



## 3.4 Existing Landscape & Open Space

### 3.4.1 Campus Character

The character of the campus landscape inspires a sense of community and celebrates the history and legacy of Howard University. The placement of buildings has created formal open spaces and quadrangles that are further organized by pathways, legacy trees and commemorative elements. These flexible spaces facilitate opportunities for students, faculty, staff and alumni, to gather, celebrate, share ideas, experience cultural diversity and support campus community-building.

Informal open spaces, to include entryway plazas and areas along corridors between the buildings, also contribute to the dynamics of campus life by providing places for students to meet, linger, and encourage pedestrian connections to other parts of campus.

On-campus athletic facilities, and the nearby Banneker Park accommodate sports and fitness activities.

### 3.4.2 Open Space

Howard's open spaces, network of pathways, and public realm all form a network and physical environment that creates the backdrop for the overall campus experience. The open space network should continue to support the functional needs of the surrounding built structures, offer flexible spaces for students, faculty and alumni to gather, and serve as a community resource for the surrounding neighbors.

Goals for the Open Space Plan:

- Preserve the iconic views: Founders Library, the McMillian Reservoir, views across the Quadrangles and The Long Walk.
- Preserve the formal gateways and gates to the Upper Quadrangle.
- Promote natural views within the framework of the campus and physical access to nature.
- Preserve significant landscapes sacred to the pride of Howard University's tradition.
- Maintain the formality and flexibility of the Upper and Lower Quadrangles

- Ensure the appropriate treatment of heritage trees.
- Build on the best landscape planning aspects of the existing campus. Ensure that future landscape interventions are context-driven.
- Place open spaces strategically within new developments to create seamless connections and memorable places.
- Create a consistent palette of materials abutting the public realm that offer high aesthetics in a manner that is maintainable when considering life cycle costs.
- Incorporate low impact sustainable technologies to treat stormwater and conserve energy.
- Advance the goal of providing alternative transportation options on campus. Improve pedestrian corridors and implement roadways that promote bicycle and pedestrian circulation.
- Maintain open edges that integrate the campus with the community.

### 3.4.3 Monuments & Legacy

“The Long Walk,” a reflection of the growth and development each individual face along their journey at Howard is historically rendered into the landscape as the processional walk from The College of Fine Arts to Founders Library.

Part of the Howard University legacy that is translated into the open space includes the commemorative elements created and placed by different Greek organizations. These elements are primarily found in the Upper Quad and the Lower Quad and range in size and scale from statues to monuments.

There are four historic gates that lead to the Upper Quad. Two vehicular gates on Howard Place and two pedestrian gates on 6th street. These ornamental iron structures are supported by brick pillars.

### 3.4.4 Tree Canopy

Trees serve an important role within the urban campus at Howard University. They provide clean air by removing carbon dioxide and other

pollutants; stormwater management by absorbing runoff; shade that contributes to building energy savings and temperature reduction; habitats for wildlife; enhancements for the outdoor amenity spaces; and contributes to the campus identity.

The tree canopy coverage is the outer extent of an individual tree’s crown. The tree critical root zone is identified by the extent of the tree dripline. It is important to maintain as much canopy coverage and critical root zone as possible to preserve healthy trees. Only 5% of the Campus is covered by tree canopy. A healthy percentage of tree canopy cover would be at least 40%.

The following are the goals for the Howard University tree canopy:

1. Preserve identified trees of high value.
2. Consider open space function and viewsheds when planting trees within the campus landscape.
3. Prepare and execute tree protection plans during future campus development.
4. Plant new trees and provide healthy soil volumes.
5. Replace trees that are in Poor Condition.
6. Manage pests, diseases and invasive species.
7. Promote species diversity.
8. Tree preservation education for campus organizations.

The District of Columbia has a city-wide tree canopy goal of providing 40% canopy coverage by 2032. This is determined by evaluating the condition, size, species and long-term resilience from pests and disease of trees.

The following laws are in place to protect the existing canopy:

- Urban Forestry Preservation Act of 2002
- Tree Canopy Protection Amendment Act of 2016

The Mid-City Planning area has the most diminished tree canopy throughout the study area. Increasing the tree canopy coverage within this area is a key goal of the DC Urban Forestry Division.

**LEGEND**

- - - Campus Boundary
- Existing Buildings
- Open Space
- Formal Landscape
- Athletic Field
- Proposed Trees
- Perceived Space

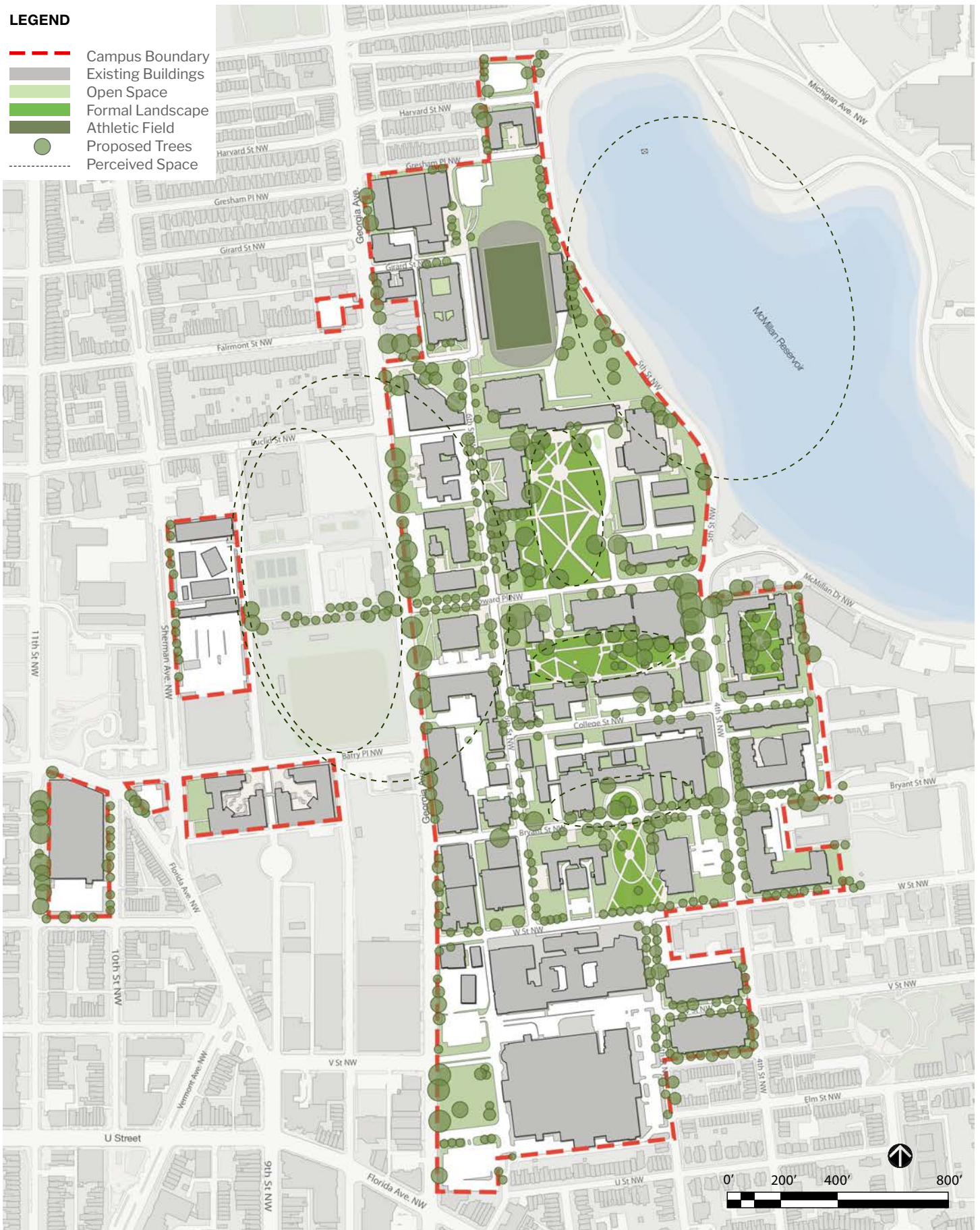


Figure 3.15: Landscape & Tree Canopy

Map Number	Common Name	Scientific Name	(Trunk Diameter in Inches Measured at 4.5 FT)	Condition	DC Heritage Tree
1	Willow Oak	<i>Quercus phellos</i>	11.9	Good	
2	Pin Oak	<i>Quercus palustris</i>	19.1	Fair	
3	Pin Oak	<i>Quercus palustris</i>	15.8	Fair	
4	Pin Oak	<i>Quercus palustris</i>	12.2	Fair	
5	Pin Oak	<i>Quercus palustris</i>	20.4	Fair	
6	Willow Oak	<i>Quercus phellos</i>	24.3	Good/Fair	
7	Willow Oak	<i>Quercus phellos</i>	23.5	Good/Fair	
8	Willow Oak	<i>Quercus phellos</i>	21.3	Good/Fair	
9	Willow Oak	<i>Quercus phellos</i>	15.2	Good/Fair	
10	Willow Oak	<i>Quercus phellos</i>	17.2	Fair	
11	Northern Red Oak	<i>Quercus rubra</i>	23.1	Poor	
12	Willow Oak	<i>Quercus phellos</i>	24.8	Good/Fair	
13	Pin Oak	<i>Quercus palustris</i>	21.6	Fair	
14	Pin Oak	<i>Quercus palustris</i>	34.7	Excellent	Heritage
15	Water Oak	<i>Quercus nigra</i>	35	Fair	Heritage
16	Pin Oak	<i>Quercus palustris</i>	37.6	Good	Heritage
17	Pin Oak	<i>Quercus palustris</i>	26	Good/Fair	
18	Sugar Maple	<i>Acer saccharum</i>	15.7	Fair/Poor -	
19	Silver Maple	<i>Acer saccharinum</i>	33.7	Poor	Heritage
20	Willow Oak	<i>Quercus phellos</i>	42.3	Good/Fair	Heritage
21	Water Oak	<i>Quercus nigra</i>	38.2	Fair	Heritage
22	Siberian Elm	<i>Ulmus pumila</i>	30.3	Fair/Poor -	
23	Water Oak	<i>Quercus nigra</i>	42	Good/Fair	Heritage
24	Northern Red Oak	<i>Quercus rubra</i>	44.4	Good	Heritage
25	Northern Red Oak	<i>Quercus rubra</i>	36.5	Fair	Heritage
26	Northern Red Oak	<i>Quercus rubra</i>	32.2	Fair/Poor -	Heritage
27	Pin Oak	<i>Quercus palustris</i>	31.5	Good/Fair	
28	American Elm	<i>Ulmus americana</i>	34.9	Fair	Heritage
29	Willow Oak	<i>Quercus phellos</i>	39	Excellent	Heritage
30	Willow Oak	<i>Quercus phellos</i>	39.8	Good/Fair	Heritage
31	Willow Oak	<i>Quercus phellos</i>	24.3	Fair	
32	Willow Oak	<i>Quercus phellos</i>	34	Good/Fair	Heritage

