3.3.5 Residence Life Inventory

Howard's Residence Life system currently has a design capacity of 5,095 beds. Shared occupancy options allow the system to accommodate 5,291 students, which represents roughly 56% of total University enrollment. This is an acceptable percentage for many universities with an urban, residential campus such as Howard University's central campus in Washington, D.C. However, within the Washington D.C. context, rental housing in the immediately surrounding neighborhoods is either high priced or of low quality.

The University aspires to provide approximately 2,500 additional beds as part of projects F1, F2 and J to accommodate a projected enrollment of 15,000 eligible students by 2030.

Each residence hall has unique character traits that define the nature of resident interaction with peer groups, the greater Campus culture, and the surrounding community. These characteristics can be explored through a series of expanding spatial relationships influenced by quantitative factors such as unit type configuration and hall size, and qualitative factors such as housing policies, programming opportunities, and student preference.

3.4 Existing Landscape & Open Space

3.4.1 Campus Character

The campus landscape character inspires a sense of community and celebrates the history and legacy of Howard University. The existing building arrangements create formal open spaces and quadrangles, organized by axial pathways, lawn panels, planting beds, legacy trees, and commemorative elements. These flexible spaces facilitate gatherings of students, faculty, staff, alumni and community.

The informal open spaces include entrance plazas, corridors between the buildings, and streetscapes. These spaces also contribute by providing connectivity and areas to gather. The Master Plan should preserve and enhance these types of spaces throughout the campus.

On-campus athletic facilities and the nearby Banneker Park accommodate sports and fitness activities. The flexible streets around the athletic facilities should continue to accommodate temporary closures for enhanced pedestrian movement during events.

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. The goals for the Open Space Plan include:

- 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 surrounding community.
- Replace, where possible, greenspace areas that are utilized for critical development projects with new landscapes of comparable quality and type.
- Enhance the gateways and streetscape experience along Georgia Avenue and 5th Street NW at McMillan Reservoir.

3.4.3 Legacy Environments

"The Long Walk," a reflection of the growth and development individuals face along their journey at Howard, is historically rendered into the landscape as the processional walk from the Childers Hall to Founders Library.

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

Four historic gates lead to the Upper Quad. Two vehicular gates on Howard Place and two pedestrian gates on 6th street. Brick pillars support these ornamental iron structures.

3.4.4 Tree Canopy

Trees serve an essential role within the urban campus at Howard University. They provide clean air by removing carbon dioxide and other pollutants; stormwater management by absorbing runoff; create 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 furthest extent of an individual tree's crown. The extent of the tree dripline identifies the tree's critical root zone. It is vital 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 should be at least 40% to meet the city-wide goal. The following are the goals for the Howard University tree canopy:

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

DC has a City-wide tree canopy goal of 40% canopy coverage by 2032. The following DC laws are in place to protect the existing tree canopy:

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

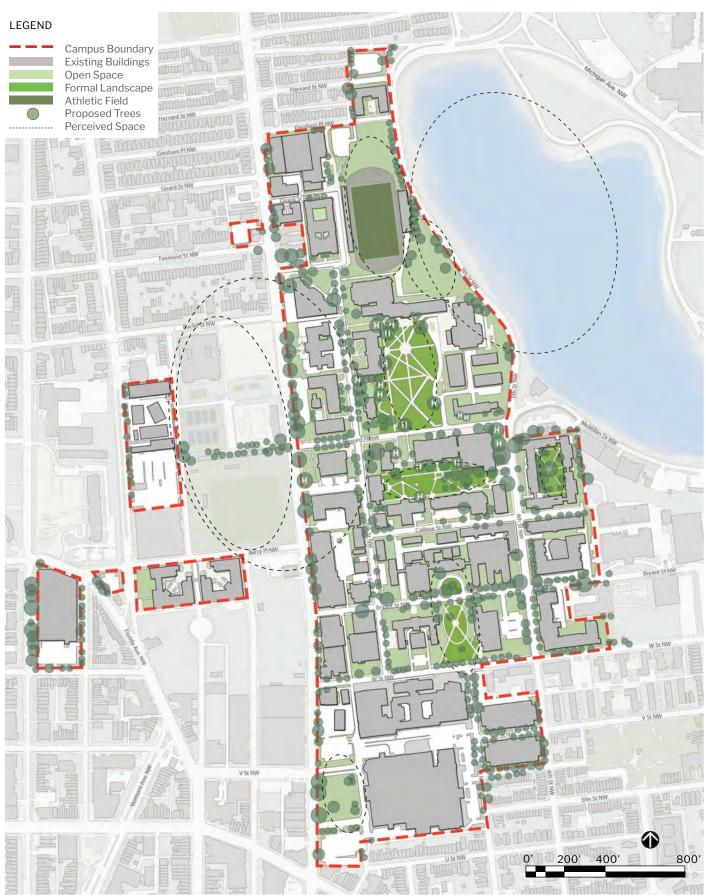


Figure 3.15: Landscape & Tree Canopy

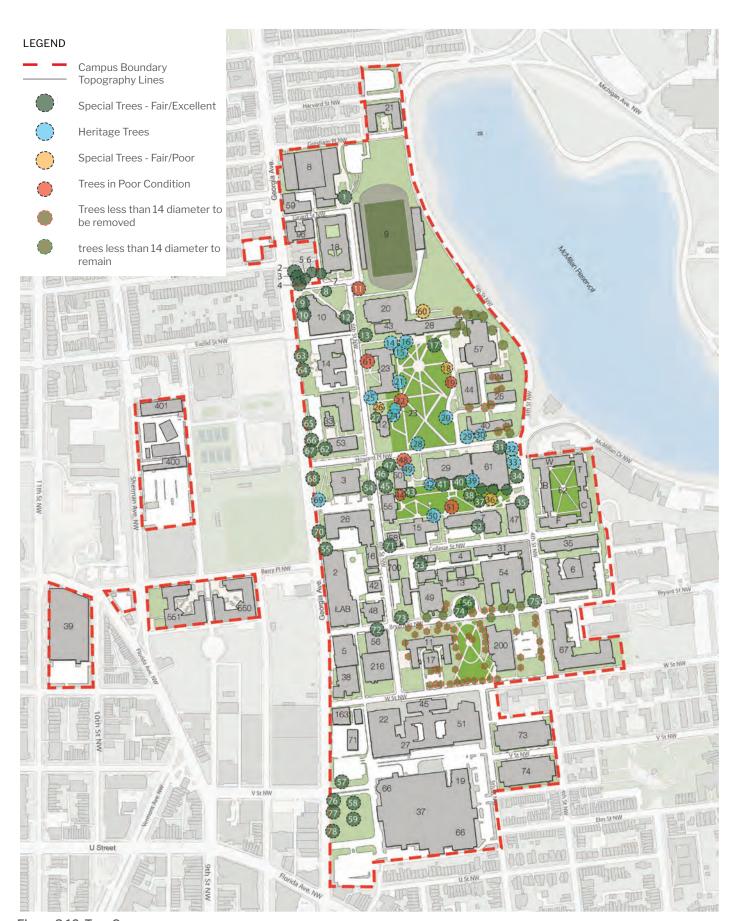


Figure 3.16: Tree Canopy

Map Number	Common Name	Scientific Name	(Trunk Diameter in Inches Measured at 4.5 FT)	Condition	DC Heritage Tree	
1	Willow Oak	Quercus phellos	11.9	Good		
2	Pin Oak	Quercus palustris	19.1	Fair		
3	Pin Oak	Quercus palustris	15.8	Fair		
4	Pin Oak	Quercus palustris	12,2	Fair		
5	Pin Oak	Quercus palustris	20.4	Fair		
6	Willow Oak	Quercus phellos	24.3	Good/Fair		
7	Willow Oak	Quercus phellos	23,5	Good/Fair		
8	Willow Oak	Quercus phellos	21.3	Good/Fair		
9	Willow Oak	Quercus phellos	15.2	Good/Fair		
10	Willow Oak	Quercus phellos	17.2	Fair		
11	Northern Red Oak	Quercus rubra	23.1	Poor		
12	Willow Oak	Quercus phellos	24.8	Good/Fair		
13	Pin Oak	Quercus palustris	21.6	Fair		
14	Pin Oak	Quercus palustris	34,7	Excellent	Heritage	
15	Water Oak	Quercus nigra	35	Fair	Heritage	
16	Pin Oak Pin Oak	Quercus palustris Quercus palustris	37.6 26	Good/Fair	Heritage	
18	Sugar Maple	Acer saccharum	15.7	Fair/Poor -		
19	Silver Maple	Acer saccharinum	33.7	Poor	Heritage	
20	Willow Oak	Quercus phellos	42.3	Good/Fair	Heritage	
21	Water Oak	Quercus nigra	38.2	Fair	Heritage	
22	Siberian Elm	Ulmus pumila	30,3	Fair/Poor -		
23 24	Water Oak Northern Red Oak	Quercus nigra Quercus rubra	42 44.4	Good/Fair Good	Heritage Heritage	
25	Northern Red Oak	Quercus rubra	36,5	Fair	Heritage	
26	Northern Red Oak	Quercus rubra	32.2	Fair/Poor -	Heritage	
27	Pin Oak	Quercus palustris	31.5	Good/Fair		
28	American Elm	Ulmus americana	34.9	Fair	Heritage	
29 30	Willow Oak Willow Oak	Quercus phellos Quercus phellos	39 39,8	Excellent Good/Fair	Heritage Heritage	
31	Willow Oak	Quercus phellos	24.3	Fair		
32	Willow Oak	Quercus phellos	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	Quercus phellos	35.7	Good/Fair	Heritage
- 33	WIIIOW Oak	Quercus prieilos	30.7	Good/Fair	Hentage
34	Willow Oak	Quercus phellos	26.4	Good/Fair	
35	Southern Magnolia	Magnolia grandiflora	11.6, 15.7 = 19.5	Good/Fair	
36	Pin Oak	Quercus palustris	25	Fair/Poor	
37	Pin Oak	Quercus palustris	21.8	Good/Fair	
38	Pin Oak	Quercus palustris	21.1	Excellent	_
39	Deodar Cedar	Cedrus deodara	33.4	Good	Heritage
40	Atlas Cedar	Cedrus atlantica	30.2	Excellent	
41	Atlas Cedar	Cedrus atlantica	28.1	Good/Fair	
42	American Elm	Ulmus americana	43.5	Fair	Heritage
43	Willow Oak	Quercus phellos	37.7	Fair	Heritage
44	Northern Red Oak	Quercus rubra	32.8	Poor	Heritage
45	Northern Red Oak	Quercus rubra	47.9	Excellent	Heritage
46	American Elm	Ulmus americana	38	Fair	Heritage
47	Northern Red Oak	Quercus rubra	41.9	Excellent	Heritage
48	Siberian Elm	Ulmus pumila	38.2	Poor	Heritage
49	Northern Red Oak	Quercus rubra	34.9	Excellent	Heritage
50	Little-Leaf Linden	Tilia cordata	35.9	Excellent	Heritage
51	Pin Oak	Quercus palustris	31.2	Poor	
52	Pin Oak	Quercus palustris	19.8	Fair	
53	Northern Red Oak	Quercus rubra	23.2	Good/Fair	
54	American Beech	Fagus grandifolia	16.5	Good/Fair	
- 54	American Decem	r agus granunona	13.0, 16.0, 13.5, 14.0,	GOODY BII	
55	American Elm	Ulmus americana	11.5 = 30.6	Excellent	
56	Norway Spruce	Picea abies	15	Good/Fair	
57	Pagoda Tree	Styphnolobium japonicum	18.9	Fair	
58	Bradford Pear	Pyrus calleryana	26.3	Fair	
59	Bradford Pear	Pyrus calleryana	29.7	Fair	
60	Scarlet Oak	Quercus coccinea	26	Fair/Poor	
61	Northern Red Oak	Quercus rubra	24.2	Poor	
	English Oak 'Regal				
62	Prince'	PRINCE	22.3	Fair	
63	Pin Oak	Quercus palustris	25.5	Good	
64 65	Pin Oak Red Oak	The second second second	A CALL	Good	
66	Pin Oak	Ulmus americana		Fair	
67	Pin Oak			Good	
68	Pin Oak	Platanus	200	Excellent	
69	American sycamore		39.3	Excellent	Heritage
70 71	Pin Oak Sugar maple	Quercus palustris Acer saccharum	28.8	Good	
72	Willow Oak	Quercus phellos	28.5	Fair	
73	Elm	Ulmus	24	Good	
74 75	Japanese zelkova American elm	Zelkova serrata Ulmus americana	25 25	Good Good	
76	American elm	Ulmus americana	26.2	Good	
77	American elm	Ulmus americana	29 30	Good	

LEGEND:

Special Trees - Fair/Excellent

Heritage Trees

Special Trees - Fair/Poor

Trees in Poor Condition

Trees less than 14 diameter to be removed

Trees less than 14 diameter to remain

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. 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

The grade change across the campus is an approximately 85-foot change in elevation from the existing Howard University Hospital to the Upper Quad. Founders Library, situated at the

Upper Quad's edge, 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. Also, vistas from the Upper Quad to the McMillian Reservoir should be considered for future open space placement and design.

