

Section 4

Campus Development Plan

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4.1 Planning Themes

The Central Campus Master Plan shall remain the product of a broad effort by the Howard University administration, staff, faculty, and students, various neighboring community stakeholders, several civic associations and task forces, and the Advisory Neighborhood Commissions (ANC) 1B. The purpose of the Campus Plan is to create a dynamic, achievable, and flexible framework for Howard University's central campus's physical environment that supports and advances its mission and strategic plan. It will enrich the lives of those who live, study, teach and work at and around Howard's vibrant urban campus.

The Campus plan is guided by the goals, objectives, planning principles, and design criteria developed through the process. The goals, objectives, and principles were generated in response to the existing conditions analysis findings and through collaboration with Howard's administration, faculty, staff, students, and community stakeholders.

4.1.1 Planning Goals

Planning Goals aim to align space needs with the five Howard Forward Priorities: enhance academic excellence, inspire new knowledge, serve the community, improve efficiency, and achieve financial sustainability.

Recommend optimal uses for the various campus parcels and the identification of sites for new facility development.

Acknowledge the historic campus resources, both its buildings and landscapes.

Promote the continued contributions of Howard toward the economic and cultural vitality of the local community and the city.

Structure a process by which the University meets its goals and objectives in an environmentally sustainable manner that serves to expand the awareness of students, faculty, staff, and alumni to the importance of sustainability.

Ensure compliance with the District’s regulatory requirements, including reducing adverse neighborhood impacts, identifying future institutional impacts, and promoting neighborhood and community stability.

4.1.2 Planning Principles

Planning principles are derived from the goals referenced above, as follows:

Support the Academic Mission

The primary areas of focus for Howard University are education, research, and creative activities. As such, the physical resources of the University must be planned, designed, and developed to support these activities, today and in the future. The planning framework will enable Howard to continue its tradition of excellence, which serves an increasingly diverse population of students, faculty, and staff.

Improve Quality of Life

Provide a quality physical environment with a variety of places and spaces in which the campus community of students, faculty, and staff can socialize, study, network, learn, and relax.

Advance Smart and Sustainable Urban Design

Continue and advance the strong composition and balance of building density and mixed uses within various formal quadrangles and informal open spaces. Explore strategies to integrate/activate Howard University’s edge facilities to address and enhance both the internal campus and the external community.

Enhance the Public Realm

Commit to enhancing and maintaining the campus’s cultural landscapes that have meaning and memory to the campus community and design and develop new public open-spaces that



enhance the campus setting and become future cultural landscapes. Create seamless connections between public space and the campus landscape that promote pedestrian movement and activities.

Enhance Physical Access and Connectivity

Strengthen and expand the campus network of high-quality, walkable spaces and strong pedestrian and bicycle connection to, and throughout the campus on both the north-south and east-west axes.

Support Interdisciplinary Academics & Research

Create environments that support and spur Interdisciplinary academics and research critical to Howard's 21st century academic vision that affirms its preeminence in research-focused higher learning.

4.1.3 Major Capital Projects

The 2020 Campus Plan includes nine (9) major capital initiatives that each address specific functional needs identified by the University and intended to support its Strategic Plan and academic, healthcare, and research programs through the following objectives:

Academic, Healthcare & Research Objectives

- Provide an interdisciplinary center for the Arts & Communications programs
- Create an innovative interdisciplinary environment for STEM that offers groundbreaking instructional space

- Develop a Health Sciences Complex to house all health science programs in one multidisciplinary setting
- Develop a new world-class teaching Hospital with an associated medical office building

Campus Life Objectives

- Provide additional student-focused space for activities, recreation, dining, and socializing in a new HU Union and a new Fusion Building
- Provide additional athletic support and facility space in a new Intercollegiate Athletics Annex
- Provide attractive apartment-style housing to enable more students to live near the campus

4.1.4 Campus Population Growth

The following graph shows the expected growth in enrollment over a ten-year period to the expected 15,000 student range. Student enrollment growth was calculated using the assumption that STEM program would grow at a rate of 5% per year over the planning period.

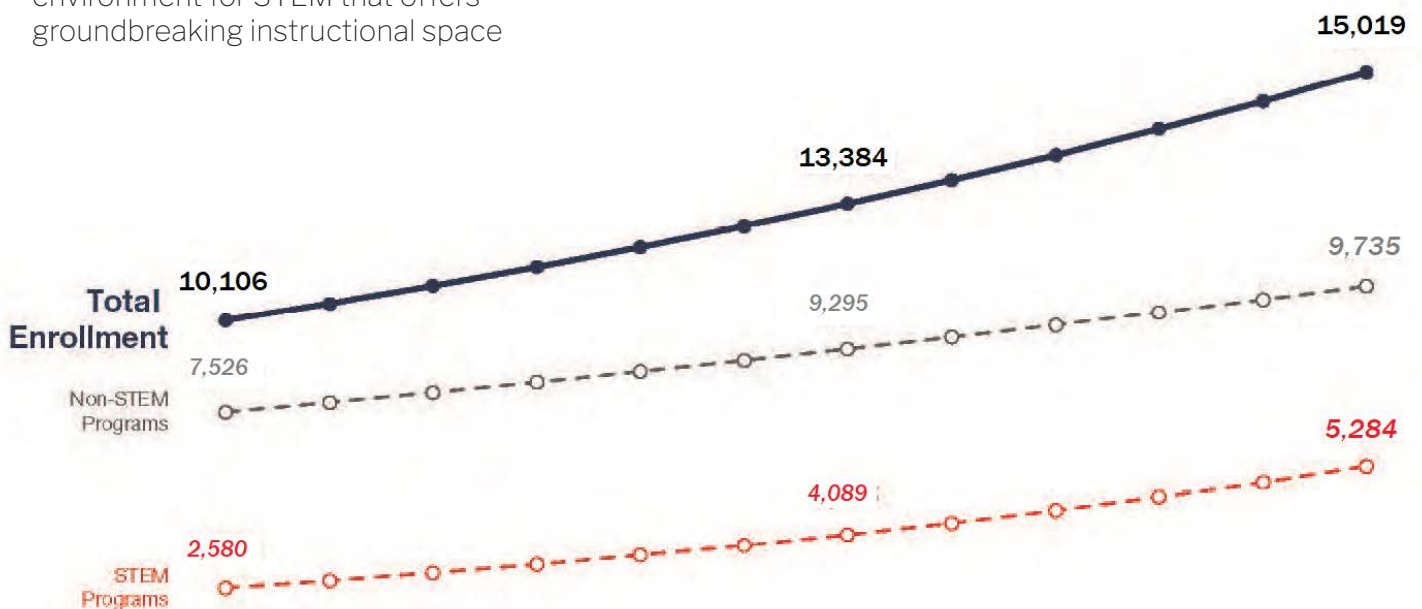


Table 4.1: Projected Student Population Growth

4.1.5 The Future Campus

The University is proposing a progressive plan for needed improvements to existing facilities, landscapes, and infrastructure. The strategy includes the renovation, modernization, and where appropriate, the merging of existing buildings and the new facilities, landscapes, and systems deemed critical to meet future strategic academic, research, healthcare, and campus life priorities.

As a world-class academic and research presence, the vision of Howard University is reflected in an ambitious investment in its academic programs, facilities, grounds, infrastructure, and the community surrounding the campus.

To meet its capital needs over the next decade, Howard will undertake extensive renovations of specific existing buildings and systems and develop new facilities to house critical programs that support our mission, vision, and strategic priorities.

Howard Forward 2024 established the program priorities that informed the development strategies in the Campus Plan. The planning goals, objectives, and principles set the overarching framework within which the various critical programmatic needs Howard should be met.

The University is committed to optimizing its physical assets' value and performance in support of its mission. To advance and achieve this priority, the University recommends a tactical and catalytic development strategy that will optimize value, mitigate risk, and include diversity in the value chain. The strategy aggregates the five (5) Howard Forward Pillars into three (3) focus areas:

1. Enabling leadership in academics and research, including a focus on STEM and Health Sciences, arts and communications, law and business that enables Howard to take advantage of emerging opportunities in the greater work economy;
2. Enriching the campus experience with projects that emphasize experiential learning and improve campus life and activities, and
3. Improving efficiency, effectiveness, and financial stability, which includes optimizing land use, program consolidation, and diversification of revenue streams.

The University will prioritize core academics and research, both high-demand programs and online courses, investing in cutting-edge technology and creating innovative physical and virtual learning environments.

Existing / New	Square	Lot Sqft	Footprint	GSF	Ext. /New FAR	Allowed FAR	Project
Existing	0330	42,646	36,063	22,173	0.52	1.8	
Existing	0394	5,750	0	0	0	1.8	
Existing	2872	9,915	0	0	0	1.8	
Existing	2873	113,401	57,645	573,687	5.06	5.0	
New	2882	138,616	55,465	499,185	3.60	1.8	F1/F2
Existing	3055	52,670	16,243	88,979	1.69	1.8	
New	3057	1,329,765	362,798	1,442,459	1.08	1.8	A, B, & C
Existing	3058	59,860		75,000	1.25	1.5/1.8*	
Existing	3060	227,132	78,743	341,886	1.51	1.8	
Existing	3063	107,553	46,587	216,319	2.01	1.8	
New	3064	217,762	109,087	528,784	2.43	1.8/4.3**	J
New	3065	89,432	65,904	219,897	2.46	6.0	G
Existing	3068	99,145	57,353	138,829	1.40	3.5	
New	3069	491,255	271,354	1,149,970	2.34	1.8	D, E, H1/H2
Existing	3072	52,457	34,083	136,332	2.60	1.8	
Existing	3074	9,057	10,123	30,396	3.36	6.0	
Existing	3075	641,070	296,087	1,168,647	1.82	6.0	
Existing	3080	44,340	34,327	137,308	3.10		
		3,731,826	1,531,862	6,769,851	1.81		

Table 4.2: Proposed Campus Square/Lot/FAR Data

The University will highlight STEM academic fields, bolster interdisciplinary programs, and establish new academic and research facilities.

Howard will enrich the campus experience and serve the community by leveraging relationships with corporate partners to foster a campus community that promotes physical and mental wellbeing. The University will ensure compliance with regulatory and governing agencies as well as reduce the campus carbon footprint. Howard intends to achieve financial sustainability by delivering a more efficient campus footprint, developing solid real estate partnerships, and diversifying revenue streams to include surplus and non-core land monetization. Howard's monetization strategy is not divestment, but its retention through long-term leasing of underutilized properties.

4.1.6 Interdisciplinary Aggregation

Howard will aggregate academic units based upon synergistic functional requirements to create greater operational efficiency, programmatic synergy, and cultivate a more unanimous and engaging learning experience. Successful aggregation requires a review and assessment of the six (6) major space typologies that serve the academy:

- o general-purpose classrooms,
- o assembly space,
- o laboratories,
- o studios,
- o specialty resources, and
- o library/study space.

Functionally, all units require access to general-purpose classrooms and assembly space, as well as specialized and library/ study spaces. Programs such as fine and performing arts, architecture, and communications require and heavily use distinct studio spaces. These disciplines have a natural synergy supporting fields of study focused on arts and media that are suitable for cross-pollination.

Similarly, STEM and health science-related fields require specialized laboratories. These programs, at their respective graduate and undergraduate levels, also possess under-utilized curricular synergies, which the plan hopes to reinforce.

