed description of each resource and the methodology for determining jurisdictional waters is provided in Appendix A: Ecology Resource Survey and Wetland Delineation.

Table 10: Waters of the United States

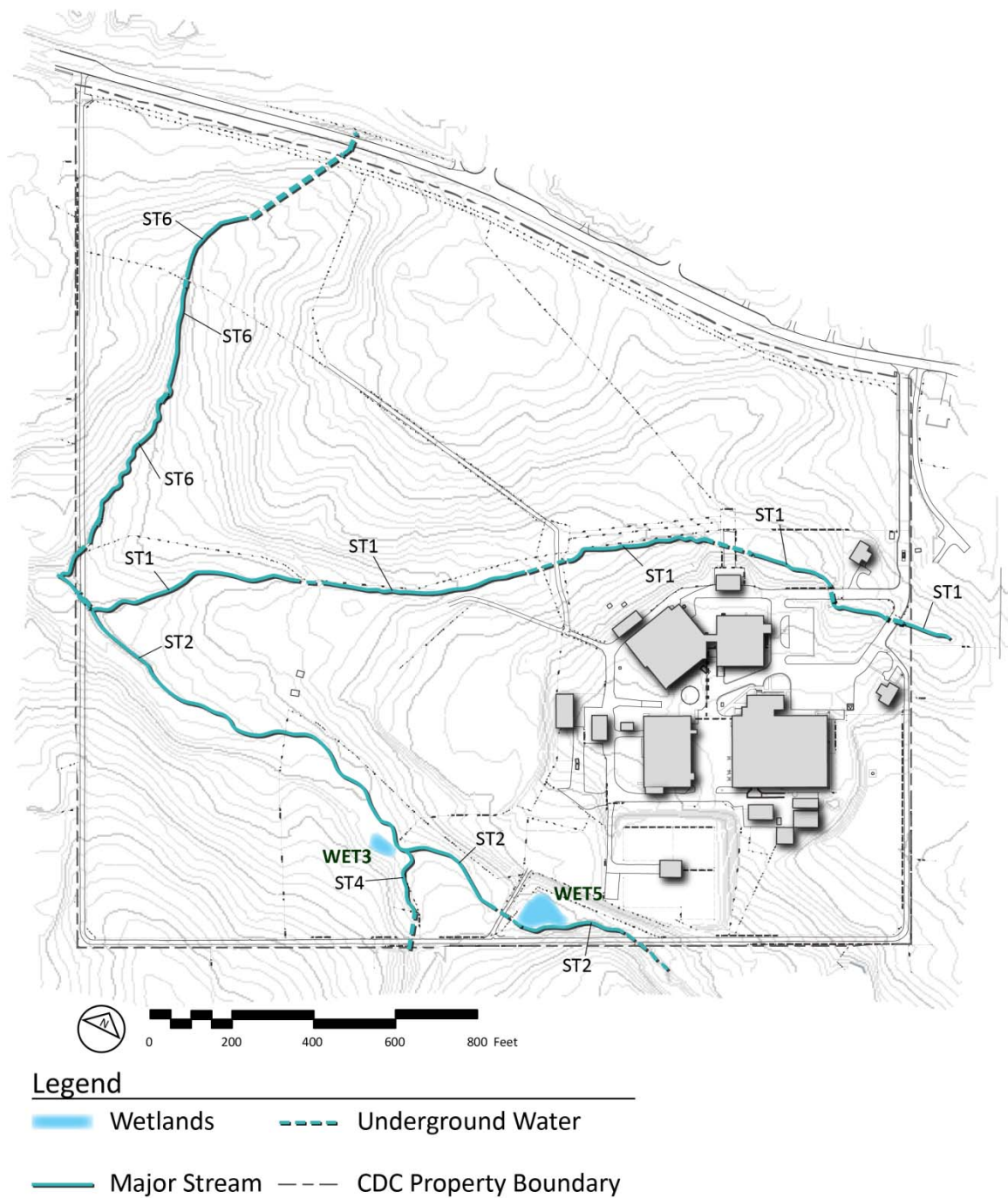
Map ID	Type	Description
ST1	Ephemeral, Intermittent and Perennial	Stream 1 is an unnamed tributary to Haynes Creek that flows east to west through the center of the Lawrenceville Campus. Stream 1 transitions from an ephemeral channel to a perennial stream within the same continuous reach. Portions of Stream 1 are classified as a buffered state water. A portion of the channel is considered a non-buffered state water because it lacks baseflow and wretched vegetation
ST2	Perennial	Stream 2 is Haynes Creek, a perennial stream that flows northwest from the south-central end of the Lawrenceville Campus to its confluence with Stream 1. At bankfull, the width of S2 is approximately four to six feet and the depth is three to seven feet. The substrate is composed of sand, silt, pebble, and cobble (brought in from an outside source). Stream 2 is classified as a buffered state water and the vegetated riparian zone is greater than 25 feet wide on both banks and is composed of mixed pine-hardwood habitat.
ST4	Perennial	Stream 4 is a perennial tributary to Haynes Creek that flows north from the southern boundary of the Lawrenceville Campus. At bankfull, the channel is approximately two to three feet wide and one to three feet deep. The substrate of S4 is composed of sand and silt. Stream 4 is classified as a buffered state water.
ST6	Perennial	Stream 6 is a perennial unnamed tributary to Haynes Creek. This resource flows south through the project area from the northwestern quadrant of the campus. At bankfull, the channel is approximately three to five feet wide and three to five feet deep. The substrate of S6 is dominated by sand, silt, and pebbles. Stream 6 is classified as a buffered state water.
WET3	Wetland	Wetland 3 is a palustrine emergent wetland located adjacent to Stream 4 near its confluence with Stream 2. Dominant hydrophytic vegetation includes tree species such as red maple and tulip poplar. Herbaceous vegetation consists primarily of smartweed (<i>Polygonum hydropiperoides</i>), jewelweed (<i>Impatiens capensis</i>), Napalese browntop, and giant cane (<i>Arundinaria gigantea</i>).
WET5	Wetland	Wetland 5 is a palustrine emergent wetland located adjacent to Stream 2 along the south-central boundary of the project area. Dominant vegetation includes red maple, blunt spike-rush (<i>Eleocharis obtusa</i>), common rush (<i>Juncus effusus</i>), knotweed (<i>Polygonum cuspidatum</i>), and sensitive fern (<i>Onoclea sensibilis</i>).

Floodplains. Executive Order (EO) 11988 (Floodplain Management), and its amendment (EO 13690) requires federal agencies to avoid to the extent possible long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of

³² Gwinnett County. *Stream Buffer Ordinance*.

http://www.gwinnettcounty.com/content/LocalUser/pnd/stormwater_design_guide/FlashHelp/stormwater_design_guide/Selected_County_Stormwater_Regulations/Stream_Buffer_Protection.htm (Accessed on December 11, 2013)

Figure 16: Jurisdictional Waters



floodplain development wherever there is a practicable alternative. According to EO 13690 the flood elevation can be determined by (i) Use data and methods informed by best-available, actionable climate science; (ii) Build two feet above the 100-year (1%-annual-chance) flood elevation for standard projects, and three feet above for critical buildings like hospitals and evacuation centers; or build to the 500-year (0.2%-annual-chance) flood elevation.³³ A review of Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) was undertaken to identify floodplains within the Study Area. According to the FEMA FIRM, the Lawrenceville Campus is not located within the 100- or 500-year floodplain (See Figure 17: Study Area Floodplains and Wetlands).

Vegetation

Four vegetation communities or habitat types were identified during the September 2013 site survey including ruderal, agricultural, planted pine, and mixed pine-hardwood (Refer to Figure 18: Vegetation). A description of each vegetation community or habitat type is provided below.

Ruderal. The vegetated component of this community is composed of herbaceous species such as tall fescue grass (*Festuca arundinacea*), broomsedge (*Andropogon virginicus*), goldenrod (*Solidago glomerata*), sawtooth blackberry (*Rubus argutus*), and vine species such as Japanese honeysuckle (*Lonicera japonica*), kudzu (*Pueraria lobata*), and poison ivy (*Toxicodendron radicans*). Most of the ruderal areas within the campus occur along the paved and unpaved roadways, and among the buildings and parking areas, which are regularly maintained by mowing or herbicide. This community is heavily impacted by anthropogenic activity and does not provide any habitat for wildlife species.

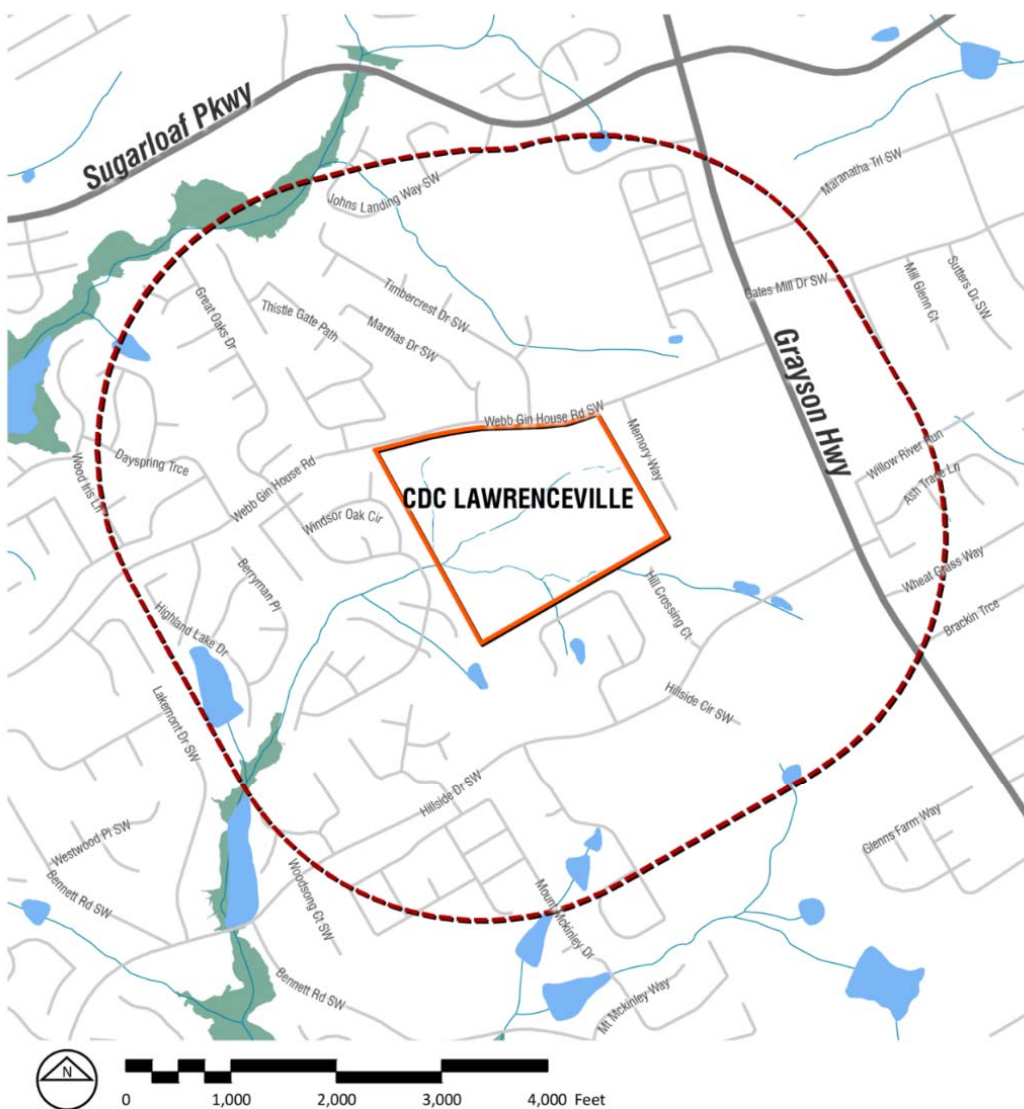
Mixed Pine-Hardwood. Dominant canopy species within this habitat type include loblolly pine (*Pinus taeda*), tulip poplar (*Liriodendron tulipifera*), red maple (*Acer rubrum*), water oak (*Quercus nigra*), and sweetgum (*Liquidambar styraciflua*). Understory species consist of Chinese privet (*Ligustrum sinense*) and saplings of the dominant species. Herbaceous species consists of Japanese honeysuckle, poison ivy, Christmas fern, blackberry, English ivy (*Hedera helix*), winged sumac (*Rhus copallinum*), purple passion flower (*Pasiflora incarnata*), and kudzu (*Pueraria montana*). This community occurs primarily in the center of the site and along riparian corridors. The mixed pine-hardwood community provides good wildlife habitat. The community consists of several mast producing tree species, and the understory is dense enough to offer shelter and a variety of ecological niches.

Planted Pine. The northwestern quadrant of the Project Site consists of mature, planted, loblolly pine. Trees within this area are even-aged and between 50 to 75-years-old. Although the area is no longer used for silviculture, the understory is maintained by mowing. In addition to frequent maintenance, the forest floor contains a heavy layer of pine needles, which prohibit the growth of herbaceous vegetation. This community is of minimal value to wildlife species because it does not offer suitable food or cover.

Agricultural. Much of the Lawrenceville Campus consists of agricultural fields used to support small livestock. The fields contain a variety of grass species such as bahiagrass (*Paspalum notatum*), smooth crabgrass (*Digitaria ischaemum*), and panic grass (*Panicum spp.*). The fields are sustained through natural regeneration but they are frequently maintained by grazing livestock and mowing. These agricultural areas provide minimal habitat for wildlife species but are considered a food source for

³³ CEQ. Fact Sheet: Taking Action to Protect Communities and Reduce the Cost of Future Flood Disasters. https://www.whitehouse.gov/administration/eop/ceq/Press_Releases/January_30_2015 (Accessed on May 5, 2015).

Figure 17: Study Area Floodplains and Wetlands



Legend

- | | |
|------------------------------|-----------------------|
| CDC Property Boundary | Open Water & Wetlands |
| 1/2 Mile Study Area Boundary | Streams and Rivers |
| Major Roads | Floodplain |
| Streets | |

Sources: US Geological Survey; FEMA; Atlanta Regional Commission

Figure 18: Vegetation



migratory birds. Several eastern bluebirds (*Sialia sialis*) were observed foraging over the agricultural fields and along the existing fence lines. In compliance with Executive Order 13112, a survey was conducted for invasive species that could spread during construction. Invasive species listed as Category 1 by the Georgia Exotic Pest Plant Council and identified on the Project Site include: Napalese browntop (*Microstegium vimineum*), kudzu (*Pueraria lobata*), Chinese privet (*Ligustrum sinense*), Japanese honeysuckle (*Lonicera japonica*), and English ivy (*Hedera helix*).

Wildlife and Protected Species

The Lawrenceville Campus was investigated for the presence of state and federally listed species and their suitable habitat. Methodology for determining the presence of state and federally protected species was based on a review of known county occurrences, early coordination conducted with Georgia Department of Natural Resources (GADNR), United States Fish and Wildlife Service (USFWS), and available life history data from multiple sources including the rare species profiles available on the GADNR-Wildlife Resources Division web page and a field investigation conducted on September 17, 2013.³⁴ A detailed description of the methodology and field investigation is provided in Appendix A: Ecology Resource Survey and Wetland Delineation.

Federally Protected Species. In compliance with Section 7 of the Endangered Species Act, the presence of threatened and endangered species, and their designated critical habitat was evaluated. According to the USFWS Information, Planning, and Conservation System (IPAC) database for Gwinnett County two federally protected species may occur in the project area: black-spored quillwort (*Isoetes melanospora*) and little amphianthus (*Amphianthus pusillus*).

Little amphianthus (*Amphianthus pusillus*, federally and state threatened): Little amphianthus is a small, annual, aquatic, herbaceous plant. The species exhibits leaves on both the water's surface as well as below the surface. Leaves above the water's surface are in pairs and ovate in morphology. Little amphianthus produces tiny, inconspicuous white to pale violet flowers in March and April, which may be present on both the tops of the floating leaves as well as on those below the water surface. Little amphianthus has been found in Alabama, Georgia, and South Carolina. This species is endemic to shallow, rock-rimmed, flat-bottomed, vernal pools on granite outcrops. The vernal pools have a thin layer of gravelly soil in the deeper parts of the pools. Water depths during the flowering period range from zero to 10 cm.

Little amphianthus grows in association with a variety of species, with the Piedmont quillwort (*Isoetes piedmontana*) being the most commonly associated species. In deeper more permanent pools, two-headed water-starwort (*Callitriche terophylla*) is commonly present, and elf orpine (*Diamor phacymosa*) is more commonly present in the margins of the pools with drier shallower soil. Additional species associated with little amphianthus include blunt spikerush (*Eleocharis obtusa*), Piedmont false pimpernel (*Lindernia monticola*), granite flatsedge (*Cyperus granitophilus*), little bluestem (*Andropogon scoparius*), Philadelphia panicgrass (*Panicum lithophilum*), bentgrass species (*Agrostis spp.*), rush species (*Juncus spp.*), fimbry species (*Fimbristylis spp.*), oneflower stitchwort (*Arenaria uniflora*), polytrichum moss (*Polytrichum commune*), orangegrass (*Hypericum gentianoides*), woolly ragwort (*Senecio tomentosus*), and algal growths.

³⁴ GADNR. *Rare Species Profiles*. http://www.georgiawildlife.com/rare_species_profiles (Accessed on September 4, 2013).

Early correspondence with the GADNR indicated that there are no known elemental occurrences of little amphianthus within a three-mile radius of the Lawrenceville Campus. Two small areas of granite outcrops (less than 500 square feet) are located on the Lawrenceville Campus. However, these areas are extremely small, isolated, and do not contain vernal pools necessary to support little amphianthus. Furthermore, none of the associated species listed above were identified. The Project Site does not exhibit suitable habitat for the little amphianthus.

Black-spored quillwort (Isoetes melanospora, federally and state endangered): Black-spored quillwort is an inconspicuous perennial herb. The leaves arise from a bulbous base, are bunched, linear, slender-tipped and resemble quills. This herb is restricted to shallow flat-bottomed depressions on granite outcrops that collect precipitation. The depressions are less than one foot in depth and are entirely rock rimmed with at least one-half to one inch of soil. Black-spored quillwort grows in association with several of the species mentioned above including little amphianthus.³⁵

Correspondence with the GADNR indicated that there are no known elemental occurrences of the black-spored quillwort within a three-mile radius of the Project Site. Suitable habitat was not identified within the Lawrenceville Campus during the September 2013 field survey. As noted above, granite outcrops are present in two locations on the site, but these outcrops are considered unsuitable due to their size and shape. The outcrops identified on site do not contain vernal pools with one-half to one inch of substrate. Therefore, the Project Site does not provide suitable habitat for the black-spored quillwort or its habitat.

State Protected Species. The Georgia Endangered Wildlife Act prohibits the capture, killing, or selling of protected species and protects the habitat of these species on public lands. Georgia's Wildflower Preservation Act of 1973 provides for designation of and protection of plant species that are rare, unusual, or in danger of extinction. An early coordination request was made to GADNR for information regarding known occurrences of protected species within three miles of the Lawrenceville Campus. The response from GADNR indicated that one state protected species is known to occur within a three-mile radius of the project corridor (Refer to Appendix A: Ecology Resource Survey and Wetland Delineation Appendix B).

Granite stonecrop (Sedum pusillum, state threatened): The granite stonecrop is an annual herb usually two to four inches in height with few branches and spiral leaves. The plant has succulent stems with a pale bluish-green coloration often tinged with red. The alternately arranged leaves are pointed, succulent, round in cross section and up to 0.5 inches long. The flowers consist of four white petals and four green sepals with eight red tipped stamens. This plant is found on large flat granite rock outcrops among mosses in partial shade, usually in leaf litter under older eastern red cedar trees. The range of this species extends through the Piedmont Plateau of Georgia, South Carolina, and south-central North Carolina. Threats to the species include habitat fragmentation, off-road vehicle traffic, removal of red cedar trees from granite outcrops, and habitat destruction from quarrying and dumping.

Early coordination with the GADNR revealed that there are known elemental occurrences of the granite stonecrop approximately 1.5 miles and 2.0 miles northeast of the proposed Lawrenceville Campus. However, the Lawrenceville Campus does not contain suitable habitat for the granite stonecrop.

³⁵ U.S. Department of Agriculture Natural Resources Conservation Service. *Plants Database*. <http://plants.usda.gov/lava> (Accessed on September 4, 2013)

Although two granite outcrops were identified on site, these areas do not contain vernal pools or pools with sufficient substrate for plants to colonize.