3.4.6 Existing 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: 67%

Existing Permeable Surface: 33%

LEGEND

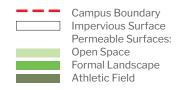




Figure 3.17: Permeable Surface

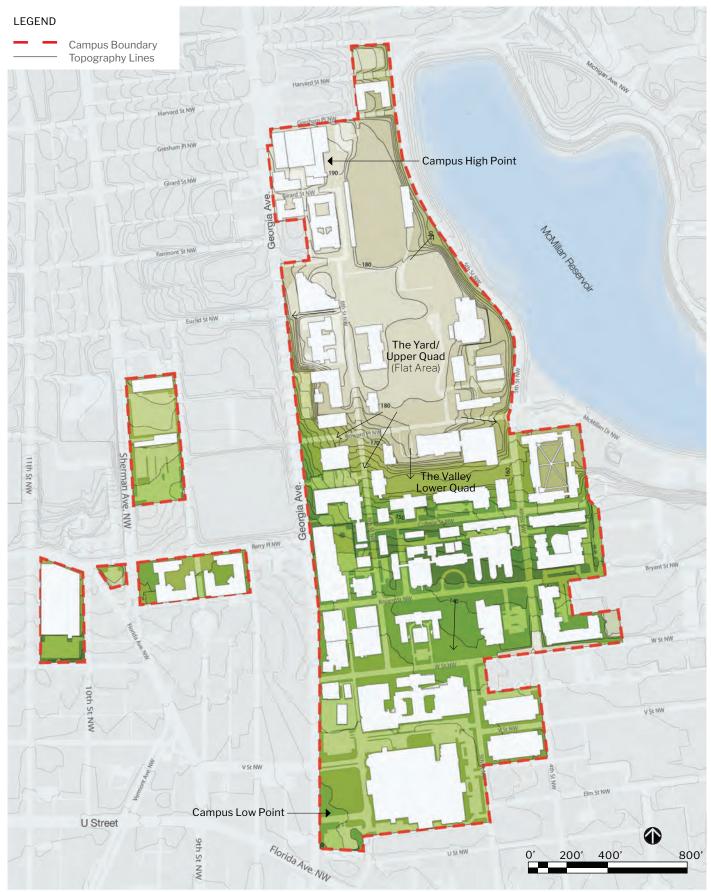


Figure 3.18: Topography Map

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 campus 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 relatively 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. The 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 non-signalized crosswalks that cross four vehicle lanes. Some intersections 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 do not offer the type of pedestrian comfort and priority seen on many

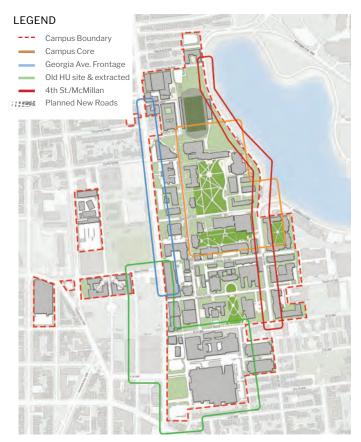


Figure 3.19: Pedestrian Areas of Focus

college campuses. 6th Street currently features curbside parking on both sides. Eliminating some of this parking would allow room for wider sidewalks, a cycle track 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.