4.1.7 Institutional Priorities

The first initiatives are urgent, and prioritize investments in the physical plant infrastructure and utilities to avoid crippling functional interruptions, improve efficiencies, and enable the University to support environments that continue to attract and retain outstanding students, faculty, researchers, and clinicians.

Ongoing Urgent

Recent critical steam plant issues have prompted repairs to stabilize campus infrastructure and develop central utility modernization and recovery. The C. B. Powell building is more than 100 years old and facing the imminent failure of numerous critical building components. The University will relocate programs that currently occupy the facility, and the original C. B. Powell building will be renovated and re-occupied as part of two co-located capital projects.

Proposed

The planning process identified nine capital projects as critical for Howard to achieve its academic, research, and student life priorities over the next decade. The projects' focus ranges from student support and services to interdisciplinary academic space to a new Howard University Hospital. The nine Capital Projects deemed by the University as needed include:

- A. The Intercollegiate Athletics Annex
- B. The Center for Arts & Communications
- C. The Howard University Union
- D. The Health Sciences Complex
- E. The STEM Center
- F. The Apartment-Style Residences
- G. The Medical Office Building
- H. The Howard University Hospital
- J. The Fusion Building

ASSET	ASSET NAME	ADA	BUILDING ENVELOPE	INTERIOR	PLUMBING	HVAC	EHS	ELECTRICAL
1	MORDECAI JOHNSON BUILDING	Partial	Partial	Substantial	Partial	Substantial	Partial	Substantial
2	WONDER PLAZA	Partial	Substantial	Substantial	Partial	Substantial	Partial	Partial
3	HOWARD MACKAY BUILDING (ARCHITECTURE)	Partial	Partial	Substantial	Substantial	Substantial	Partial	Substantial
6	MARY BETHUNE ANNEX	Partial	Partial	Substantial	Partial	Substantial	Partial	Substantial
7	ERNEST JUST HALL (BIOLOGY)	Partial	Partial	Substantial	Substantial	Partial	Partial	Substantial
8	JOHN BURR GYMNASIUM BUILDING	Partial	Substantial	Substantial	Substantial	Substantial	Substantial	Substantial
10	SCHOOL OF BUSINESS	Partial	Partial	Partial	Partial	Substantial	Partial	Substantial
12	ANDREW CARNEGIE BUILDING	Partial	Partial	Partial	Partial	Substantial	Substantial	Partial
13	C. B. POWELL BUILDING (COMMUNICATIONS)	Substantial	Substantial	Substantial	Substantial	Substantial	Substantial	Substantial
15	CHEMISTRY BUILDING	Partial	Substantial	Substantial	Substantial	Substantial	Substantial	Substantial
16	CHEMICAL ENGINEERING BUILDING	Partial	Partial	Partial	Partial	Partial	Partial	Partial
18	GEORGE COOK HALL	Substantial	Substantial	Substantial	Partial	Substantial	Partial	Partial
19	CANCER RESEARCH CENTER	Partial	Partial	Partial	Substantial	Substantial	Partial	Substantial
20	LOUIS CRAMTON AUDITORIUM	Partial	Substantial	Partial	Partial	Partial	Partial	Partial
21	CHARLES DREW HALL	Partial	Partial	Partial	Partial	Partial	Partial	Substantial
26	LEWIS DOWNING HALL (ENGINEERING)	Partial	Partial	Partial	Substantial	Partial	Partial	Substantial
28	LULU CHILDERS HALL (FINE ARTS)	Substantial	Substantial	Substantial	Substantial	Substantial	Substantial	Substantial
29	FOUNDERS LIBRARY	Partial	Partial	Substantial	Substantial	Substantial	Partial	Substantial
34	BETHUNE ANNEX CAFETERIA	Partial	Partial	Partial	Partial	Partial	Partial	Partial
35	COLLEGE HALL NORTH	Partial	Partial	Partial	Partial	Partial	Partial	Partial
38	INTERDISCIPLINARY RESEARCH BUILDING	Partial	Partial	Substantial	Partial	Partial	Partial	Partial
39	HOWARD UNIVERSITY SERVICE CENTER	Partial	Substantial	Substantial	Substantial	Substantial	Substantial	Substantial
42	RALPH BUNCHE INTERNATIONAL AFFAIRS CENTER	Partial	Partial	Partial	Partial	Partial	Partial	Partial
43	IRA ALDRIDGE THEATER	Partial	Substantial	Substantial	Partial	Substantial	Partial	Substantial
47	CHAUNCEY COOPER HALL (PHARMACY)	Partial	Partial	Substantial	Substantial	Partial	Partial	Partial
48	POWER PLANT	Partial	Substantial	Substantial	Substantial	Substantial	Partial	Substantial
50	ANDREW RANKIN MEMORIAL CHAPEL	Substantial	Substantial	Partial	Partial	Partial	Partial	Partial
53	INABEL LINDSAY HALL (SOCIAL WORK)	Partial	Substantial	Substantial	Partial	Partial	Partial	Substantial
55	WILBUR THIRKIELD HALL (PHYSICS)	Partial	Partial	Substantial	Substantial	Substantial	Substantial	Substantial
57	ARMOUR BLACKBURN UNIVERSITY CENTER	Partial	Substantial	Substantial	Partial	Substantial	Partial	Substantial
58	EARLY LEARNING CENTER	Partial	Partial	Partial	Partial	Partial	Partial	Partial
67	COLLEGE HALL SOUTH	Partial	Partial	Partial	Partial	Partial	Partial	Partial
96	HOWARD MANOR	Partial	Substantial	Substantial	Substantial	Substantial	Substantial	Substantial
200	LOUIS STOKES HEALTH SCIENCES LIBRARY	Partial	Partial	Substantial	Partial	Partial	Partial	Partial
401	HARRISON BROTHERS BUILDING	Partial	Partial	Partial	Partial	Partial	Partial	Partial







-  MINIMAL
-  PARTIAL
-  SUBSTANTIAL

Table 4.3: Renovation Matrix

LEGEND

-  Campus Boundary
-  Renovated
-  To-be Renovated

CAPITAL PLAN

-  Proposed Demo 2020-2030
-  Future Demo 2030+

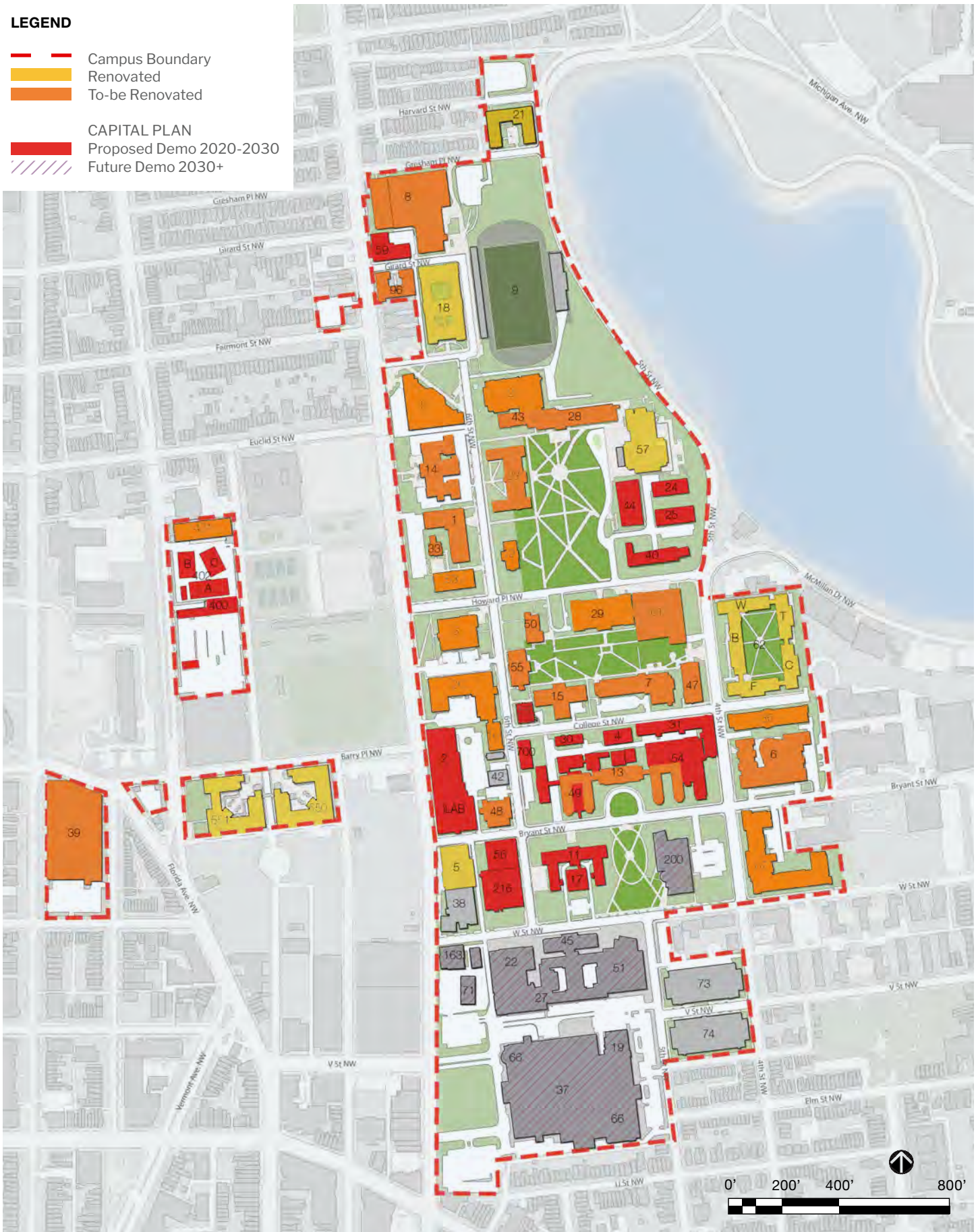


Figure 4.1: Renovation, Decommissioning & Demolition

The proposed central campus total land area within the HU boundary remains approximately 86 acres, with 58 buildings that combined equal 6.3 million square feet, resulting in a proposed Floor-to-Area Ratio of 1.81 for the Central Campus.

As Howard moves forward with its proposed capital projects, many of the efforts will require the temporary relocation of programs occupying facilities slated for renovation or buildings planned for demolition to create a new capital project development site.

The University has a three-tiered strategy for program relocations, either long-term or temporary, including:

1. Backfill into existing on-campus facilities,
2. On-campus swing-space/relocation, and
3. Modular Unit temporary relocations.

The University usually locates modular on its property, but outside the historic campus core. Although rare, the University may need to look off-campus for temporary space to meet critical program needs.

Potential Future Development Opportunities

Once the New HU Hospital complex is completed and occupied, the existing HU Hospital, health sciences buildings, and adjacent support buildings will be vacated and decommissioned.

The newly freed-up land gives rise to a unique opportunity for Howard to collaborate with developers in creating a vibrant, innovative, and urban mixed-use destination along Georgia Avenue.

The vacated spaces that formerly housed STEM programs can be converted into valuable swing space to accommodate temporary uses and the growth and expansion of special programs.

The Georgia Avenue streetscape improvements should be a campus and community draw by creating place-making opportunities within the public realm.