Critical Habitat. According to the USFWS Critical Habitat Mapper, there is no critical habitat located within Gwinnett County, Georgia.³⁶

Bald and Golden Eagles. The Bald and Golden Eagle Protection Act of 1940 provides for the protection of the bald eagle and the golden eagle by prohibiting, except under certain specified conditions, the taking, possession and commerce of such birds. No bald eagle nests have been documented by GADNR as occurring within three miles of the Lawrenceville Campus. No suitable foraging habitat for eagles such as large open water bodies exists within the project area.

Migratory Birds. The Migratory Bird Treaty Act (MBTA) and the Executive Order on the Responsibility of Federal Agencies to Protect Migratory Birds (EO 13186), requires the protection of migratory birds and their habitats. The Lawrenceville Campus does not contain any bridges or box culverts that could be suitable for migratory birds.

Bats. Bats are known to utilize structures such as culverts and bridges for roosting throughout much of the United States, particularly in the southern states. Signs of bat roosts include visible, audible and olfactory identification, presence of guano, or staining from guano or body oils. No suitable structures were identified in the Lawrenceville Campus and no evidence of roosting was observed during the ecological field survey.

Essential Fish Habitat. In compliance with the Magnuson-Stevens Fishery Conservation and Management Act, projects within the State of Georgia must identify unavoidable adverse impacts to Essential Fish Habitat (EFH). The Lawrenceville Campus does not occur in any of the coastal counties of Georgia that may contain EFH. In Georgia, EFH can be found in the following counties: Camden, Glynn, McIntosh, Liberty, Bryan, and Chatham. The Lawrenceville Campus is located in Gwinnett County, which does not contain any tidally influenced areas.

No Build Alternative

Under the No Build Alternative, no new construction, major renovations or major infrastructure improvements would occur on campus, as such there would be no clearing, grading or other construction activities occurring on the Lawrenceville Campus. The No Build Alternative would not result in impacts to geology, soils, topography, surface waters or wetlands within on-campus or within the Study Area.

Build Alternative

Geology, Soils and Topography

Under the Build Alternative, construction activity would occur on previously disturbed areas as well as areas consisting of pasture land and lawn areas. Construction activity would entail demolition, some below ground excavation, pavement removal, clearing and grading, resulting in the disturbance of soils.

³⁶ U.S. Fish and Wildlife Service. *Critical Habitat*. <http://criticalhabitat.fws.gov/crithab/> (Accessed 18 September 2013).

Some ground disturbance would also occur for infrastructure improvements, such as extension of on-campus utilities and installation of the photovoltaic system. Ground disturbance for the photovoltaic system would include pasture grass removal, post driving, minor trenching for the installation of underground conduit and transformer pad and installation of geotech fabric material and stone.

Soil and slope stabilization measures would be used to reduce soil movement and potential erosion during construction. An erosion and sedimentation control plan would also be implemented to control and reduce sediments from entering storm drains and/or adjacent areas during construction. Any grading activities would follow this plan to ensure soil stability and minimize impacts. Although ground disturbance would occur, including grading, there are no unique landforms or topographic features that would be impacted. Significant topographic alterations would not occur. The Build Alternative would not result in significant adverse impacts to geology, soils, and topography.

Water Resources and Water Quality

There are four jurisdictional streams and two jurisdictional wetlands located on the Lawrenceville Campus. The proposed new emergency egress/ingress access road would require constructing a roadway crossing at Stream 1, within the footprint of an existing crossing. If construction of the proposed roadways extends beyond the existing culvert, or replaces the existing culvert with a longer structure, a Section 404 permit issued by the United States Army Corps of Engineers (USACE) would be required. A Section 404 Permit is required for any dredge activity or placement of fill material within jurisdictional waters of the United States. Any impact to jurisdictional waters of the U.S. totaling more than 0.1 acre of wetlands or 100 linear feet of stream would also require the purchase of compensatory mitigation credits from a USACE approved commercial mitigation bank.

In addition to the new emergency ingress/egress roadway, construction associated with parking and driveways for the new Transshipping and Receiving Area and the new Office Support Building A may occur in close proximity to Stream 1. Any encroachment into the 25-foot protective buffer of a state water would require a buffer variance from the GAEPD. In accordance with the local buffer ordinance established and enforced by Gwinnett County, any encroachment into the 50-foot undisturbed buffer, or any impervious material placed within the additional 25-foot setback, would require a local buffer variance. Gwinnett County also has additional buffer restrictions for projects that occur within the Big Haynes Creek watershed and within seven miles of a surface water intake structure. Although the headwaters of Streams 1, 2, 4, and 6 occur within the Big Haynes Creek subwatershed, there are no surface water intake structures within seven miles. Therefore, all special restrictions associated with the Big Haynes Creek watershed would not apply to the Lawrenceville Campus.

Implementation of the Build Alternative would result in an increase in impervious surfaces on the campus. Stormwater control measures would be implemented on site to manage stormwater runoff. Section 438 of the Emergency Independence and Security Act of 2007 (EISA) establishes stormwater runoff requirements for federal development projects. EISA requires that “the sponsor of any development or redevelopment project involving a Federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction and maintenance strategies for the property to

maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to temperature, rate, volume, and duration of flow”.³⁷

Current stormwater control measures proposed include the use of pervious surfaces for the proposed new secondary access road. A pervious four-inch stone base or native vegetation would be installed under the solar array. An infiltration trench is also proposed along the eastern and northern edge of the solar array to capture stormwater runoff and allows infiltration into the surrounding soils.

Additional stormwater management would be developed during final design in compliance with Section 438 and may include the use of green infrastructure/low impact development practices such as bioretention, bioswales, green roofs, revegetation, enhancement of riparian buffers, as well as detention facilities to control stormwater during large storm events.

Since the Build Alternative involves the disturbance of one or more acres of soil, a National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction Activity would be required to address construction related erosion, sediment and pollution issues. The GAEPD administers NPDES Permits and authorizes stormwater discharges to the waters of the State of Georgia that result from construction activities. The GAEPD requires a NPDES Permit to include a Stormwater Pollution Prevention Plan (SWPPP), which establishes procedures for minimizing pollutants in stormwater discharges during and post construction.

Once specific site design plans have been developed for the emergency ingress/egress roadway, the proposed Transshipping and Receiving Area and Office Support Buildings A and B the HHS/CDC will obtain all necessary permits and variances and undertake all necessary coordination with USACOE, GAEPD and Gwinnett County to minimize impacts to jurisdictional waters on the Lawrenceville Campus. The implementation of stormwater control measures in compliance with Section 438 and development of a SWPPP with soil and erosion control measures would minimize impacts to surface waters during and post construction. In addition, the HHS/CDC is proposing to revegetate stream buffer areas to further minimize impacts to jurisdictional waters located on the campus.

Vegetation

Construction of the Build Alternative would result in the loss of 9.3 acres of agricultural and ruderal communities. These communities are not considered high quality vegetation and provide minimal habitat for wildlife species. Construction activities would include measures to prevent or minimize the spread of invasive species as appropriate for the time of the year. The Build Alternative would not result in significant adverse impacts to vegetation.

Floodplains

All proposed site improvements would not occur within a FEMA designated floodplain and therefore floodplain areas would not be impacted. The Build Alternative would not result in significant adverse impacts to floodplains.

³⁷ USEPA. *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act*. <http://water.epa.gov/polwaste/nps/upload/eisa-438.pdf> (Accessed on June 12, 2014)

Wildlife and Protected species

The Lawrenceville Campus was investigated for the presence of state and federally listed species and their suitable habitat. Based on coordination with GADNR, USFWS and reviews of data sources, two federally protected species (*Little amphianthus* and *Black-spored quillwort*) and one state protected species (*Granite stonecrop*) had the potential to occur on the Lawrenceville Campus. A field investigation conducted on September 17, 20013 determined that the Lawrenceville Campus did not provide suitable habitat for these federally or state protected species. As such, the Build Alternative would not result in significant adverse impacts to federally or state protected species. Due to the lack of suitable habitat on the Lawrenceville Campus, the Build Alternative is not anticipated to result in a significant adverse impact on federally protected eagles, migratory birds or bats.

3.10 Utility Service

Existing Conditions

Electrical/Gas Service

Electrical service to the campus is provided by Georgia Power with HHS/CDC responsible for on-campus distribution. In addition to the electrical service provided by Georgia Power, the campus is also equipped with backup emergency generators. Natural gas is supplied to the Lawrenceville Campus with Atlanta Gas Light (AGL) owned gas line and is purchased through Southstar Energy Services. The campus is served by an incoming AGL gas line and is supplied to the existing buildings on campus through HHS/CDC-owned gas lines. The Lawrenceville Campus reduced its consumption of natural gas by 26 percent from 2009 to 2012.

Heating and Cooling

The Lawrenceville Campus utilizes a chiller plant to provide chilled water for cooling to the three primary buildings on campus. All chillers, cooling towers and associated equipment were replaced or upgraded in 2010. According to HHS/CDC, the chiller plant has 30 percent excess capacity at most times of the year. Smaller buildings are served by individual package units.

The Lawrenceville Campus uses steam for building heating, the heating of water and for laboratory equipment use. The on-campus boiler plant services the main buildings on campus, other smaller buildings on campus are served by individual gas-fired package units. All three boilers have been replaced in the last 10 years.

Water

Domestic water, used for domestic and fire protection purposes, is supplied to the Lawrenceville Campus by the Gwinnett County Water and Sewer Authority. Gwinnett County draws its water supply from Lake Lanier. Water is treated at Gwinnett County's two water treatment plants, the Lanier Filter Plant or the Shoal Creek Filter Plant, which have a combined water production capacity of approximately 225 million gallons per day (mgd).³⁸ The campus's water distribution network consists of underground water lines, an elevated water tank and fire hydrants.

Sanitary Sewer

Sanitary sewer treatment is provided by the Gwinnett County Water and Sewer Authority. The County operates three wastewater treatment facilities with a capacity of 98 mgd.³⁹ The sanitary sewer collection system on the Lawrenceville Campus consists of sewer mains and manholes which were primarily installed during the construction of the original buildings. The sewer mains connect to a Gwinnett County main that runs across the southwest corner of the site. The County sewer main also

³⁸ Gwinnett County Department of Water Resources. *Water Production*.

<http://www.gwinnettcountry.com/portal/gwinnett/Departments/PublicUtilities/WaterProduction> (Accessed on September 26, 2013).

³⁹ Gwinnett County. *Gwinnett County 2030 Water and Wastewater Master Plan*.

conveys waste from upstream properties across Lawrenceville Campus. According to HHS/CDC, the existing sanitary sewer lines have adequate capacity to handle the current campus load.

Stormwater

The majority of the campus consists of pervious surfaces such as pasture lands and wooded areas. Approximately 12.5 percent of the campus consists of impervious services such as building footprints, roadways, sidewalks and surface parking areas. Stormwater from the site currently drains via sheet flow to the pasture areas and through a limited storm sewer system which discharges directly into the existing streams traversing the site. Runoff from impervious areas of the campus, which are primarily concentrated in the southeastern portion of the property, is directed via sheet flow, existing swales and piping to the existing streams on site. HHS/CDC currently monitors stormwater turbidity at both the upstream and downstream locations of the streams on campus.

No Build Alternative

Under the No Build Alternative, the proposed improvements would not be implemented and the campus would continue to operate under current conditions. The demand for electricity, domestic water, natural gas and sewage generated on-campus would remain at current levels. Under the No Build Alternative, impervious surfaces would not be constructed on-campus and consequently additional stormwater runoff would not be generated.

Executive Order 13693 Planning for Federal Sustainability in the Next Decade, the Energy Independence & Security Act of 2007 and the Energy Policy Act of 2005 are all mandates that require federal agencies to support conservation. In response to federal mandates, the HHS/CDC developed a Sustainability Policy that includes goals, guidelines and procedural changes to minimize the consumption of natural resources. With the implementation of the HHS/CDC Sustainability Policy, the HHS/CDC is committed to reducing the consumption of electricity, potable water and natural gas in the future. Refer to Section 3.12. Greenhouse Gases and Sustainability, of this document for additional information regarding these federal mandates.

Build Alternative

Electrical/Gas Service

Expansion and upgrades to the campus electrical/gas distribution system would be required to service the proposed new facilities. Construction of the new buildings would slightly increase electricity and gas demands on-campus. This increase in electricity demand would be off-set by the energy generated by the proposed photovoltaic system, although it would not meet all of the Lawrenceville Campus electrical power demands. The Lawrenceville Campus would continue to obtain service from Georgia Power and AGL. The Build Alternative would not result in a significant adverse impact to Georgia Power Grid or AGL and their service areas. Future design of new buildings will incorporate required energy efficiency, explore additional on-site renewable energy alternatives, and comply with zero-net Federal energy performance targets and would not result in significant adverse impacts.

Heating and Cooling

Although the existing chiller and boiler systems have adequate capacity, the proposed new buildings would not necessarily be connected to this existing infrastructure due to Federal mandates for energy conservation measures, such as on-site renewable energy. The proposed Science Support Building, Transshipping and Receiving Area, and Office Support Buildings A and B would be served by or in-part by existing infrastructure, or on-site renewable energy.

Water

The existing domestic and fire protection distribution lines would be extended to the new buildings on campus. In addition a new tap to the existing main would also be required for fire protection. The increase in employees on campus would result in a slight increase in domestic water use. However, no significant changes to campus research activity or campus operations are proposed that would require intensive water use. The new buildings would be designed to promote water conservation and reuse and would incorporate water conservation strategies. Water conservation strategies would include rainwater harvesting and condensate recovery systems for non-potable water use such as in cooling towers for toilet flushing. New buildings would incorporate high efficiency fixtures to reduce wastewater volumes. No campus landscape irrigation systems are planned for exterior spaces. The increase in water use, associated with the new employee population, is not anticipated to result in significant adverse impacts to the Gwinnett County Water and Sewer Authority's treatment plants or its service area. Water conservation strategies would be implemented to reduce water usage.

Sanitary Sewer

Under the Build Alternative, only minor changes to the existing sewer collection system would be required such as extending existing sewer lines and installing new manholes. The sewage generation levels would increase slightly as a result of new employee population. This increase in sewage generation is not anticipated to result in significant adverse impacts to Gwinnett County's sanitary sewer service.

Stormwater

As discussed in Section 3.9: Natural Resources, implementation of the Build Alternative would result in an increase in impervious surfaces on the campus. Measures to control post-development stormwater discharge and improve water quality are required in accordance with Gwinnett County and State of Georgia regulations. These regulations require control of peak runoff rate and reduction in suspended solid loading of stormwater leaving the site. Section 438 of EISA also establishes stormwater runoff requirements for federal development projects. EISA requires that development or redevelopment to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property.

Stormwater control measures would be implemented on site to manage stormwater runoff. Current stormwater control measures proposed include the use of pervious surfaces for the proposed new secondary access road, installation of a pervious stone base or native vegetation for the solar array and installation of an infiltration trench along the eastern and northern edge of the solar array to capture

stormwater runoff. Additional stormwater management would be developed during final design in compliance with Section 438, Gwinnett County and state regulations and may include the use of green infrastructure/low impact development practices such as bioretention, bioswales, green roofs, revegetation, enhancement of riparian buffers, as well as detention facilities to control stormwater runoff during small storm events and detention facilities to control stormwater during large storm events.

Since the Build Alternative involves the disturbance of one or more acres of soil, a NPDES General Permit for Stormwater Discharges Associated with Construction Activity would be required to address construction related erosion, sediment and pollution issues. The GAEPD administers NPDES Permits and authorizes stormwater discharges to the waters of the State of Georgia that result from construction activities. The GAEPD requires a NPDES Permit to include a Stormwater Pollution Prevention Plan (SWPPP), which establishes procedures for minimizing pollutants in stormwater discharges, including sediment and erosion control measures and other Best Management Practices (BMPs). The implementation of stormwater control measures and the SWPPP with BMPs would minimize impacts to surface waters during and post construction. The Build Alternative is not expected to adversely impact stormwater.

3.11 Hazardous Materials

Existing Conditions

A Phase I Environmental Site Assessment (Phase I ESA) was completed for the Lawrenceville Campus in order to determine if there are any recognized environmental conditions (REC) associated with the Lawrenceville Campus that could adversely affect construction of the proposed improvements. The Phase I ESA was performed in conformance with the scope and limitations of the American Society of Testing and Materials (ASTM) Standard E 1527-05. The Phase I ESA included a site reconnaissance conducted on September 17, 2013, a review of environmental databases, reviews of historical data sources and on-site and off-site interviews.

According to the ASTM Standard E 1527-05, the definition of a REC is the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. A REC includes the presence or likely presence of hazardous substances or petroleum products even under conditions in compliance with laws.

According to the Phase I ESA the Lawrenceville Campus was listed on a total of nine different regulatory databases. The nine databases that listed the Lawrenceville Campus did not indicate any spills, cleanups, or other concerns that a potential REC occurred on-site with the exception of the State Leaking Underground Storage Tank (LUST) database listing. A suspected release on the Lawrenceville Campus was reported in September of 1993 to the Georgia Environmental Protection Division (GAEPD). The suspected release was caused by a defective probe rather than a confirmed release to soil and/or groundwater. GAEPD issued a No Further Action Letter (NFA) for the suspected release in November of 1993. Based upon the nature of the LUST listing (i.e., no actual release reported) and the regulatory status of NFA for the Site, this suspected release is not considered a REC. Additionally, the Environmental Data Resources (EDR) report indicated that two 25,000 gallon heating oil tanks were removed from the ground in April of 1995. No release appeared to be reported for these removals.⁴⁰

The Lawrenceville Campus originally utilized an on-site wastewater treatment facility that included two oxidation treatment lagoons. According to HHS/CDC the wastewater treatment facility was utilized for sanitary wastewater treatment. The wastewater treatment facility was decommissioned in the 1990's and the oxidation treatment lagoons were filled with dirt in 2001. Based upon the reported information that the oxidation treatment lagoons were used solely for sanitary wastewater treatment purposes, the filled-in oxidation treatment lagoons are not considered a REC. However, if the treatment lagoons were used for purposes other than sanitary wastewater treatment, further testing and analysis may be warranted.

The Phase I ESA revealed no evidence of RECs in connection with the Lawrenceville Campus.

⁴⁰ Jacobs, prepared on behalf of CDC. *Phase I Environmental Site Assessment for the Lawrenceville Campus Draft*. November 2013.

Hazardous Waste

The HHS/CDC manages hazardous waste on campus. Waste is handled, stored and disposed of in accordance with local, state and federal regulations. Hazardous wastes are generated as a result of laboratory research activities, campus operations and maintenance services on campus. Hazardous waste on campus is managed in accordance with the Resources Conservation and Recovery Act (RCRA). RCRA is a federal regulation governing the disposal of hazardous and non-hazardous waste. RCRA sets standards for treatment, storage and disposal of hazardous waste. The Lawrenceville Campus qualifies as a Conditionally Exempt Small Quantity Generators (CESQG). A CESQG generates 100 kilograms or less per month of hazardous waste, or 1 kilogram or less per month of acutely hazardous waste.⁴¹ All regulated hazardous waste are transported off-site by a private contractor and disposed of at a permitted facility.

No Build Alternative

Under the No Build Alternative, no new construction, major renovations or major infrastructure improvements would occur on campus. Research activities, campus operations and maintenance services which generate hazardous waste would remain at similar levels. Hazardous waste would continue to be handled in accordance with HHS/CDC policies and applicable local, state and federal regulations and transported off-site by contracted waste haulers.

Build Alternative

The proposed construction would occur on land that is either developed or consists of pasture lands or lawn areas. The Phase I ESA revealed no evidence of RECs in connection with the proposed construction areas. However, the Phase I ESA did not evaluate the potential for asbestos-containing building materials in the buildings proposed for demolition. HHS/CDC would evaluate the buildings for asbestos containing materials prior to demolition and conduct demolition and disposal in accordance with applicable state and federal regulations.

The Build Alternative would not introduce new research activities or operations that would generate additional hazardous waste. The existing research activities, campus operations and maintenance services which currently generate hazardous waste would remain at similar levels. The quantity or the character of hazardous waste is not anticipated to significantly change. HHS/CDC would continue to handle and dispose of waste in accordance with HHS/CDC policies and applicable local, state, and federal regulations. The new transformer would be pad mounted and would include an oil capture perimeter system. Proper maintenance and inspection would prevent any potential oil leaks.