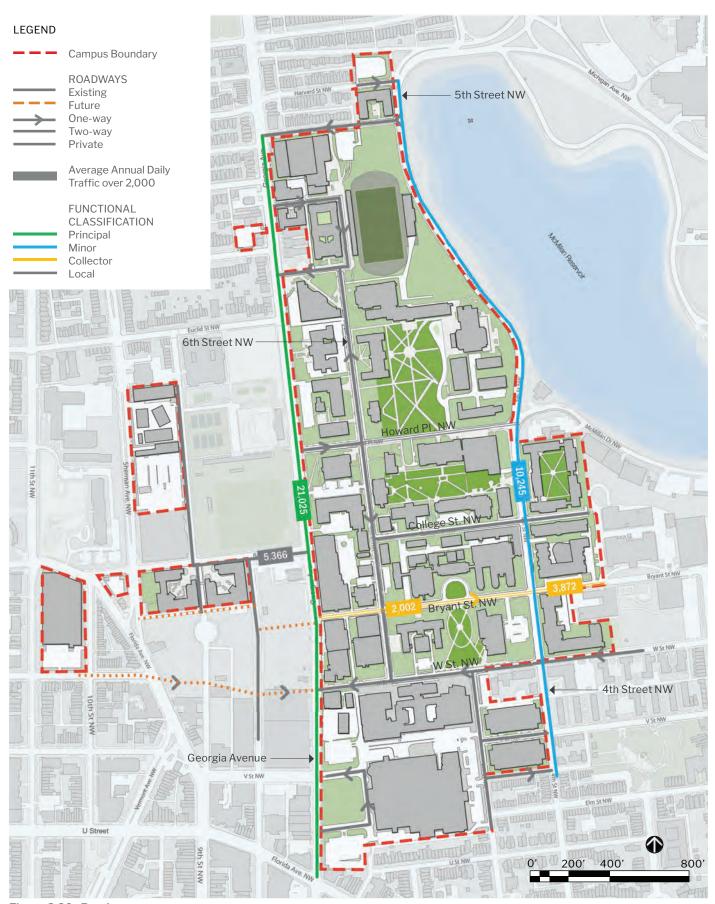


Figure 3.20: Roadways



Figure 3.21: North/South Roads



Figure 3.22: East/West Roads

3.5.3 Bicvcle 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.

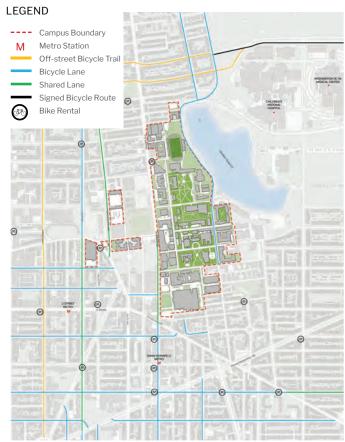


Figure 3.23: Bicycle Routes

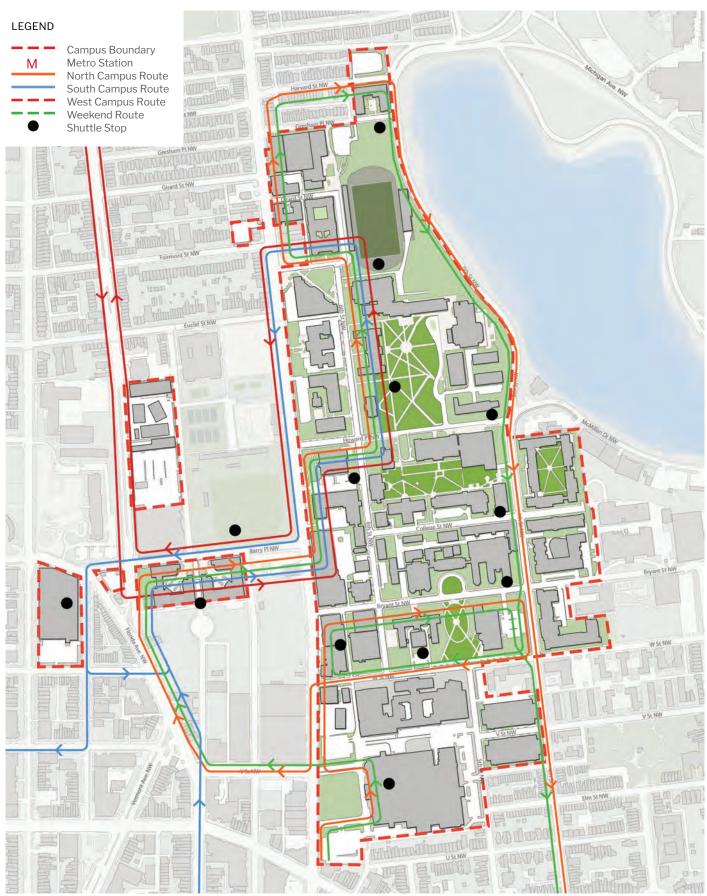


Figure 3.24: HU Shuttle Routes

3.5.5 Public Transit

The HU campus is well-served by existing bus and rail transit. Two Metro stations – U Street and Shaw-Howard University – are within a 0.7 mile (15 minute) walk from The Yard at the campus center. Both stations are served by the Green, and Yellow lines, with scheduled trains arriving every eight minutes during the AM and PM rush, every 15 minutes during midday, every 20 minutes during evenings, and every 15 to 20 minutes on weekends. 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 3.25: Main Nodes and Roads