Map Number	Common Name	Scientific Name	(Trunk Diameter in Inches Measured at 4.5 FT)	Condition	DC Heritage Tree
33	Willow Oak	<i>Quercus phellos</i>	35.7	Good/Fair	Heritage
34	Willow Oak	<i>Quercus phellos</i>	26.4	Good/Fair	
35	Southern Magnolia	<i>Magnolia grandiflora</i>	11.6, 15.7 = 19.5	Good/Fair	
36	Pin Oak	<i>Quercus palustris</i>	25	Fair/Poor	
37	Pin Oak	<i>Quercus palustris</i>	21.8	Good/Fair	
38	Pin Oak	<i>Quercus palustris</i>	21.1	Excellent	
39	Deodar Cedar	<i>Cedrus deodara</i>	33.4	Good	Heritage
40	Atlas Cedar	<i>Cedrus atlantica</i>	30.2	Excellent	
41	Atlas Cedar	<i>Cedrus atlantica</i>	28.1	Good/Fair	
42	American Elm	<i>Ulmus americana</i>	43.5	Fair	Heritage
43	Willow Oak	<i>Quercus phellos</i>	37.7	Fair	Heritage
44	Northern Red Oak	<i>Quercus rubra</i>	32.8	Poor	Heritage
45	Northern Red Oak	<i>Quercus rubra</i>	47.9	Excellent	Heritage
46	American Elm	<i>Ulmus americana</i>	38	Fair	Heritage
47	Northern Red Oak	<i>Quercus rubra</i>	41.9	Excellent	Heritage
48	Siberian Elm	<i>Ulmus pumila</i>	38.2	Poor	Heritage
49	Northern Red Oak	<i>Quercus rubra</i>	34.9	Excellent	Heritage
50	Little-Leaf Linden	<i>Tilia cordata</i>	35.9	Excellent	Heritage
51	Pin Oak	<i>Quercus palustris</i>	31.2	Poor	
52	Pin Oak	<i>Quercus palustris</i>	19.8	Fair	
53	Northern Red Oak	<i>Quercus rubra</i>	23.2	Good/Fair	
54	American Beech	<i>Fagus grandifolia</i>	16.5	Good/Fair	
55	American Elm	<i>Ulmus americana</i>	13.0, 16.0, 13.5, 14.0, 11.5 = 30.6	Excellent	
56	Norway Spruce	<i>Picea abies</i>	15	Good/Fair	
57	Pagoda Tree	<i>Styphnolobium japonicum</i>	18.9	Fair	
58	Bradford Pear	<i>Pyrus calleryana</i>	26.3	Fair	
59	Bradford Pear	<i>Pyrus calleryana</i>	29.7	Fair	
60	Scarlet Oak	<i>Quercus coccinea</i>	26	Fair/Poor	
61	Northern Red Oak	<i>Quercus rubra</i>	24.2	Poor	
62	English Oak 'Regal Prince'	<i>Quercus x warei 'Long' REGAL PRINCE</i>	22.3	Fair	
63	Pin Oak	<i>Quercus palustris</i>	25.5	Good	
64	Pin Oak	<i>Quercus palustris</i>	30.1	Good	
65	Red Oak	<i>Quercus rubra</i>	24.1	Good	
66	Pin Oak	<i>Quercus palustris</i>	24.2	Fair	
67	Pin Oak	<i>Quercus palustris</i>	26.7	Good	
68	Pin Oak	<i>Quercus palustris</i>	28.5	Excellent	
69	American sycamore	<i>Platanus occidentalis</i>	39.3	Excellent	Heritage
70	Pin Oak	<i>Quercus palustris</i>	28.8	Good	
71	Sugar maple	<i>Acer saccharum</i>	22	Good	
72	Willow Oak	<i>Quercus phellos</i>	28.5	Fair	
73	Elm	<i>Ulmus</i>	24	Good	
74	Japanese zelkova	<i>Zelkova serrata</i>	25	Good	
75	American elm	<i>Ulmus americana</i>	25	Good	
76	American elm	<i>Ulmus americana</i>	26.2	Good	
77	American elm	<i>Ulmus americana</i>	29	Good	
78	American elm	<i>Ulmus americana</i>	30	Good	

Table 3.12: Heritage Tree Chart



Figure 3.16: Landscape & Tree Canopy

Within these acts, certain trees on private property are protected from removal.

- Heritage Trees: defined as trees over 100 inches in circumference, cannot be removed without a permit issued by the Mayor.
- Special Trees: defined as trees 44 inches to 99.9 inches in circumference require a Special Tree removal permit.

When developing on campus around the critical root zone of a Heritage Tree, the contractor is required to provide a Tree Preservation and Management Plan that includes Pre-, During, and Post-Construction preservation measures.

Table 3.1.2 and Figure 3.16 contain an inventory of significant campus trees and surrounding street trees.

- Trees in Excellent, Good, and Good/Fair Condition should be preserved and monitored as part of the general campus tree maintenance program.
- Trees in Fair Condition should be evaluated by a certified arborist to determine what course of action is needed to protect the tree from further deterioration.
- Trees in Fair/Poor Condition have a high likelihood of needing replacement within the next 10 years. These trees should be evaluated by a certified arborist to determine what course of action is needed to protect the tree from becoming a Hazard. Monitoring on a continuous basis is needed.
- Trees in Poor condition will need to be replaced within the next 5 years.

Trees should be evaluated by a certified arborist to determine if they are currently a hazard and need to be immediately removed. Monitoring on a continuous basis is needed.

### 3.4.5 Topography & Vistas

There is an approximate 85-foot change in elevation from the existing Howard University Hospital to the Upper Quad. Founders Library, situated at the edge of the Upper Quad, overlooks the Lower Quad, the lower campus, and the Nation’s Capital beyond. The clock tower is a visual landmark whose views should be considered as

campus development continues. In addition, vistas from the Upper Quad to the McMillian Reservoir should be considered for future open space placement and design.

### 3.4.6 Permeable Surface

Permeable surfaces allow water to percolate into the soil to filter out pollutants and recharge the water table. Impermeable/impervious surfaces are solid surfaces that don’t allow water to penetrate, forcing it to run off.

- Main Campus: 3,896,842 sf
- Existing Impervious Surface: 1,276,648 sf
- Existing Permeable Surface: 33%

#### LEGEND

- Campus Boundary
- Impervious Surface
- Permeable Surfaces:
- Open Space
- Formal Landscape
- Athletic Field