⁴¹ USEPA. *Hazardous Waste: Conditionally Exempt Small Quantity Generator*.
<http://www.epa.gov/osw/hazard/generation/cesqg.htm> (Accessed on November 26, 2013)

3.12 Greenhouse Gases and Sustainability

Existing Conditions

Climate Change and Greenhouse Gas Emissions

Climate change refers to the gradual increase or decrease in worldwide average surface temperatures, causing long-term fluctuations in weather patterns, with a tendency towards more severe storms. Greenhouse gases (GHG) are emitted into the atmosphere through natural processes and human activity. In recent history, human activities including the burning of fossil fuels and deforestation have increased the concentration of GHG emissions into the atmosphere. Consequently, global climate change as the result of the emission of greenhouse gases has become an issue of long-term and international significance. Some amount of GHG in the atmosphere is necessary to trap heat in the atmosphere keeping the planet warm; thereby maintaining a habitable climate. However, as GHGs continue to build up in the atmosphere, the heat trapped in the atmosphere increases causing a resultant increase in the average temperature of the earth worldwide. To date, no standards have been established to examine a project's effect on climate change, nor has the U.S. Environmental Protection Agency (EPA) established thresholds for greenhouse gas emissions.

Typically, the main greenhouse gases that are emitted into the atmosphere as a result of human activity are: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Of the anthropogenic greenhouse gases, carbon dioxide is the most prevalently emitted from manmade uses, including internal combustion and the burning of other fuel materials.

Activities at the Lawrenceville Campus that generate greenhouse gasses include the operation of fossil fuel equipment such as boilers, emergency generators and employees commuting to work. The campus generates GHGs indirectly by purchasing electricity from Georgia Power.

Federal Sustainability Mandates

Executive Order (EO) 13693, *Planning for Federal Sustainability in the Next Decade* was signed in March 2015, replacing EO 13423, *Strengthening Federal Environmental, Energy and Transportation Management* and EO 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*. EO 13693 expands and updates the previous Federal environmental performance requirements and energy reduction guidelines in order to reduce greenhouse gas emissions and support conservation and sustainability. The EO supports the reduction of the Federal greenhouse gas emissions by 40 percent by 2025 and directs Federal agencies to increase the amount of renewable electric energy by 30 percent by 2025, (increase renewable electric and thermal energy by 25% by 2025). EO 13693 also requires Federal agencies to meet the following targets:⁴²

- Reduce energy use in Federal buildings by 2.5 percent per year between 2015 and 2025.

⁴² The Whitehouse. Fact Sheet: Reducing Greenhouse Gas Emissions in the Federal Government and Across the Supply Chain. <https://www.whitehouse.gov/the-press-office/2015/03/19/fact-sheet-reducing-greenhouse-gas-emissions-federal-government-and-acro> (Accessed on May 6, 2015)

- Reduce per-mile GHG emissions from Federal fleets by 30 percent from 2014 levels by 2025, and increase the percentage of zero emission and plug in hybrid vehicles in Federal fleets.
- Reduce water intensity in Federal buildings by 2 percent per year through 2025.
- Design to achieve energy net-zero and water or waste net-zero by 2030, starting in the 2020 planning year.

Energy Policy Act of 2005 was signed by President Bush and addresses energy production in the United States including but not limited to energy efficiency, renewable energy, oil and gas, coal, electricity and climate change technology.⁴³ *The Energy Independence & Security Act* signed in 2007 by President Bush aimed to move the United States toward greater energy independence and security by improving the energy performance of the Federal Government, increasing production of clean renewable fuels, increasing the efficiency of product, buildings and vehicles. Key provisions enacted were the Corporate Average Fuel Economy Standards, the Renewable Fuel Standard and appliance/lighting efficiency standards.⁴⁴ The mandates require energy efficiency and metering requirements for buildings, energy savings performance contracts, energy efficient product procurement and reducing petroleum/increasing alternative fuel use.⁴⁵

HHS Strategic Sustainability Performance Plan

The White House Council on Environmental Quality (CEQ) and the Office of the Federal Environmental Executive (OFEE) oversee the execution of these federal mandates in all departments of the federal government. In leading the initiative for a greener federal government, CEQ has called upon agencies to submit a plan for embracing sustainability and meeting federal sustainability mandates.⁴⁶ As part of this effort, the Department of Health and Human Services (HHS) submits a Strategic Sustainability Performance Plan (SSPP) each year to the CEQ. The SSPP outlines ways to integrate sustainability into HHS operations. Sustainability categories such as greenhouse gas reduction, high-performance sustainable design, water use efficiency, pollution prevention and agency innovation are highlighted in the SSPP.

As an agency of HHS, CDC participates in HHS' overarching plan to meet these goals and is required to report on these annually. To that end, CDC has developed a Sustainability Implementation Plan (SIP) to outline how the CDC would address the HHS' SSPP targets in support of federal mandates. Over the past several years significant progress has been made throughout government relative to sustainable practices.

Campus Sustainability Initiatives

The HHS/CDC has implemented a number of sustainability initiatives at the Lawrenceville Campus in order to comply with federal mandates. The HHS/CDC has undertaken steps to evaluate equipment and processes in order to improve the operating efficiency of facilities and reduce energy and water

⁴³ EPA. Laws and Regulations: Summary of Energy Policy Act. <http://www2.epa.gov/laws-regulations/summary-energy-policy-act> (Accessed June 25, 2015)

⁴⁴ EPA. Laws and Regulations: Summary of Energy Independence and Security Act. <http://www2.epa.gov/laws-regulations/summary-energy-independence-and-security-act> (Accessed June 25, 2015)

⁴⁵ CDC. 2012 Annual Sustainability Report.

⁴⁶ CDC. 2012 Annual Sustainability Report. p.2.

consumption. During 2009 – 2011 HHS/CDC completed a sustainability assessment and energy and water studies for the campus. The sustainability assessment outlined strategies to improve sustainability performance of the buildings and campus. The following strategies were undertaken as a result of the sustainability assessment: cool roof coating application to reflect solar heat, capture of air-handler condensate to be used by campus boilers, and lighting upgrades. HHS/CDC is currently underway with a service performance contract to continue the energy and water conservation efforts on the campus.

In addition, the HHS/CDC undertook major upgrades to existing HVAC systems. The HHS/CDC upgraded all chillers, cooling towers and associated equipment in 2010 and replaced all three boilers in the last ten years. HHS/CDC is currently undergoing upgrades to one of the main campus buildings and will seek US Green Building Council (USGBC) LEED certification. The replacement or upgrade of equipment and evaluation of processes such as the condensate recovery has resulted in fuel, water and energy reductions for the campus in recent years.

No Build Alternative

Under the No Build Alternative, the implementation of the proposed improvements would not occur. The HHS/CDC both from an agency-wide and campus perspective is moving towards meeting or exceeding the targets associated with federal sustainability mandates. It is anticipated that in the future, the HHS/CDC would continue to institute sustainability practices and programming in order to meet federally mandated sustainability thresholds.

Build Alternative

Under the Build Alternative, the HHS/CDC would continue to comply with or work towards compliance with all federal regulations pertaining to sustainability. The installation of the photovoltaic system would provide the Lawrenceville Campus with a renewable energy source to off-set the increase in energy demand associated with the proposed campus improvements. The proposed photovoltaic system supports federal directives to increase renewable electric energy and reduce greenhouse gas emissions. The HHS/CDC will also seek to integrate sustainable planning and design objectives such as constructing buildings to promote energy efficiency and water conservation, preserving as much vegetation as possible to maintain landscape and pasture integrity, utilizing pervious surfaces for the solar array, parking and roadway where practicable, enhancing and maintaining existing stormwater, drainage and riparian buffer zones. The new internal roadway is proposed to align with the existing pathways and utilize the existing stream crossings to limit disturbance to riparian buffers. Stormwater control measures would be implemented to minimize stormwater runoff and improve water quality, including the installation of an infiltration trench to manage stormwater associated with the solar array. In addition to the use of pervious surfaces and infiltration trench, additional green infrastructure/low impact development strategies would be investigated to manage stormwater in compliance with Section 438, Gwinnett County and state regulations. Sustainable demolition practices including recycling and reuse of building materials would be undertaken.

The Build Alternative would result in a minor increase in electricity usage and natural gas which generate greenhouse gas emissions. The photovoltaic system would reduce the energy demand for electricity generated by fossil fuel combustion, by generating on-site renewable energy. Under the Build Alternative the employee population is anticipated to increase by 26. This would result in a minor

increase in greenhouse gasses associated with employee vehicle travel. Although these operations would generate minor additional greenhouse gas emissions, the HHS/CDC is committed to the goals of energy conservation, reducing energy use, eliminating or reducing greenhouse gas emission as mandated by EO 13693. Future design of new buildings will incorporate required energy efficiency, explore additional on-site renewable energy alternatives, and implement zero-net Federal energy performance targets. CDC also is committed to reducing greenhouse gases from employee vehicle travel by continuing to support carpooling, van pooling, public transportation use, compressed schedules, and telework options when appropriate. For its efforts CDC was recognized as a Platinum Level Partner for Atlanta's Clean Air Campaign, 2011, 2012, and 2013.

3.13 Construction Impacts

The purpose of this section is to summarize the anticipated impacts during construction associated with the Build Alternative. Typically, any construction-related impacts resulting from the implementation of the Build Alternative would be intermittent and short-term and as a result are considered temporary in duration and, therefore not significant. In order to minimize potential construction-related effects, the proposed planned improvements would be designed, scheduled and staged to minimize disruption. Additionally, Best Management Practices (BMPs) would be applied during construction to minimize the duration and intensity of these effects. The types of construction activity and materials that are generally used to minimize any construction related effects generated during construction are briefly detailed below.

The phasing and implementation of the Build Alternative improvements would be implemented in approximately five stages over a ten year planning period, subject to authorization and funding of projects through the CDC, HHS, OMB and Congressional budget process.

The five phases are as follows:

- **Phase 1** involves the construction of the photovoltaic system.
- **Phase 2** a new approximately 12,000 gsf Science Support Building and expansion of a service road and loading area for the new facility. The existing science support building would be demolished.
- **Phase 3** involves the construction of Office Support Building B and construction of a paved, 139-space employee parking area to be located along the eastern extent of the campus. In addition, a new secondary campus entry point constructed of pervious material would be constructed off of Webb Gin House Road, forming an intersection with Timbercrest Drive.
- **Phase 4** includes the construction of Office Support Building A and demolition of two existing aging office and support buildings.
- **Phase 5** includes construction of the Transshipping and Receiving Area and construction of a 20-space paved visitor parking area.

Sustainable demolition practices would be undertaken including recycling and reuse to minimize waste generated. The staging area for construction materials and equipment would be self-contained on the Lawrenceville Campus. Additional construction activities that would take place within the Lawrenceville Campus would include site preparation, minor grading and trenching and the extension of utilities. Campus site work including the construction of ABA-compliant sidewalks connecting newly developed and modified areas of the campus to the existing main campus core would occur during the construction period.

No Build Alternative

Under the No Build Alternative, no new construction, major renovations, or infrastructure improvements would occur on the Lawrenceville Campus.

Build Alternative

Construction-related effects for several key technical areas evaluated in the EA are presented below.

Transportation

Changes to travel patterns are not anticipated as all construction activities including the movement and repositioning of oversized machinery and/or materials would occur on a portion of the expansive, self-contained Lawrenceville Campus. Additionally, roadway or lane closures are not anticipated in the surrounding Study Area as construction activities associated with the Build Alternative would be contained to the Lawrenceville Campus. The Lawrenceville Campus currently exhibits minimal levels of pedestrian activity. In addition, staging areas would be located in designated areas so as not to interfere with existing campus circulation. As a result, in consideration of these factors, construction period pedestrian impacts are not anticipated as a result of the Build Alternative.

Fugitive dust is usually generated during demolition and construction operations that expose or handle soil, such as site clearing, excavating, cutting and filling, and grading operations. The quantity of dust generated during construction activities depends on the construction practice, frequency of operations, as well as climate and soil characteristics.

Air Quality

Construction-related air quality impacts would be temporary and limited to the construction period. These impacts would be limited to short-term, increased fugitive dust and mobile source emissions that would cease with the conclusion of construction. Fugitive dust is airborne particulate matter that is typically of a relatively large particulate size. Construction-related fugitive dust is generated by construction activities such as ground excavation, concrete demolition, and the movement of haul trucks, concrete trucks, delivery trucks and earth-moving vehicles operating around a development site. Construction activities cause particulate matter to be re-suspended or “kicked up” as a consequence of various activities including vehicle movement over paved and unimproved surfaces, site preparation, dirt tracked onto paved surfaces from unpaved areas at access points, and material blown from areas of exposed soils.

A number of Best Management Practices would be utilized to minimize or eliminate temporary air quality impacts generated during the construction phases of the Build Alternative. The application of various control measures during construction activities would be employed to minimize the amount of construction dust generated. These measures may include:

- Cleaning construction equipment and adjacent paved areas that may be covered with dirt or dust;
- Covering haul trucks carrying loose materials to and from construction areas;
- Use of clean fuels in construction equipment;
- Deployment of clean diesel construction equipment (new, retrofit, rebuilt, or repowered); and,
- Implementation of anti-idling practices at construction areas.
- Application of mulch, vegetative cover, irrigation and use of barriers

Construction equipment would also create gaseous emissions such as hydrocarbons and nitrogen oxide emissions as well as particulate matter from diesel engines. However, the fact that dust and gases would be released into the air would be inconsequential because the intermittent usage of this equipment makes their effect on air quality negligible. Consequently, the extent to which these pollutants are released would not have an effect on the surrounding area and would not endanger public health.

Carbon monoxide (CO) is the principal pollutant of concern when considering localized construction-induced air quality impacts of motor vehicles. While the presence of construction trucks and equipment would slightly increase CO levels in the area, these emissions would not be significant when compared to the emissions from roadway vehicle traffic. Coordination of construction activities with the movement of equipment and construction personnel would reduce the potential for emissions.

Noise

The main noise sources during construction include noise associated with the operation of construction equipment as well as construction and delivery vehicles traveling to and from the site. Potential noise impacts associated with construction activities would be short-term and of limited duration. The extent of impact from these sources would depend on the nature of the construction, the noise characteristics of the equipment operated and their duration of utilization, the construction schedule and the distance to noise-sensitive receptors from the construction site limit on the campus property. Construction activities would be limited to daytime hours and construction would be handled and transported in such a manner as to not create unnecessary noise. More specifically, construction activities are typically permitted between the weekday hours of 7 AM and 10 PM in compliance with the *Gwinnett County Noise Ordinance*.⁴⁷ As shown in Table 11, average noise levels measured in dBA at 50 feet for representative construction equipment would range between 72 and 101 dBA.

⁴⁷ Gwinnett County Code of Ordinances. *Article III. Noise, Sec. 42-47*.
<http://library.municode.com/showDocumentFrame.aspx?clientID=10878&jobId=202339&docID=0> (Accessed December 11, 2013).

Table 11: Typical Construction Equipment Noise Emission Levels

Equipment Item	Noise Level (dBA at 50 Feet)
Air Compressor	81
Asphalt Spreader (Paver)	89
Asphalt Truck	88
Backhoe	85
Compactor	80
Concrete Spreader	89
Concrete Mixer	85
Concrete Vibrator	76
Crane (derrick)	88
Dozer	87
Dump	88
Front End Loader	84
Gas-Driven (Vibro-compactor)	76
Generator	76
Hoist	76
Jackhammer (Paving Breaker)	88
Motor Crane	83
Pick-up Truck (light)	72
Pile Driver / Extractor	101
Pneumatic Tools	76
Pump	76
Rock Drill	98
Roller	80
Scraper	88
Shovel	82
Truck (Medium and Heavy)	84
Source: Harris, C.M. "Handbook of Noise Control," Second Ed. McGraw Hill, New York, 1979	

Construction noise control measures could potentially include the usage of:

- Approved mufflers on all construction vehicles and equipment
- Temporary noise barriers
- Equipment shields or enclosures
- Baffled diesel generators or use of electric generators instead of diesel
- Aprons (sound absorptive mats that are hung from equipment)

Hazardous Materials

Typically, the greatest potential for hazardous materials impacts occurs during the construction phase of a project. Activities such as demolition and excavation have the potential to disturb, release or otherwise expose workers and/or individuals to contaminants that may be contained within a structure or buried beneath the surface of the ground. Section 3.11, *Hazardous Materials*, discusses the findings

of a Phase I ESA performed for the Lawrenceville Campus and examines the potential for hazardous materials impacts due to the implementation of the Build Alternative.

Based upon the investigation of the site, historical land uses, and a review of readily available, environmental databases, the Phase I ESA revealed no evidence of RECs in connection with the Lawrenceville Campus. The Phase I ESA did not evaluate the potential for asbestos-containing materials (ACMs) in the buildings slated for demolition. Prior to any future demolition or construction, in accordance with HHS/CDC design and construction standards, the appropriate site evaluation would be conducted to confirm that there are no ACMs in the structures proposed for demolition. Should these investigations reveal any potential contamination, all necessary disposal and/or remediation actions would be implemented prior to the commencement of construction activity in accordance with applicable state and federal regulations.

Soil Erosion Control

During the construction activities, soil and slope stabilization measures would be implemented to minimize potential erosion and soil movement during construction activities. As campus improvements related to the Build Alternative would involve the disturbance of more than one acre of soil disturbance, a National Pollutant Discharge Elimination System (NPDES) *General Permit for Storm Water Discharges Associated with Construction Activity* would be required. The General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which is required to incorporate site specific erosion and sediment control practices.

Provision in the construction contract would require the contractor to exercise every practicable precaution during construction to prevent the pollution of streams in the project vicinity. Temporary erosion control measures, as deemed necessary during construction may include the use of silt fencing, berms, sediment basins, fiber mats, gravel, slope drains or other erosion control methods, as applicable. These provisions are coordinated with permanent erosion control features insofar as practical to ensure economical, effective and continuous erosion control throughout the construction and post-construction periods, and are in accordance with the *Federal Aid Policy Guide, Part 650, Subpart B*.

Summary

In order to reduce the potential impacts during construction, campus improvements resulting from the Build Alternative would be planned, designed, scheduled and staged to minimize disruption to the Lawrenceville Campus, surrounding areas, and the environment. While some interference is unavoidable, the duration and severity of these effects would be minimized by the continued implementation of strong controls and effective scheduling of construction. Construction-period effects would be temporary and would not result in any significant impacts to land use, public policy, socioeconomic conditions, and architectural and visual resources. In addition, the Build Alternative is not anticipated to result in any severe disruptions to campus operations. No significant construction impacts are anticipated as a result of the Build Alternative.