	Typical frequency (minutes)								Walking Distance
Route Name	Early morning	AM rush	Midday	PM rush	Evening	Late night	Saturday	Sunday	from The Yard to Nearest Stop
Takoma-Petworth Line	25	15	-	15			30 ¹	30 ¹	0.4 mile (7 min)
Fort Totten-Petworth Line	25	15	25	15	25	30	30	30	0.5 mile (9 min)
Georgia Avenue-7th Street Line	12	12	12	12	12	12	15	15	0.1 mile (2 min)
Georgia Avenue MetroExtra		12	12	12	19	-	+	15	0.1 mile (2 min)
U Street-Garfield Line	15	10	10	15	15	15	15	15	0.5 mile (10 min)
East Capitol StCardozo Line	25	25	25	25	30	45	40	40	0.5 mile (10 min)
P Street-LeDroit Park Line	25	15	30	25	30	40	30	30	0.4 mile (7 min)
Brookland-Potomac Park Line		25 ²	*	25 ²	-			(9)	0.5 mile (11 min)
Crosstown Line	25	15	20	20	20	30	20	20	0.5 mile (11 min)
Benning Road Line	*	30 ³	-	25 ³			8	4	0.5 mile (10 min)
	Takoma-Petworth Line Fort Totten-Petworth Line Georgia Avenue-7th Street Line Georgia Avenue MetroExtra U Street-Garffeld Line East Capitol StCardozo Line P Street-LeDroit Park Line Brookland-Potomac Park Line Crosstown Line	Takoma-Petworth Line 25 Fort Totten-Petworth Line 25 Georgia Avenue-7th Street Line Georgia Avenue MetroExtra U Street-Garfield Line 15 East Capitol StCardozo Line 25 P Street-LeDroit Park Line 25 Brookland-Potomac Park Line Crosstown Line 25	Takoma-Petworth Line 25 15 Fort Totten-Petworth Line 25 15 Georgia Avenue-7th Street Line Georgia Avenue MetroExtra U Street-Garfield Line 15 10 East Capitol StCardozo Line 25 25 P Street-LeDroit Park Line 25 15 Brookland-Potomac Park Line 25 15 Crosstown Line 25 15	Route Name Early morning AM rush moday Midday Takoma-Petworth Line 25 15 - Fort Totten-Petworth Line 25 15 25 Georgia Avenue-7th Street Line 12 12 12 Georgia Avenue MetroExtra - 12 12 12 U Street-Garfield Line 15 10 </td <td>Route Name Early morning AM rush midday Midday PM rush Takoma-Petworth Line 25 15 - 15 Fort Totten-Petworth Line 25 15 25 15 Georgia Avenue-7th Street Line 12 12 12 12 12 Georgia Avenue MetroExtra - 12 12 12 12 12 U Street-Garfield Line 15 10 10 15 15 25 <t< td=""><td>Route Name Early morning AM rush midday Midday PM rush PM rush Evening Takoma-Petworth Line 25 15 - 15 - Fort Totten-Petworth Line 25 15 25 15 25 Georgia Avenue-Line 12 12 12 12 12 12 Georgia Avenue-MetroExtra - 12 12 12 12 - - - - 12 12 12 -</td><td>Route Name Early morning AM rush morning Midday PM rush PM rush Evening Late night Takoma-Petworth Line 25 15 - 15 - - Fort Totten-Petworth Line 25 15 25 15 25 30 Georgia Avenue-Line 12 12 12 12 12 12 12 12 12 12 12 12 -</td><td>Route Name Early morning AM rush morning Midday PM rush PM rush Evening Late night Saturday Takoma-Petworth Line 25 15 - 15 - - 30 ¹ Fort Totten-Petworth Line 25 15 25 15 25 30 30 Georgia Avenue-Line 12 12 12 12 12 12 12 12 15 Georgia Avenue-MetroExtra - 12 12 12 12 - - - - U Street-Garffield Line 15 10 10 15 15 15 15 East Capitol StCardozo Line 25 25 25 25 30 45 40 P Street-LeDroit Park Line 25 15 30 25 30 40 30 Brookland-Potomac Park Line - 25 ² - 25 ² - - - - - - - - -</td><td> Route Name Early morning AM rush Midday PM rush Evening Late night Saturday Sunday </td></t<></td>	Route Name Early morning AM rush midday Midday PM rush Takoma-Petworth Line 25 15 - 15 Fort Totten-Petworth Line 25 15 25 15 Georgia Avenue-7th Street Line 12 12 12 12 12 Georgia Avenue MetroExtra - 12 12 12 12 12 U Street-Garfield Line 15 10 10 15 15 25 <t< td=""><td>Route Name Early morning AM rush midday Midday PM rush PM rush Evening Takoma-Petworth Line 25 15 - 15 - Fort Totten-Petworth Line 25 15 25 15 25 Georgia Avenue-Line 12 12 12 12 12 12 Georgia Avenue-MetroExtra - 12 12 12 12 - - - - 12 12 12 -</td><td>Route Name Early morning AM rush morning Midday PM rush PM rush Evening Late night Takoma-Petworth Line 25 15 - 15 - - Fort Totten-Petworth Line 25 15 25 15 25 30 Georgia Avenue-Line 12 12 12 12 12 12 12 12 12 12 12 12 -</td><td>Route Name Early morning AM rush morning Midday PM rush PM rush Evening Late night Saturday Takoma-Petworth Line 25 15 - 15 - - 30 ¹ Fort Totten-Petworth Line 25 15 25 15 25 30 30 Georgia Avenue-Line 12 12 12 12 12 12 12 12 15 Georgia Avenue-MetroExtra - 12 12 12 12 - - - - U Street-Garffield Line 15 10 10 15 15 15 15 East Capitol StCardozo Line 25 25 25 25 30 45 40 P Street-LeDroit Park Line 25 15 30 25 30 40 30 Brookland-Potomac Park Line - 25 ² - 25 ² - - - - - - - - -</td><td> Route Name Early morning AM rush Midday PM rush Evening Late night Saturday Sunday </td></t<>	Route Name Early morning AM rush midday Midday PM rush PM rush Evening Takoma-Petworth Line 25 15 - 15 - Fort Totten-Petworth Line 25 15 25 15 25 Georgia Avenue-Line 12 12 12 12 12 12 Georgia Avenue-MetroExtra - 12 12 12 12 - - - - 12 12 12 -	Route Name Early morning AM rush morning Midday PM rush PM rush Evening Late night Takoma-Petworth Line 25 15 - 15 - - Fort Totten-Petworth Line 25 15 25 15 25 30 Georgia Avenue-Line 12 12 12 12 12 12 12 12 12 12 12 12 -	Route Name Early morning AM rush morning Midday PM rush PM rush Evening Late night Saturday Takoma-Petworth Line 25 15 - 15 - - 30 ¹ Fort Totten-Petworth Line 25 15 25 15 25 30 30 Georgia Avenue-Line 12 12 12 12 12 12 12 12 15 Georgia Avenue-MetroExtra - 12 12 12 12 - - - - U Street-Garffield Line 15 10 10 15 15 15 15 East Capitol StCardozo Line 25 25 25 25 30 45 40 P Street-LeDroit Park Line 25 15 30 25 30 40 30 Brookland-Potomac Park Line - 25 ² - 25 ² - - - - - - - - -	Route Name Early morning AM rush Midday PM rush Evening Late night Saturday Sunday

¹ At the stop nearest the HU campus (Sherman Ave & Barry PI), 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).

Table 3.16: Public Transit Routes

² 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).

³ 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).

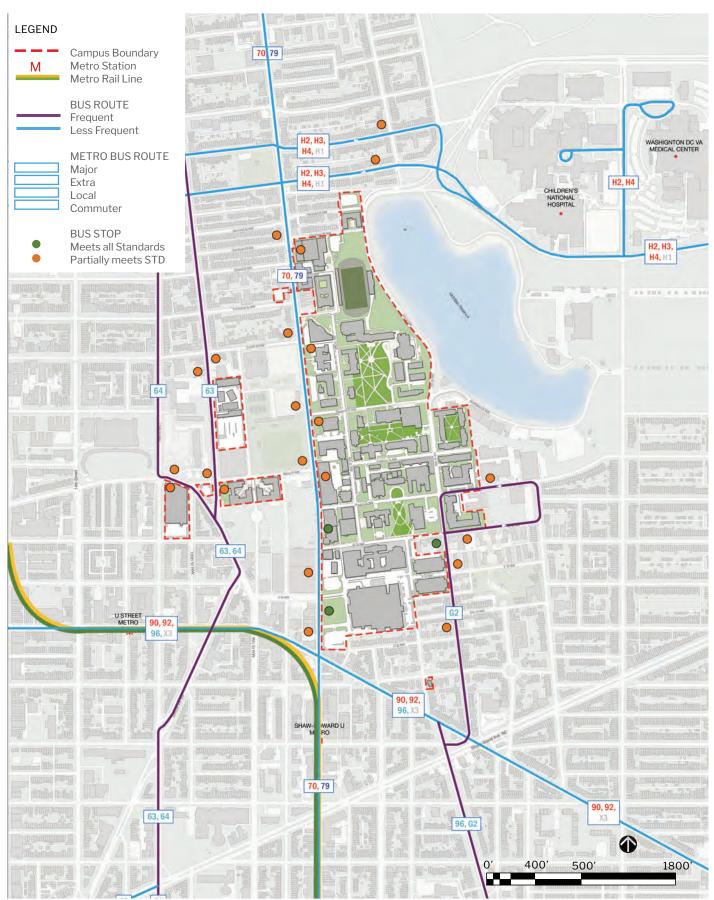


Figure 3.26: Public Transit Routes

3.5.6 Parking

The campus core's historical parking supply data shows decreased academic parking from approximately 2,300 to 1,960 spaces from 2011 to 2020. The reduction aligns with the overall goals of the ongoing Transportation Demand Management

(TDM) Plan. With the HU hospital parking supply's inclusion, the campus core's existing parking supply includes approximately 3,580 spaces. The table below (Table 3.17) and accompanying maps (Fig. 3.27-3.29) demonstrate existing parking zones, lot locations, and their respective access points.