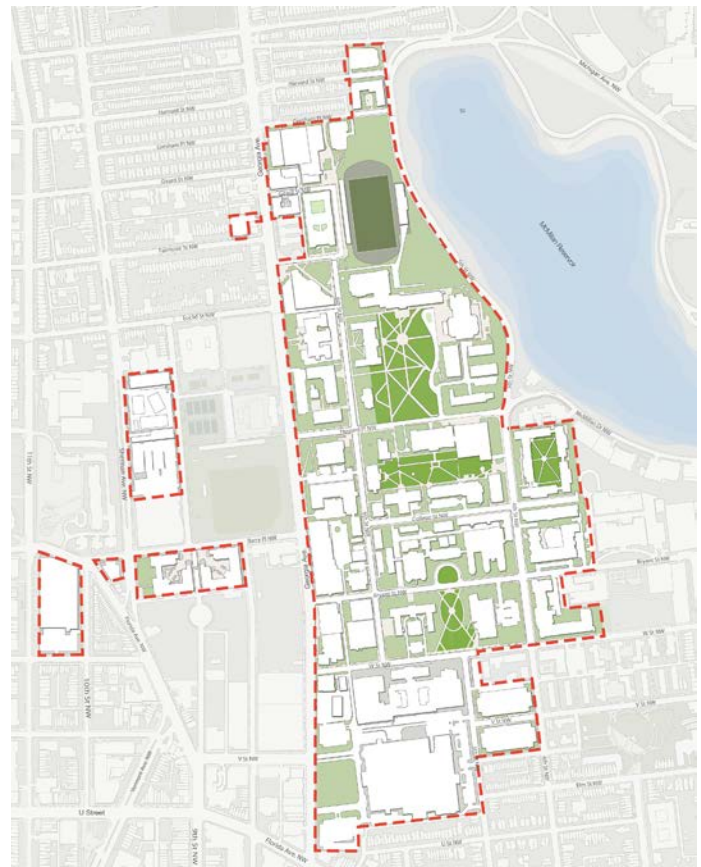


Figure 3.17: Permeable Surface

**LEGEND**


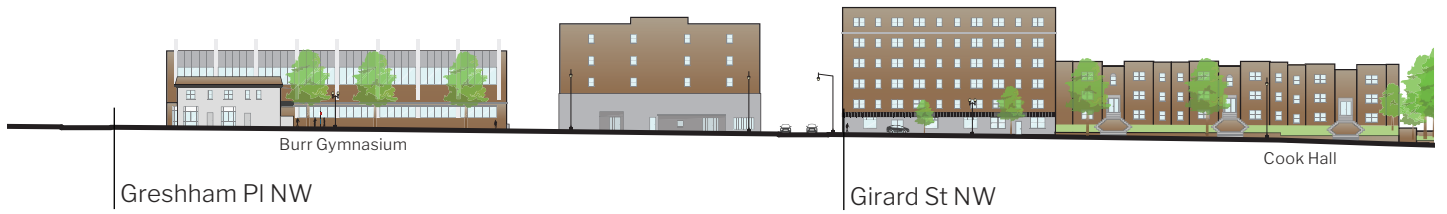
-  Campus Boundary
-  Topography Lines



Figure 3.18: Topography Map

Zone A



Zone C

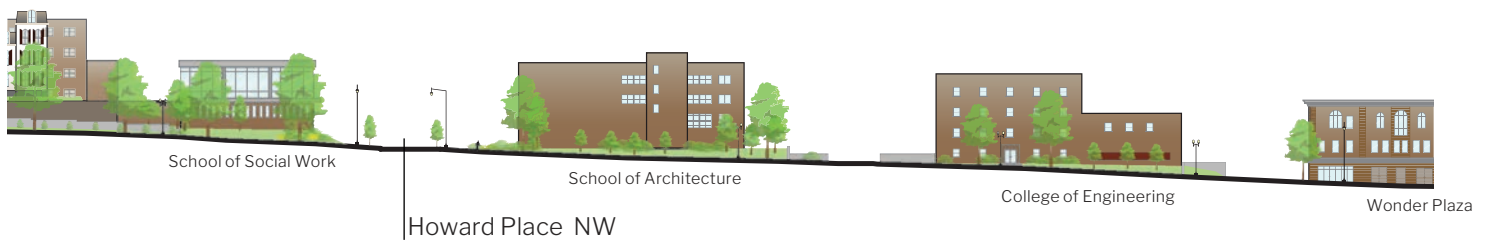


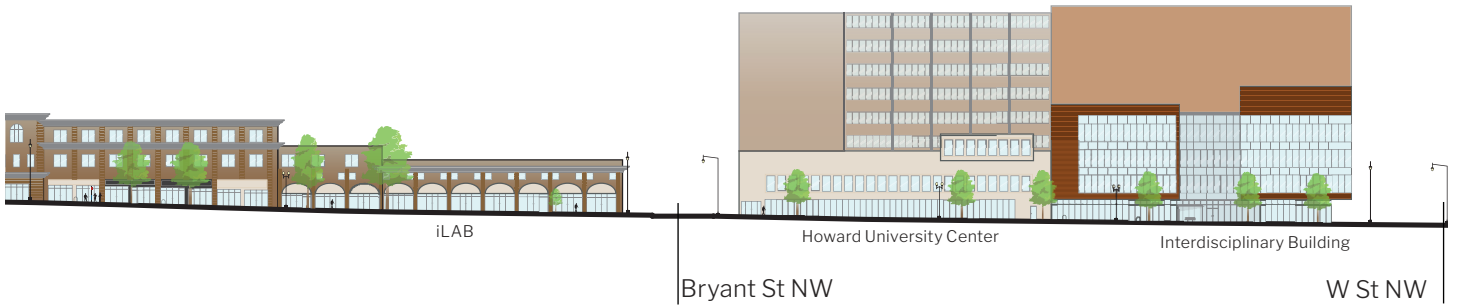
Figure 3.19: Elevation: Georgia Avenue NW - East View



Zone B



Zone D



## 3.5 Existing Circulation & Parking

### 3.5.1 Roadways

The HU campus contains roadways of various types and configurations. DDOT classifies Georgia Avenue as a principal arterial, 4th/5th Street as a minor arterial, Bryant Street as a collector, and all remaining roads as local. Most roadways that cross the campus are one-way. The only two-way roads crossing the campus boundary are Georgia Avenue, 4th/5th Street, College Street, Barry Place, 9th Street, 8th Street, 5th Street, and V Street. All roadways are public except Howard Place between 6th Street and 4th Street, and Bryant Street between 6th Street and 4th Street, which are privately owned by the University. There is no public access on McMillan Drive. The topography rises significantly from south to north toward the “hilltop,” particularly along Georgia Avenue and 6th Street.

### 3.5.2 Pedestrian Network

The pedestrian network within the central campus is generally well-connected and of high quality. The campus’ internal pathways interact with the sidewalks and the urban street grid within the campus to form a fairly continuous and comfortable pedestrian network. The planned extensions of W Street and Bryant Street between Florida Avenue and Georgia Avenue will further improve pedestrian connectivity and comfort in the area.

A notable exception to the high-quality pedestrian environment surrounding the HU campus is Georgia Avenue, whose four-lane configuration and infrequent vehicle stopping points encourage high speeds, making it a barrier for pedestrians. Of particular note is the section of Georgia Avenue between Euclid Street and Gresham Place, which has several unsignalized crosswalks that cross four vehicle lanes, and some intersection legs that lack a crosswalk altogether.

Within the HU campus, 6th Street is the longstanding pedestrian spine, and presents ongoing opportunities to create a pedestrian-oriented, campus-like promenade. Most of 6th Street’s existing sidewalks meet DDOT’s width and buffer requirements, but don’t offer the type of pedestrian comfort and priority seen on many

#### LEGEND

- Campus Boundary
- Campus Core
- Georgia Ave. Frontage
- Planned New Roads

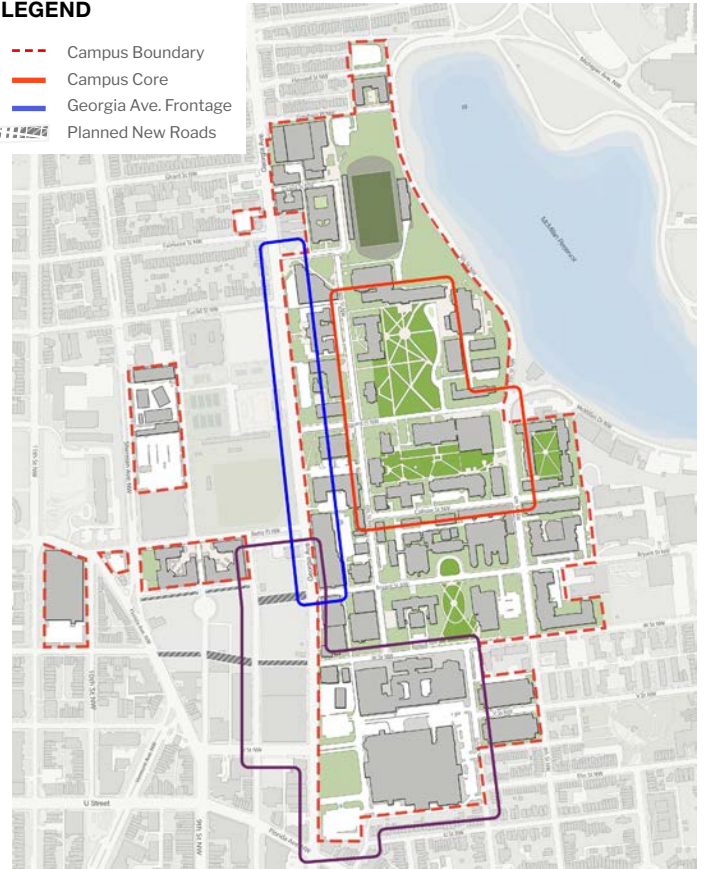


Figure 3.20: Pedestrian Areas of Focus

college campuses. 6th Street currently features curbside parking on both sides. Eliminating some of this parking would allow room for wider sidewalks, a cycletrack or other bicycle facility, and other streetscape improvements, all while maintaining 6th Street’s current one-way vehicular travel pattern.

Several new roadways are planned near the HU campus that will improve east-west pedestrian connectivity in the area. These include extensions of Bryant Street between Georgia Avenue and Sherman Avenue, and of W Street between Georgia Avenue and Florida Avenue.