4 List of Preparers

Name	Firm	Responsibility	Education	Years Experience
Toby Kizner, AICP, PP	Jacobs	Introduction, Purpose and Need, Alternatives QA/QC	M.R.P., City and Regional Planning, Cornell University B.S. Urban and Regional Planning, Cornell University	22
Marta Szewczyk	Jacobs	Introduction, Purpose and Need, Alternatives, Urban Design and Visual Resources, Greenhouse Gases and Sustainability, Air Quality, Noise, Utility Service	M.S. Environmental Science, Colorado School of Mines B.A. Environmental Science, Hobart and William Smith Colleges	11
Ray Dominguez, PE	Jacobs	Transportation	B.S. Civil Engineering, Villanova University	12
Colton Callaghan	Jacobs	Transportation	B.S. Civil Engineering, Rensselaer Polytechnic Institute	1
Erik Kruszewski	Jacobs	Socioeconomics, Lands Use, Zoning, Public Policy, Community Facilities and Services	B.S. Urban Policy Studies with a Specialization in Urban Design, Georgia State University	7
Michael Goldemberg, AICP	Jacobs	Construction Impacts, QA/QC	M.U.P. Urban Planning, New York University, B.A. Political Science, University of Wisconsin-Madison	10
Joe Shoffner, AICP	Jacobs	Data Collection, Graphics Production	M.U.R.P. Urban & Regional Planning, University of Colorado-Denver; BA, Geography, University of Kansas	12
Stacy Stewart	Jacobs	Natural Resources	B.S.F.R., Forest Resources -Wildlife, University of Georgia Level 1B Certified Regulatory Inspector and Level II Certified Plan Reviewer #61337, Georgia Soil and Water Conservation Commission	13
Sherri H. Clark	Jacobs	Hazardous Materials	M.S., Geology, University of Georgia B.S., Geology, Louisiana State University	22
Scott Terrell	Jacobs	Hazardous Materials	M.S., Forest Resources - Hydrology, University of Georgia B.S., Geology, University of Georgia	5
Jackie Tyson	New South Associates	Cultural Resources	M.H.P. Historic Preservation, University of Kentucky; B.A. Anthropology, Georgia State University	10
Matt Tankersley	New South Associates	Cultural Resources	M.A. Historic Preservation, Georgia State University; B.S. Anthropology, College of Charleston	14

5 Acronyms

ABA	Architectural Barriers Act
ACM	Asbestos Containing Materials
AGL	Atlanta Gas Light
AMA	Atlanta Metropolitan Area
ARC	Atlanta Regional Commission
ASTM	American Society of Testing and Materials
BRT	Bus Rapid Transit
BMP	Best Management Practice
BTU	British Thermal Unit
C&D	Construction and Demolition
CAA	Clean Air Act
CDC	The Centers for Disease Control and Prevention
CEQ	Council on Environmental Quality
CESQG	Conditionally Exempt Small Quantity Generator
CFR	Code of Federal Regulations
CMP	Congestion Management Process
CMS	Congestion Management System
CH ₄	Methane
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CRA	Cultural Resources Assessment
CTP	Comprehensive Transportation Plan
CWA	Clean Water Act
dB	Decibels
dBA	"A" Weighted Scale
EA	Environmental Assessment
EDR	Environmental Data Resources
EFH	Essential Fish Habitat
EJ	Environmental Justice
EO	Executive Order
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
ESPC	Energy Savings Performance Contracts
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GAEPD	Georgia Environmental Protection Division
GAM	HHS General Administration Manual
GADNR	Georgia Department of Natural Resources
GCDRES	Gwinnett County Department of Fire and Emergency Services
GCPD	Gwinnett County Police Department
GCSO	Gwinnett County Sheriff's Office
GCT	Gwinnett County Transit
GDOT	Georgia Department of Transportation
GHG	Greenhouse Gases

GMC	Gwinnett Medical Center
GNAHRGIS	Georgia's Natural, Archaeological and Historic Resources Geographic
GSF	Gross Square Feet
HFCs	Hydrofluorocarbons
HHS	United States Department of Health and Human Services
Hp	Horsepower
HPD	Historic Preservation Division
HVAC	Heating Ventilation Air Conditioning
HUC	Hydrologic Unit Codes
IPAC	Information Planning and Conservation System
KW	Kilowatt
LEED	Leadership in Energy and Environmental Design
LOS	Level of Service
LUST	Leaking Underground Storage Tank
MBTA	The Migratory Bird Treaty Act
MGD	Millions Gallons per Day
MMBtu/hr	One Million British Thermal Units per Hour
MLRA	Major Land Resource Area
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
MSL	Mean Sea Level
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFA	No Further Action Letter
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
N ₂ O	Nitrous Oxide
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O ₃	Ozone
OFEE	Office of the Federal Executive
OID	Office of Infectious Disease
OMB	Office of Management and Budget
OPDIV	Operating Division
OPHSS	Office of Public Health scientific Services
OSSAM	Office of Safety, Security and Asset Management
Pb	Lead
PFCs	Perfluorocarbons
PHS	Public Health Service
PM	Particulate Matter
PPM	Parts Per Million
RCRA	Resources Conservation and Recovery Act
REC	Recognized Environmental Condition
RTP	Regional Transportation Plan
SF ₆	Sulfur Hexafluoride
SHPO	State Historic Preservation Office

SIP	Sustainability Implementation Plan
SMOP	Synthetic Minor Operating Permit
SO ₂	Sulfur Dioxide
SOV	Single Occupancy Vehicle
SSPP	HHS's Strategic Sustainability Performance Plan
SWPPP	Storm Water Pollution Prevention Plan
TIP	Transportation Improvement Program
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USDA NRCS	United States Department of Agriculture Natural Resources Conservation Service
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound

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Appendix A: Public Review Comments and Public Notices

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Commenter: Jean Publieee
Date Submitted: Sep 29, 2017
Submitted via Regulations.gov

Comment

i am not in favor of any demolition of buildings in lawrenceville georgia and find this to be an unnecessary expense

iu also wonder why you would waste an acre to put in solar installations when they can be put on the roof of any buildings you have there. you have acres of buildings going up and you want to put solar installations on the ground. are you stupid or something?

solar installations should always go on the roof. we dont need to waste natural land with solar crap. that is what roofs are for.
and any other space on teh roof should have gardens on it.

i think the gsa is woefull in plannning and they should be immediately taken off this project. their plans for this new building for the inept, full oif flaws, lying cdc is not worth our tax dollars. this agency lies to the public about vaccines. it is sneaky and slipshod with vaccines and causing l out of 25 boys in the usa to have autism because they want 60 or more doses of their damned vaccines into tiny babies, definitely an assault on a babys 8 lbs.

the evil us govt just goes ahead without asking the public and then bankrupts the us citizenry to continue uto fund this lousy agency that should be shut down. I AM NOT IN FAVOR AT ALL OF FUNJDING NEW BUILDINGS FOR THIS CROOKED AGENCY. I CONSIDER IT TOTALLY CROOKED. REVOLVING DOOR BETWEEN BIG PHARMA AND THIS AGENCY IS WIDE WIDE OPEN. AND WE GET NEW VACCINES ADN TEH PEOPLE LEAVING CDC GET BIG SALARIES.
SOMETHING IS NOT RIGHT WHEN YOU LIE TO THE PUBLIC WITH YOUR DOCUMENTS.

CDC Response

CDC undertook a thorough evaluation of the location and placement of the photovoltaic system. Roof mounted solar panels were evaluated in detail, however it was determined that the ground mounted system was a better option in the short and long term. The decision to install ground mounted system took into consideration the proximity to power distribution, limitations of rooftop equipment, safety, the ability to maintain rooftop areas including roof replacement, potential impact to historic character of existing buildings, and the upfront/ overall lifecycle cost.

Dated: September 18, 2017.

Lorin S. Currit,

*Director, Federal Acquisition Policy Division,
Office of Government-Wide Acquisition
Policy, Office of Acquisition Policy, Office
of Government-Wide Policy.*

[FR Doc. 2017-20169 Filed 9-21-17; 8:45 am]

BILLING CODE 6820-EP-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[Docket No. CDC-2015-0049]

Notice of Availability of a Revised Environmental Assessment for HHS/ CDC Lawrenceville Campus Proposed Improvements 2015-2025, Lawrenceville, Georgia

AGENCY: Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS).

ACTION: Notice of availability and request for comment.

SUMMARY: The Centers for Disease Control and Prevention (CDC), within the Department of Health and Human Services (HHS), announces the availability and opportunity for public review and comment of a revised Environmental Assessment (EA) for the HHS/CDC Lawrenceville Campus Proposed Improvements 2015-2025 on the HHS/CDC Lawrenceville Campus, Lawrenceville, Georgia. The revised EA has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321 *et seq.*), the Council on Environmental Quality (CEQ) implementing regulations (40 CFR 1500-1508) and the HHS General Administration Manual (GAM) Part 30 Environmental Procedures, dated February 25, 2000.

DATES: Written comments must be received by October 23, 2017.

ADDRESSES: You may submit comments, identified by Docket No. CDC-2015-0049 by any of the following methods:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.

- *Mail:* Comments submitted by mail should be sent to Stephen Klim, RA, LEED Green Associate Architect Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 1600 Clifton Road NE., MS-K96, Atlanta, Georgia 30329, Attn: Docket No. CDC-2015-0049.

Instructions: All submissions received must include the agency name and

Docket Number. All relevant comments received will be posted without change to <http://regulations.gov>, including any personal information provided. For access to the docket to read background documents or comments received, go to <http://www.regulations.gov>.

Hard copies of the revised EA are available for review at the following locations:

- Gwinnett County Public Library, Lawrenceville Branch, 1001 Lawrenceville Hwy, Lawrenceville, GA 30046, Telephone: (770) 978-5154.

- Gwinnett County Public Library, Five Forks Branch, 2780 Five Forks Trickum Road, Lawrenceville, GA 30044-5865, Telephone: (770) 978-5154.

- Gwinnett County Public Library, Grayson Branch, 700 Grayson Parkway, Grayson, GA 30017-1208, Telephone: (770) 978-5154.

FOR FURTHER INFORMATION CONTACT:

Stephen Klim, RA, Office of Safety, Security, and Asset Management, Centers for Disease Control and Prevention, 1600 Clifton Road NE., MS-K96, Atlanta, Georgia 30329, Telephone: (770)488-8009.

SUPPLEMENTARY INFORMATION: On February 16, 2016 CDC published a Notice of Availability for the Final Environmental Assessment (2016 Final EA) and Finding of No Significant Impact (FONSI) for the HHS/CDC's Lawrenceville Campus Proposed Improvements 2015-2025 (81 FR 7800). The proposed improvements identified in the 2016 Final EA included (1) building demolition; (2) new building construction, including an approximately 12,000 gross square feet (gsf) Science Support Building, a new Transshipping and Receiving Area at approximately 2,500 gsf and two new Office Support Buildings at approximately 8,000 gsf and 6,000 gsf; (3) expansion and relocation of parking on campus; and (4) the creation of an additional point of access to the campus and pedestrian improvements. The 2016 Final EA concluded that no significant impacts to the human or natural environment would result and HHS/CDC issued a FONSI.

Since completion of the 2016 Final EA and FONSI, HHS/CDC proposed changes to the Proposed Action. HHS/CDC has revised the EA to include the installation of a photovoltaic system within the northern portion of the campus. The photovoltaic system would consist of a 249.9-kilowatt (KW) ground-mounted solar array covering an area of approximately 41,750 sf (0.99 acre). The proposed photovoltaic system would provide the Lawrenceville Campus with

a renewable energy source in order to comply with federal renewable energy mandates.

The revised EA evaluates the potential environmental impacts of the proposed photovoltaic system, along with the proposed improvements identified in the 2016 Final EA. Potential impacts of the No Build and the Build Alternative are evaluated on the following resource categories: Socioeconomics; land use; zoning; public policy; community facilities; transportation; air quality; noise; cultural resources; urban design and visual resources; natural resources; utilities; waste; and greenhouse gases and sustainability.

Dated: September 18, 2017.

Lauren Hoffman,

Acting Executive Secretary, Centers for Disease Control and Prevention.

[FR Doc. 2017-20104 Filed 9-21-17; 8:45 am]

BILLING CODE 4163-18-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

[CMS-3343-FN]

Medicare and Medicaid Programs; Continued Approval of the American Osteopathic Association/Healthcare Facilities Accreditation Program's (AOA/HFAP's) Ambulatory Surgical Center Accreditation Program

AGENCY: Centers for Medicare & Medicaid Services, HHS.

ACTION: Final notice.

SUMMARY: This final notice announces our decision to approve the American Osteopathic Association/Healthcare Facilities Accreditation Program (AOA/HFAP) for continued recognition as a national accrediting organization for ambulatory surgical centers (ASCs) that wish to participate in the Medicare or Medicaid programs.

DATES: This final notice is effective September 22, 2017 through September 22, 2023.

FOR FURTHER INFORMATION CONTACT: Monda Shaver, (410) 786-3410, Erin McCoy, (410) 786-2337, or Patricia Chmielewski, (410) 786-6899.

SUPPLEMENTARY INFORMATION:

I. Background

Under the Medicare program, eligible beneficiaries may receive covered services in an ambulatory surgical center (ASC) provided certain requirements are met. Sections

mission and primary activity are to conduct activities to improve patient safety and the quality of health care delivery.

HHS issued the Patient Safety Rule to implement the Patient Safety Act. AHRQ administers the provisions of the Patient Safety Act and Patient Safety Rule relating to the listing and operation of PSOs. The Patient Safety Rule authorizes AHRQ to list as a PSO an entity that attests that it meets the statutory and regulatory requirements for listing. A PSO can be "delisted" if it is found to no longer meet the requirements of the Patient Safety Act and Patient Safety Rule, when a PSO chooses to voluntarily relinquish its status as a PSO for any reason, or when the PSO's listing expires. Section 3.108(d) of the Patient Safety Rule requires AHRQ to provide public notice when it removes an organization from the list of federally approved PSOs.

AHRQ has accepted a notification from Verge Patient Safety Organization, a component entity of Verge Solutions, LLC, PSO number P0118, to voluntarily relinquish its status as a PSO. Accordingly, Verge Patient Safety Organization was delisted effective at 12:00 Midnight ET (2400) on February 2, 2016.

Verge Patient Safety Organization has patient safety work product (PSWP) in its possession. The PSO will meet the requirements of section 3.108(c)(2)(i) of the Patient Safety Rule regarding notification to providers that have reported to the PSO. In addition, according to sections 3.108(c)(2)(ii) and 3.108(b)(3) of the Patient Safety Rule regarding disposition of PSWP, the PSO has 90 days from the effective date of delisting and revocation to complete the disposition of PSWP that is currently in the PSO's possession.

More information on PSOs can be obtained through AHRQ's PSO Web site at <http://www.pso.ahrq.gov/>.

Sharon B. Arnold,

AHRQ Deputy Director.

[FR Doc. 2016-03034 Filed 2-12-16; 8:45 am]

BILLING CODE 4160-90-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[Docket No. CDC-2015-0049]

Notice of Availability of the Final Environmental Assessment and a Finding of No Significant Impact for HHS/CDC Lawrenceville Campus Proposed Improvements 2015-2025, Lawrenceville, Georgia

AGENCY: Centers for Disease Control and Prevention, Department of Health and Human Services (HHS).

ACTION: Notice.

SUMMARY: The Centers for Disease Control and Prevention (CDC), within the Department of Health and Human Services (HHS), is issuing this notice to advise the public that HHS/CDC has prepared and signed on February 9, 2016 a Finding of No Significant Impact (FONSI) based on the Final Environmental Assessment (Final EA) for the HHS/CDC Lawrenceville Campus Proposed Improvements 2015-2025 on the HHS/CDC Lawrenceville Campus, Lawrenceville, Georgia. The Final EA has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321 *et seq.*), the Council on Environmental Quality (CEQ) implementing regulations (40 CFR 1500-1508) and the HHS General Administration Manual (GAM) Part 30 Environmental Procedures, dated February 25, 2000.

DATES: The FONSI and Final EA are available as February 16, 2016.

FOR FURTHER INFORMATION CONTACT: Copies of the FONSI and/or the Final EA or additional information may be obtained by contacting Angela Wagner, Portfolio Manager, Centers for Disease Control and Prevention, 1600 Clifton Road NE., MS-K96, Atlanta, GA 30329. Telephone: (770) 488-8170.

SUPPLEMENTARY INFORMATION: The Centers for Disease Control and Prevention (CDC) within the U.S. Department of Health and Human Services (HHS), has prepared an Environmental Assessment (EA), to assess the potential impacts associated with the undertaking of proposed improvements on the HHS/CDC's Lawrenceville Campus located at 602 Webb Gin House Road in Lawrenceville, Georgia. The proposed improvements include: (1) Building demolition; (2) new building construction, including an approximately 12,000 gross square feet (gsf) Science Support Building, a new

Transshipping and Receiving Area at approximately 2,500 gsf and two new small Office Support Buildings at 8,000 gsf and 6,000 gsf; (3) expansion and relocation of parking on campus; and (4) the creation of an additional point of access to the campus. The proposed improvements would be undertaken between the time period of 2015 and 2025 and are contingent on receipt of funding. The proposed improvements are needed to maintain an appropriate facilities quality level on the Lawrenceville Campus.

On August 14, 2015, HHS/CDC published a notice in the **Federal Register** (80 FR 48863) announcing the availability of a Draft EA and requesting public comment. The comment period ended on September 28, 2015. No substantive comments were received that raised specific issues or concerns with the methodology, analysis, conclusion or accurateness of the EA.

Based on the analysis of environmental impacts in the EA and in accordance with NEPA, HHS/CDC has determined that the proposed action will not significantly affect the human or natural environment and therefore does not require the preparation of an environmental impact statement.

Dated: February 10, 2016.

Sandra Cashman,

Executive Secretary, Centers for Disease Control and Prevention.

[FR Doc. 2016-03059 Filed 2-12-16; 8:45 am]

BILLING CODE 4163-18-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[30Day-15-0573]

Agency Forms Undergoing Paperwork Reduction Act Review

The Centers for Disease Control and Prevention (CDC) has submitted the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The notice for the proposed information collection is published to obtain comments from the public and affected agencies.

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address any of the following: (a) Evaluate whether the proposed collection of information is necessary for the proper performance of

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Appendix B: Correspondence

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HISTORIC PRESERVATION DIVISION

MARK WILLIAMS
COMMISSIONER

DR. DAVID CRASS
DIVISION DIRECTOR

June 22, 2015

Sam Tarr
Historic Preservation Coordinator
Asset Management and Services Office
Centers for Disease Control and Prevention
Atlanta, Georgia 30341-3724

**RE: CDC: Cultural Resources Assessment, 2007-2012
DeKalb and Gwinnett Counties, Georgia
FP-080808-001**

Dear Mr. Tarr:

The Historic Preservation Division (HPD) has reviewed the report entitled, *Cultural Resources Assessment, 2007-2012: The Centers for Disease Control and Prevention (CDC)*, prepared by New South Associates and dated September 16, 2013. Our comments are offered to assist the US Department of Health and Human Services, CDC in complying with the provisions of Section 110 of the National Historic Preservation Act (NHPA).

Based on the information contained in the report, HPD concurs Building 10 of the Roybal Campus and Building 1 of the Chamblee Campus are not eligible for listing in the National Register of Historic Places (NRHP). However, HPD is unable to concur with the eligibility determination for the Lawrenceville Campus. It is HPD's opinion that the campus retains integrity of location, setting (within the campus-proper), design, materials, workmanship, feeling, and association. While the surrounding area is no longer rural, it is HPD's opinion that the area within the campus boundaries retains integrity of setting and design based on the retention of the majority of the historic site plan designed from 1963 to 1964. The changes to the campus, such as the removal of the lagoon and addition of modern buildings, have not diminished integrity of design or setting to the degree that the historic relationship of the campus' resources cannot be read. Additionally, the campus and the majority of its buildings retain sufficient integrity of materials and workmanship. The alterations to the buildings, and to the campus itself, have been minor in scale compared to the context of the overall campus. These alterations have, in most cases, not diminished the ability of individual buildings to convey their clear mid-century form, and overall have not greatly diminished the ability of the campus to convey its original design, collectively. As such, the campus retains an industrial/agricultural feeling and association, as historically intended. Therefore, with the campus' established significance, HPD finds the Lawrenceville Campus to be eligible for the NRHP under criteria A and C.

Please refer to project number **FP-080808-001** in any future correspondence regarding this project. If we may be of further assistance, please do not hesitate to contact me at Jennifer.dixon@dnr.ga.gov or (770) 389-7851.

Sincerely,

Jennifer Dixon, MHP, LEED Green Associate
Program Manager
Environmental Review & Preservation Planning



HISTORIC PRESERVATION DIVISION

MARK WILLIAMS
COMMISSIONER

DR. DAVID CRASS
DIVISION DIRECTOR

July 15, 2015

Marta Szewczyk
Senior Planner
Jacobs Engineering
Two Penn Plaza
Suite 0603
New York, New York 10121

**RE: CDC: Improve Existing Facilities and Infrastructure, 602 Webb Gin Road, Lawrenceville
Gwinnett County, Georgia
HP-150617-001**

Dear Ms. Szewczyk:

The Historic Preservation Division (HPD) has reviewed the information submitted concerning the above referenced project. Our comments are offered to assist the Department of Health and Human Services (DHHS), Centers for Disease Control and Prevention (CDC) and its applicants in complying with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA). **In order for us to complete our review and concur with your determination of effect, we will need additional information.**

Based on the information submitted and HPD's previous review of the 2007-2012 cultural resources assessment, HPD is unable to concur that the Lawrenceville Campus is not eligible for listing in the National Register of Historic Places (NRHP). As noted in our June 22, 2015 letter to Sam Tarr of the CDC, HPD continues to find that the Lawrenceville Campus served a unique, specialized purpose for the CDC, holding significance as the only facility of its kind in the country upon its completion in 1964 and that the campus retains integrity of location, setting, design, materials, workmanship, feeling, and association. Therefore, it is HPD's opinion that the Lawrenceville Campus should be considered eligible for listing in the NRHP under criteria A and C.

As submitted, the subject project cannot be evaluated for effects on historic properties located within its area of potential effect (APE) without additional information. HPD looks forward to receiving assessment of effects documentation to include a discussion of contributing and non-contributing aspects of the Lawrenceville campus, detail project plans and elevations, photographs of the project area and surroundings, a discussion of the potential direct and indirect effects the proposed project would have upon the Lawrenceville Campus and any attempts made to avoid adverse effects.