Lot Code			2011			2017			2019		
	A - 2 A - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2	Peak Hour		Peak Hour			Peak Hour				
	Lot Name	Supply	Occupancy		Supply	Occupancy		Supply	Occupancy		
		Cappin	Veh's %		Outpill.	Veh's %		Cuppiy	Veh's %		
Α	Childers	72	71	99%	76	83 1	109%	76	70	92%	
AA	Florida Avenue	23	19	83%	23	23	100%	23	21	91%	
В	Founders	56	39	70%	57	50	88%	57	22	39%	
BB	HUSC	37	37	100%	26	25	96%	26	25	96%	
BB1	HUSC Garage	3/	-		94	40	43%	94	69	73%	
C	Business	36	36	100%	36	32	89%	36	28	78%	
Ď	Miner	52	54	104%	56	42	75%	56	38	68%	
E	Johnson	43	43	100%	43	33	77%	43	34	79%	
ELC	The state of the s	43	45	100%		6	86%	7	6		
F	Early Learning Center	63	E7	90%	7		1000		32	86% 56%	
	Mackey		57		57	32	56%	57			
G	Downing	35	34	97%	35	17	49%	35	21	60%	
H	Drew	54	45	83%	56	32	57%	56	8	14%	
1	Greene	46	44	96%	46	20	43%	46	22	48%	
J	Burr	12	9	75%	12	7	58%	12	15 1	125%	
K	Georgia	34	29	85%	34	20	59%	34	12	35%	
KK	Wonder Plaza	52	39	75%	50	42	84%	50	0	0%	
1	Just	23	16	70%	23	21	91%	23	17	74%	
M	Chem	8	6	75%	6	5	83%	6	3	50%	
MM	LSHSL	43	19	44%	43	34	79%	43	17	40%	
0	C.B.P.	53	42	79%	53	47	89%	55	44	83%	
P	6th Street	10	5	50%	11	6	55%	11	6	55%	
Q	Power/Bunche	12	3	25%	16	9	56%	16	4	25%	
R	Bethune	218	210	96%	-	500				94	
RR	Bethune Underground	63	24	38%	63	25	40%	63	25 ²	40%	
RR	Bethune Annex	12	141	117%	12	9	75%	12	92	75%	
S	Nursing	61	45	74%	62	48	77%	62	41	66%	
T	5th & W	26	10	38%	26	22	85%	26	11	42%	
Ú	6th & W	18	10	56%	16	13	81%	16	14	88%	
V	Howard Center	315	281	89%	303	137	45%	334	282	84%	
w	East Tower	138	112	81%	142	97	68%	142	93	65%	
ww	East Tower Underground	103	82	80%	99	57	58%	99	57 2	58%	
X	9th Street	33	22	67%	31	5	16%				
YY	West Tower Underground	103	58	56%	99	5	5%	99	52	5%	
Z	Banneker	314	173	55%	178	133	75%	178	114	64%	
1	Howard Center II	47	29	62%				17.0			
2	9th & V Street Lot	68	20	29%	60	36	60%	70 3	60	86%	
3				92%	1000	70.7	92%	70 -	7.7.	0070	
	Annex I Rear	12	11		13	12		1,963	1,225	62%	
	demic Supply	2,295	1,748	76%	1,964	1,225	62%	1,963			
H1	HU Bryant St Lot	**	**	**	**	***	**	**	**		
H2	HU Medical Arts Lot	100	100	-	.01	200	-	30	16	53%	
НЗ	HUH Permit Only Lot	***		85	8-			106	87	82%	
H4	HUH Daily/Visitor Lot	-	-		-	40		124	111	90%	
H5	HUH Daily/Visitor Lot	194	-	-	-	166	9	57	54	95%	
H6	HUH Permit Only Lot	100	**	**		***	-	35	29	83%	
H7	HU A1-Rear Lot	100	-	**	*	100	-	23	11	48%	
H8	HU Hurb1 Lot	100	-		940	-	**	50	46	92%	
H9	HUH Garage 1	+				-		609	544	89%	
H10	HUH Garage 2	100	100	- 90	901	100	-	580	508	88%	
Total Hos	pital Supply			-	_	-		1,614	1,406	87%	

Observations performed on a weekday when classes were in session, at several times in the morning and afternoon. Peak occupancy listed is the highest observed occupancy at each lot among all times.

Table 3.17: Parking Space Count by Lot (2011, 2017, 2020)

Illegal parking observed, leading to occupancy greater than 100%.

² 2019 data collection not feasible; 2017 data substituted.

³ Lot was open during 2019 counts, but is now permanently closed.



Figure 3.27: Existing Parking

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

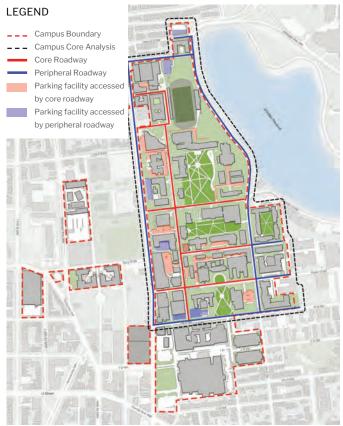


Figure 3.29: Existing Parking by Core vs. Peripheral Access

3.6 Infrastructure & Utility Systems

The existing utilities within the public rightsof-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 3.30-3.35 for a series of diagrams which provide a general understanding of how this lattice of systems interface with the campus boundary.