4.1.8 Planning Process

The planning process explored development concepts informed by identified program uses, campus and site context, adjacencies, access, infrastructure, historic resources, and applicable DC Zoning regulations.

Multiple, subsequent iterations of campus-wide and individual project concepts were prepared, which addressed site and building considerations such as adjacent historic resources, scale, massing, and facility heights. These included concepts that maximized building heights to the allowable 90-foot limit for college and university campuses.

The University and campus stakeholders will continue to evaluate the iterations and provide recommendations for improving the campus and individual projects as Howard begins implementing the Campus Plan. The campus plan and capital projects outlined in the following pages result from the interactive process and represent the University's preferred development scenario for its Central Campus. The University will continue collecting feedback from the campus community as the Plan evolves and as specific projects are implemented through Further Processing.

4.2 Development Strategy

4.2.1 Proposed Development Programs

The purpose of the Campus Plan is to create a physical environment that is inspirational and supportive of fulfilling Howard's mission and strategic plan. The outcomes of the Campus Plan should enrich the lives of all who live, study, teach, and work at Howard University.

As a vibrant urban institution within one of the country's most dynamic cities, the Plan needs to maximize the short- and long-term growth and development potential on the Howard campus. A unifying factor across all proposed development programs is the aggregation of uses based upon synergistic functional requirements to create greater operational efficiency, programmatic interconnectivity, and cultivate a more consistent and engaging campus experience.

LEGEND

- Campus Boundary
- Proposed Buildings
- Proposed Renovation
- Existing Buildings
- Open Space
- Formal Landscape
- Future Building
- Future Decommission



BUILDING LEGEND

- A. Intercollegiate Athletics Annex
- B. Center for Arts & Communications
- C. Howard University Union
- D. Health Sciences Complex
- E. STEM Center
- F. Apartment-Style Residences
- G. Medical Office Building
- H. Howard University Hospital
- J. Fusion Building

Figure 4.2: Proposed Campus Plan

4.2 (A) Intercollegiate Athletics Annex

Through a series of new construction and phased renovation projects, Burr Gymnasium will ultimately function as a dedicated intercollegiate athletics facility. The academic and general recreation functions within Burr will relocate to the proposed Fusion Building (see Section 4.2.1.8).

The proposed Intercollegiate Athletics Annex (IAA) to the Burr Gymnasium will provide much-needed, adjacent office, support, classroom, meeting, and activity space. The four-story facility will house programs to improve student athlete’s schedules and optimize coaching contact hours. The Athletics Annex will also help to establish a new face for Howard athletics along Georgia Avenue.

Historic Preservation Considerations

The proposed development site at 2801 Georgia Avenue NW is currently improved with a five-story brick building. The facility was originally constructed in 1928, was expanded in 1933, and served as a furniture storage warehouse for the American Storage and Transfer Company.

The building was acquired by the University in 1968 and became known as “University Warehouse #2,” or the “Bank Building.” The openings on the ground floor of the building were altered following its acquisition by the University, and a first-floor slate-tile façade added.

The existing building is not currently designated as a historic landmark and is not located within an existing historic district. The building does not appear to possess the historical or architectural significance or integrity necessary to be eligible for individual listing in the National Register or DC Inventory.

Neighborhood Context & Impacts

The height of the proposed Annex is one story less than the current warehouse facility, and its intended design and function will enhance and activate this edge environment of the campus along Georgia Avenue. The new facility will house Intercollegiate offices and instructional space.

Occupant parking/loading is provided in an existing lot behind the Burr Gymnasium. The proposed scale is consistent with other HU facilities along Georgia Avenue NW.

As a result of these planning parameters, the project is not expected to adversely impact the neighborhood.

A. INTERCOLLEGIATE ATHLETICS ANNEX (IAA)	
Zoned	MU-4
FAR	1.08 (1.5 Non-Residential)
Height	50' (50' Max/90' Institutional Allowed)
Lot Occupancy	0.0067% (60%)

Table 4.4: Athletics Annex Site Zoning Requirements

A. INTERCOLLEGIATE ATHLETICS ANNEX (IAA) 50' Height	
Floor 1	8,897 GSF
Total Floor 1	8,897 GSF
Upper Floors (2-4)	13,645 GSF (each)
Total 2-4 Floors	40,935 GSF
	4 Levels of Athletic + Support Spaces
	1 Level of Basement

AAB TOTAL 49,832 GSF (Does Not Include any below grade basement/parking)

Table 4.5: Athletics Annex Building Data

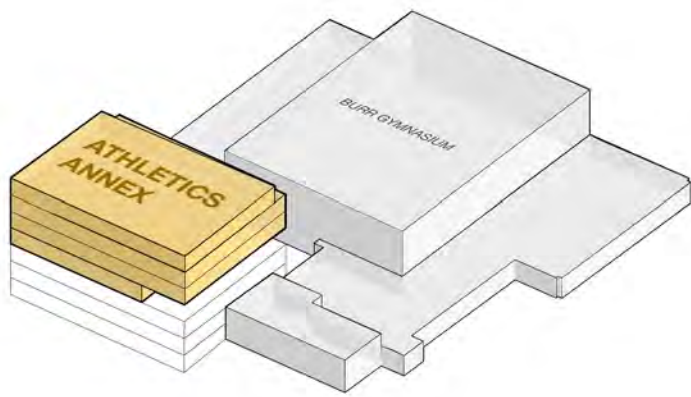


Figure 4.3: Athletics Annex: Massing Study



Figure 4.4: Athletics Annex: Diagrammatic Section

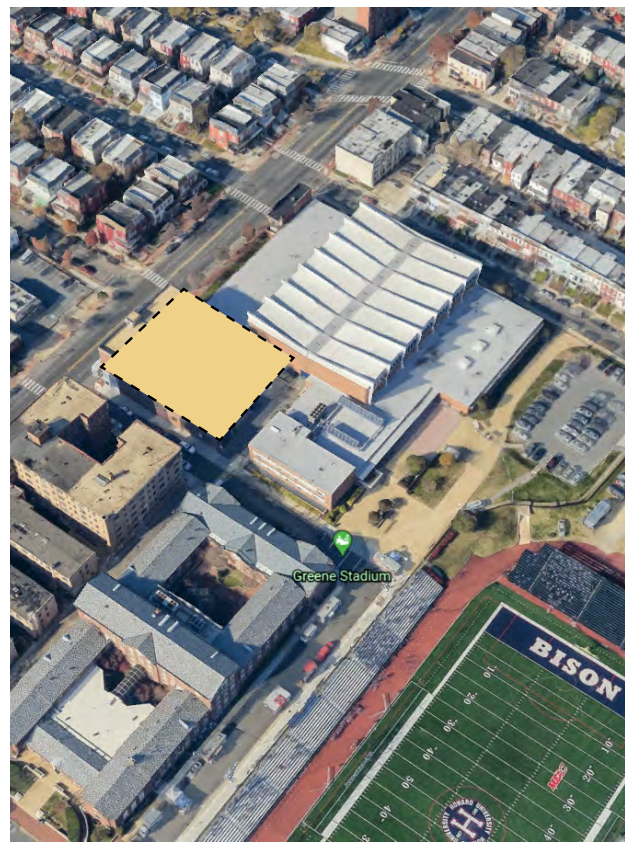


Figure 4.5: Athletics Annex in Context

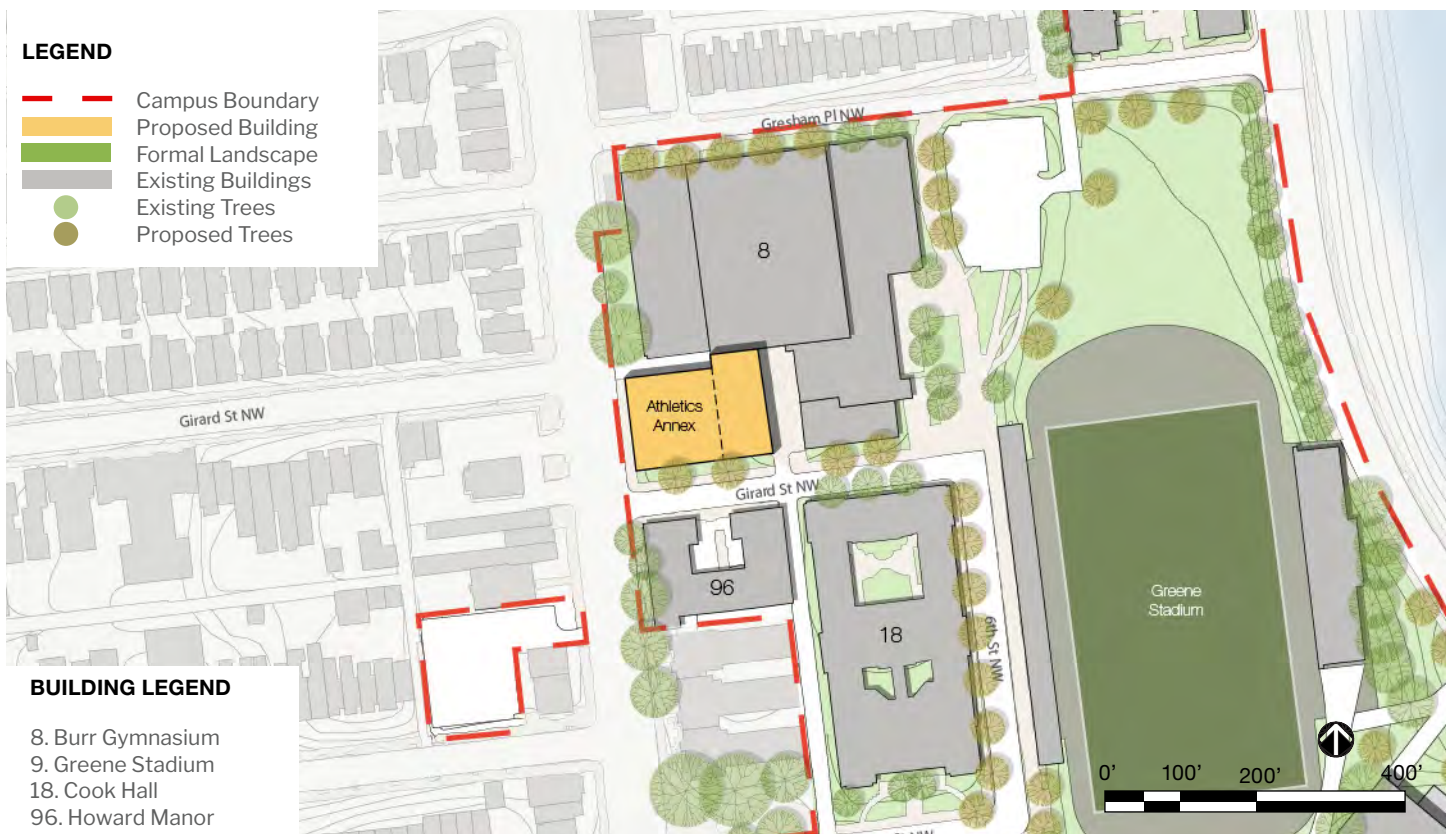


Figure 4.6: Athletics Annex: Plan View

4.2 (B) Center For Arts & Communications

A new Center for Arts and Communications (CAC) will rise on the northern end of the Yard, directly north of Childers Hall. The multi-story facility will house studio-based learning environments, classrooms, offices, and support spaces for programs such as the fine and performing arts, architecture, and communications. Optimally, the university’s media stations would also maintain a presence within the facility.