We look forward to receiving the requested information as soon as it becomes available. Please refer to project number **HP-150617-001** in any future correspondence regarding this project. If we may be of further assistance, please do not hesitate to contact Christine Quinn, Environmental Review Historian, at (770) 389-7853 or christine.quinn@dnr.ga.gov.

Sincerely,

Jennifer Dixon, MHP, LEED Green Associate
Program Manager
Environmental Review & Preservation Planning

JAD/cqd

cc: Allison Duncan, Atlanta Regional Commission



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
and Prevention (CDC)
Atlanta, GA 30341-3724

October 3, 2017

Ms. Jennifer Dixon
Program Manager
Georgia Department of Natural Resources
Historic Preservation Division
Environmental Review & Preservation Planning
2610 GA Hwy 155
Stockbridge, Georgia 30281

RE: **CDC: Cultural Resources Assessment**
Lawrenceville Campus
Gwinnett County, Georgia
Ref.: **FP-080808-001 & HP-150617-001**

Dear Ms. Dixon,

Thank you for taking the time to discuss the status of CDC's Lawrenceville Campus this past Thursday, your consultation and advice is greatly appreciated. As a follow-up to our discussion I wanted to summarize CDC's proposed historic preservation efforts and actions at the Lawrenceville Campus.

CDC proposes the following:

1. CDC's *Cultural Resources Assessment (CRA), 2007-2012: The Centers for Disease Control and Prevention (CDC)* prepared by New South Associates and dated September 16, 2013, recommended that the Lawrenceville Campus was not eligible for the National Register of Historic Places (NRHP). In response to the CRA, GA HPD had previously, and continues to find, the Lawrenceville Campus to be eligible for listing on the NRHP under criteria A and C.

In response to the advice of the GA HPD, CDC accepts the recommendation that the Lawrenceville Campus is eligible for the NRHP.

2. CDC will immediately move forward with the necessary efforts to establish contributing and non-contributing resources to the district and a NRHP boundary. A map and a narrative description of the properties and their boundary will be prepared for submittal to the GA HPD for consultation.

3. Upon consultation and consensus between CDC and GA HPD regarding the NRHP boundary, CDC will immediately move forward with the necessary efforts to develop a programmatic approach to the treatment of the historic property, recognizing that physical changes will occur as the CDC's mission is carried forward on the Lawrenceville laboratory campus. After technical consultation with HPD, CDC will develop a Programmatic Agreement (PA) that addresses the need for the CDC to develop its scientific facilities while honoring its legacy.

CDC is eager to complete both the development of the NRHP Boundary and the Programmatic Agreement as soon as possible. CDC is currently securing the necessary resources to submit the NRHP Boundary to GA HPD in mid-October 2017 and will strive to complete consultation, development, and adoption of the final PA by March 1, 2018.

We look forward to collaborating with GA HPD on this undertaking. If you should have any questions, please do not hesitate to contact me at mst1@cdc.gov or 770.488-2408.

Sincerely,



Sam Tarr
CDC Asset Management and Services Office



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
and Prevention (CDC)
Atlanta, GA 30341-3724

November 1, 2017

Ms. Jennifer Dixon
Program Manager
Georgia Department of Natural Resources
Historic Preservation Division
Environmental Review & Preservation Planning
2610 GA Hwy 155
Stockbridge, Georgia 30281

RE: **CDC: Cultural Resources Assessment**
Lawrenceville Campus
Gwinnett County, Georgia
Ref.: FP-080808-001 & HP-150617-001

Dear Ms. Dixon,

CDC has contracted with New South Associates (NSA) to provide historic preservation consulting services to complete the actions I outlined in my October 3, 2017 correspondence regarding CDC's Lawrenceville Campus.

NSA, in consultation with CDC, has completed the necessary research and field work efforts to establish contributing and non-contributing resources to the district and define a proposed NRHP boundary. Please find enclosed the map and narrative description of the properties and their boundary for GA HPD review, comments and recommendation.

As previously indicated in my October 3, 2017 correspondence, Upon consultation and consensus between CDC and GA HPD regarding the NRHP boundary, CDC will immediately move forward with the necessary efforts to develop a programmatic approach to the treatment of the historic property, recognizing that physical changes will occur as the CDC's mission is carried forward on the Lawrenceville laboratory campus. After technical consultation with HPD, CDC will develop a Programmatic Agreement (PA) that addresses the need for the CDC to develop its scientific facilities while honoring its legacy.

We look forward to GA HPD's response and recommendations regarding the proposed NRHP boundary. If you should have any questions, please do not hesitate to contact me at mst1@cdc.gov or 770.488-2408.

Sincerely,

A handwritten signature in black ink, appearing to read "Sam Tarr". The signature is fluid and cursive, with the first name "Sam" and last name "Tarr" clearly distinguishable.

Sam Tarr
CDC Asset Management and Services Office

Appendix C: Ecology Resource Survey and Wetland Delineation

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Ecology Resource Survey and Wetland Delineation
July 2014

Centers for Disease Control and Prevention – Lawrenceville Campus Improvements
Gwinnett County, Georgia

Prepared by:



6801 Governors Lake Parkway
Building 200
Norcross, GA 30071

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Ecology Resource Survey and Wetland Delineation Overview
Centers for Disease Control and Prevention – Lawrenceville Campus Improvements

Present in the Project Area	
Jurisdictional Streams	Yes, 4
Jurisdictional Wetlands	Yes, 2
Buffered State Waters	Yes, 4
Invasive Species	Yes, 5
Bald Eagle Nest, Habitat	No
Critical Habitat	No
Essential Fish Habitat	No
Bat Roosting Habitat	No
Migratory Bird Habitat	No

Federal and State Protected Species							
Species Name	Common Name	Federal Rank	State Rank	Habitat Present	Species Present	Special Provision	Biological Determination
<i>Isoetes melanospora</i>	Black-spored quillwort	E	E	No	No	No	No effect
<i>Amphianthus pusillus</i>	Little amphianthus	T	T	No	No	No	No effect
<i>Sedum pusillus</i>	Granite stonecrop	N/A	T	No	No	No	No effect

Federal protection status is as follows: E-Endangered, T-Threatened, C-Candidate, N/A - Not federally listed; State protection status is as follows: E-Endangered, T-Threatened, R-Rare

Executive Summary

Jacobs Engineering Group, Inc. is preparing an Environmental Assessment (EA) for the Centers for Disease Control and Prevention (CDC), an Operating Division (OPDIV) of the Department of Health and Human Services (HHS), to assess the potential impacts associated with proposed improvements on the CDC's Lawrenceville Campus located at 602 Webb Gin House Road in Gwinnett County, GA. The proposed improvements entail building demolition and new building construction, including an approximately 12,000 gross square feet (gsf) Science Support Building, a new Transshipping and Visitor Center and two new Office Buildings as well as expansion and relocation of parking on campus and the creation of an additional point of access to the campus. Ecological studies within the proposed project area included surveys for Waters of the United States following the accepted methodology of the United States Army Corps of Engineers (USACE) and state waters as defined by the Georgia Department of Natural Resources (GADNR) – Environmental Protection Division. In addition, office and field reviews were conducted for federal and state protected species with the potential to occur in the project area.

The predominant habitat types within the project area include ruderal, agricultural, planted pine, and mixed pine-hardwood. During the ecological survey performed on September 17, 2013, five invasive plant species were identified along the project alignment: Nepalese browntop (*Microstegium vimineum*), kudzu (*Pueraria lobata*), Chinese privet (*Ligustrum sinense*), Japanese honeysuckle (*Lonicera japonica*), and English ivy (*Hedera helix*).

Office and field reviews were conducted for plant and animal species afforded protection by the Endangered Species Act. Office reviews of the United States Fish and Wildlife Services (USFWS) Information, Planning, and Conservation System (IPAC) database for Gwinnett County indicated that two federally protected species may occur in the project area: black-spored quillwort (*Isoetes melanospora*) and little amphianthus (*Amphianthus pusillus*). Correspondence as part of an early coordination effort with GADNR Wildlife Resources Division and the USFWS, requested information on known occurrences of federal and state protected species within a three-mile radius of the project corridor. The results indicated that one state protected plant species, granite stonecrop (*Sedum pusillus*), is known to occur approximately 1.5 miles northeast of the site. However, the ecology field survey conducted on September 17, 2013 did not identify any federally or state protected species or their suitable habitat; therefore, the proposed project would have no effect on any federally or state protected species known to occur in Gwinnett County. In addition, ecological studies did not identify the bald eagle (*Haliaeetus leucocephalus*) or its habitat; therefore, the proposed project would not result in a “take” of the bald eagle or its habitat. No critical habitat or essential fish habitat were identified near the proposed project. Furthermore, no structures, such as suitable bridges or large box culverts that may provide habitat for migratory birds and/or bats were identified.

Ecological studies identified six Waters of the United States within the survey corridor consisting of four streams and two wetlands. All jurisdictional streams and wetlands are subject to the jurisdiction of the USACE and Section 404 of the Clean Water Act. In addition, all streams are subject to local and state-mandated buffer requirements.

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I. PROJECT OVERVIEW

A. Project Location

The proposed project area is the Centers for Disease Control and Prevention's (CDC) Lawrenceville Campus located in unincorporated Gwinnett County, Georgia. The physical address of the site is 602 Webb Gin House Road, Gwinnett County (**Figure 1 – Project Location and Study Area**). The approximate geographic coordinates of the site are latitude 33°54'28.31" N and longitude 83°58'30.12" W. The 80.6-acre Lawrenceville Campus is bordered by Webb Gin House Road to the north and residential subdivisions to the east, south, and west. The project is located in the Southern Outer Piedmont (45b) ecoregion. In addition, the project corridor is located in the Upper Ocmulgee River basin within United States Geological Survey (USGS) hydrologic unit code (HUC) 03070103. The project corridor is situated on the Grayson, Georgia 7.5 Minute USGS topographic map.

B. Purpose and Need

HHS/CDC's mission is to serve as the national focus for developing and applying disease prevention and control, environmental health, and health promotion and health education activities designed to improve the health of the people of the United States. To accomplish its mission, CDC identifies and defines preventable health problems and maintains active surveillance of diseases through epidemiologic and laboratory investigations and data collection, analysis, and distribution.

The Lawrenceville Campus, developed in the 1960's, was originally used as a rabies laboratory, breeding, and animal holding facility. Today the campus provides office, laboratory and collection space for research and support staff. Since the original construction of the campus in the early 1960's, only minor changes to the Lawrenceville Campus have occurred, primarily focused on repairs or renovations to existing buildings. A collaborative and integrated planning process was undertaken by HHS/CDC staff in order to assess existing conditions on the Lawrenceville Campus and to identify any potential growth or shifts in Program space use, based on long term scientific mission support and operational requirements.

The result of the planning process was documented in the HHS/CDC Lawrenceville Campus 2025 Master Plan Draft. The planning process identified the need for the proposed improvements on the campus including the new Science Support Building, new office buildings, the new Transshipping and Visitor Center, additional parking and sidewalk improvements and a secondary emergency egress/ingress.

The proposed improvements are needed in order to address deficiencies with existing facilities and infrastructure on the Lawrenceville Campus in support of current program requirements. This includes the need for new support, storage and office space to replace existing obsolete structures, expanded animal support and storage space, and a new transshipping and visitor center to improve the movement of visitors and goods through the campus. Relocation and expansion of parking is needed to satisfy a current shortfall of parking during special events and to comply with security requirements. A secondary point of access to the campus would be developed in order to provide for an emergency egress and ingress for the campus and improvements to pedestrian infrastructure would provide a safe, high-quality pedestrian environment.

C. Project Description

Jacobs Engineering Group, Inc. is preparing an Environmental Assessment (EA) for the Centers for Disease Control and Prevention (CDC), an Operating Division (OPDIV) of the Department of Health and Human Services (HHS), to assess the potential impacts associated with proposed improvements on the CDC's Lawrenceville Campus located at 602 Webb Gin House Road in Gwinnett County, GA. The proposed improvements entail building demolition and new building construction, including an approximately 12,000 gsf Scientific Resources Building, a new Visitor Center/Transshipping facility, two new Office Buildings, relocation and expansion of parking on campus and creation of an additional point of access to the campus and pedestrian improvements (**Figure 2 - Build Alternative**). Proposed improvements took into consideration federal regulations in which the CDC must be compliant and address areas of safety, security, and sustainability. The various improvements are described in detail below:

Science Support Building Construction. A new approximately 12,000 gsf Science Support Building is proposed to replace an existing 3,421 gsf obsolete support and storage building. The new building would replace an aging structure that was originally constructed for other purposes and has surpassed its operational life span. The new building would consolidate functions currently housed in two existing separate buildings. The new Science Support Building would serve as an animal support and storage area. The new building would be constructed approximately 250 feet south of the existing science support building on what is currently existing pasture land. The existing 3,421 gsf science support building would be demolished.

New Transshipping and Visitor Center Construction. The HHS/CDC is proposing to construct an approximately 2,500 gsf new Transshipping and Visitor Center. The building would serve as the new shipping and receiving facility for the campus. As part of the same structure, a Visitor Center would be included and would function in conjunction with the existing guard station. All campus visitors would be required to check in at the visitor center and be escorted on campus by a badged employee.

New Office Building A Construction. A new approximately 6,000 gsf Office Building is proposed to replace two existing obsolete office and support buildings (1,426 gsf and 1,426 gsf) that would be demolished. The new Office Building A would provide office and support space and would be constructed on an existing parking lot.

New Office Building B Construction. A new approximately 8,000 gsf Office Building is proposed. The new office Building B would provide office support space for campus programming.

Parking Expansion and Relocation. A net increase of approximately 81 new parking spaces is proposed as part of the Build Alternative. A new 20-space, paved visitor parking lot would be constructed north of the Transshipping and Visitor Center outside the secure fenced perimeter. The new visitor parking lot will accommodate daily visitors to the campus as well as visitors during special events. The new visitor parking lot will comply with Interagency Security Committee (ISC) security guidelines and setback requirements.

A new 139-space, paved employee parking lot would be constructed along the eastern edge of the campus in order to comply with ISC security requirements. The parking lot would be accessed by the existing main entry drive from Webb Gin House Road. The new parking area would relocate the existing

non-ISC compliant parking spaces on campus and would provide additional spaces for special events parking. The existing non-ISC compliant parking areas would be demolished.

New Emergency Ingress/Egress Campus Entrance. A new campus entry point would be constructed off of Webb Gin House Road, forming an intersection with Timbercrest Drive. A new internal campus roadway would be constructed on current pasture land and would link the new entry point to the main campus core. The roadway surface would be constructed of pervious material. The new access point would only be utilized for emergency egress/ingress purposes only, in the event of an emergency evacuation or should the main entrance be blocked.

ABA-Compliant Sidewalk Connectivity. Sidewalks would be constructed to connect newly developed and modified areas of the campus to the existing main campus core area. All sidewalks would be Architectural Barriers Act (ABA)-complaint, approximately 6-feet in width, and span roadway crossings with appropriate curb-cuts, pavement markings and signage. In addition, shade trees and seating areas will complement the expanded pedestrian network.

D. Survey Methodology

Prior to conducting field surveys, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps, Natural Resource Conservation Service (NRCS) soil survey mapping, and USGS topographic mapping were reviewed in order to identify areas where state and/or federal waters may be present within the boundaries of the site. Background information from the sources described above was compiled and utilized to perform a comprehensive ecology field survey and delineate jurisdictional waters. Areas that were identified from preliminary office investigations were evaluated for the presence of state and/or federal jurisdictional waters. Additionally, the campus was investigated for the presence of state and/or federally listed species and/or their suitable habitat.

Methodology for state and federal waters field determinations was based on guidance from the following resources: 1987 Corps of Engineers Wetlands Delineation Manual (Manual), July 2010 Interim Regional Supplement to the (Manual): Eastern Mountains and Piedmont Region. This multi-parameter approach requires positive evidence of three criteria:

- hydrophytic vegetation;
- hydric soils; and
- wetland hydrology.

Areas were considered jurisdictional wetlands if they exhibited evidence of all three of the above wetland parameters. A low-medium-high rating system was used to evaluate wetland sites in terms of their ability to perform their associated functions. Factors considered included type of habitat (i.e. forested, emergent, etc.), vegetation diversity, hydrology, size, surrounding landscape, wildlife habitat, wildlife corridors, and size/type of stream course.

In addition, the Georgia Environmental Protection Division's (GAEPD) *Field Guide for Determining the Presence of State Waters that Require a Buffer* and the *North Carolina Division of Water Quality Methodology for Identification of Intermittent and Perennial Streams and Their Origins (Version 4.11)* were used as an aid during field studies to determine federal and/or state jurisdictional status of waters

within the project area. Jurisdictional status was applied to drainage features if they exhibited an ordinary high water mark (OHWM), well defined scoured channel, hydric soils, evidence of perennial or intermittent baseflow at times other than precipitation events, and evidence of substrate sorting.

Methodology for determining the presence of state and/or federally protected species and/or their suitable habitat was based on a review of known county occurrences, early coordination conducted with Georgia Department of Natural Resources (GADNR), USFWS, and available life history data from multiple sources including the rare species profiles available on the GADNR-Wildlife Resources Division web page (**Appendix B-Agency Correspondence**).

E. Habitats and Land Use Areas

Habitat types within the proposed project area were identified and described during the September 2013 field investigation. Four habitat types were identified during the September 2013 survey including ruderal, agricultural, planted pine, and mixed pine-hardwood (**Figure 3 – Vegetation Map**). See below for a detailed description of each habitat.

Ruderal

The vegetated component of this community is composed of herbaceous species such as tall fescue grass (*Festuca arundinacea*), broomsedge (*Andropogon virginicus*), goldenrod (*Solidago glomerata*), sawtooth blackberry (*Rubus argutus*), and vine species such as Japanese honeysuckle (*Lonicera japonica*), kudzu (*Pueraria lobata*), and poison ivy (*Toxicodendron radicans*). Most of the ruderal areas within the campus occur along the paved and unpaved roadways and among the buildings and parking areas, which are regularly maintained by mowing or herbicide. This community is heavily impacted by anthropogenic activity and does not provide habitat for wildlife species.

Mixed Pine-Hardwood

Dominant canopy species within this habitat type include loblolly pine (*Pinus taeda*), tulip poplar (*Liriodendron tulipifera*), red maple (*Acer rubrum*), water oak (*Quercus nigra*), and sweetgum (*Liquidambar styraciflua*). Understory species consist of Chinese privet (*Ligustrum sinense*) and saplings of the dominant species. Herbaceous species consists of Japanese honeysuckle, poison ivy, Christmas fern, blackberry, English ivy (*Hedera helix*), winged sumac (*Rhus copallinum*), purple passion flower (*Pasiflora incarnata*), and kudzu (*Pueraria montana*). This community occurs primarily in the center of the site and along riparian corridors. The mixed pine-hardwood community provides good wildlife habitat. The community consists of several mast producing tree species, and the understory is dense enough to offer shelter and a variety of ecological niches.

Planted Pine

The northwestern quadrant of the project site consists of mature, planted, loblolly pine. Trees within this area are even-aged and approximately 50 to 75-years old. Although the area is no longer used for silviculture, the understory is maintained by mowing. In addition to frequent maintenance, the forest floor contains a heavy layer of pine needles, which prohibit the growth of herbaceous vegetation. This community is of minimal value to wildlife species because it does not offer food or cover.

Agricultural

Much of the CDC Lawrenceville Campus consists of agricultural fields used to support small livestock. The fields contain a variety of grass species such as bahiagrass (*Paspalum notatum*), smooth crabgrass (*Digitaria ischaemum*), and panic grass (*Panicum* spp.). The fields are sustained through natural regeneration but they are frequently maintained by grazing livestock and mowing. These agricultural areas provide minimal habitat for wildlife species but are considered a food source for migratory birds. Several eastern bluebirds (*Sialia sialis*) were observed foraging over the agricultural fields and along the existing fence lines.

F. Geology and Soils

The CDC Lawrenceville Campus is located in the Piedmont Plain Physiographic Province. The Piedmont Province is north of the fall line and is composed of igneous and metamorphic rock overlain by saprolitic and residual soil formed by the in-place weathering of bedrock. According to the 1976 Geologic Map of Georgia, the primary unit name is Granitic Gneiss undifferentiated. A very small portion of the campus is located within the Mica Schist/Amphibolite unit. These units are located in the Blue Ridge and Piedmont Province, and the age of both units is Precambrian-Paleozoic.