**LEGEND**

- - - Campus Boundary
  
- PUBLIC STREETS**
- Existing
- Future
- One-way
- Two-way
  
- PRIVATE STREET**
- 1,234 Average Annual Daily Traffic over 2,000
  
- FUNCTIONAL CLASSIFICATION**
- Principal
- Minor
- Collector
- Local

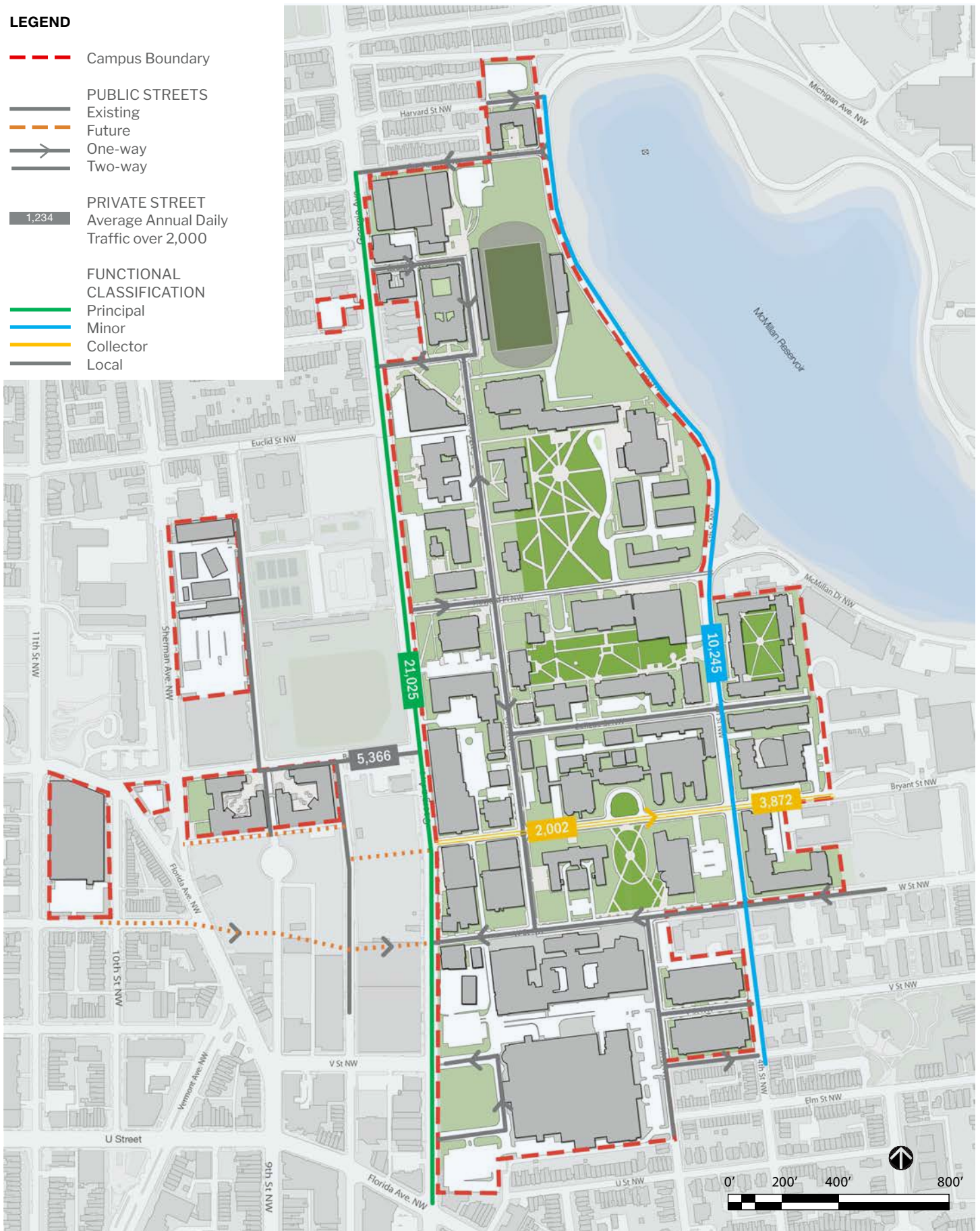






Figure 3.21: Roadways

**LEGEND**

-  Campus Boundary
-  North/South Roads
-  Campus
-  North/South Loop

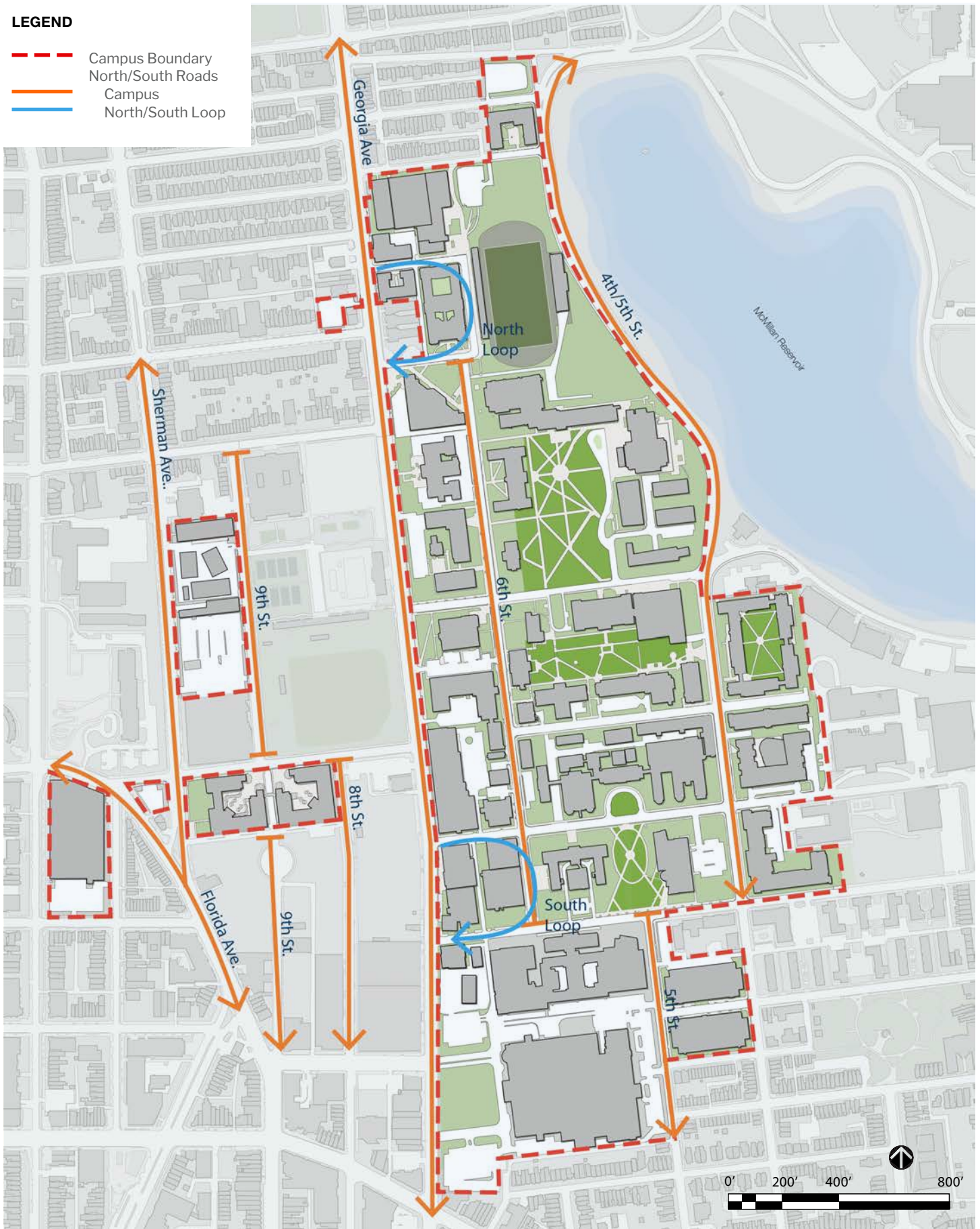


Figure 3.22: North/South Roads

**LEGEND**

- - - Campus Boundary
- East/West Roads
- Campus
- North/South Loop
- Pleasant Plains
- LeDroit



Figure 3.23: East/West Roads

### 3.5.3 Bicycle Network

Currently, the only on-street bicycle facilities on or adjacent to the HU campus are the north-south bicycle lanes on 4th/5th Street and the north-south shared lanes on Georgia Avenue south of Barry Place. Numerous facilities exist west of the campus, like the bike lanes on W Street, V Street, and 11th Street, but they do not extend onto the campus. No bicycle facilities exist directly east of the campus.

While the generally low-speed streets on campus may offer an acceptable level of comfort and safety for some bicyclists, improvements are necessary to ensure a bicycle network suitable for all ages and abilities. Some recommendations for these improvements include: 1) Constructing a north-south bike facility on 6th Street; 2) Constructing east-west bike facilities on Howard Place, Bryant Street, and/or W Street; 3) Including bike facilities on the planned extensions of Bryant Street and W Street, which would connect the HU campus with the existing bike lanes on W Street and V Street.

### 3.5.4 HU Shuttles

HU currently operates four campus shuttle routes.


The North Campus route runs Monday through Friday every 15 to 20 minutes between 7:00am and 6:40pm, and every 35 minutes between 6:40pm and 12:30am.

The South Campus route runs Monday through Friday every 15 minutes between 7:00am and 7:00pm, and every 30 minutes between 7:00pm and 12:30am.

The West Campus route runs Monday through Friday every 60 minutes between 7:10am and 10:10pm, and Saturdays every 60 minutes between 10:10am and 5:10pm.

The Weekend route runs Saturday and Sunday every 25 minutes between 12:00pm and 12:00am.

#### LEGEND

- - - Campus Boundary
- M Metro Station
- Off-street Bicycle Trail
- Bicycle Lane
- Shared Lane
- Signed Bicycle Route
-  Bike Rental

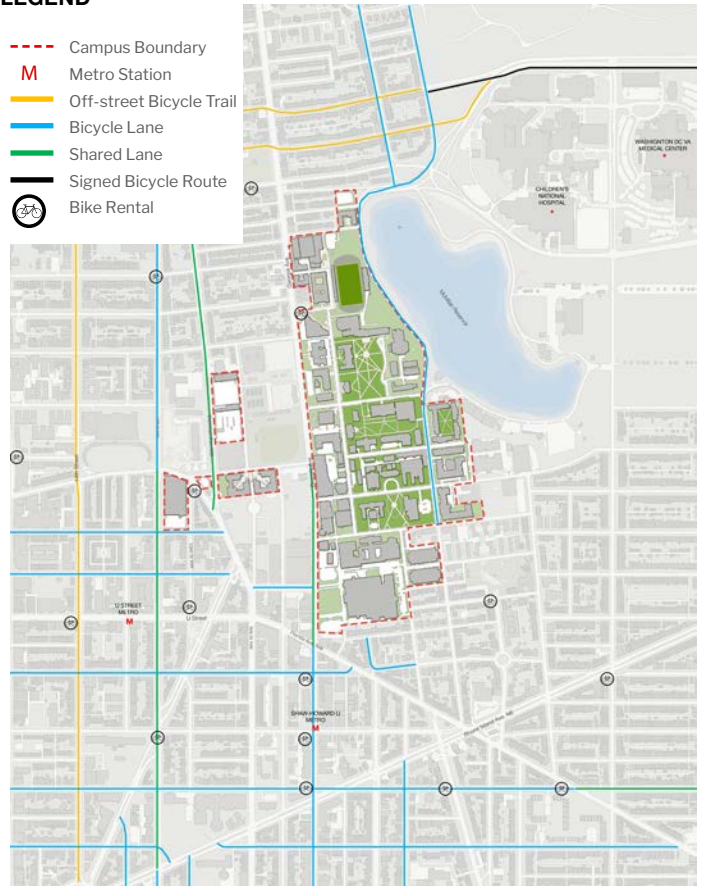


Figure 3.24: Bicycle Routes

**LEGEND**

- - - Campus Boundary
- M Metro Station
- North Campus Route
- South Campus Route
- - - West Campus Route
- - - Weekend Route