The co-location of synergistic programs will create opportunities for interdisciplinary studies and collaboration. The core campus location will enable better event synchronization with other major event venues within the northern end of campus.

The concept retains three significant facilities (Cramton Auditorium, Ira Aldridge Theatre, and Childers Hall), and introduces a new state-of-the-art academic facility that creates a fusion environment of old/new facilities.

Historic Preservation Considerations

The proposed CAC development site is currently occupied by the University’s Fine Arts complex made up of the College of Fine Arts including Lulu Childers Hall, Cramton Auditorium, and the Ira Aldridge Theater.

The development concept retains the existing buildings and envisions construction of a new facility along the rear north and east elevations, in the location of an existing asphalt parking lot.

The existing buildings were designed by the collaboration of prominent Black architects Paul R Williams and Howard University Architect Hilyard R. Robinson.

These three facilities were part of the 1951 campus development plan formulated by the General Services Administration (GSA) during the presidency of Mordecai Johnson.

The three buildings are not currently designated as historic landmarks; however, Childers Hall forms the northern boundary of the upper quadrangle, also known as “the Yard,” which is designated a National Historic Landmark (NHL) Historic District and is listed in the National Register of Historic Places. Childers Hall, Crampton Auditorium, and Aldridge Theater are potentially significant for their contribution to the development of the University during the mid-twentieth century and for their association with architects Hilyard Robinson and Paul R. Williams.

In consideration of the buildings’ significance and contribution to the development of Howard University, the future addition contemplated as part of the development should be designed in a compatible manner in accordance with the DC Historic Preservation Law and related regulations and guidelines.

Neighborhood Context & Impacts

The CAC site occupies an internal highpoint within the campus, overlooking the McMillan Reservoir, and removed from any adjacent residential neighborhoods. Parking will be provided in a structured facility located beneath the new development. The proposed parking will accommodate future attendees at campus events and performances. The new facility will positively benefit the community with minimal adverse impact.

B. Center for Arts & Communications	
Zoned	RA-2
FAR	1.08 (1.5 Non-Residential)
Height	90' (50' Max/90' Institutional Allowed)
Lot Occupancy	2.6% (60%)

Table 4.6: CAC Site: Zoning Requirements

B. Center for Arts & Communications (CAC) @ 90' Height	
Floors 1 -3	35,491 GSF (each)
Total 1-3 Floors	106,473 GSF
Upper Floors (4-7)	27,011 (each)
Total 4-7 Floors	108,044 GSF
	7 Levels of Academic + Support Spaces
	1 Level of Basement (Not Included in Total)
	2 Levels of Below-Grade Structured Parking
CAC TOTAL	214,517 GSF (GSF Does Not Include any below grade basement/parking)

Table 4.7: CAC Building Data

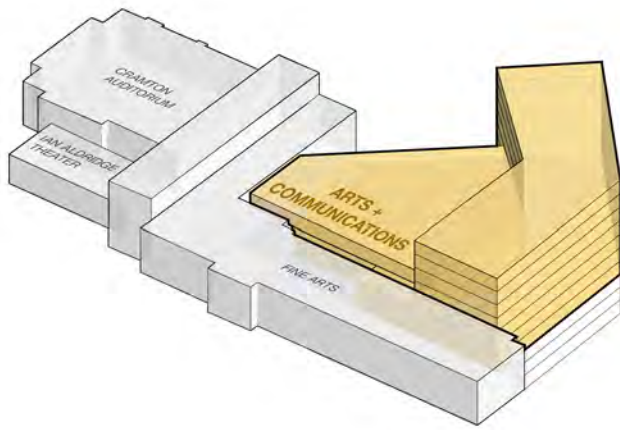


Figure 4.7: Center for Arts & Communications: Massing Study

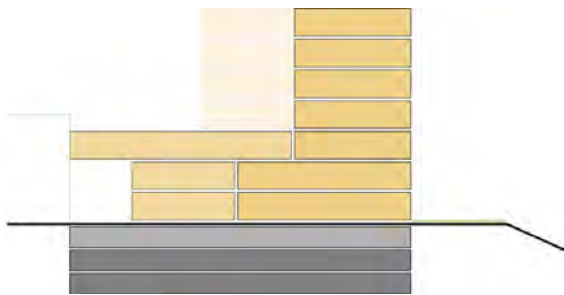


Figure 4.8: Center for Arts & Communications: Diagrammatic Section

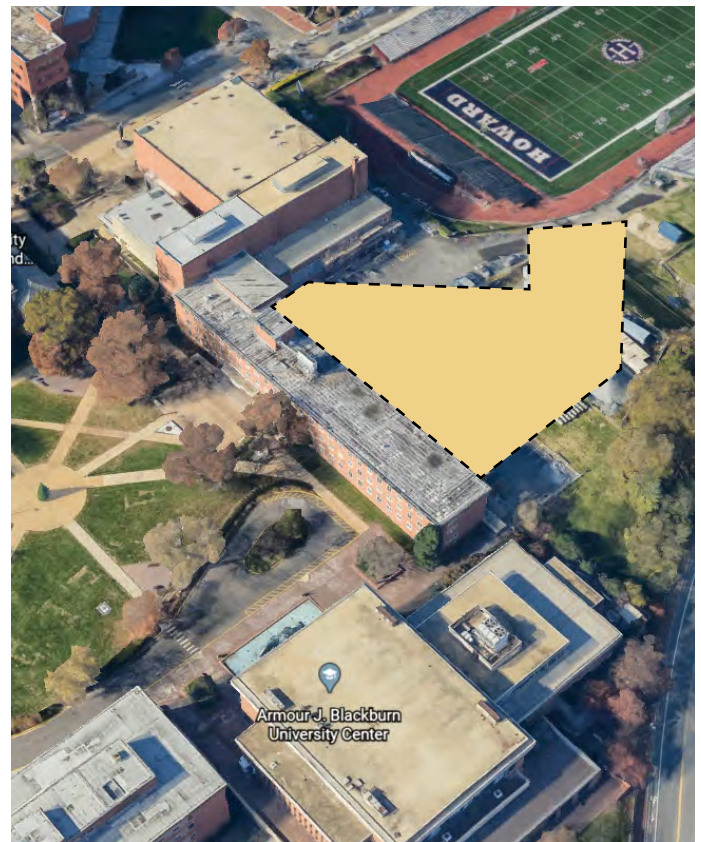


Figure 4.9: Center for Arts & Communications in Context



Figure 4.10: Center for Arts & Communication: Plan View

4.2 (C) Howard University Union

The proposed Howard University Union (HUU) is intended to be flexible to the evolving needs of the campus. A fusion of uses will include: student activities, student affairs, meeting space, study space, academic support, recreational and social spaces. The Union is envisioned directly north of the Undergraduate Library.

The highly active facility will invigorate Howard’s historic Upper Quadrangle and serve to link student housing communities along the east-west corridor of Howard Place. The facility will provide space for student organizations, events, cultural exchange, recreation, and encourage social and academic collaboration.

The new facility is comparably scaled to other nearby buildings and would provide an expansive eastern terrace – potentially linked to the Blackburn Center - that will overlook the McMillan Reservoir.

Historic Preservation Considerations

The proposed HUU development site (see 3.6.3) is currently the location of four existing buildings: Alain Leroy Locke Hall, the Human Ecology Building (Howard University Middle School), and Academic Support Buildings A and B.

The design of the proposed HUU will factor in the relative level of historic significance of these facilities. It is generally anticipated that selective demolition of some or all of these existing buildings will be required to achieve the University’s desired program.

These buildings are not designated historic resources; however, Locke Hall and the Howard Middle School currently form the eastern boundary of the upper quadrangle, which is designated a

National Historic Landmark (NHL) Historic District and is listed in the National Register of Historic Places.

The Howard Middle School building, originally known as the Human Ecology Building, was built in 1960 to the design of University Architect Hilyard Robinson in partnership with Paul Revere Williams. Alain Locke Hall was built in 1964 as a classroom building for the College of Arts and Sciences. The building was designed by DC firm Justement, Elam and Darby.

The Howard Middle School Building and Locke Hall are potentially significant for their contribution to the development of the University during the mid-twentieth century. The Middle School Building may also be significant for its association with architects Robinson and Williams.

Academic Support Buildings A and B were built in 1975 and designed as temporary faculty support buildings by the Atlanta-based architecture firm Turner Associates. The Academic Support Buildings do not appear to possess the historical or architectural significance or integrity necessary to be eligible for individual listing in the National Register or DC Inventory.

Neighborhood Context & Impacts

The HUU development site occupies an internal campus vista overlooking the McMillan Reservoir and removed from any residential areas. The proposed building includes an outdoor terrace on the eastern side, which will activate this previously isolated area along 4th Streets NW.

Parking and service access would occur in a proposed garage beneath the facility. As planned, the Union would not adversely impact the surrounding community.

C. HOWARD UNIVERSITY UNION (HUU)	
Zoned	RA-2
FAR	1.08 (1.5 Non-Residential)
Height	90' (50' Max/90' Institutional Allowed)
Lot Occupancy	3.4% (60%)

Table 4.8: Howard University Union: Zoning Requirements

C. HOWARD UNIVERSITY UNION (HUU) 90' Height	
Floors 1-3	45,770 GSF (each)
Total 1-3 Floors	137,310
Floor 4-7	39,183 (each)
Total 5 Floors	156, 732 GSF
7	Levels of Student Life, Support & Academic Spaces
1	Level of Basement (Not Included in Total)
2	Level of Below-Grade Structured Parking
RSUF TOTAL	284,042 GSF (GSF Does Not Include below grade basement/parking)