A total of 13 soil types are present in the project area according to the United States Department of Agriculture - Natural Resources Conservation Service (USDA NRCS) (**Figure 4 - Soils Map**) (**Table A. Soils Summary**). Eight dominant soil types were identified within the CDC Lawrenceville Campus, consisting of approximately 31.9 percent of the Rawlings and Rion soils, 29.3 percent of the Gwinnett series, 13.3 percent of the Chewacla series, 12.5 percent of the Appling-Hard labor complex, 5.2 percent of the Worsham series, and 4.4 percent of the Toccoa series. The remaining five soil types comprise less than 2 percent each of the project area.

G. Watershed

The CDC Lawrenceville Campus is located within the Ocmulgee River basin. This basin is located in the Piedmont and Coastal Plain physiographic provinces of central Georgia. The Ocmulgee basin is flanked by the Flint River basin to the west, the Suwannee and Satilla River basins to the south, and the Oconee River basin to the east. The headwaters of the basin are located in DeKalb and Gwinnett Counties and consist of the Alcovy, Yellow, and South Rivers that drain the eastern and southeastern Metropolitan Atlanta area. These rivers, which join at Jackson Lake west of Monticello, Georgia, form the Ocmulgee River. The Ocmulgee River continues in a southerly direction until it swings eastward north of Ben Hill County, converges with the Little Ocmulgee River at Lumber City in Telfair County, and joins the Oconee River about eight miles farther downstream to form the Altamaha River. South of Jackson Lake, the Towaliga River and several large creeks including Tobesofkee, Echeconnee, and Big Indian Creeks join the Ocmulgee River. The Ocmulgee River basin is located entirely in the State of Georgia and drains approximately 6,085 square miles (Ocmulgee River Basin Management Plan, Georgia Department of Natural Resources, Environmental Protection Division, 2004).

The USGS has divided the Ocmulgee River basin into three sub basins, or HUCs. The proposed project area is in the Upper Ocmulgee River sub basin (HUC 03070103). The northernmost part of the Upper Ocmulgee River sub basin is within the Piedmont Province physiographic region where the headwaters of the Ocmulgee River are located, and the southernmost part of the sub basin crosses the Fall Line into the Upper Coastal Plain physiographic region. The Upper Ocmulgee basin drains approximately 2,973 square

miles and encompasses all or parts of 20 Georgia counties. The sub basin is oriented in a general north-south direction from Gwinnett County to the north, through Bibb County, and into Houston and Twiggs Counties at the southernmost point. Approximately 85 percent of the sub basin is in the Southern Piedmont Major Land Resource Area (MLRA), and approximately 15 percent is in the Carolina and Georgia Sandhills MRLA.

Several interstate highways traverse the Upper Ocmulgee sub basin. Interstate 85 crosses the northern end of the basin in a southwest to northeast direction, Interstate 75 travels from Clayton County in the northwest to southeast through much of the length of the basin, and Interstate 20 crosses in an east-west direction from the City of Atlanta and DeKalb County. Interstate 16 joins with Interstate 75 in Monroe County north of the City of Macon and proceeds in a southeasterly direction, ultimately continuing to the City of Savannah. Numerous towns and cities, as well as a several small communities, are present within the Upper Ocmulgee sub basin. The northern end of the basin is located within the Atlanta metropolitan area in heavily urbanized Gwinnett and DeKalb Counties. As the Ocmulgee River and its major tributaries flow south away from metro Atlanta, they pass through areas of urban and suburban development of varying densities as well as large areas of agricultural and forested lands. The density of urban and suburban development increases again in the southern end of the sub basin in the Macon metropolitan area.

II. STATE AND FEDERALLY PROTECTED RESOURCES

A. Protected Species and Habitats

Prior to conducting the field investigation, a list of federally protected species was obtained from the USFWS Information, Planning and Conservation System (IPAC) webpage and the GADNR Wildlife Resources Division list of protected species documented for Gwinnett County. An early coordination letter was submitted to the GADNR requesting a list of protected species documented as occurring within a three-mile radius of the project corridor. The GADNR response letter indicated that no federally protected species have been identified within three miles of the project site (**Appendix B**).

i. Federally Protected Species

In compliance with Section 7 of the Endangered Species Act, the project must identify the presence of threatened and endangered species and their designated critical habitat, as well as evaluating project impacts. Federally listed species identified as occurring within Gwinnett County through the resources described above and the potential for impacts associated with the proposed project are discussed in further detail below. Descriptions of protected species habitat requirements in this section are based in large part on the Rare Species Profiles available through the GADNR website.

Little amphianthus (*Amphianthus pusillus*, federally and state threatened) – Little amphianthus is a small, annual, aquatic, herbaceous plant. The species exhibits leaves on both the water's surface as well as below the surface. Leaves above the water's surface are in pairs and ovate in morphology. Little amphianthus produces tiny, inconspicuous white to pale violet flowers in March and April, which may be present on both the tops of the floating leaves as well as on those below the water surface. Little amphianthus has been found in Alabama, Georgia, and South Carolina. This species is endemic to shallow, rock-rimmed, flat-bottomed, vernal pools on granite outcrops. The vernal pools have a thin layer

of gravelly soil in the deeper parts of the pools. Water depths during the flowering period range from zero to 10 cm. Little amphianthus grows in association with a variety of species, with the Piedmont quillwort (*Isoetes piedmontana*) being the most commonly associated species. In deeper more permanent pools, two-headed water-starwort (*Callitriche terophylla*) is commonly present, and elf orpine (*Diamor phacymosa*) is more commonly present in the margins of the pools with drier shallower soil. Additional species associated with little amphianthus include blunt spikerush (*Eleocharis obtusa*), Piedmont false pimpernel (*Lindernia monticola*), granite flatsedge (*Cyperus granitophilus*), little bluestem (*Andropogon scoparius*), Philadelphia panicgrass (*Panicum lithophilum*), bentgrass species (*Agrostis* spp.), rush species (*Juncus* spp.), fimbry species (*Fimbristylis* spp.), oneflower stitchwort (*Arenaria uniflora*), polytrichum moss (*Polytrichum commune*), orangegrass (*Hypericum gentianoides*), woolly ragwort (*Senecio tomentosus*), and algal growths.

Correspondence with the GADNR indicated that there are no known elemental occurrences of little amphianthus within a three-mile radius of the project. The project site contains two small (less than 500 square feet) areas of granite outcrops. However, these areas are extremely small, isolated, and do not contain vernal pools necessary to support little amphianthus. Furthermore, none of the associated species listed above were identified. Due to the lack of suitable habitat within the site, the proposed project would have no effect on little amphianthus or its habitat.

Black-spored quillwort (*Isoetes melanospora*, federally and state endangered) – Black-spored quillwort is an inconspicuous perennial herb. The leaves arise from a bulbous base, are bunched, linear, slender-tipped and resemble quills. This herb is restricted to shallow flat-bottomed depressions on granite outcrops that collect precipitation. The depressions are less than one foot in depth and are entirely rock rimmed with at least one-half to one inch of soil. Black-spored quillwort grows in association with several of the species mentioned above, including little amphianthus.

Correspondence with the GADNR indicated that there are no known elemental occurrences of the black-spored quillwort within a three-mile radius of the project site. Suitable habitat was not identified within the project area during the September 2013 field survey. As noted above, granite outcrops are present in two locations on the site, but these outcrops are considered unsuitable due to their size and shape. The outcrops identified on site do not contain vernal pools with one-half to one inch of substrate. Therefore, the proposed project would have no effect on the black-spored quillwort or its habitat.

ii. State Protected Species

The Georgia Endangered Wildlife Act prohibits the capture, killing, or selling of protected species and protects the habitat of these species on public lands. Georgia's Wildflower Preservation Act of 1973 provides for designation of and protection of plant species that are rare, unusual, or in danger of extinction. An early coordination request was made to GADNR for information regarding known occurrences of protected species within three miles of the proposed project. The response from GADNR indicated that one state protected species is known to occur within a three-mile radius of the project corridor (**Appendix B**). The following is a detailed discussion of the state protected species listed on the GADNR early coordination letter:

Granite stonecrop (*Sedum pusillum*, state threatened) - The granite stonecrop is an annual herb usually two to four inches in height with few branches and spiral leaves. The plant has succulent stems

with a pale bluish-green coloration often tinged with red. The alternately arranged leaves are pointed, succulent, round in cross section and up to 0.5 inches long. The flowers consist of four white pedels and four green sepals with eight red tipped stamens. This plant is found on large flat granite rock outcrops among mosses in partial shade, usually in leaf litter under older eastern red cedar trees. The range of this species extends through the Piedmont Plateau of Georgia, South Carolina, and south-central North Carolina. Threats to the species include habitat fragmentation, off-road vehicle traffic, removal of red cedar trees from granite outcrops, and habitat destruction from quarrying and dumping.

Correspondence from early coordination with the GADNR revealed that there are known elemental occurrences of the granite stonecrop approximately 1.5 miles and 2 miles northeast of the proposed project site. However, the project area does not contain suitable habitat for the granite stonecrop. Although two granite outcrops were identified on site, these areas do not contain vernal pools or pools with sufficient substrate for plants to colonize. The proposed project would have no effect to granite stonecrop or its habitat.

iii. Critical Habitat

According to the USFWS critical habitat mapper (<http://criticalhabitat.fws.gov/crithab/>), there is no critical habitat located within Gwinnett County, Georgia. The proposed project would have no adverse modification to critical habitat.

iv. Bald and Golden Eagles

The Bald and Golden Eagle Protection Act of 1940 provides for the protection of the bald eagle and the golden eagle by prohibiting, except under certain specified conditions, the taking, possession and commerce of such birds. No bald eagle nests have been documented by GADNR as occurring within three miles of the project corridor. No suitable foraging habitat for eagles such as large open water bodies exists within the project area; therefore, the proposed project would not “take” bald eagles or their habitat.

v. Migratory Birds

The Migratory Bird Treaty Act (MBTA) and the Executive Order on the Responsibility of Federal Agencies to Protect Migratory Birds (EO 13186) requires the protection of migratory birds and their habitats. Bridges and large box culverts provide suitable habitat for migratory birds, however, these habitats are not present within the project area. There may be minimal clearing of mixed pine hardwood and mixed hardwood habitat. Given the fragmented nature of the forested habitats within the project area, they are not considered exemplary. Therefore, the project would have no effect on migratory bird habitat.

vi. Bats

Bats are known to utilize structures such as culverts and bridges for roosting throughout much of the United States, particularly in the southern states. Signs of bat roosts include visible, audible and olfactory identification, presence of guano, or staining from guano or body oils. No suitable structures were identified in the project area and no evidence of roosting was observed during the ecological field survey. As a result, the project is anticipated to have no effect on bats.

vii. Essential Fish Habitat

In compliance with the Magnuson-Stevens Fishery Conservation and Management Act, projects within Georgia must identify unavoidable adverse impacts to Essential Fish Habitat (EFH). The proposed project does not occur in any of the coastal counties of Georgia that may contain EFH. In Georgia, EFH can be found in the following counties: Camden, Glynn, McIntosh, Liberty, Bryan, and Chatham. The proposed project is located in Gwinnett County, which does not contain any tidally influenced areas. Therefore, the proposed project would have no effect on EFH under the National Oceanic and Atmospheric Administration EFH Fisheries purview.

B. Invasive Species

In compliance with Executive Order 13112, a survey was conducted for invasive species that could spread during construction. Invasive species listed as Category 1 by the Georgia Exotic Pest Plant Council and identified in the project study area include: Nepalese browntop (*Microstegium vimineum*), kudzu (*Pueraria lobata*), Chinese privet (*Ligustrum sinense*), Japanese honeysuckle (*Lonicera japonica*), and English ivy (*Hedera helix*).

Construction activities would include measures to prevent or minimize the spread of these species as appropriate for the time of the year. These measures would include the removal and disposal of vegetative parts in the soil that may reproduce by root raking prior to moving the soil, burning on site any such parts and above ground parts that bear fruit, controlling or eradicating infestations prior to construction, and cleaning of vehicles and other equipment prior to leaving the infested site. The measures used would be those that are appropriate for the particular species and the specific site conditions that exist on the project.

C. Jurisdictional Waters of the US, State Waters, and Assessment of Effects

Jurisdictional Waters of the U.S. are defined by 33 CFR Part 328.3(b) and are protected by Section 404 of the Clean Water Act (33 USC 1344). Buffered state waters are defined by the Georgia Erosion and Sedimentation Control Rules 391-3-7, promulgated under the Georgia Erosion and Sedimentation Act (Act), O.C.G.A. 12-7 as “any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the State, which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.” Buffered state waters in Georgia require a 25-foot protective buffer on warm-water resources and a 50-foot buffer on cold-water resources (trout streams). In addition, Gwinnett County's local buffer ordinance places a 75-foot buffer on all perennial and intermittent streams (50 feet undisturbed and an additional 25 feet for impervious materials). A field evaluation for Waters of the U.S. and buffered state waters was conducted on September 17, 2013. Prior to the field evaluation, the last precipitation event recorded in the project area occurred on September 2, 2013 in the form of 0.08 inch of rainfall. Rainfall measurements were taken into consideration for hydrology and stream flow conditions present during the field study. A full description of each resource identified within the project site is provided below and summarized in **Tables B and C**. Please refer to **Figure 5 - Jurisdictional Waters Map** for a detailed location of each resource.

Stream 1 (ST1)

Stream 1 is an unnamed tributary to Haynes Creek that flows east to west through the center of the project site. Stream 1 transitions from an ephemeral channel to a perennial stream within the same continuous reach. Stream 1 originates at the fence line on the eastern boundary of the campus where it receives stormwater from the existing roadways and parking lots. From the fence, approximately 15 feet of the channel is lined with riprap, and approximately 130 feet is contained within an open corrugated plastic pipe. This portion of the channel is considered a non-buffered state water because it lacks baseflow and wretched vegetation. The intermittent portion of ST1 begins at a culvert crossing below an agricultural stable. Within this area, the channel is approximately three feet wide and one foot deep at bankfull, and the substrate consists of mud and silt. The intermittent portion of ST1 is considered a buffered state water due to the presence of baseflow and wretched vegetation. The vegetated riparian zone of ST1 is greater than 25-ft on both banks. The riparian zone is dominated by species such as Chinese privet, sassafras (*Sassafras albidum*), sweetgum, crabgrass, Nepalese browntop, Japanese honeysuckle, southern red oak (*Quercus falcata*), English ivy, poison ivy, and purple passionflower.

The remaining portion of ST1 is classified as a perennial buffered state water. Within this segment, the stream exhibits baseflow, wretched vegetation, riffle/pool complexes, increased levels of iron oxidizing bacteria, and sediment sorting. The stream turns perennial approximately 250 feet downstream from a culvert and grassed agricultural driveway. In this area, the channel is approximately four to five feet wide and three to five feet deep at bankfull. The substrate of ST1 is dominated by sand, pebble, and silt. The vegetated riparian area is forested, greater than 25 feet wide on both banks, and is composed of mixed pine-hardwood habitat. The entire reach of ST1 is classified as a warm-water stream (non-trout). Stream 1 is not listed on the 303(d)/305(b) list of impaired waters, nor is it a tributary to a listed waterway.

Stream 2 (ST2)

Stream 2 is Haynes Creek, a perennial stream that flows northwest from the south-central end of the project site to its confluence with Stream 1. At bankfull, the width of ST2 is approximately four to six feet and the depth is three to seven feet. The substrate is composed of sand, silt, pebble, and cobble (brought in from an outside source). Stream 2 exhibits perennial characteristics such as baseflow, wretched vegetation, iron oxidizing bacteria, an ordinary high water mark, sediment sorting, and depositional bars and benches. Stream 2 is considered impaired due to culverting, erosion, and runoff. Stream 2 is classified as a buffered state water, and the vegetated riparian zone is greater than 25 feet wide on both banks and is composed of mixed pine-hardwood habitat. Dominant species within the buffer zone include loblolly pine, sweetgum, water oak, red maple, Chinese privet, and Nepalese browntop. Stream 2 is classified as a warm-water stream requiring a 25-foot protective buffer due to its perennial characteristics. Stream 2 is not listed on the 303(d)/305(b) list, nor is it a tributary of a listed waterway.

Wetland 3 (WET3)

Wetland 3 is a palustrine emergent wetland located adjacent to S4 near its confluence with S2. Dominant hydrophytic vegetation includes tree species such as red maple and tulip poplar. Herbaceous vegetation consists primarily of smartweed (*Polygonum hydropiperoides*), jewelweed (*Impatiens capensis*), Nepalese browntop, and giant cane (*Arundinaria gigantea*). The indicators of wetland hydrology are water-stained leaves, drainage patterns, oxidized rhizospheres, and geomorphic position. The soil profile from zero to five inches consists of clay with a matrix color of 10YR 4/2 (95 percent) and redox features with a color

of 10YR 6/6 (five percent). From five to eight inches in depth, the matrix was clay with a color of 2.5YR 6/3 (100 percent). From eight inches on, the matrix was 2.5YR 5/1 (80 percent) with redox features of 7.5YR 5/6 (20 percent) which indicates a depleted matrix (Hydric soil indicator F3). The existing condition of WET3 is a Class 3 system due to surrounding hydrologic alterations such as grading and development. WET3 is considered a jurisdictional wetland because all three wetland criteria listed in the Manual have been met and the resource shares a hydrologic connection to other jurisdictional resources in the area. WET3 does not provide suitable habitat for any state or federally listed species.

Stream 4 (ST4)

Stream 4 is a perennial tributary to Haynes Creek that flows north from the southern boundary of the project site. At bankfull, the channel is approximately two to three feet wide and one to three feet deep. The substrate of ST4 is composed of sand and silt. Stream 4 is classified as a perennial stream due to evidence of baseflow, wrested vegetation, sediment sorting, an ordinary high water mark, and iron oxidizing bacteria. Stream 4 is considered impaired due to erosion and runoff. The riparian area is greater than 25 feet wide along both banks and is dominated by mixed pine-hardwoods such as loblolly pine, sweetgum, red maple, and water oak. Stream 4 is classified as a buffered state water requiring a 25-foot protective buffer due to its perennial flow regime. Stream 4 is not listed on the 303(d)/305(b) list, nor is it a tributary of a listed waterway.

Wetland 5 (WET5)

Wetland 5 is a palustrine emergent wetland located adjacent to Stream 2 along the south-central boundary of the project area. Dominant vegetation includes red maple, blunt spike-rush (*Eleocharis obtusa*), common rush (*Juncus effuses*), knotweed (*Polygonum cuspidatum*), and sensitive fern (*Onoclea sensibilis*). The indicators of wetland hydrology include oxidized rhizospheres, drainage patterns, and FAC-neutral testing. Hydric soil indicators consisted of a depleted matrix (F3). The soil profile from zero to one inch consists of muck with a matrix color of 10YR 2/1 (100 percent). From one to three inches in depth, the matrix was clay with a color of 10YR 4/1 (80 percent) and redox features of 7.5YR 6/6 (20 percent). From three to twelve inches, the matrix was 5Y5/1 (95 percent) with redox features of 7.5YR 6/0 (five percent) which indicates a depleted matrix. The existing condition of WET5 is a Class 3 system due to surrounding hydrologic alterations such as grading and development. WET5 is considered a jurisdictional wetland because all three wetland criteria listed in the Manual have been met and the resource shares a hydrologic connection to other jurisdictional features within the area. WET5 does not provide suitable habitat for any state or federally listed species.

Stream 6 (ST6)

Stream 6 is a perennial unnamed tributary to Haynes Creek. This resource flows south through the project area from the northwestern quadrant of the campus. At bankfull, the channel is approximately three to five feet wide and three to five feet deep. The substrate of S6 is dominated by sand, silt, and pebbles. The vegetated riparian area is greater than 25 feet on both banks and is dominated by mixed pine-hardwoods such as sweetgum, loblolly pine, red maple, water oak, American sycamore (*Platanus occidentalis*), and blackgum (*Nyssa sylvatica*). Stream 6 is classified as a buffered state water requiring a 25-foot protective buffer due to its perennial flow regime. Stream 6 is not listed on the 303(d)/305(b) list, nor is it a tributary of a listed waterway.

D. Avoidance and Minimization of Federal Resource Impacts

The National Environmental Policy Act (NEPA), and other regulations, requires that a number of additional environmental factors be taken into account. The locations of the proposed improvements were developed to include all environmental considerations. Basic environmental, historic, and social data of the site was gathered and studied. Data for the project included aerial photography, topographic maps, wetland inventory maps, floodplain maps, soil maps, and GADNR historic survey maps.

Proposed improvements to the CDC Lawrenceville Campus would have minimal impact to ecological resources. The proposed project would avoid aquatic resources and their 25-foot protective buffers to the maximum extent practical while still meeting the need and purpose of the project. Best Management Practices (BMPs) such as Type C silt fence and orange barrier fence would be used to control erosion and sedimentation and limit clearing within sensitive areas.