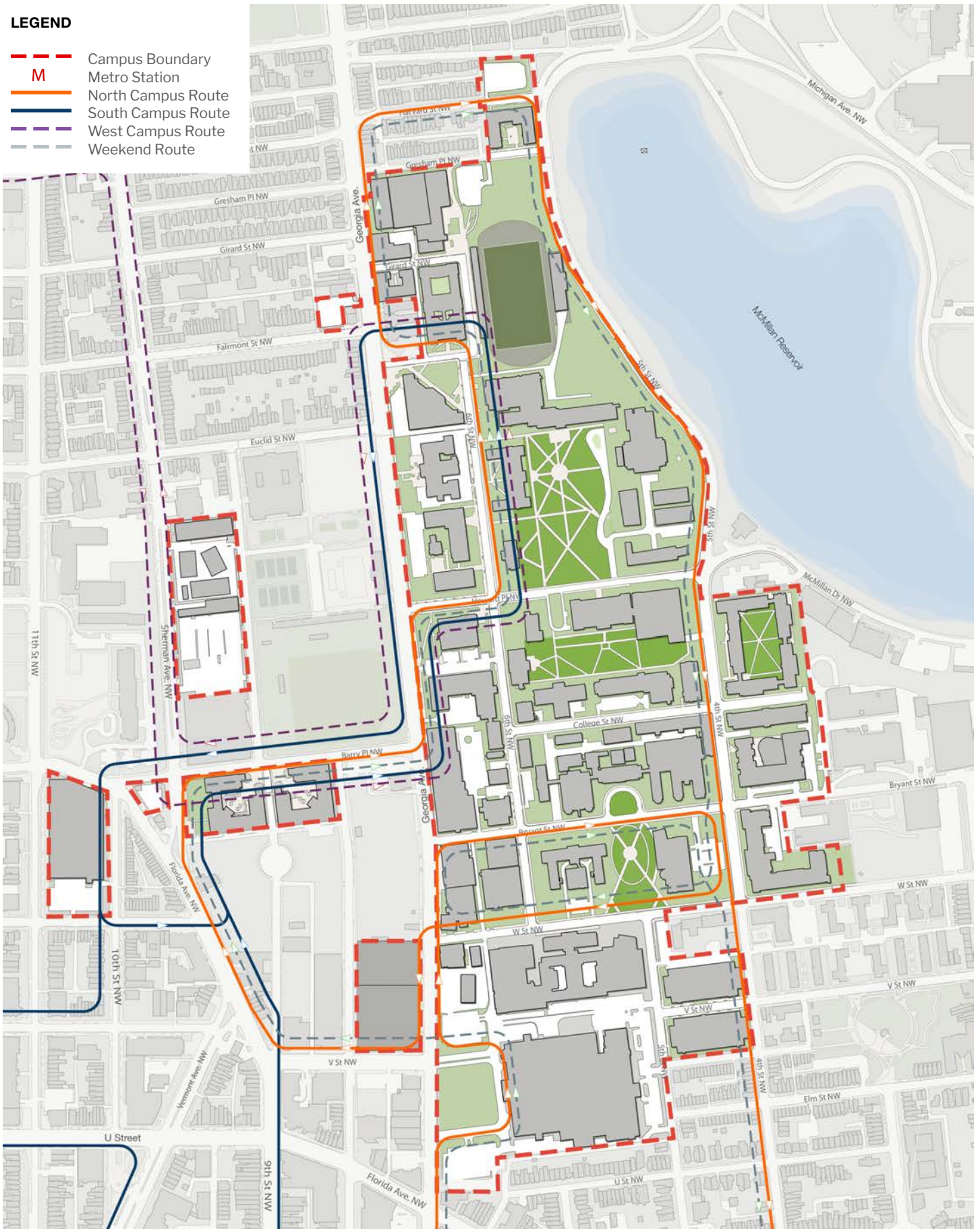


Figure 3.25: HU Shuttle Routes

### 3.5.5 Public Transit

The HU campus is well-served by existing bus and rail transit. Two Metrorail stations – U Street and Shaw/Howard University – are within a 0.7 mile (15 minute) walk from The Yard at the center of campus. Both stations are served by the Green and Yellow lines, on which trains arrive every eight minutes during the AM and PM rush, every 12 minutes during midday and evenings, every 20 minutes during late night, every 12 to 20 minutes on Saturdays, and every 15 to 20 minutes on Sundays. The Green Line runs between Greenbelt, Maryland and Branch Avenue, Maryland by way of downtown Washington, DC. The Yellow Line runs between Greenbelt, Maryland and Huntington, Virginia by way of downtown Washington, DC.

The HU campus is also served by frequent Metrobus service. Bus routes, frequencies, and distances from the Yard at the center of campus are shown on the table below (Table 3.13).



Figure 3.26 Main Nodes and Roads

Route Number	Route Name	Typical frequency (minutes)								Walking Distance from The Yard to Nearest Stop
		Early morning	AM rush	Midday	PM rush	Evening	Late night	Saturday	Sunday	
63	Takoma-Petworth Line	25	15	-	15	-	-	30 <sup>1</sup>	30 <sup>1</sup>	0.4 mile (7 min)
64	Fort Totten-Petworth Line	25	15	25	15	25	30	30	30	0.5 mile (9 min)
70	Georgia Avenue-7th Street Line	12	12	12	12	12	12	15	15	0.1 mile (2 min)
79	Georgia Avenue MetroExtra	-	12	12	12	-	-	-	-	0.1 mile (2 min)
90, 92	U Street-Garfield Line	15	10	10	15	15	15	15	15	0.5 mile (10 min)
96	East Capitol St.-Cardozo Line	25	25	25	25	30	45	40	40	0.5 mile (10 min)
G2	P Street-LeDroit Park Line	25	15	30	25	30	40	30	30	0.4 mile (7 min)
H1	Brookland-Potomac Park Line	-	25 <sup>2</sup>	-	25 <sup>2</sup>	-	-	-	-	0.5 mile (11 min)
H2, H3, H4	Crosstown Line	25	15	20	20	20	30	20	20	0.5 mile (11 min)
X3	Benning Road Line	-	30 <sup>3</sup>	-	25 <sup>3</sup>	-	-	-	-	0.5 mile (10 min)

<sup>1</sup> At the stop nearest the HU campus (Sherman Ave & Barry Pl), buses only operate from 5:05 to 7:05am and 5:45 to 7:15pm, and only in the peak direction (southbound in the AM, northbound in the PM).

<sup>2</sup> At the stop nearest the HU campus (Columbia Rd/Irving St & Georgia Ave), buses only operate from 6:35 to 9:07am and 5:30 to 6:38pm, and only in the peak direction (southbound in the AM, northbound in the PM).

<sup>3</sup> At the stop nearest the HU campus (Florida Ave & Georgia Ave/7th St), buses only operate from 6:20 to 9:03am and 4:04 to 6:06pm, and only in the peak direction (westbound in the AM, eastbound in the PM).

Table 3.13: Public Transit Routes



**LEGEND**

- - - Campus Boundary
- M Metro Station
- Metro Rail Line
- BUS ROUTE**
- Frequent
- Less Frequent
- METRO BUS ROUTE**
- XX Major
- XX Extra
- XX Local
- XX Commuter
- BUS STOP**
- Meets all Standards
- Partially meets STD

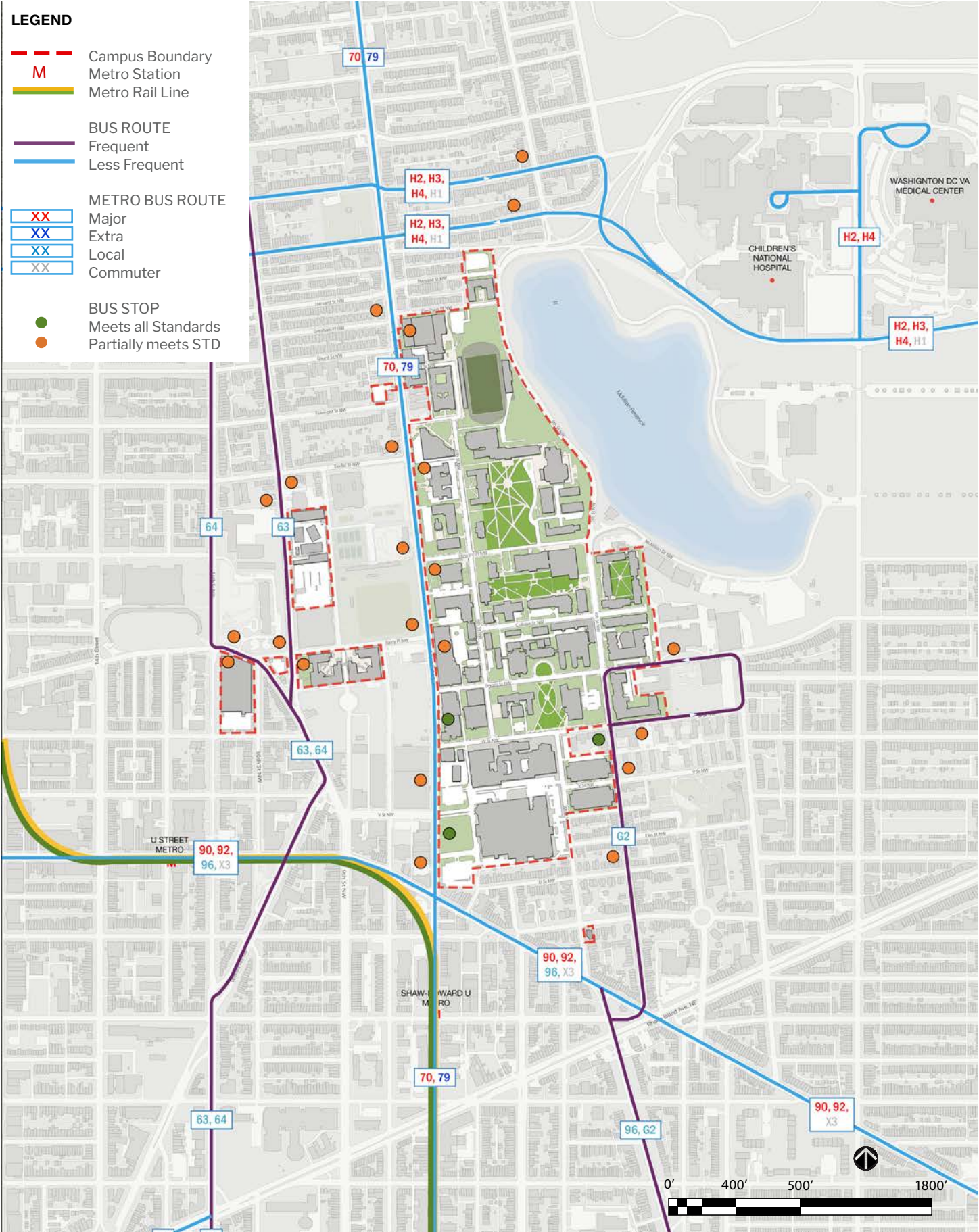


Figure 3.27: Public Transit Routes

**LEGEND**

- Existing to Remove  
Vehicle Access
- To be removed as part of Campus Plan  
Vehicle Access
- To remain during Campus Plan but be removed with hospital decommissioning  
Vehicle Access