Table 4.9: Howard University Union Data

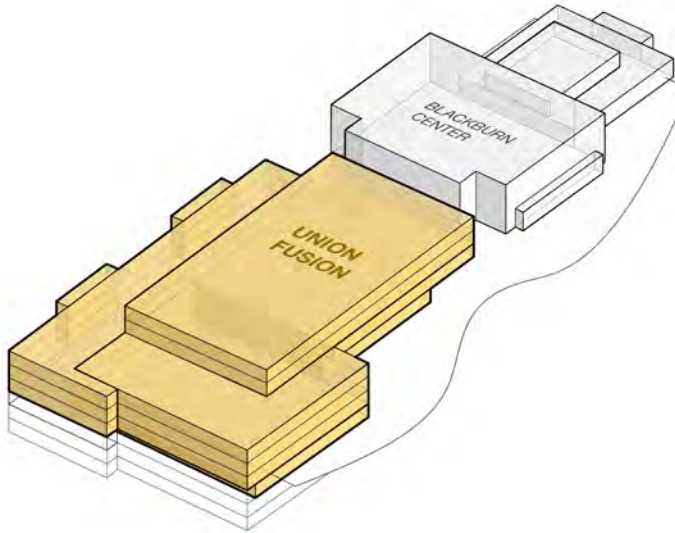


Figure 4.11 : Howard University Union: Massing Study

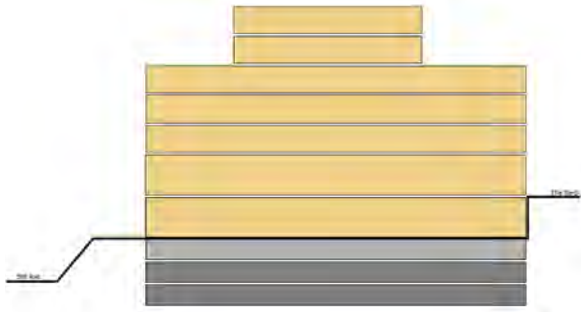


Figure 4.12: Howard University Union: Diagrammatic Section

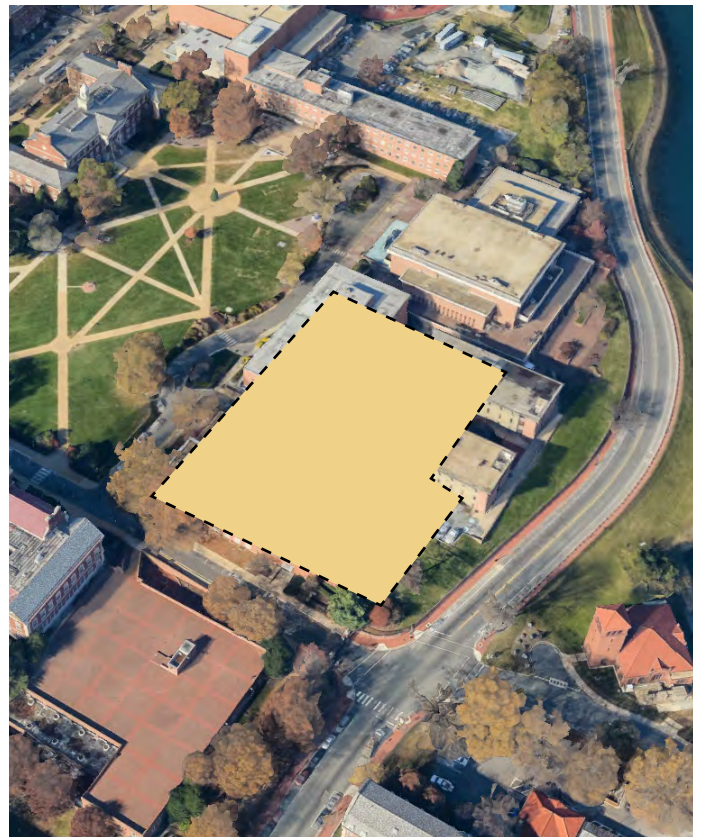


Figure 4.13: Howard University Union in Context



Figure 4.14: Howard University Union: Plan View

4.2 (D) Health Sciences Complex

The new Health Sciences Complex (HSC) will co-locate the colleges of Medicine, Dentistry, Nursing, and Allied Health Sciences, Pharmacy, and Mental Health programs.

The interdisciplinary building will embrace the existing, historically significant C.B. Powell (Freedmen’s Hospital) building. As part of the project, the renovation of the historic structure will provide space for "dry" uses such as offices, classrooms, and administrative support spaces. The seven-story facility will cluster programs requiring access to specialized labs and instructional spaces that create opportunities for interdisciplinary collaboration.

Historic Preservation Considerations

The proposed Health Science Complex and STEM Center are located on the site currently occupied by nine buildings on the block between Bryant, College, Fourth, and Sixth streets NW. The buildings include the C.B. Powell Building, WHUR and WHUT, the Mental Health Clinic, Laser Chemistry Building, Graduate School of Arts and Sciences, and others. The buildings on this block are not currently designated as historic landmarks.

Historically, these buildings were a part of the Freedmen’s Hospital complex, built in several phases between 1908 and the 1942 to replace the Civil War-era hospital complex. The original hospital building (C.B Powell), powerplant, and a morgue constructed in 1908 were designed by the firm of Bruce Price and de Sibour with John Russell Pope as the firm’s associate architect after winning a national competition. Later buildings were designed by local architect/engineer James Berrall. Continuing the original goal of providing

medical services and education to people of color, the hospital complex expanded during the early twentieth century to accommodate an increased patient load and a wider array of medical services, as well as to provide the best possible learning environment for Howard University nurses, medical students, and interns.

Despite the cooperative relationship between the Freedman’s Hospital and Howard’s Medical School, the hospital was overseen by the federal government until 1967, at which time its jurisdiction was transferred to Howard University. The Freedmen’s Hospital remained operational until 1975 when the new Howard University Hospital was opened. Following its closure, the former Freedmen’s Hospital Complex was renovated and converted to classroom and office space for the Howard University School of Communications and several University academic departments. In the 1980s, large additions housing studio space for the WHUT television station and the WHUR radio station were added to the former Freedmen’s Hospital building.

The Freedmen’s Hospital Complex, including the former Freedmen’s Hospital Tuberculosis Annex south of Bryant Street NW, is significant for its critical role in the treatment of Black patients, in the education of Black nurses and physicians during the twentieth century, and its overall innovative contributions to the advancement of medicine in the United States. The complex is eligible for listing in the National Register of Historic Places and the DC Inventory of Historic Sites.

Consistent with the previously approved 2011 Master Plan, the proposed development would include the preservation and rehabilitation of the original Freedmen’s Hospital and ward wings, the

D. Health Sciences Complex (HSC)	
Zoned	MU-2
FAR	.92 (6.0/3.5 Non-Residential)
Height	90' (90')
Lot Occupancy	17.7% (80%)

Table 4.10: Health Sciences Complex: Zoning Requirements

D. Health Sciences Complex (HSC) @ 90' Height	
Floors 1-4	86,921 GSF (each: includes portion of renovated CB Powell/Freedman’s Annex)
Total Floors 1- 4	247,945GSF
Floors 5-7	51,603 GSF (each)
Total Floors 5-7	206,412 GSF
7	Levels of Academic / Support Space
1	Level of Basement (Not Included in Total)
2	Level of Below-Grade Structured Parking
HSC TOTAL	454,357 GSF (GSF Does Not Include any below grade basement/parking)

Table 4.11: Health Sciences Complex Data

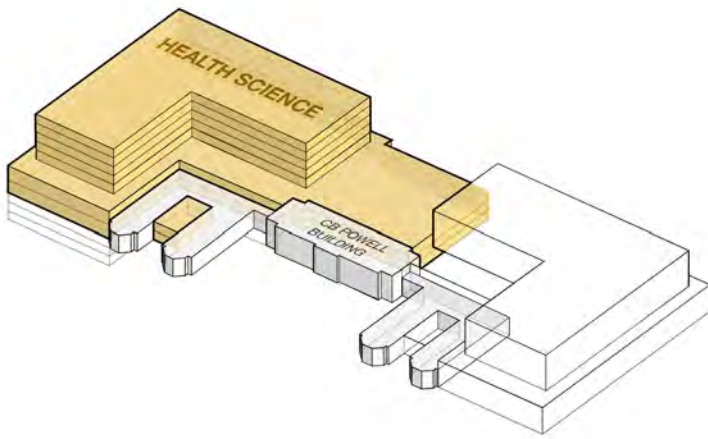


Figure 4.15: Health Sciences Complex: Massing Study



Figure 4.17: Health Sciences Complex: Context

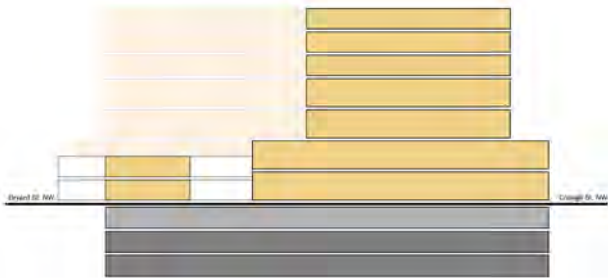










Figure 4.16: Health Sciences Complex: Diagrammatic Section

LEGEND

-  Campus Boundary
-  Proposed Building
-  Formal Landscape
-  Existing Buildings
-  Proposed Renovation
-  Existing Trees
-  Proposed Trees
-  Future Buildings

BUILDING LEGEND

- 2. Wonder Plaza
- 7. Biology Building
- 13. C.B. Powell Building
- 15. Chemistry Building
- 16. Chemical Engineering
- 35. College Hall North
- 42. International Affairs
- 47. College of Pharmacy
- 48. Power Plant
- 55. Physics Building
- 58. Early Learning Center
- 200. Health Sciences Library

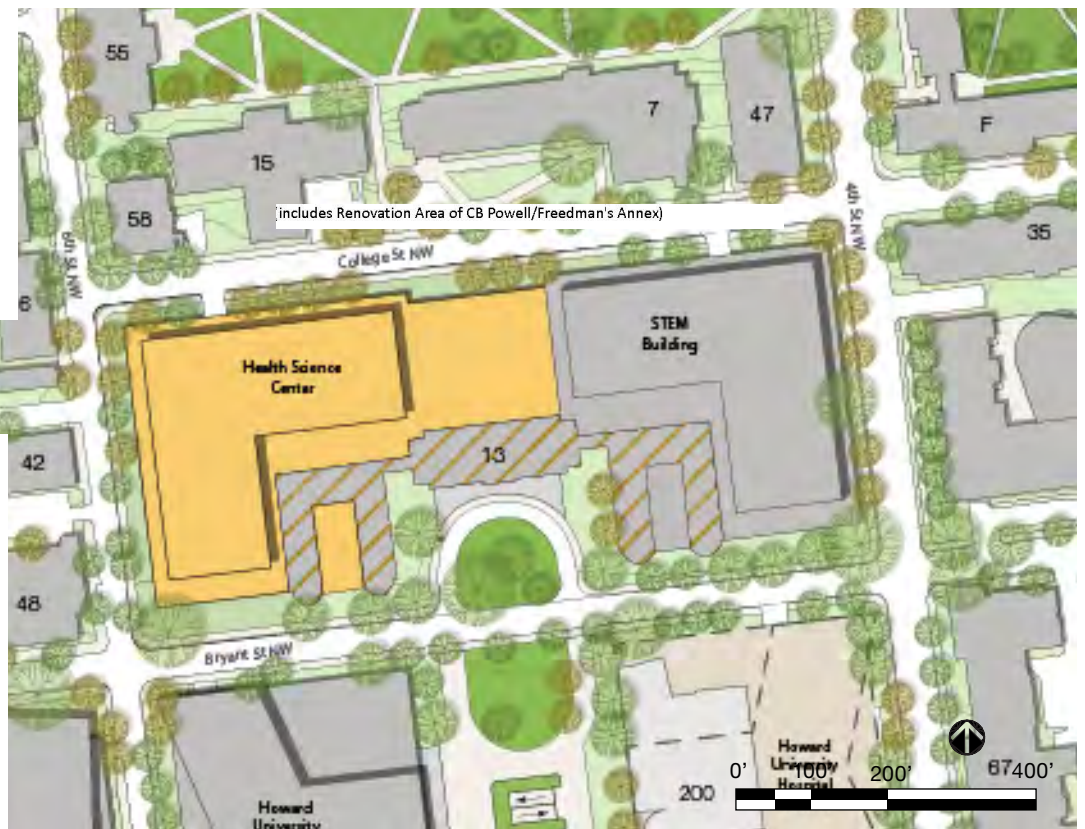


Figure 4.18: Health Sciences Complex: Plan View

centerpiece for hospital administration and patient treatment. Later ward additions and support structures, including the original power plant, stable and morgue, Home for Nurses, and Home for Internes and Residents, would be demolished. The new STEM and Health Sciences buildings would be constructed to the rear of the original hospital to fill the block with academic and research uses.