E. Permit and Mitigation

Any dredge activity or placement of fill material within jurisdictional waters of the US would require a Section 404 Permit issued by the US Army Corps of Engineers (USACE). Any impact to jurisdictional waters of the US totaling more than 0.1 acre of wetlands or 100 linear feet of stream would also require the purchase of compensatory mitigation credits from a USACE approved commercial mitigation bank. The proposed project would construct a roadway crossing at Stream 1, within the footprint of an existing crossing. If the proposed project extends the existing culvert, or replaces the existing culvert with a longer structure, a Section 404 permit would be required.

All streams within the proposed project area are classified as warm-water resources. Any encroachment into the 25-foot protective buffer of a state water would require a buffer variance from the GA EPD. In accordance to the local buffer ordinance established and enforced by Gwinnett County, any encroachment into the 50-foot undisturbed buffer, or any impervious material placed within the additional 25-foot setback, would require a local buffer variance. Gwinnett County has additional buffer restrictions for projects that occur within the Big Haynes Creek watershed and within seven miles of a surface water intake structure. Although the headwaters of Streams 1, 2, 4, and 6 occur within the Big Haynes Creek subwatershed, there are no surface water intake structures within seven miles. Therefore, all special restrictions associated with the Big Haynes Creek watershed would not apply to the proposed project.

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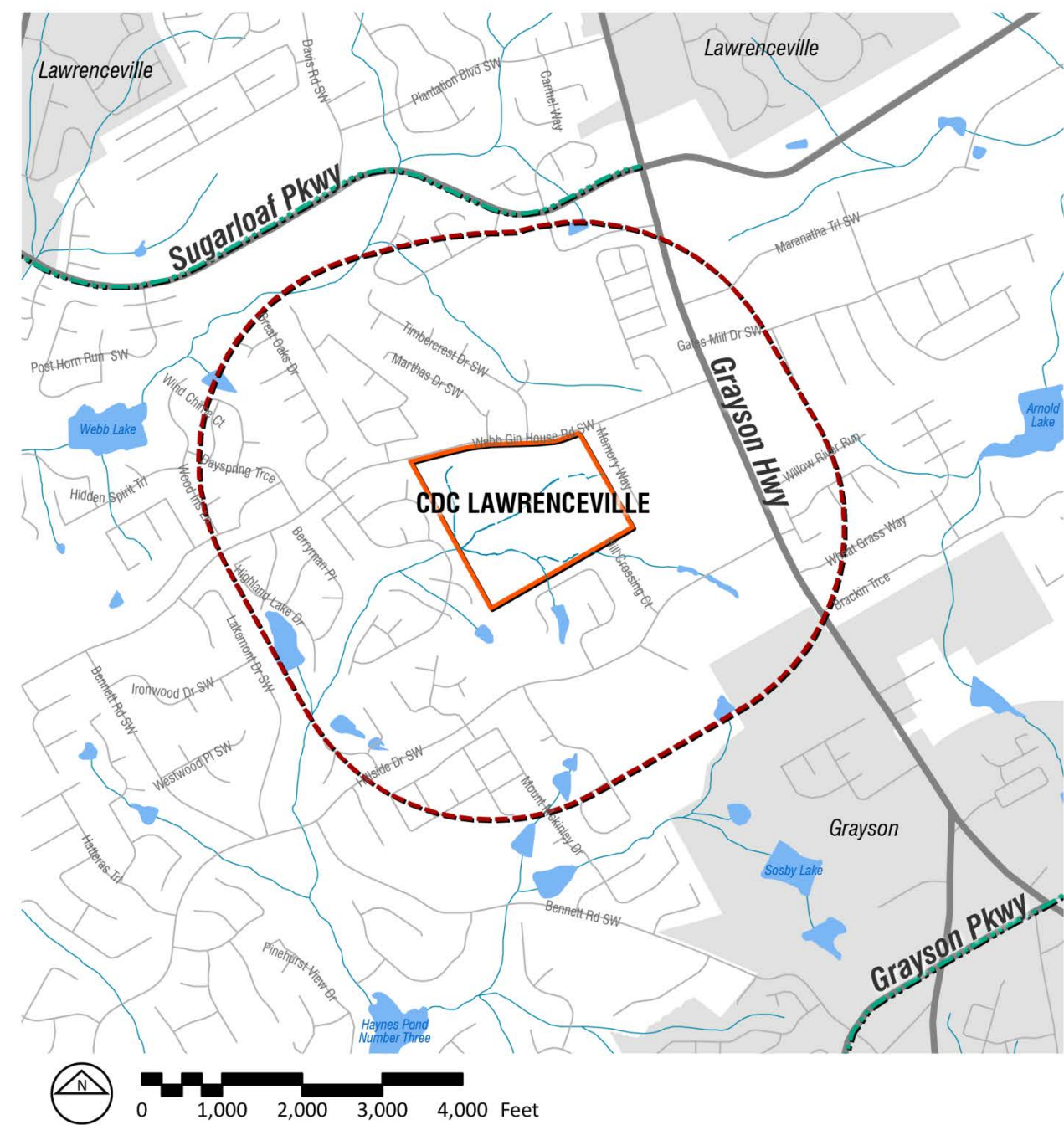
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Figures

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FIGURE 1 – PROJECT LOCATION & STUDY AREA



Legend

- | | |
|-----------------------|--------------|
| CDC Property Boundary | Major Roads |
| 1/2 Mile Study Area | Streets |
| Lake/Reservoir | Stream/River |
| City Limits | Bike Path |

Sources: Atlanta Regional Commission

FIGURE 2 – BUILD ALTERNATIVE



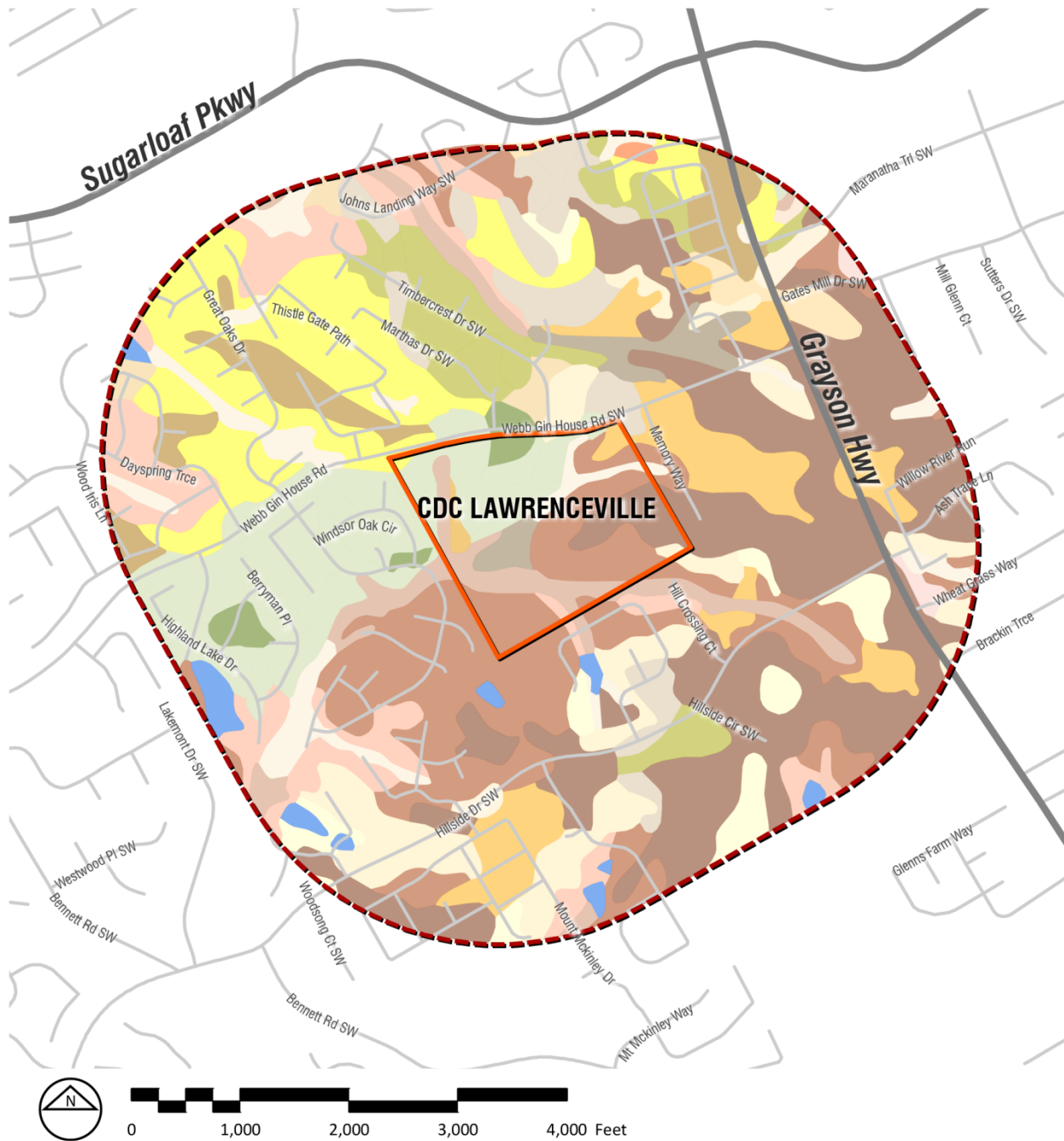
FIGURE 3 - VEGETATION



Legend

- Forested/Natural Vegetated Areas
- Mixed Pine - Hardwood
- Planted Pines
- Ruderal
- CDC Property Boundary

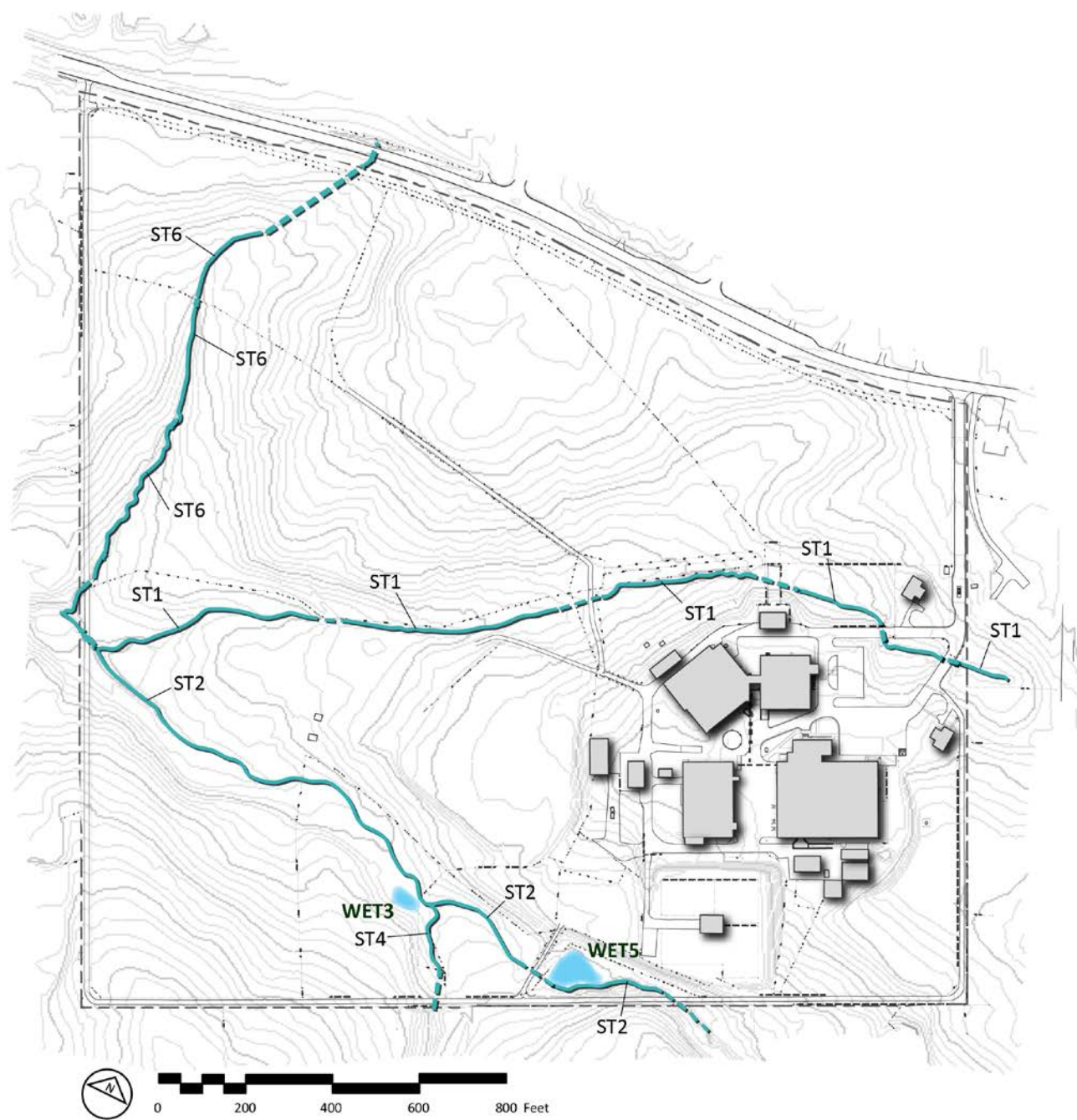
FIGURE 4 – SOILS MAP



Legend

CDC Property Boundary	Appling Sandy Clay Loam	Madison Gravelly Sandy Loam
1/2 Mile Study Area Boundary	Appling Sandy Loam	Madison Sandy Clay Loam
Major Roads	Appling-Hard Labor Complex	Muswlla Cobbly Loam
Streets	Ashlar and Wedowee Soils	Pacolet Sandy Clay Loam
	Ashlar, Ricon, and Wateree Soils	Pacolet Sandy Loam
	Bethlehem and Cecil Soils	Rawlings and Rion Soils
	Cecil Sandy Loam	Rock Outcrop-Wake Complex
	Chewacla Soils	Toccoa Fine Sandy Loam
	Gwinnett Clay Loam	Wedowee Sandy Loam
	Gwinnett Loam	Wehadkee Soils
	Hard Labor Sandy Loam	Worsham Sandy Loam
	Helena Sandy Loam	Water

FIGURE 5 – JURISDICTIONAL WATERS MAP



Legend

- | | |
|--|---|
|  Wetlands |  Underground Water |
|  Major Stream |  CDC Property Boundary |

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Tables

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Table A: Soils Summary

Series and Location	Slope Range	Erodibility (low, medium, high)	Use	Soil Characteristics
Appling (Project Area and Study Area)	0-25%	medium	Cropland, pasture, forest	Very deep, well-drained soils on ridges and side slopes of the Piedmont uplands. Found on broad nearly level to gently sloping ridges and on sloping to moderately steep sides of ridges between intermittent and permanent streams in the southern Piedmont. Medium to rapid runoff, moderate permeability.
Ashlar (Project Area and Study Area)	0-70%	medium to high	Primarily forest; small areas of cropland	Soils are moderately deep and well drained to excessively drained. Soils are gently sloping to hilly on dissected uplands of the Piedmont Plateau. Runoff is slow to very rapid, permeability is moderately rapid.
Bethlehem (Study Area)	2-45%	medium	Cropland, forest	Well drained, moderately deep soils on ridgetops and side slopes in the upper part of the Piedmont. Runoff is medium or rapid; permeability is moderate.
Cecil (Study Area)	0-25%	medium	Cropland, pasture, forest	Very deep, well drained moderately permeable soils on ridges and side slopes of the Piedmont uplands. Runoff is medium to rapid; permeability is moderate.
Chewacla (Project Area and Study Area)	0-2%	low to medium	Pasture, cropland, some forest	Somewhat poorly drained soils located in the flood plains of Piedmont and Coastal Plain river valleys. Runoff is negligible to very low, permeability is moderate.
Gwinnett (Project Area and Study Area)	2-60%	medium	Forest	Deep, well drained soils found on very gently sloping to very steep ridges of the Piedmont Plateau. Moderate permeability, medium to rapid runoff.
Hard labor (Project Area and Study Area)	0-15%	Low to medium	Cropland, forest	Very deep, moderately well drained, slowly permeable soils found on broad, nearly level to gently sloping summits and on sloping to strongly sloping side slopes of the Southern Piedmont uplands. There is a perched water table in late winter and early spring. Runoff is medium to rapid; permeability is slow.
Helena (Project Area)	0-15%	Low to medium	Cropland, some forest	Very deep, moderately well drained soils found on ridges and hill slopes of the Piedmont. Runoff is moderate to rapid, permeability is slow.
Madison (Project Area and Study Area)	2-60%	medium	Pasture, cropland, forest	Well drained, moderately permeable soils, very deep to bedrock, found on gently sloping to steep uplands in the Piedmont. Runoff is medium to rapid; permeability is moderate.
Musella (Study Area)	2-80%	medium	Forest, some cropland	Shallow, well drained, dark red soils on Piedmont uplands found on narrow, gently sloping ridgetops and moderate to strong sideslopes of the Piedmont Plateau. Rock outcrops and stones are common landscape features. Rapid runoff; permeability is moderate.

Series and Location	Slope Range	Erodibility (low, medium, high)	Use	Soil Characteristics
Pacolet (Project Area and Study Area)	2-60%	medium	Forest, cropland, pasture	Very deep, well drained, moderately permeable soils found on gently sloping to very steep Piedmont uplands. Runoff is medium to rapid; permeability is moderate.
Rawlings (Project Area and Study Area)	6-45%	medium	Forest, some pasture	Moderately deep, well drained soils found on gently sloping to steep summits and side slopes of the Piedmont uplands. Runoff is medium to very rapid; permeability is moderate.
Rion (Project Area and Study Area)	2-60%	medium	Forest, some cropland and pasture	Very deep, well drained soils found on gently sloping to very steep Piedmont Uplands. Runoff is medium to rapid; permeability is moderate.
Toccoa (Project Area and Study Area)	0-4%	low to medium	Cropland, pasture	Very deep, well drained and moderately well drained soils in the flood plains and natural levees of the Piedmont and Upper Coastal Plain valleys. Moderately rapid permeability, runoff is very low.
Wake (Study Area)	2-45%	high	Forest, small areas of cropland and pasture	Excessively drained, shallow, sandy soils. Soils are gently sloping to steep and are on ridges and side slopes on the Southern Piedmont uplands. Runoff is medium to rapid; permeability is rapid.
Wateree (Project Area and Study Area)	2-95%	medium	Primarily forest; small areas of cropland	Well drained, moderately deep soils on sloping to very steep side slopes of the Piedmont uplands. Runoff is medium, permeability is moderately rapid.
Wedowee (Study Area)	0-60%	medium	Forest, some cropland and pasture	Very deep, well drained, moderately permeable soils found on narrow ridges and on side slopes of Piedmont uplands. Runoff is medium to rapid; permeability is moderate.
Wehadkee (Study Area)	0-2%	low	Primarily forest; drained areas may be used for crops	Very deep, poorly drained and very poorly drained soils on flood plains along streams that drain from the mountains and piedmont. Runoff is very slow, permeability is moderate. Most areas are frequently flooded.
Wickham (Study Area)	0-25%	medium	Cropland, forest	Located on stream terraces in the Piedmont and Coastal Plain and marine terraces in the Lower Coastal Plain. Well drained, runoff is medium to rapid, permeability is moderate.
Worsham (Project Area and Study Area)	0-8%	medium	Woodland, pasture, small amount of cropland	Found in depressions, at the heads of drains, at the base of slopes, and on upland flats in the Piedmont Plateau. Poorly drained, runoff is high, very slow permeability.