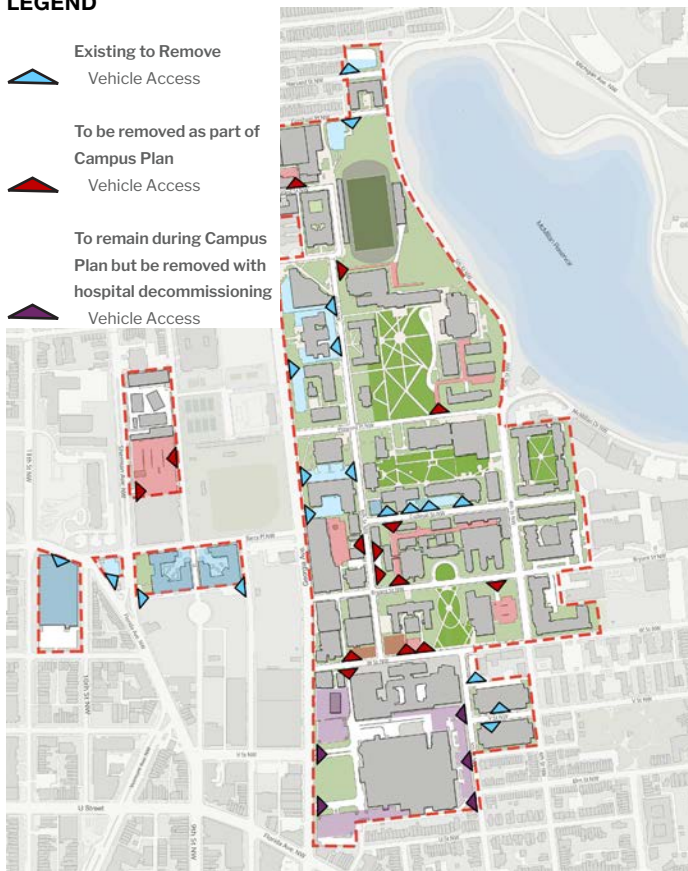


Figure 3.28: Existing Vehicle Access

**LEGEND**

- Campus Boundary
- Campus Core Analysis
- Core Roadway
- Peripheral Roadway
- Parking facility accessed by core roadway
- Parking facility accessed by peripheral roadway

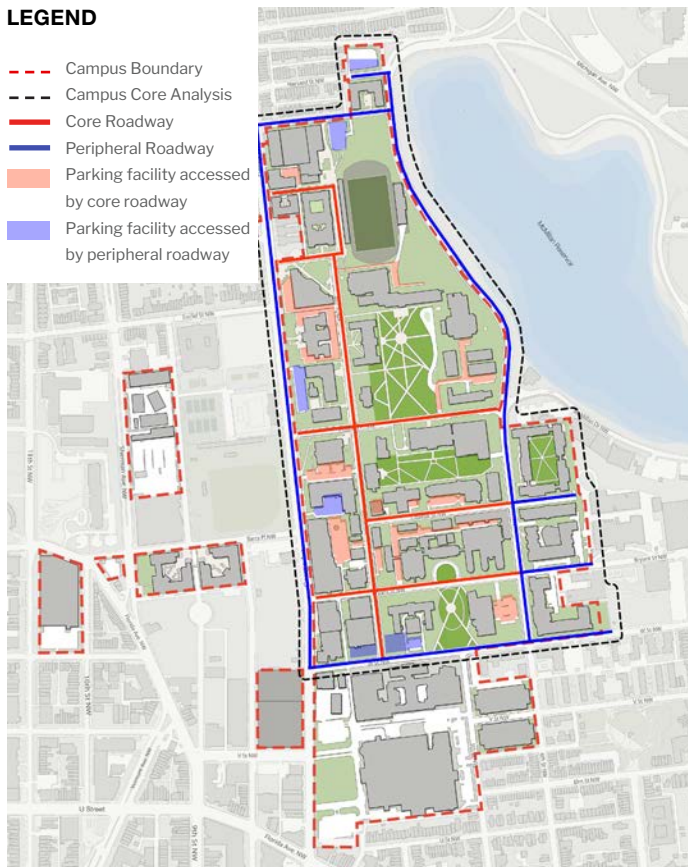


Figure 3.29: Existing Parking by Core vs. Peripheral Access

**3.5.6 Parking**

Historical parking supply data of the campus core shows a decrease in the academic parking from approximately 2,300 to 1,620 spaces from 2011 to 2020. This is aligned with the overall goals of the ongoing Transportation Demand Management (TDM) Plan. With the inclusion of the HU hospital parking supply, the existing parking supply in the campus core includes approximately 3,240 spaces. The table below (Table 3.1.4) and accompanying maps (Fig. 3.28-3.30) demonstrate existing parking zones, lot locations and their respective access points.

Lot Code	Lot Type	Lot Name	Supply (Spaces)
A	Surface	Childers	76
AA	Surface	Florida Avenue	23
B	Surface	Founders	57
BB	Surface	HUSC	49
BB1	Garage	HUSC Garage	119
C	Surface	Business	36
D	Surface	Miner	54
E	Surface	Johnson	44
MM	Surface	LSHSL	43
F	Surface	Mackey	57
G	Surface	Downing	35
H	Surface	Drew	56
I	Surface	Greene	46
J	Surface	Burr	12
K	Surface	Georgia	34
L	Surface	Just	22
M	Surface	Chem	6
ELC	Garage	Early Learning Center	7
O	Surface	C.B.P.	53
P	Surface	6 <sup>th</sup> Street	10
Q	Surface	Power/Bunche	5
R	--	Bethune	N/A
RR	--	Bethune Underground	N/A
RR	--	Bethune Annex	N/A
S	Surface	Nursing	47
T	Surface	5 <sup>th</sup> & W	26
U	Surface	6 <sup>th</sup> & W	17
V	Surface	Howard Center	334
W	Surface	East Tower	127
WW	--	East Tower Underground	N/A
X	Surface	9 <sup>th</sup> Street	N/A
YY	--	West Tower Underground	N/A
Z	Surface	Banneker	178
1	--	Howard Center II	N/A
2	Surface	9 <sup>th</sup> & V Street Lot	N/A
3	Street	Annex I Rear	N/A
KK	--	Wonder Plaza	50
6	Street	6th Street	93
<b>Campus Subtotal</b>			<b>1,623</b>
H1	--	HU Bryant Street Lot	11
H2	Surface	HU Medical Arts Lot	30
H3	Surface	HUH Permit Only Lot	106
H4	Surface	HUH Daily/Visitor Lot	124
H5	Surface	HUH Daily/Visitor Lot	57
H6	Surface	HUH Permit Only Lot	35
H7	Surface	HU A1-Rear Lot	22
H8	Surface	HU Hurb1 Lot	49
H9	Garage	HUH Garage 1	609
H10	Garage	HUH Garage 2	580
<b>Hospital Subtotal</b>			<b>1,612</b>
<b>Total Supply</b>			<b>3,235</b>

Table 3.14: Parking Space Count by Lot

**LEGEND**

- - - Campus Boundary
- HULots
- HU hospital lots
- Status to be
- X Confirmed Lot Code

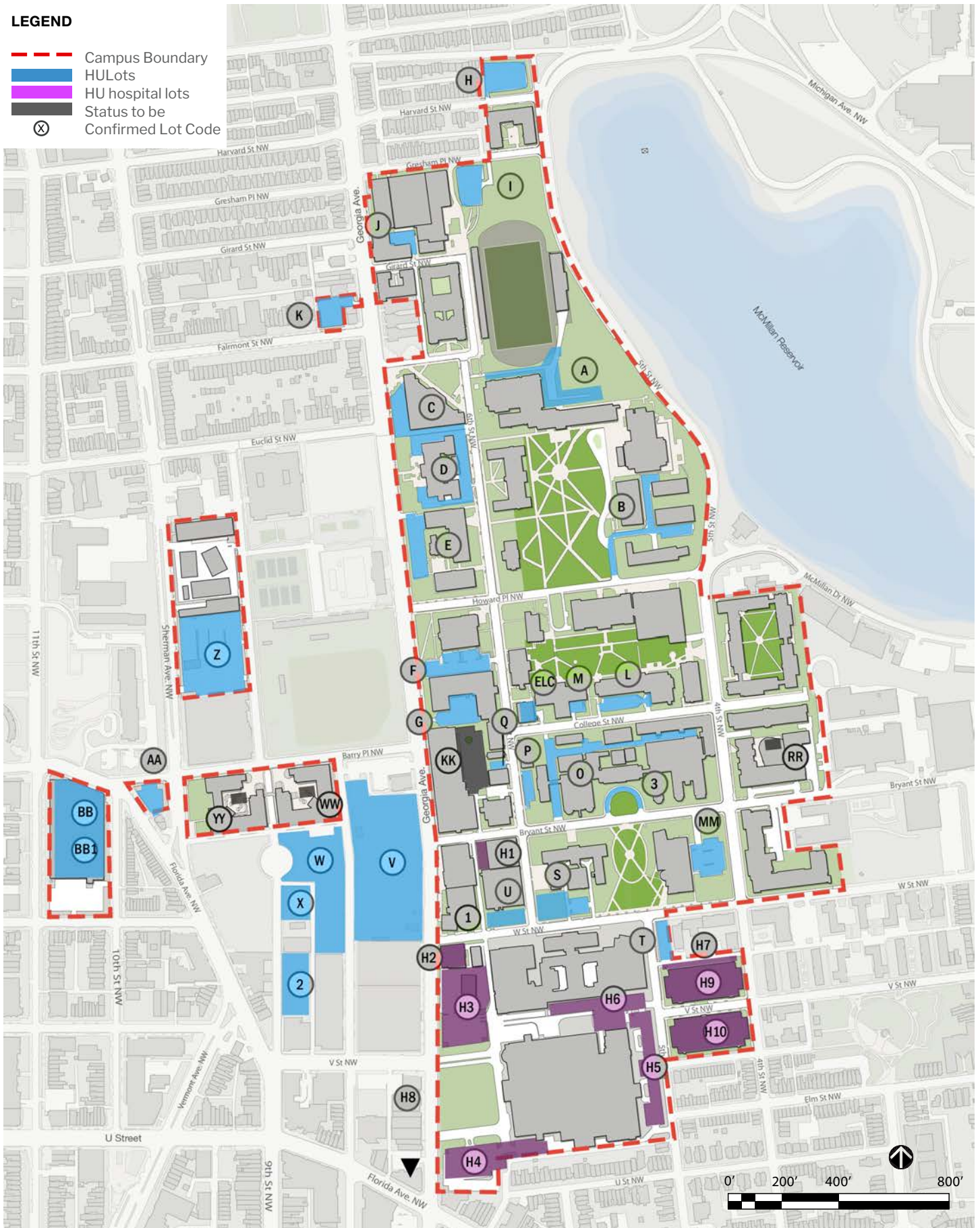


Figure 3.30: Existing Parking

## 3.6 Infrastructure & Utility Systems

The existing utilities within the public rights-of-way are owned and maintained by various utility providers. The water, electrical, and gas distribution, as well as combined sewer systems are served by their respective primary feeders from respective utility providers. Exceptions to this ownership model include utilities such as water, storm and sanitary mains along privately owned roadways (such as Howard Place and Bryant Street), and the steam distribution system throughout the campus. Both are owned and maintained by Howard University.