Neighborhood Context & Impacts

The Health Sciences Complex site is within the campus core, and is removed from campus/community edges. The development of the proposed facility will result in the renovation and adaptive reuse of the C. B. Powell Building, which would be a benefit to the University and the City. A below-grade parking structure is planned, with access and loading from College Street NW. As planned, the HSC facility would minimally impact the neighboring communities.

4.2 (E) STEM Center

A new lab-intensive STEM Center (STEM) will rise adjacent to the proposed Health Sciences Center. The STEM facility will also embrace the C.B. Powell (Freedmen’s Hospital) building, which will house general academic, office, classroom, and administrative support space. The seven-story building co-locates science, technology, engineering and mathematics programs to foster interdisciplinary collaboration, innovation, and discovery. This program enables STEM programs that are currently spread across various parts of the campus to be consolidated into one contiguous, state-of-the-art location providing one-stop access to teaching and research labs, office and administrative functions, classrooms, meeting spaces, and other academic and campus support resources.

Together, the STEM Center and Health Sciences Complex will connect to create a comprehensive “cluster” environment for innovation in instruction and research across multiple disciplines.

Historic Preservation Considerations

The historic preservation considerations for the STEM Center are the same as the previous Health Sciences Complex site.

Neighborhood Context & Impacts

The STEM Center project will mirror and link with the Health Sciences Complex within the campus core, which is similarly removed from campus/community edges. A below-grade parking structure is planned, with access and loading from College Street NW. As planned, the STEM facility would not adversely impact the neighboring communities.

E. STEM CENTER (STEM)	
Zoned	MU-2
FAR	2.23 (6.0/3.5 Non-Residential)
Height	90 (90')
Lot Occupancy	16% (80%)

Table 4.12: STEM Center Site: Zoning Requirements

E. STEM CENTER (STEM) 90' Height	
Floors 1-4	79,093GSF Each (Includes portion of renovated CB Powell/Freedman's Annex)
Total Floors 1-4	316,372 GSF (Combined)
Floors 5-7	38,475 GSF (each)
Total Floors 5-7	115,900 GSF
7	Levels of Academic/Support Space
1	Level of Basement (Not Included in Total)
2	Level of Below-Grade Structured Parking
STEM TOTAL	431,797 GSF (GSF Does Not Include any below grade basement/parking)

Table 4.13: STEM Center Data

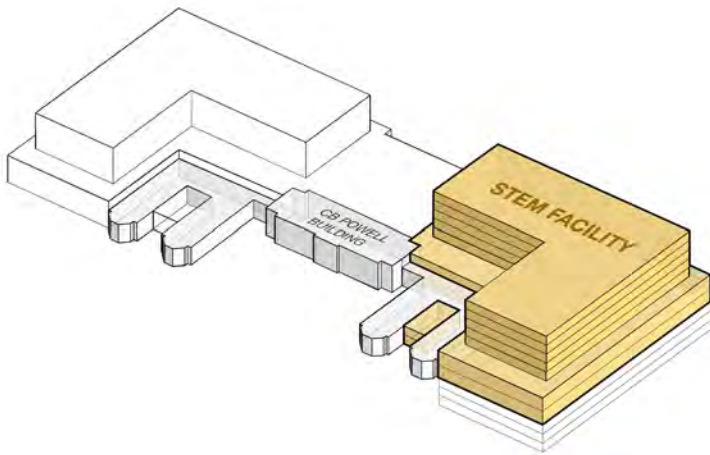


Figure 4.19: STEM Center: Massing Study



Figure 4.21: STEM Center in Context



Figure 4.20: STEM Center: Diagrammatic Section

LEGEND

- Campus Boundary
- Proposed Building
- Formal Landscape
- Existing Buildings
- Proposed Renovation
- Existing Trees
- Proposed Trees
- Future Buildings

BUILDING LEGEND

- 6. Bethune Annex
- 7. Just Hall (Biology)
- 13. C.B. Powell Building
- 15. Chemistry Building
- 35. College Hall North
- 47. Cooper Hall (Pharmacy)
- 55. Thirfield Hall (Physics)
- 58. Early Learning Center
- 67. College Hall South
- 200. Health Sciences Library



Figure 4.22: STEM Center: Plan View

4.2 (F) Apartment-Style Residences (F1 & F2)

The two Apartment-Style Residence (ASR) buildings would occupy the full block with the structures set to allowable setbacks. The concept for the two multi-story facilities is to create a contemporary living learning environment that blends into the surrounding urban fabric.

The C-shaped forms are intended to maximize the number of units that would have views over the adjacent park and to the central Howard campus. Direct access from the campus to the residences is through an existing east/west walkway within the Banneker Recreation complex that acts as an extension of Howard Place and terminates at a planned plaza fronting the entrance points of both facilities.

The site has an extant combined sewer line with a pending restrictive easement to be established along the northeastern corner, which will preclude development in that area. The first floor, fronting Sherman Avenue NW, would house amenities and appropriately scaled commercial/ retail opportunities.

Historic Preservation Considerations

The proposed Apartment-Style Residences development site is currently occupied by asphalt parking lots and a one-story utilitarian building located at 2467 Sherman Avenue NW.

The existing building, constructed of concrete block, was built as a manufacturing and office building in two phases: the western half of the building was constructed in c. 1958, and the eastern half of the building was constructed in 1959.

F. 2 Apartment-Style Residence Building	
Zoned	RA-2* (Requires a Zoning Change)
FAR	3.6 (1.8)
Height	60 (50' Max/90' Institutional Allowed)
Lot Occupancy	40% (60%)
*Requires a Zoning Change	

Table 4.14: Apartments Site Zoning Requirements

Howard University acquired the property in 1992 and re-purposed the building as its Sculpture Studio. The building is not a designated historic resource and is not located within a historic district. The building does not appear to possess the historic or architectural significance or integrity necessary to be eligible for individual listing in the NRHP or the DC Inventory.

Neighborhood Context & Impacts

The two residence facilities would occupy a campus site that is bordered on three sides by public uses: Banneker Park and School to the east; a DC Fire Station to the north; with Garfield Terrace Senior Housing and the Meyer Elementary School to the west. Lastly, a mixed-use retail and residential building (Trellis House) stands to the south on Howard-owned land.

The proposed residential buildings would be near the University's two existing upperclassman residence halls, Howard Plaza Towers East and West. This critical adjacency will help realize an upperclassman housing district on the west side of the campus core.

The new residences will visually enhance that section of Sherman Avenue and will help activate the area. Parking is proposed beneath the facilities to minimize on-street parking by occupants and visitors to the proposed ground-floor retail. The two projects should positively benefit the surrounding community while providing a convenient living-learning environment.

Apartment -Style Residence Buildings (ASR) @ 60' Height	
Floors 1-4	29,170 GSF (F-1) + 26,295 GSF (F-2) Total 55,465 GSF Floor/Combined
Total Floors 1-4	221,860 GSF (Combined)
Floor 5	25,902 GSF (F-1) + 23,255 GSF (F-2) Total 49,157 GSF Floor/Combined
Total Floor 4	49,157 GSF (Combined)
1	Level of Amenities (Offices/Retail /Fitness/Common/Storage/Support, etc.)
5	Levels of Residential Units
1	Level of Basement (Not Included in Total)
2	Level of Below-Grade Structured Parking
ASR TOTAL	271,017 GSF (GSF Does Not Include any below grade basement/parking)

Table 4.15: Apartment Building Data

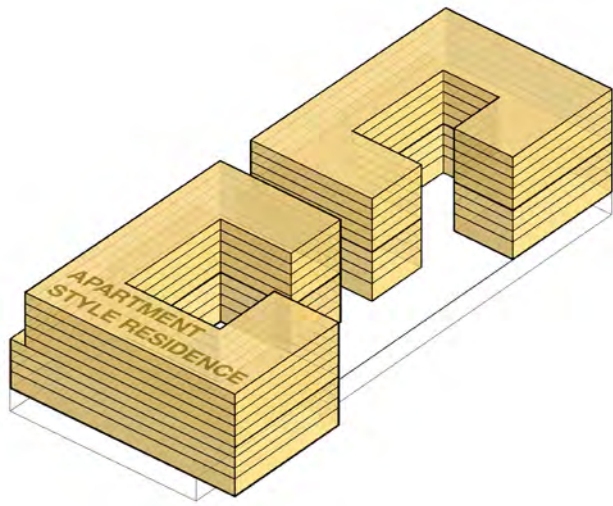


Figure 4.23: Apartment-Style Residences: Massing Study

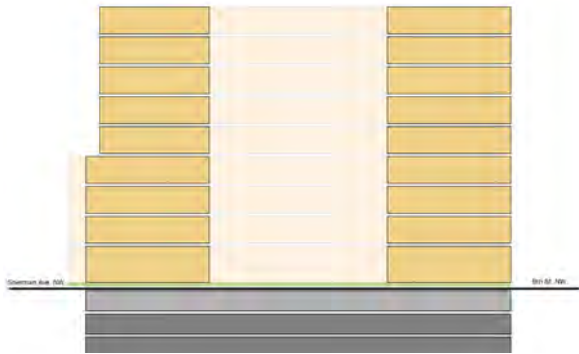


Figure 4.24: Apartment-Style Residences: Diagrammatic Section



Figure 4.25: Apartment-Style Residences in Context

LEGEND

- Campus Boundary
- Proposed Building
- Formal Landscape
- Existing Buildings
- Sewer Line
- Existing Trees
- Proposed Trees



BUILDING LEGEND

401. Harrison Brothers Building

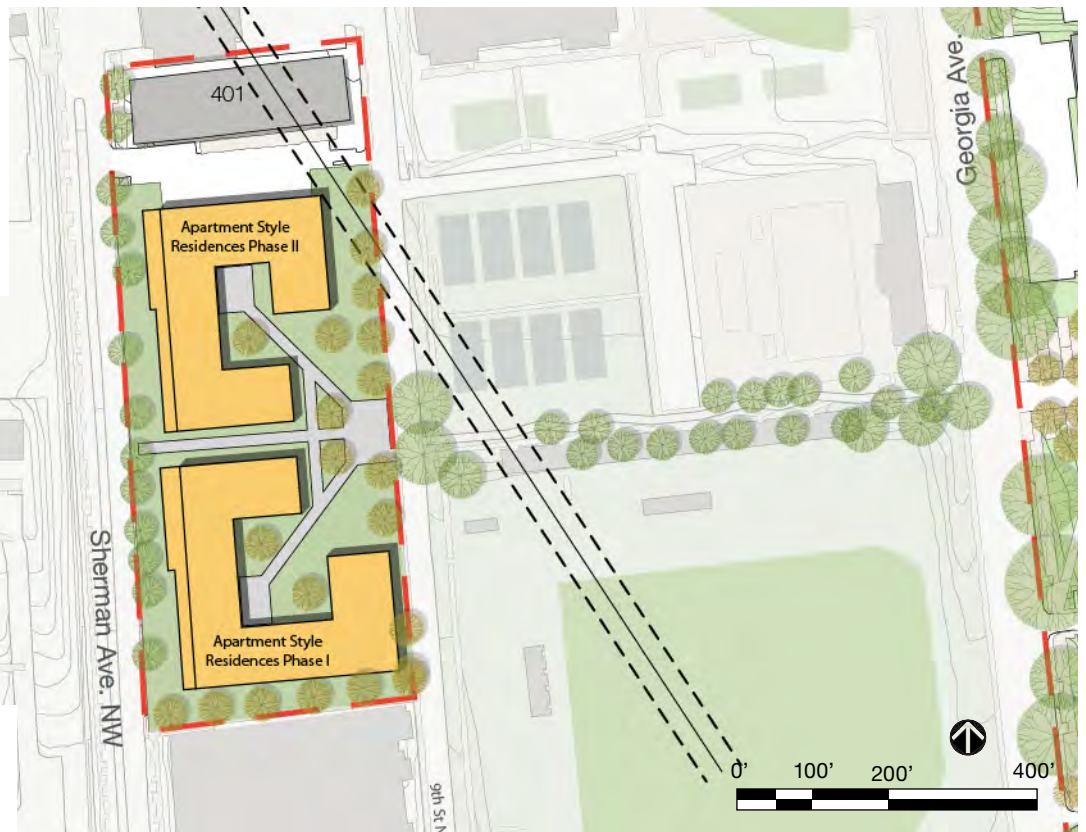


Figure 4.26: Apartment-Style Residences: Plan View

4.2 (G) Medical Office Building

4.2 (H) Howard University Hospital (H1 & H2)