Source: USDA NRCS Soil Survey

Table B: Jurisdictional Stream Summary Table
CDC Lawrenceville Campus

Label	Type	HUC	BV	FWCA	Habitat for Protected Species	Lat (°N)	Long (°W)	Impact Type	Impact Length (ft)	Impact Area (acre)
S1	Ephemeral, Intermittent, and Perennial	3070103	No	No	No	33.9079	83.97699444	N/A	0	0
S2	Perennial	3070103	No	No	No	33.906475	83.977425	N/A	0	0
S4	Perennial	3070103	No	No	No	33.905825	83.97615833	N/A	0	0
S6	Perennial	3070103	No	No	No	33.9062	83.975175	N/A	0	0
TOTAL									0	0

Table C: Wetland and Open Waters Summary
CDC Lawrenceville Campus

Label	Resource Type	HUC	Buffer	Protected Species Habitat	Lat (°N)	Long (°W)	Impact Type	Temporary Impact Area (acre)	Permanent Impact Area (acre)
WL3	Wetland	3070103	No	No	33.9062056	83.9767611	N/A	0	0
WL5	Wetland	3070103	No	No	33.9061278	83.9756694	N/A	0	0
TOTAL								0	0

Appendix A - Field Data

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NC DWQ Stream Identification Form Version 4.11

Date: 9/17/13	Project/Site: CDC - ST 1	Latitude: 33°54'31.68" N
Evaluator: Stewart / Wagner	County: Gwinnett	Longitude: 83°58'32.68" W
Total Points: Stream is at least intermittent if ≥ 19 or perennial if ≥ 30* 28.25	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other e.g. Quad Name:

A. Geomorphology (Subtotal = 14)				
	Absent	Weak	Moderate	Strong
1 ^a . Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	0	(1)	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	0	(0.5)	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	No = 0		(Yes = 3)	

^a artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 7)				
12. Presence of Baseflow	0	1	(2)	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		(Yes = 3)	

C. Biology (Subtotal = 7.25)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macroinvertebrates (note diversity and abundance)	0	(1)	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	0	(0.5)	1	1.5
24. Amphibians	0	(0.5)	1	1.5
25. Algae	0	(0.5)	1	1.5
26. Wetland plants in streambed	(FACW = 0.75; OBL = 1.5 Other = 0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

NC DWQ Stream Identification Form Version 4.11

Date: 9/17/13	Project/Site: CDC - ST 1	Latitude: 33° 54' 29.87" N
Evaluator: Stewart / Wagner	County: Guilford	Longitude: 83° 58' 35.20" W
Total Points: Stream is at least intermittent if ≥ 19 or perennial if ≥ 30* 38.25	Stream Determination (circle one) Ephemeral Intermittent <u>Perennial</u>	Other e.g. Quad Name:

A. Geomorphology (Subtotal = 18.5)

	Absent	Weak	Moderate	Strong
1 ^a . Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	(2)	3
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	0	1	(2)	3
7. Recent alluvial deposits	0	1	(2)	3
8. Headcuts	0	(1)	2	3
9. Grade control	0	0.5	(1)	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	No = 0		(Yes = 3)	

^a artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 11)

12. Presence of Baseflow	0	1	2	(3)
13. Iron oxidizing bacteria	0	1	(2)	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	0	0.5	(1)	1.5
16. Organic debris lines or piles	0	0.5	(1)	1.5
17. Soil-based evidence of high water table?	No = 0		(Yes = 3)	

C. Biology (Subtotal = 8.75)

18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macroinvertebrates (note diversity and abundance)	0	1	(2)	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	0	(0.5)	1	1.5
23. Crayfish	0	(0.5)	1	1.5
24. Amphibians	0	(0.5)	1	1.5
25. Algae	0	(0.5)	1	1.5
26. Wetland plants in streambed	(FACW = 0.75) OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

NC DWQ Stream Identification Form Version 4.11

Date: 9/17/13	Project/Site: CDC - ST 2	Latitude: 33.906475
Evaluator: Stewart / Wagner	County: Gwinnett	Longitude: 83.977425
Total Points: Stream is at least intermittent if ≥ 19 or perennial if $\geq 30^*$	Stream Determination (circle one) Ephemeral Intermittent <u>Perennial</u>	Other e.g. Quad Name:

A. Geomorphology (Subtotal = 17.5)

	Absent	Weak	Moderate	Strong
1 ^a . Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	0	1	(2)	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	0	0.5	(1)	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	No = 0		(Yes = 3)	

^a artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 11)

12. Presence of Baseflow	0	1	2	(3)
13. Iron oxidizing bacteria	0	1	(2)	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	0	0.5	(1)	1.5
16. Organic debris lines or piles	0	0.5	(1)	1.5
17. Soil-based evidence of high water table?	No = 0		(Yes = 3)	

C. Biology (Subtotal = 10.75)

18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macroinvertebrates (note diversity and abundance)	0	1	(2)	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	0	(0.5)	1	1.5
23. Crayfish	0	0.5	(1)	1.5
24. Amphibians	0	0.5	(1)	1.5
25. Algae	0	(0.5)	1	1.5
26. Wetland plants in streambed	(FACW = 0.75) OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

NC DWQ Stream Identification Form Version 4.11

Date: 9/17/13	Project/Site: CDC- ST 4	Latitude: 33.905825
Evaluator: Stewart / Wagner	County: Guilford	Longitude: 83.97615833
Total Points: Stream is at least intermittent if ≥ 19 or perennial if $\geq 30^*$	Stream Determination (circle one) Ephemeral Intermittent <u>Perennial</u>	Other e.g. Quad Name:

A. Geomorphology (Subtotal = 17.5)

	Absent	Weak	Moderate	Strong
1 ^a . Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

^a artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 10.5)

12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 9.75)

18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macroinvertebrates (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

NC DWQ Stream Identification Form Version 4.11

Date: 9/17/13	Project/Site: CDC - ST 6	Latitude: 33.9062
Evaluator: Stewart/Wagner	County: Gwinnett	Longitude: 83.975175
Total Points: Stream is at least intermittent if ≥ 19 or perennial if $\geq 30^*$	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other e.g. Quad Name:

A. Geomorphology (Subtotal = 16.5)

	Absent	Weak	Moderate	Strong
1 ^a . Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	(2)	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	0	1	(2)	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	0	1	(2)	3
9. Grade control	0	0.5	(1)	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	No = 0		(Yes = 3)	

^a artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 9.5)

12. Presence of Baseflow	0	1	(2)	3
13. Iron oxidizing bacteria	0	(1)	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	0.5	(1)	1.5
17. Soil-based evidence of high water table?	No = 0		(Yes = 3)	

C. Biology (Subtotal = 7.75)

18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macroinvertebrates (note diversity and abundance)	0	(1)	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	0	(0.5)	1	1.5
23. Crayfish	0	(0.5)	1	1.5
24. Amphibians	0	(0.5)	1	1.5
25. Algae	0	(0.5)	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: CDC Lawrenceville Campus City/County: Lawrenceville / Gwinnett Sampling Date: 9/17/13
 Applicant/Owner: CDC State: GA Sampling Point: WL3
 Investigator(s): Stewart / Wagner Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 15%
 Subregion (LRR or MLRA): LRR P Lat: 33.9062056 N Long: 83.9767611 W Datum: _____
 Soil Map Unit Name: _____ NWI classification: PEM
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☐ Surface Water (A1) ☐ True Aquatic Plants (B14) ☐ High Water Table (A2) ☐ Hydrogen Sulfide Odor (C1) ☐ Saturation (A3) ☒ Oxidized Rhizospheres on Living Roots (C3) ☐ Water Marks (B1) ☐ Presence of Reduced Iron (C4) ☐ Sediment Deposits (B2) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Drift Deposits (B3) ☐ Thin Muck Surface (C7) ☐ Algal Mat or Crust (B4) ☐ Other (Explain in Remarks) ☐ Iron Deposits (B5) ☐ Inundation Visible on Aerial Imagery (B7) ☒ Water-Stained Leaves (B9) ☐ Aquatic Fauna (B13)		<u>Secondary Indicators (minimum of two required)</u> ☐ Surface Soil Cracks (B6) ☐ Sparsely Vegetated Concave Surface (B8) ☒ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ Microtopographic Relief (D4) ☒ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: <u>Born area with sandy soil</u> 		

VEGETATION (Five Strata) – Use scientific names of plants.

 Sampling Point: WL3

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer rubrum</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>
2. <u>Liriodendron tulipifera</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
<u>20</u> = Total Cover			
50% of total cover: <u>10</u> 20% of total cover: <u>4</u>			
Sapling Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer rubrum</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
<u>10</u> = Total Cover			
50% of total cover: <u>5</u> 20% of total cover: <u>2</u>			
Shrub Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Arundinaria gigantea</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
<u>30</u> = Total Cover			
50% of total cover: <u>15</u> 20% of total cover: <u>6</u>			
Herb Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Polygonum hydropiperoides</u>	<u>40</u>	<u>Y</u>	<u>OBL</u>
2. <u>Impatiens capensis</u>	<u>40</u>	<u>Y</u>	<u>FACW</u>
3. <u>Microstegium vimineum</u>	<u>50</u>	<u>Y</u>	<u>FAC</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
<u>130</u> = Total Cover			
50% of total cover: <u>65</u> 20% of total cover: <u>26</u>			
Woody Vine Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>N/A</u>	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
<u>0</u> = Total Cover			
50% of total cover: _____ 20% of total cover: _____			

Dominance Test worksheet:	
Number of Dominant Species That Are OBL, FACW, or FAC:	<u>6</u> (A)
Total Number of Dominant Species Across All Strata:	<u>7</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>85.7%</u> (A/B)
Prevalence Index worksheet:	
Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = _____	
Hydrophytic Vegetation Indicators:	
☐ 1 - Rapid Test for Hydrophytic Vegetation	
☒ 2 - Dominance Test is >50%	
☐ 3 - Prevalence Index is ≤3.0 ¹	
☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
☐ Problematic Hydrophytic Vegetation ¹ (Explain)	
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Definitions of Five Vegetation Strata:	
Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
Woody vine – All woody vines, regardless of height.	
Hydrophytic Vegetation Present? Yes ☒ No _____	

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WL 3

[illegible]

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: CDC Lawrenceville Campus City/County: Lawrenceville / Gwinnett Sampling Date: 9/17/13
 Applicant/Owner: CDC State: GA Sampling Point: WL 5
 Investigator(s): Stewart / Wagner Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope (%): <5%
 Subregion (LRR or MLRA): LRR P Lat: 33.9061278 Long: 83.9756694 Datum: _____
 Soil Map Unit Name: _____ NWI classification: PEM

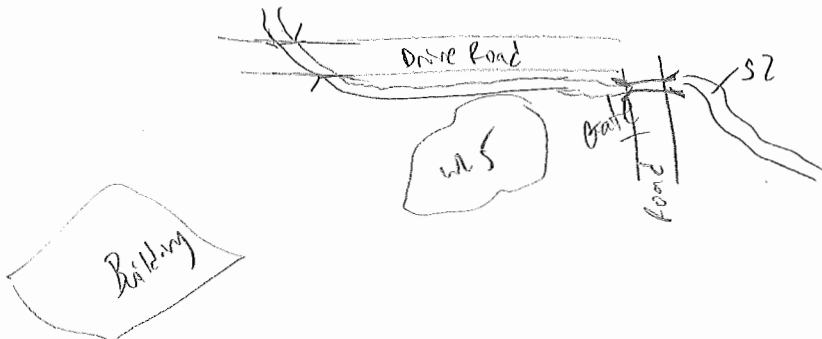
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☐ Surface Water (A1) ☐ True Aquatic Plants (B14) ☐ High Water Table (A2) ☐ Hydrogen Sulfide Odor (C1) ☐ Saturation (A3) ☒ Oxidized Rhizospheres on Living Roots (C3) ☐ Water Marks (B1) ☐ Presence of Reduced Iron (C4) ☐ Sediment Deposits (B2) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Drift Deposits (B3) ☐ Thin Muck Surface (C7) ☐ Algal Mat or Crust (B4) ☐ Other (Explain in Remarks) ☐ Iron Deposits (B5) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Water-Stained Leaves (B9) ☐ Aquatic Fauna (B13)		<u>Secondary Indicators (minimum of two required)</u> ☐ Surface Soil Cracks (B6) ☐ Sparsely Vegetated Concave Surface (B8) ☒ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ Microtopographic Relief (D4) ☒ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		



VEGETATION (Five Strata) – Use scientific names of plants.

 Sampling Point: WLS

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Acer rubrum</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80</u> (A/B)
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>10</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
Sapling Stratum (Plot size: <u>30 ft</u>) 1. <u>N/A</u> 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ _____ = Total Cover 50% of total cover: _____ 20% of total cover: _____				
Shrub Stratum (Plot size: <u>30 ft</u>) 1. <u>N/A</u> 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ _____ = Total Cover 50% of total cover: _____ 20% of total cover: _____				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>30 ft</u>) 1. <u>Eleocharis obtusa</u> <u>40</u> <u>Y</u> <u>OBL</u> 2. <u>Juncus effusus</u> <u>40</u> <u>Y</u> <u>FACW</u> 3. <u>Polygonum cuspidatum</u> <u>35</u> <u>Y</u> <u>FACU</u> 4. <u>Onoclea sensibilis</u> <u>35</u> <u>Y</u> <u>FACW</u> 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____ _____ = Total Cover 50% of total cover: _____ 20% of total cover: _____				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover 50% of total cover: _____ 20% of total cover: _____				
Remarks: (Include photo numbers here or on a separate sheet.) _____ _____ _____				Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
				Hydrophytic Vegetation Present? Yes <u>X</u> No _____

SOIL

Sampling Point: WLS

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Appendix A: Public Review Comments and Public Notices

Commenter: Jean Publieee
Date Submitted: Sep 29, 2017
Submitted via Regulations.gov

Comment

i am not in favor of any demolition of buildings in lawrenceville georgia and find this to be an unnecessary expense

iu also wonder why you would waste an acre to put in solar installations when they can be put on the roof of any buildings you have there. you have acres of buildings going up and you want to put solar installations on the ground. are you stupid or something?

solar installations should always go on the roof. we dont need to waste natural land with solar crap. that is what roofs are for.
and any other space on teh roof should have gardens on it.

i think the gsa is woefull in plannning and they should be immediately taken off this project. their plans for this new building for the inept, full oif flaws, lying cdc is not worth our tax dollars. this agency lies to the public about vaccines. it is sneaky and slipshod with vaccines and causing l out of 25 boys in the usa to have autism because they want 60 or more doses of their damned vaccines into tiny babies, definitely an assault on a babys 8 lbs.

the evil us govt just goes ahead without asking the public and then bankrupts the us citizenry to continue uto fund this lousy agency that should be shut down. I AM NOT IN FAVOR AT ALL OF FUNJDING NEW BUILDINGS FOR THIS CROOKED AGENCY. I CONSIDER IT TOTALLY CROOKED. REVOLVING DOOR BETWEEN BIG PHARMA AND THIS AGENCY IS WIDE WIDE OPEN. AND WE GET NEW VACCINES ADN TEH PEOPLE LEAVING CDC GET BIG SALARIES.
SOMETHING IS NOT RIGHT WHEN YOU LIE TO THE PUBLIC WITH YOUR DOCUMENTS.

CDC Response

CDC undertook a thorough evaluation of the location and placement of the photovoltaic system. Roof mounted solar panels were evaluated in detail, however it was determined that the ground mounted system was a better option in the short and long term. The decision to install ground mounted system took into consideration the proximity to power distribution, limitations of rooftop equipment, safety, the ability to maintain rooftop areas including roof replacement, potential impact to historic character of existing buildings, and the upfront/ overall lifecycle cost.

Appendix B - Agency Coordination

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U.S. Fish and Wildlife Service

Natural Resources of Concern

This resource list is to be used for planning purposes only — it is not an official species list.

Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:

GEORGIA ECOLOGICAL SERVICES FIELD OFFICE
105 WESTPARK DRIVE
WESTPARK CENTER SUITE D
ATHENS, GA 30606
(706) 613-9493

Project Name:

CDC

Project Counties:

Gwinnett, GA

Project Type:

Development

Endangered Species Act Species List ([USFWS Endangered Species Program](#)).

There are a total of 3 threatened, endangered, or candidate species, and/or designated critical habitat on your species list. Species on this list are the species that may be affected by your project and could include species that exist in another geographic area. For example, certain fishes may appear on the species list because a project could cause downstream effects on the species. Please contact the designated FWS office if you have questions.

Species that may be affected by your project:

Ferns and Allies	Status	Species Profile	Contact
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Natural Resources of Concern

Black Spored quillwort (<i>Isoetes melanospora</i>)	Endangered	species info	Georgia Ecological Services Field Office
Flowering Plants			
Little amphianthus (<i>Amphianthus pusillus</i>)	Threatened	species info	Georgia Ecological Services Field Office
Mammals			
northern long-eared Bat (<i>Myotis septentrionalis</i>) Population:	Proposed Endangered	species info	Georgia Ecological Services Field Office

FWS National Wildlife Refuges ([***USFWS National Wildlife Refuges Program***](#)).

There are no refuges found within the vicinity of your project.

FWS Migratory Birds ([***USFWS Migratory Bird Program***](#)).

Most species of birds, including eagles and other raptors, are protected under the Migratory Bird Treaty Act (16 U.S.C. 703). Bald eagles and golden eagles receive additional protection under the [Bald and Golden Eagle Protection Act](#) (16 U.S.C. 668). The Service's [Birds of Conservation Concern \(2008\)](#) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

NWI Wetlands ([***USFWS National Wetlands Inventory***](#)).

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these



U.S. Fish and Wildlife Service

Natural Resources of Concern

requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).



MARK WILLIAMS
COMMISSIONER

DAN FORSTER
DIRECTOR

October 17, 2013

Stacy Stewart
Senior Environmental Scientist
Jacobs
www.jacobs.com

Subject: Known occurrences of natural communities, plants and animals of highest priority conservation status on or near CDC Lawrenceville Campus Building Demolition and Replacement, Gwinnett County, Georgia

Dear Ms. Stewart:

This is in response to your request of September 9, 2013. According to our records, within a three-mile radius of the project site, there are the following Natural Heritage Database occurrences:

GA *Sedum pusillum* (Granite Stonecrop) approx. 1.5 mi. NE of site
GA *Sedum pusillum* (Granite Stonecrop) approx. 2.0 mi. NE of site

* Entries above preceded by "US" indicates species with federal status in Georgia (Protected or Candidate). Species that are federally protected in Georgia are also state protected; "GA" indicates Georgia protected species.

Recommendations:

We have no records of high priority species or habitats within the project area. Because this project is in a previously developed setting, it is not likely to negatively impact rare species or habitats provided best management practices are used.

We are concerned about stream habitats that could be impacted by demolition and/ or construction activities. We urge you to use stringent erosion control practices during these activities. In order to protect aquatic habitats and water quality, we recommend that all machinery be kept out of creeks. Further, we strongly advocate leaving vegetation intact within 100 feet of creeks, which will reduce inputs of sediments, assist with maintaining riverbank integrity, and provide shade and habitat for aquatic species. We realize that some trees may have to be removed, but recommend that shrubs and ground vegetation be left in place.

NEW ENVIRONMENTAL REVIEW COORDINATOR

Please send all future correspondence to Anna Yellin, Environmental Review Coordinator. Email correspondence is preferred. I can be contacted at anna.yellin@dnr.state.ga.us or 706-557-3283.

Disclaimer:

Please keep in mind the limitations of our database. The data collected by the Nongame Conservation Section comes from a variety of sources, including museum and herbarium records, literature, and reports from individuals and organizations, as well as field surveys by our staff biologists. In most cases the information is not the result of a recent on-site survey by our staff. Many areas of Georgia have never been surveyed thoroughly. Therefore, the Nongame Conservation Section can only occasionally provide definitive information on the presence or absence of rare species on a given site. Our files are updated constantly as new information is received. **Thus, information provided by our program represents the existing data in our files at the time of the request and should not be considered a final statement on the species or area under consideration.**

If you know of populations of highest priority species that are not in our database, please fill out the appropriate data collection form and send it to our office. Forms can be obtained through our web site (<http://www.georgiawildlife.com/node/1376>) or by contacting our office. If I can be of further assistance, please let me know.

Sincerely,



Anna Yellin
Environmental Review Coordinator

Data Available on the Nongame Conservation Section Website

- Georgia protected plant and animal profiles are available on our website. These accounts cover basics like descriptions and life history, as well as threats, management recommendations and conservation status. Visit <http://www.georgiawildlife.com/node/2721>.
- Rare species and natural community information can be viewed by Quarter Quad, County and HUC8 Watershed. To access this information, please visit our GA Rare Species and Natural Community Information page at: <http://www.georgiawildlife.com/conservation/species-of-concern?cat=conservation>.
- Downloadable files of rare species and natural community data by quarter quad and county are also available. They can be downloaded from: <http://www.georgiawildlife.com/node/1370>.

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Appendix C - Photographs

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Stream 1 – Ephemeral segment, facing downstream (west) from origin of channel.



Stream 1 – Intermittent segment, located approximately 300 feet west of agricultural stables.



Stream 1 – Perennial segment, facing downstream (west) near confluence of Stream 2.



Stream 2 – Facing downstream (west) near confluence with Stream 1.



Wetland 3



Stream 4 – Facing upstream (north) near confluence with Stream 2.



Wetland 5



Stream 6 – Facing downstream (south) near the confluence of Stream 2.

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Back Cover

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