Please refer to Figures 3.31-3.36 for a series of diagrams which provide a general understanding of how this lattice of systems interface with the campus boundary.

See the appendix for diagrams demonstrating how proposed development sites overlay with existing campus and public infrastructure.

**WATER DISTRIBUTION**

DC WATER SHOULD EXERCISE THE VALVES THEY HAVE ON CAMPUS MORE REGULARLY.  
 - KEEP ACTION #1 (12" LINE ALONG HOWARD PLACE)

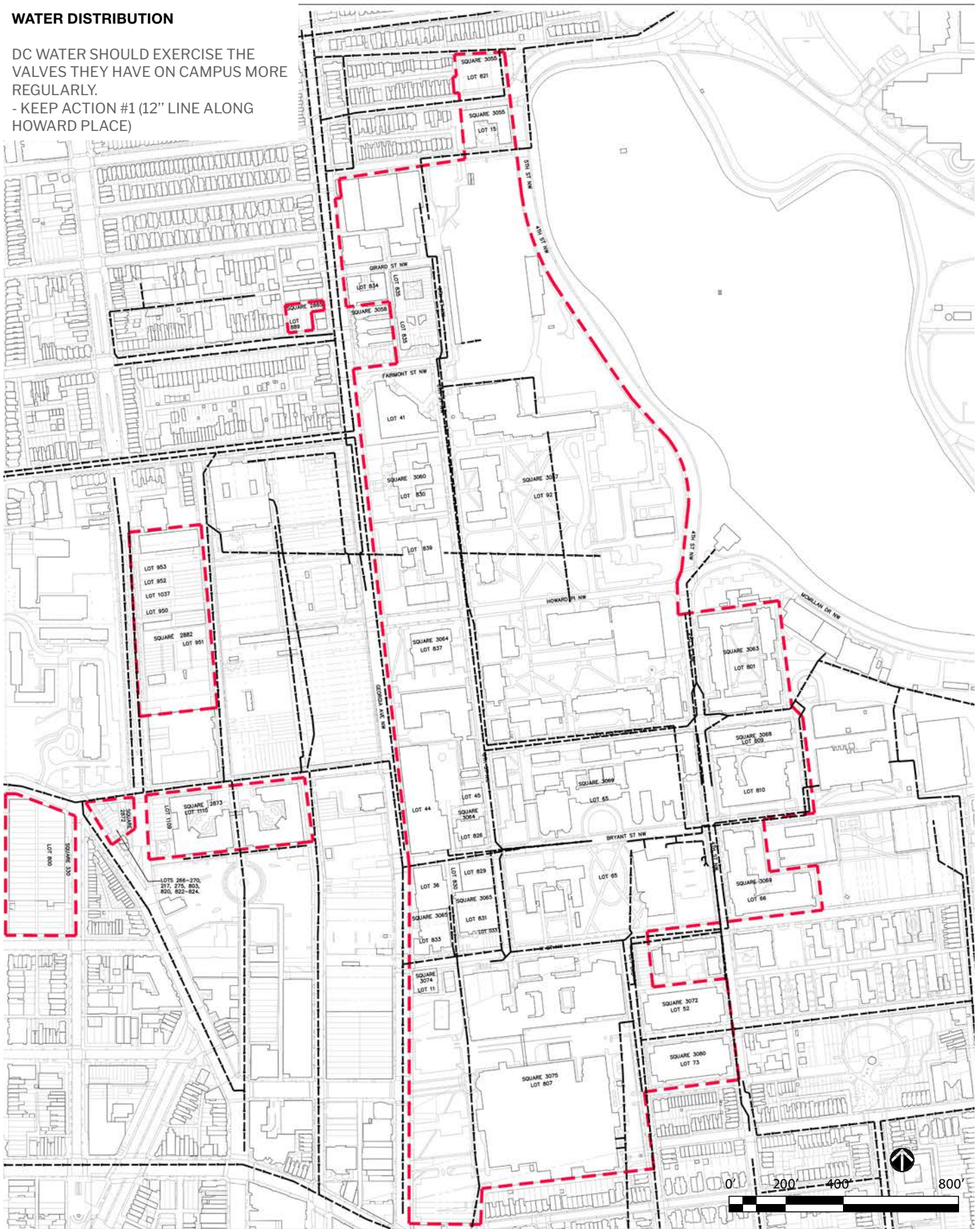


Figure 3.31: Existing Water Distribution

**POWER**

FLORIDA AVENUE PEPCO  
SUBSTATION NEEDS  
MAINTENANCE. (IF ISSUES  
ARISE, HU IS ASKED TO SHED  
LOAD).

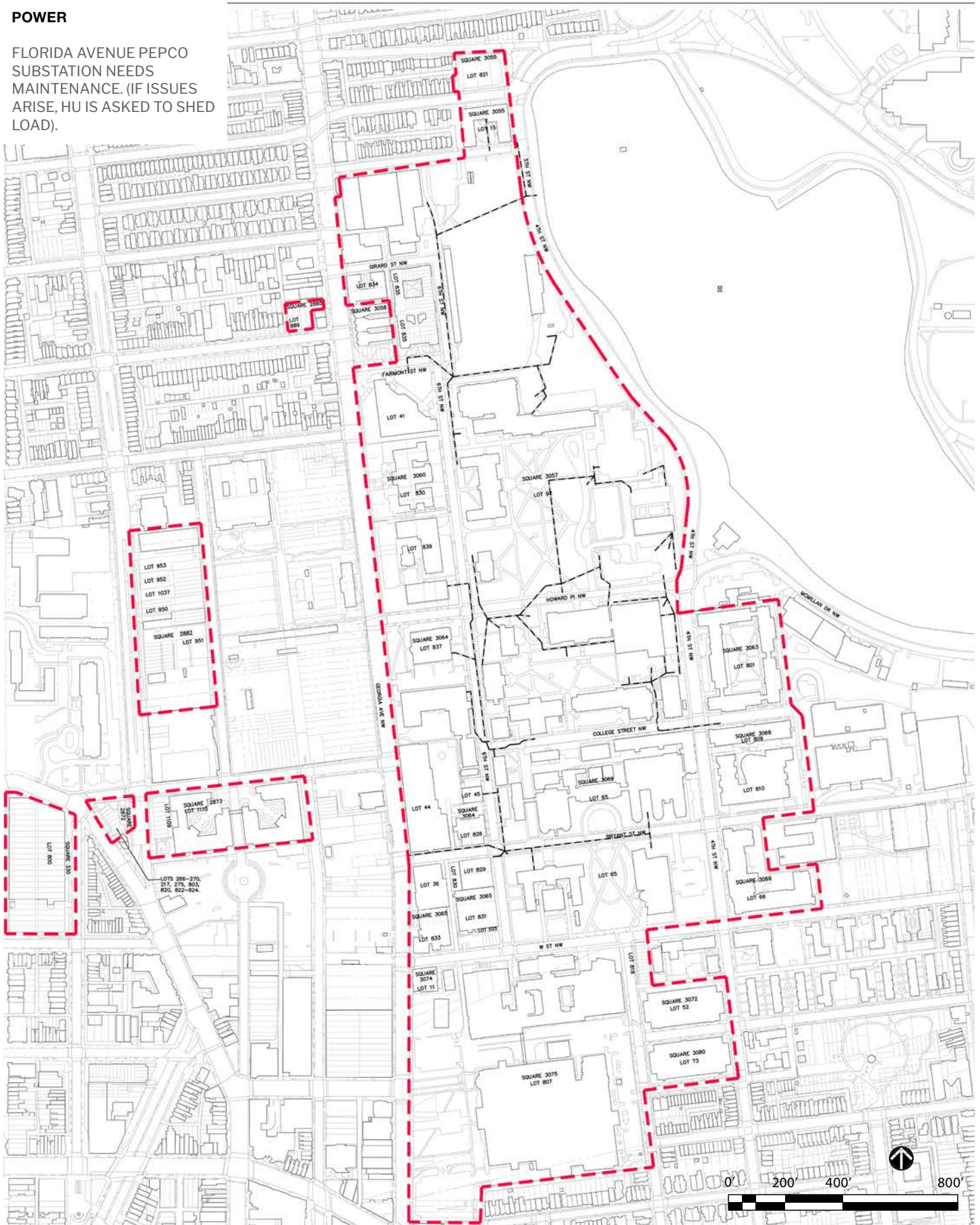


Figure 3.32: Existing Electrical Distribution

**STEAM PLANT**

- TEMP. BOILERS ARE DEPLOYED ACROSS CAMPUS.
- PLANS TO DEMO ALL EXISTING EQUIPMENT
- WILL MODERNIZE TO BECOME A CHP PLANT
- 200K #2 FUEL/ OIL TANK WILL BE DRAINED AND REMOVED, THIS IS AT SE CORNER OF BRYANT AND 6TH STREET.