The Development of a new state-of-the-art teaching hospital and trauma center is a cornerstone of Howard’s commitment to service. The proposed Medical Office Building would be a seven-story, 180,052 GSF outpatient clinic facility, and the new seven-story, 677,045 GSF Howard University Hospital (HUH) will be an advanced, modern teaching hospital and trauma center.

The state-of-the-art facilities will serve both the planned health sciences programs and the DC community. The two adjacent facilities will occupy two sites on either side of Sixth Street between W and Bryant streets. Beyond the 10-year planning period, an interconnecting future phase (H2) is envisioned to the east of the proposed HU Hospital site (H1) in order to provide additional clinical operations and patient beds, as needed.

Historic Preservation Considerations

There are four existing buildings located on the two proposed sites, all of which would be demolished to accommodate the new hospital.

The first site, identified as building/site G, is located on the west side of 6th Street, and is currently occupied by two brick buildings located at 2230

Sixth Street NW and 2216-2220 Sixth Street NW. Neither building is currently designated.

2230 Sixth Street NW was built in 1940 to house and maintain the truck fleet of the Continental Baking Company, located nearby in the former Corby Baking Company complex on Georgia Avenue NW. Howard University obtained the property in 1993 and has utilized the building for storage. The building does not appear to possess the historical or architectural significance or integrity necessary to be eligible for individual listing in the National Register or DC Inventory.

2216-2220 Sixth Street NW was initially built in 1940 as offices and a distribution facility for the District News Company, owned and operated by Joseph Ottenstein who served as president of the company. It was expanded in 1946, 1954, and 1957 to accommodate growth of the company before moving to a new facility on Bladensburg Road.

The property was sold to the University in 1963 and it was renovated and reconfigured for use by the Howard University College of Medicine as office and lab space for the Human Genome Center. Today, the building is vacant. The building is potentially significant for its association with the original owner, the District News Company; however, past renovations to accommodate its

G. Medical Office Building	
Zoned	PDR-2*
FAR	2.46 (6.0/4.0 Non-Residential)
Height	90 (90' Max)
Lot Occupancy	36% (80%)

H. Howard University Hospital	
Zoned	MU-2
FAR	2.34 (6.0/3.5 Non-Residential)
Height	90 (90' Max)

Table 4.16: HUH & MOB Site Zoning Requirements

G. Medical Office Building (MOB) @ 90' Height	
Zoning	PDR-3
Floors 1-2	32,000 GSF (each)
Total Floors 1-2	64,000 GSF
Floors 3-7	29,013 GSF (each)
Total Floors 3-7	116,052 GSF
	7 Levels of Office + Support Spaces
	1 Level of Basement (Not Included in Total)
	2 Level of Below-Grade Structured Parking
MOB TOTAL	180,052 GSF (GSF Does Not Include any below grade basement/parking)

H. Howard University Hospital (HUH) Phase I @ 90' Height	
Floors 1-2	82,000 GSF (each)
Total Floors 1-2	164,000 GSF
Floors 3-6	53,900 GSF (each)
Total Floors 3-6	215,600 GSF
	B1 Below Grade Level Parking
	B2 Below Grade Level HU Program Service/MEP/Parking
	B3 Below Grade Level Structured Parking
HUH TOTAL	677,045 GSF (GSF Does Not Include any below grade basement/parking)

Table 4.17: HUH & MOB Data

change in use from an office and distribution warehouse to medical use have substantially diminished its integrity. Consequently, the building does not appear to be eligible for individual listing in the National Register or DC Inventory.

The second site, referred to as site/building H1, is located to the east of Sixth Street and is currently occupied by two buildings including a three-story plus basement brick building later occupied by the College of Nursing and Allied Health Sciences (Annex 1), and a three-story building within the south side courtyard of Annex 1, known as Annex 2. Annex 1 was constructed as the Freedmen's Hospital Tuberculosis Annex in 1941 at a time when tuberculosis was unequally affecting the District's African American residents. The TB unit at Freedmen's Hospital was considered crucial for helping to alleviate the crowded conditions of the other designated TB wards. The building was designed by architect Waddy B. Wood in the Stripped Classical style. The building's role in the treatment of tuberculosis was short lived following advancements in the treatment for the disease led to its decline and slow eradication in the District. In 1962, the TB Annex was converted and renovated for private medical patients of the Freedmen's Hospital. Following the building's transfer to Howard University in 1967, the building was re-purposed to house the College of Nursing and Allied Health Sciences.

Annex 2 was constructed in 1970 as a temporary facility to house the University health affairs library. It was designed by Robert Nash and Associates. The buildings were heavily damaged as a result of a steam tunnel rupture and are vacant. Neither building is currently designated as a historic landmark. Annex 1 is significant for its association with the Freedmen's Hospital Complex and is potentially eligible for listing in the National Register of Historic Places and the DC Inventory of Historic Sites. Its condition has been seriously affected as a result of the steam tunnel rupture diminishing its potential for reuse.

Neighborhood Context & Impacts

The proposed HU Hospital and Medical Office Building sites replaces these uses north of their existing locations. This shifts the functions closer to the campus core, which creates better connectivity and more opportunities for collaboration across disciplines. The proposed

buildings will be right-sized to meet the projected future demand for beds, and efficiently configured to occupy less land. Structured parking is planned beneath both facilities, and loading/service would occur from Bryant Street NW.

The new modern hospital and clinical uses within the Medical Office Building will positively impact, through health services, the immediate community, the City, and the greater metropolitan region. The new plan frees up land for future development that would also result in positive impacts on the economy, jobs, and increase housing opportunities. As planned, the combined projects should not result in any undesirable impacts to the neighboring communities.