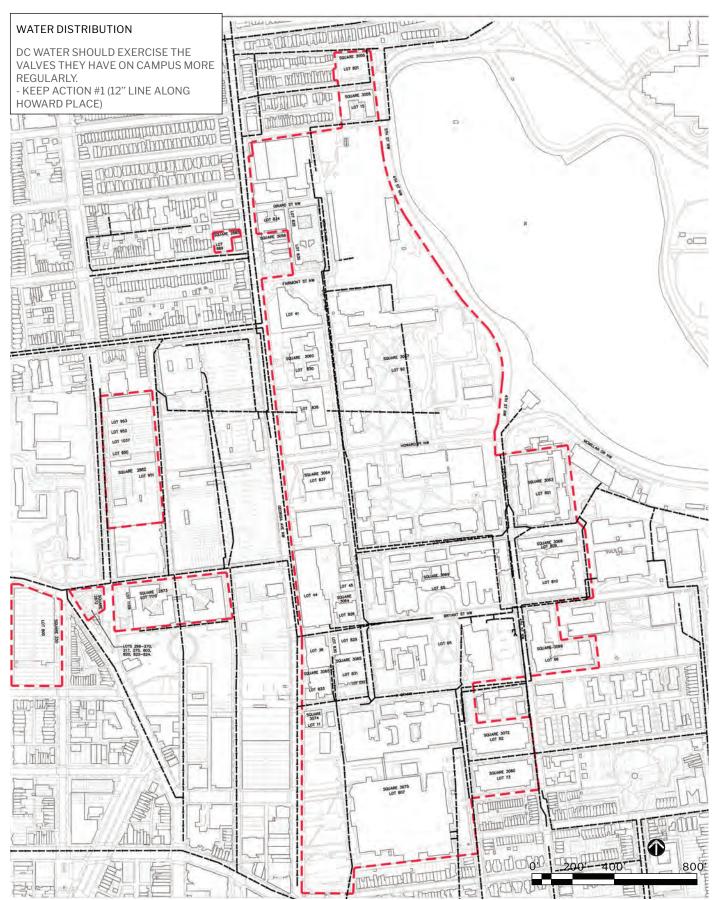


Figure 3.30: Existing Water Distribution

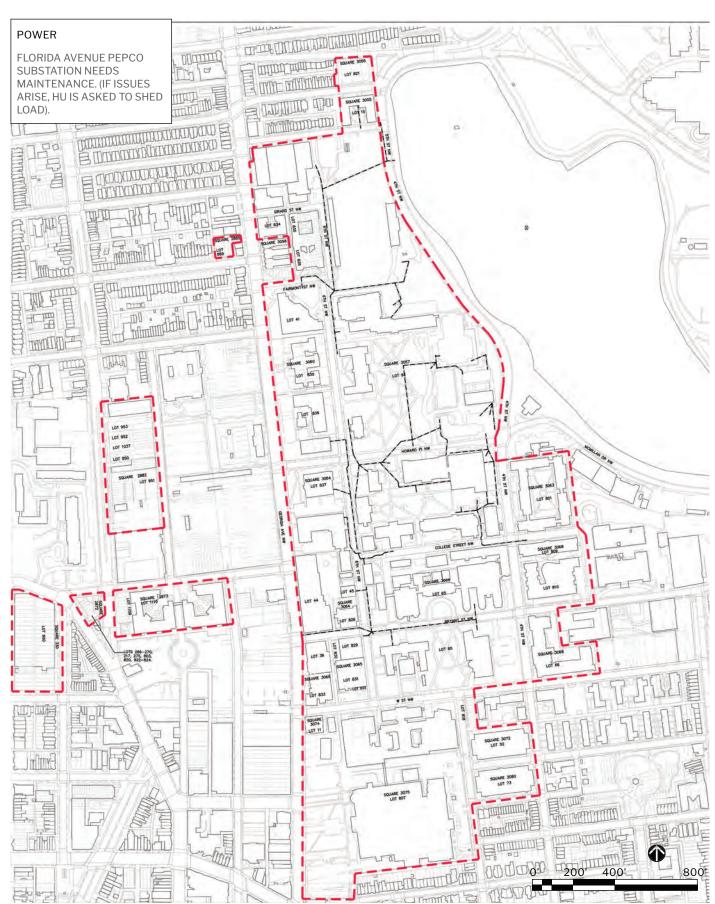


Figure 3.31: Existing Electrical Distribution

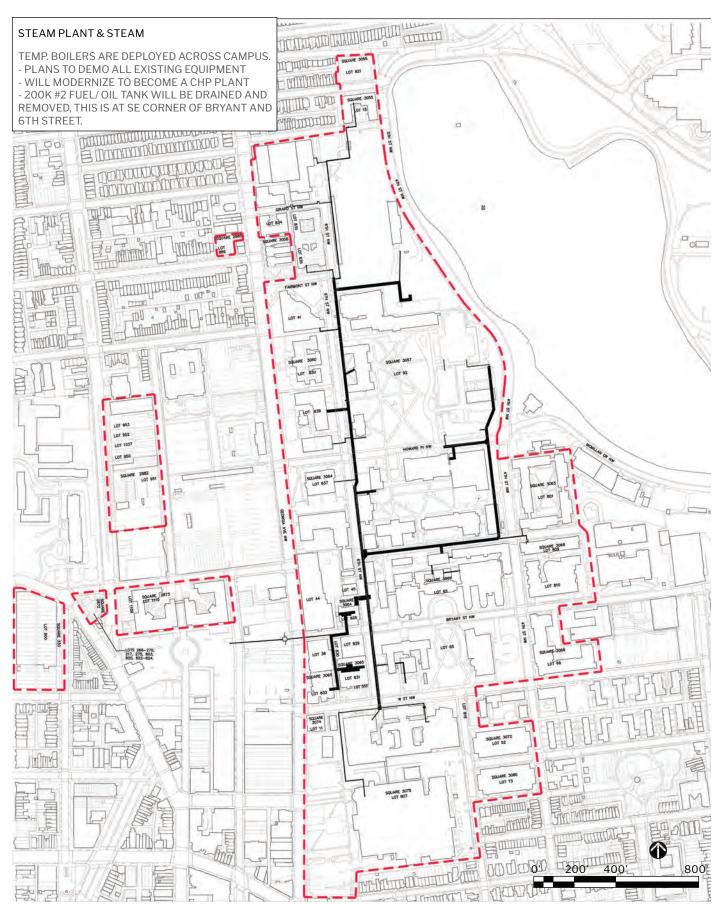


Figure 3.32: Existing Steam Distribution

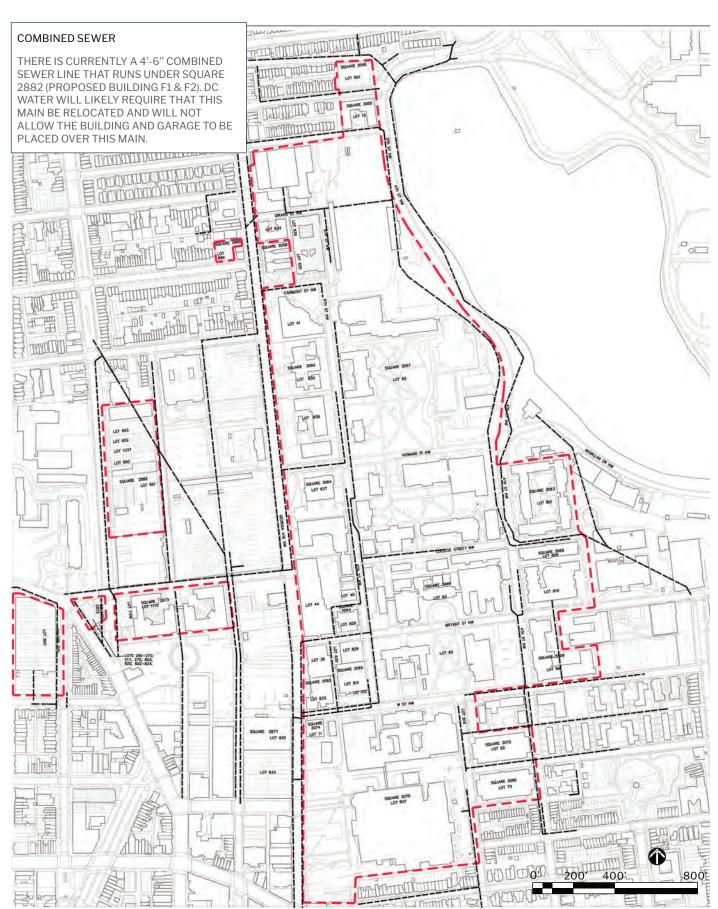