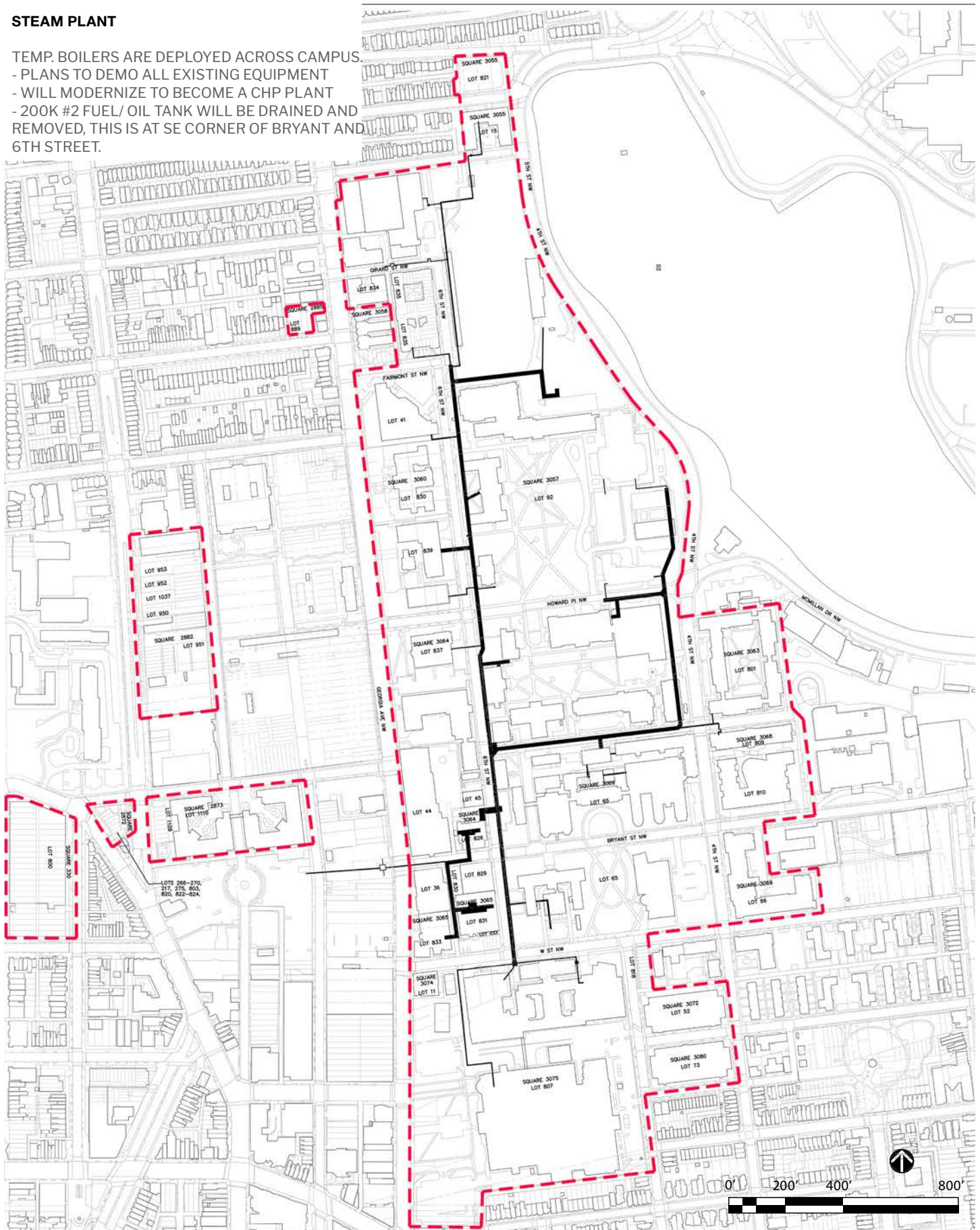


Figure 3.33: Steam Distribution

### COMBINED SEWER

THERE IS CURRENTLY A 4'-6" COMBINED SEWER LINE THAT RUNS UNDER SQUARE 2882 (PROPOSED BUILDING F1 & F2). DC WATER WILL LIKELY REQUIRE THAT THIS MAIN BE RELOCATED AND WILL NOT ALLOW THE BUILDING AND GARAGE TO BE PLACED OVER THIS MAIN.



Figure 3.34: Combined Sewer Distribution



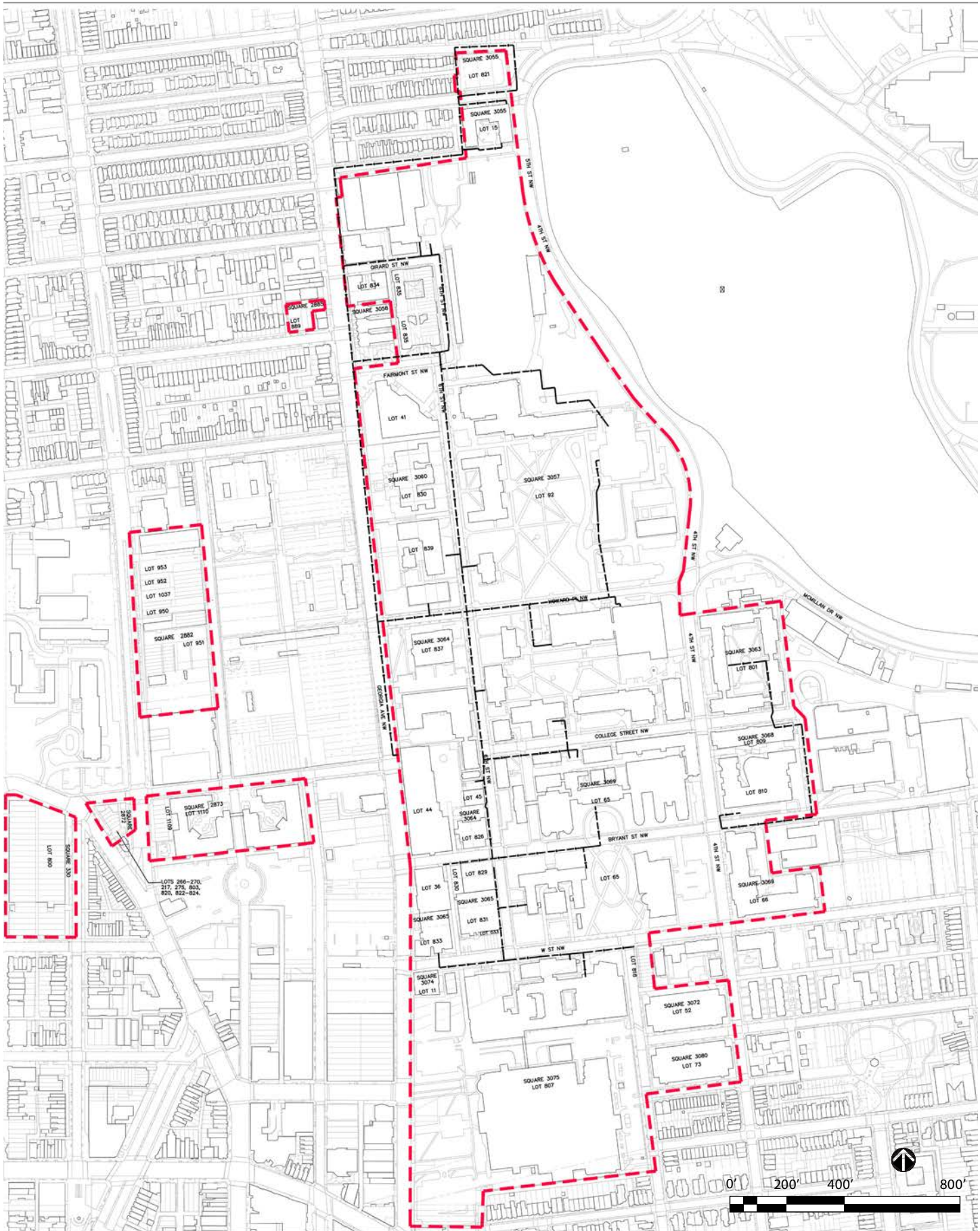


Figure 3.35: Gas Distribution

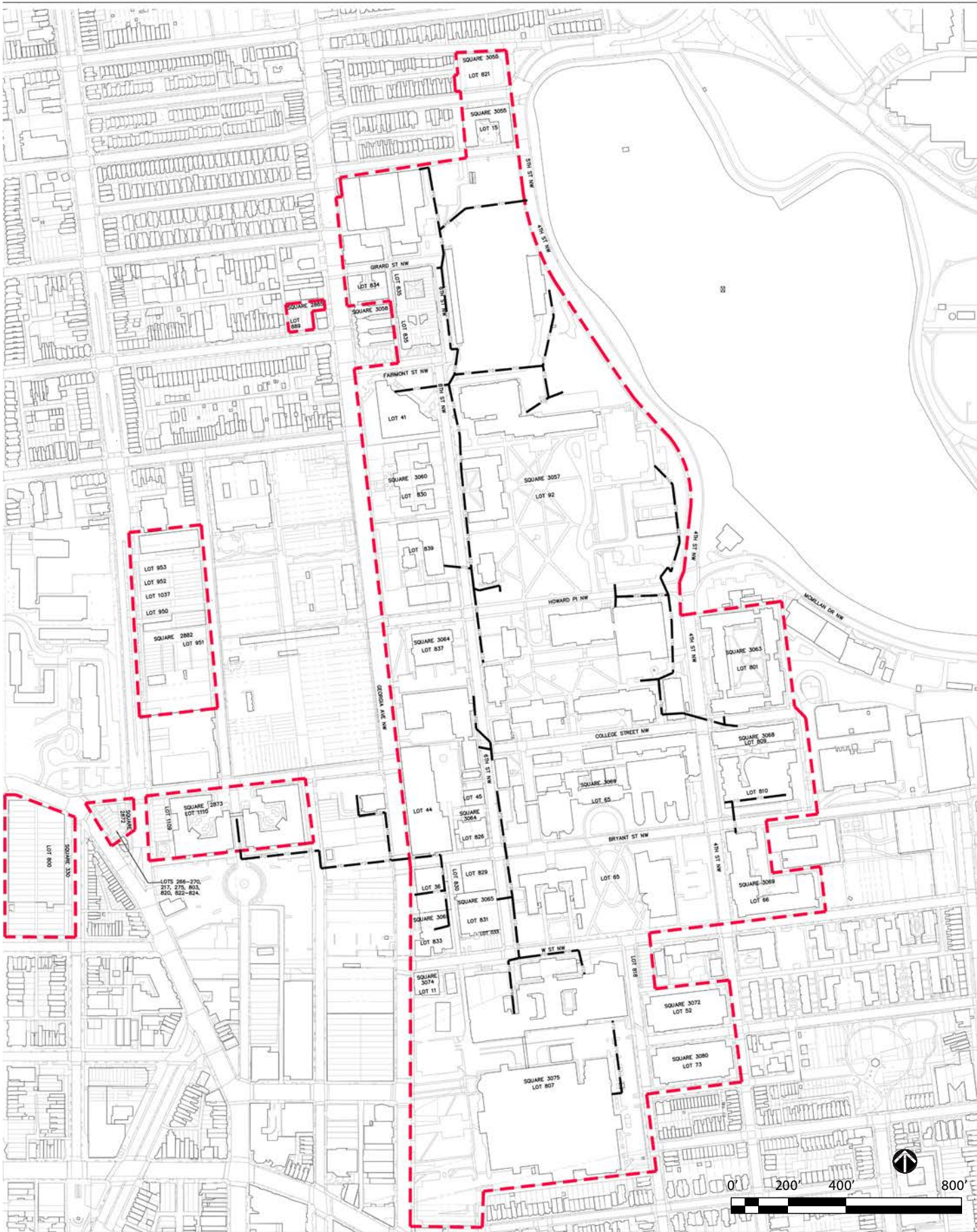


Figure 3.36: Fiber Optic Distribution

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