Figure 3.33: Existing Combined Sewer Distribution

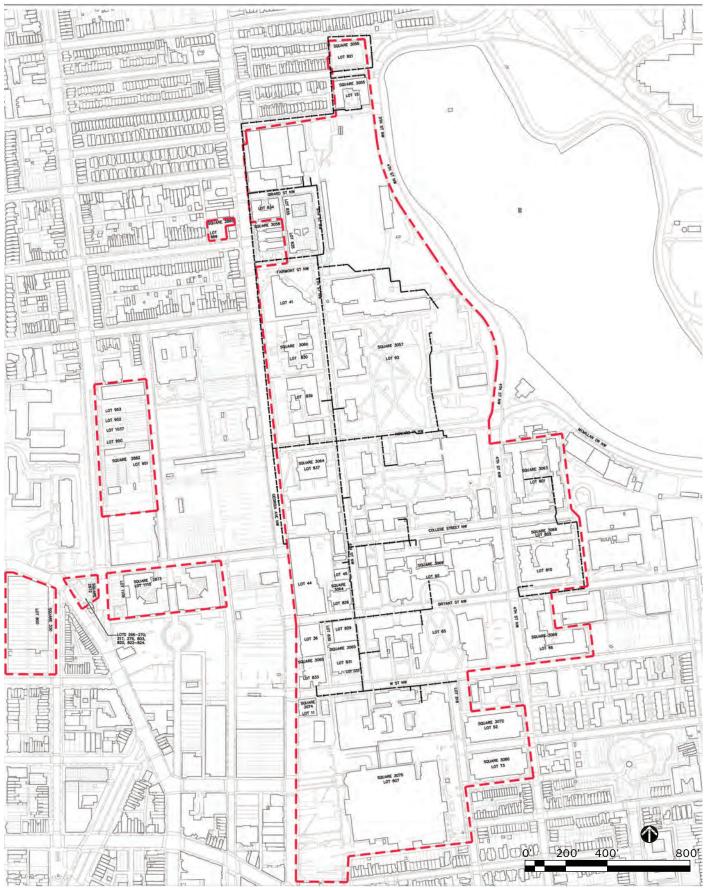


Figure 3.34: Existing Gas Distribution

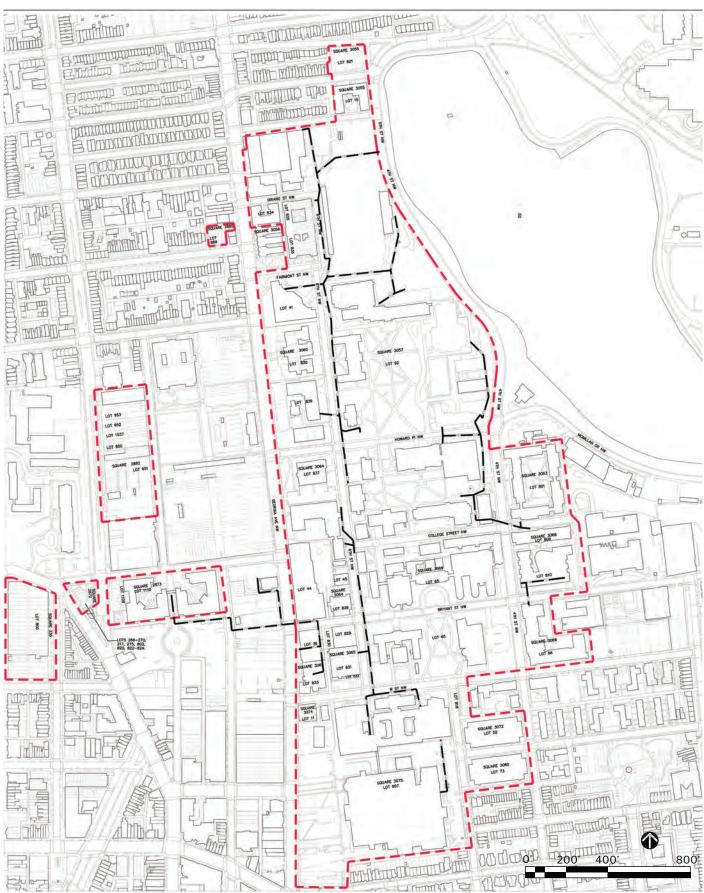


Figure 3.35: Existing Fiber Optic Distribution

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