Figure 4.27: Howard University Hospital & Medical Office Building in Context

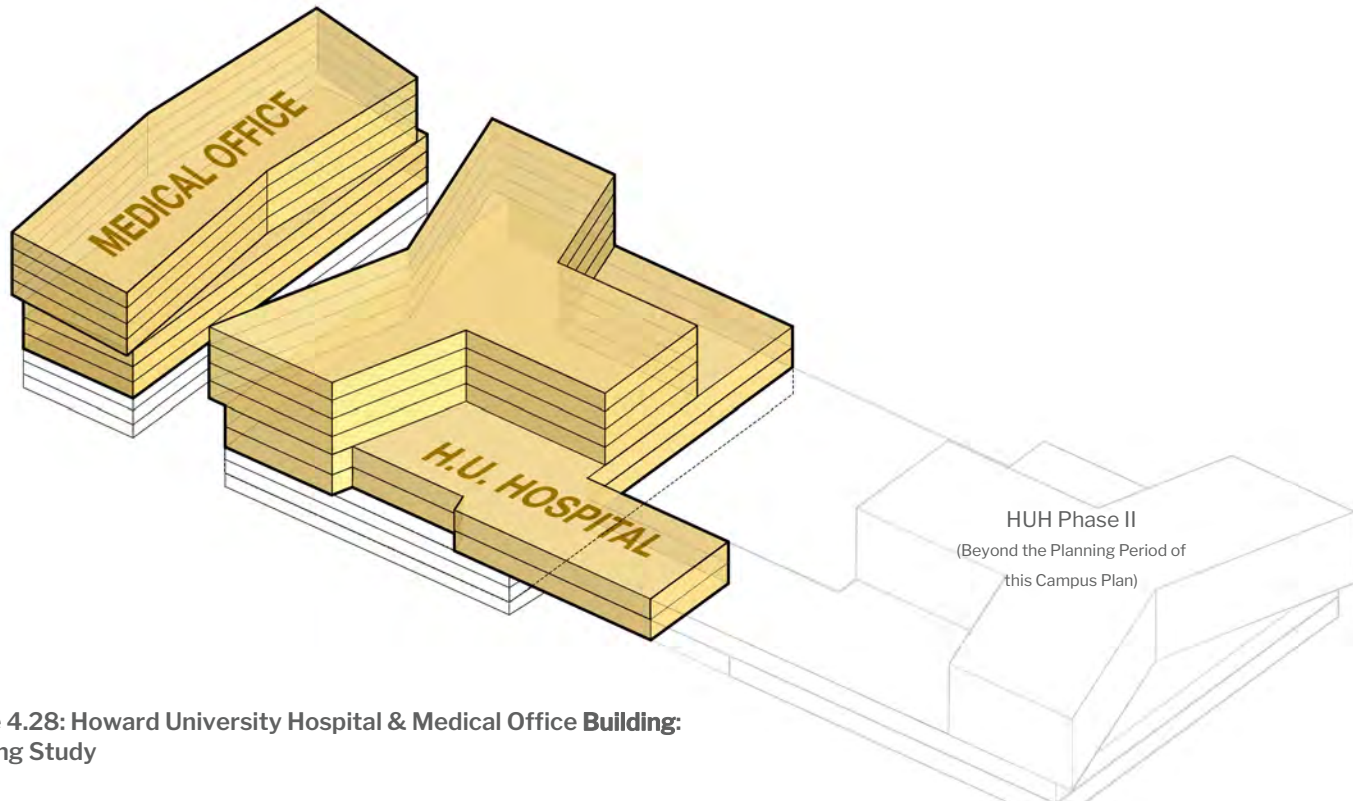


Figure 4.28: Howard University Hospital & Medical Office Building: Massing Study

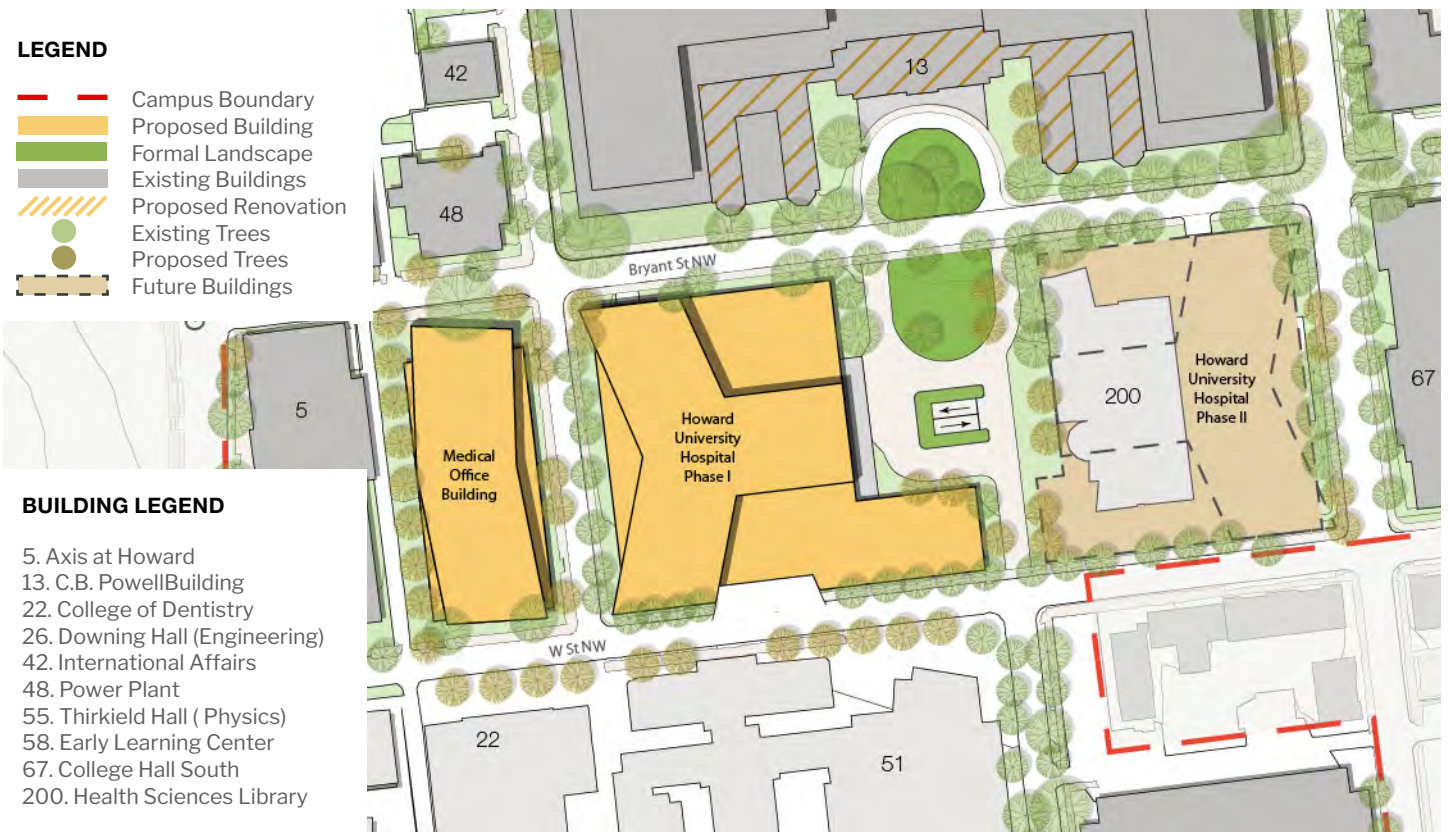


Figure 4.29: Howard University Hospital & Medical Office Building: Plan View

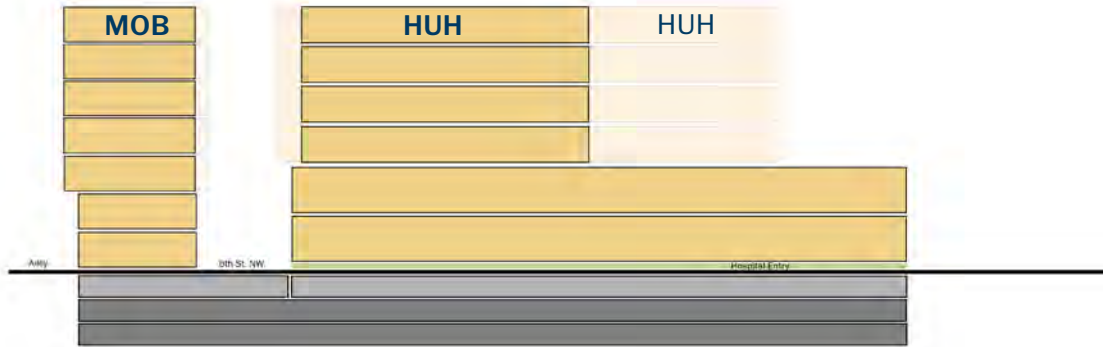


Figure 4.30: Howard University Hospital & Medical Office Building: Diagrammatic Section



Figure 4.31: Perspective In-between MOB & HUH

4.2 (J) Fusion Building

The Fusion Building will create a new epicenter for student engagement and activity, by fusing recreation, club, academic, residential, and retail uses. The proposed concept provides additional flexibility in student life facilities and support spaces while adding density and animation to Georgia Avenue.

The 380,000 SF mixed-use project will include student residences, a recreation center, a Wellness Center and Clinic, the iLAB, a University Club, and appropriately scaled retail. Adjacent to Howard’s Interdisciplinary Research Building, the new building will create a new vibrant campus gateway on Georgia Avenue.

Historic Preservation Considerations

The proposed building is currently occupied by the University Wonder Plaza (iLAB) building, located at 2301 Georgia Avenue, NW. The proposed development program may require full or selective demolition of existing facilities.

The building was originally constructed in 1902 for the Corby Baking Company and was expanded with a large addition to house additional baking and distribution facilities in 1911. The Corby Baking Company was founded c. 1890 by brothers Charles I. and William S. Corby. Corby Baking prided itself on using modern baking technologies such as automation, including machines that could produce approximately 90,000 uniform loaves of bread and cakes daily - totaling half a ton in weight.

The bakery was described in a 1915 as Washington’s largest commercial bakery and as one of the nation’s “most progressive” bakeries, the company perfected and patented several key baking processes and machines that modernized baking, including high-speed mixers with

automatic counters, dough slides, and dough dividers. Many of these inventions and experiments that led to the modernization of baking practices took place at their main plant on Georgia Avenue.

The brothers operated their baking company until 1925 when they sold operations to the Continental Baking Corporation, the makers of Wonder Bread. Continental Baking Co. operated the complex as a baking facility until 1988 when operations were moved to Philadelphia.

At that time, much of the former baking facility was demolished and replaced by a surface parking lot. A smokestack associated with the former bakery ovens (demolished) remains surrounded by surface parking.

The University purchased the property in 1993. Following its acquisition, the remaining portions of the bakery were renovated for University use and the ground floor fronting Georgia Avenue was heavily altered to accommodate retail and commercial use.

Despite these alterations, the remaining building is potentially eligible for listing in the National Register and DC Inventory as a surviving former industrial building and bakery building associated with the Corby Baking Company.

Neighborhood Context & Impacts

The proposed Fusion Building will become a nexus of activity on the western edge of the core campus. The proposed facility will include retail, restaurants, recreation, iLab, wellness, and student housing.

The project shifts housing closer to the campus edge, which creates better connectivity. Utilizing the eastern edge of Georgia Avenue will lessen impacts to the neighborhood while infusing the corridor with valuable animation and foot traffic.

J FUSION BUILDING (FB)	
Zoned	PDR-2
FAR	2.43 (6.0/4.0 Non-Residential)
Height	90 (90' Max.)
Lot Occupancy	36% (80%)

Table 4.18: Fusion Building Site Zoning

J FUSION BUILDING 90' Height	
Floors 1-2	66,668 GSF (each)
Total Floors 1- 2	133,336 GSF
Floors 3-7	37,373 GSF (each)
Total Floors 3-7	186,865 GSF
B1	Below Grade Level Parking / Bldg. Service
B2	Below Grade Level Paarking
TOTAL	320,201 GSF (GSF Does Not Include any below grade basement/par

Table 4.19: Fusion Building Data

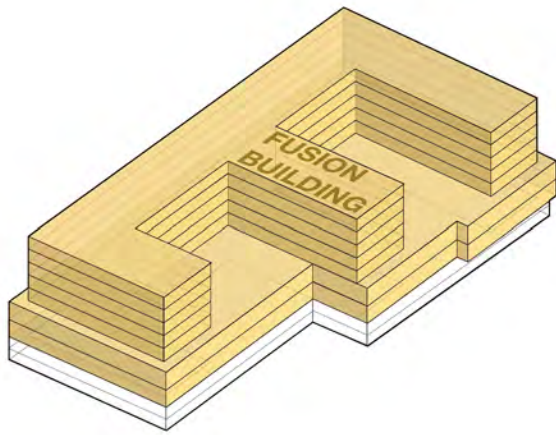


Figure 4.32: Fusion Building: Massing Study

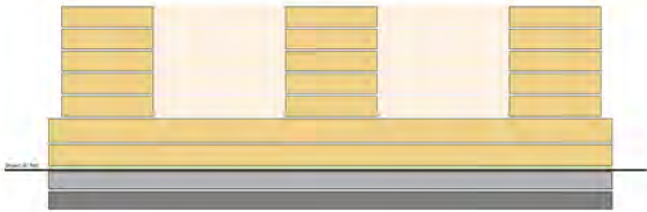


Figure 4.33 Fusion Building : Diagrammatic Section

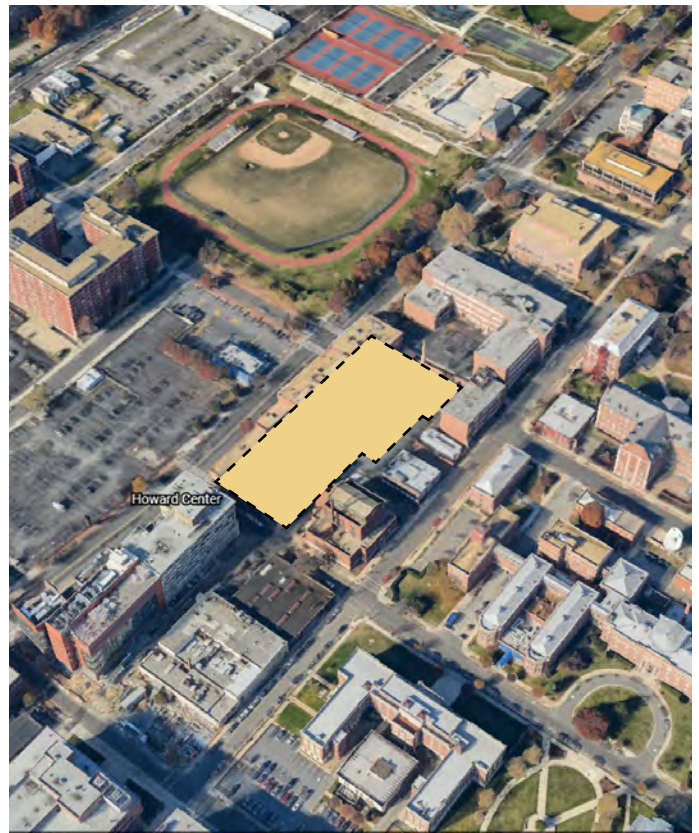


Figure 4.34: Fusion Building in Context

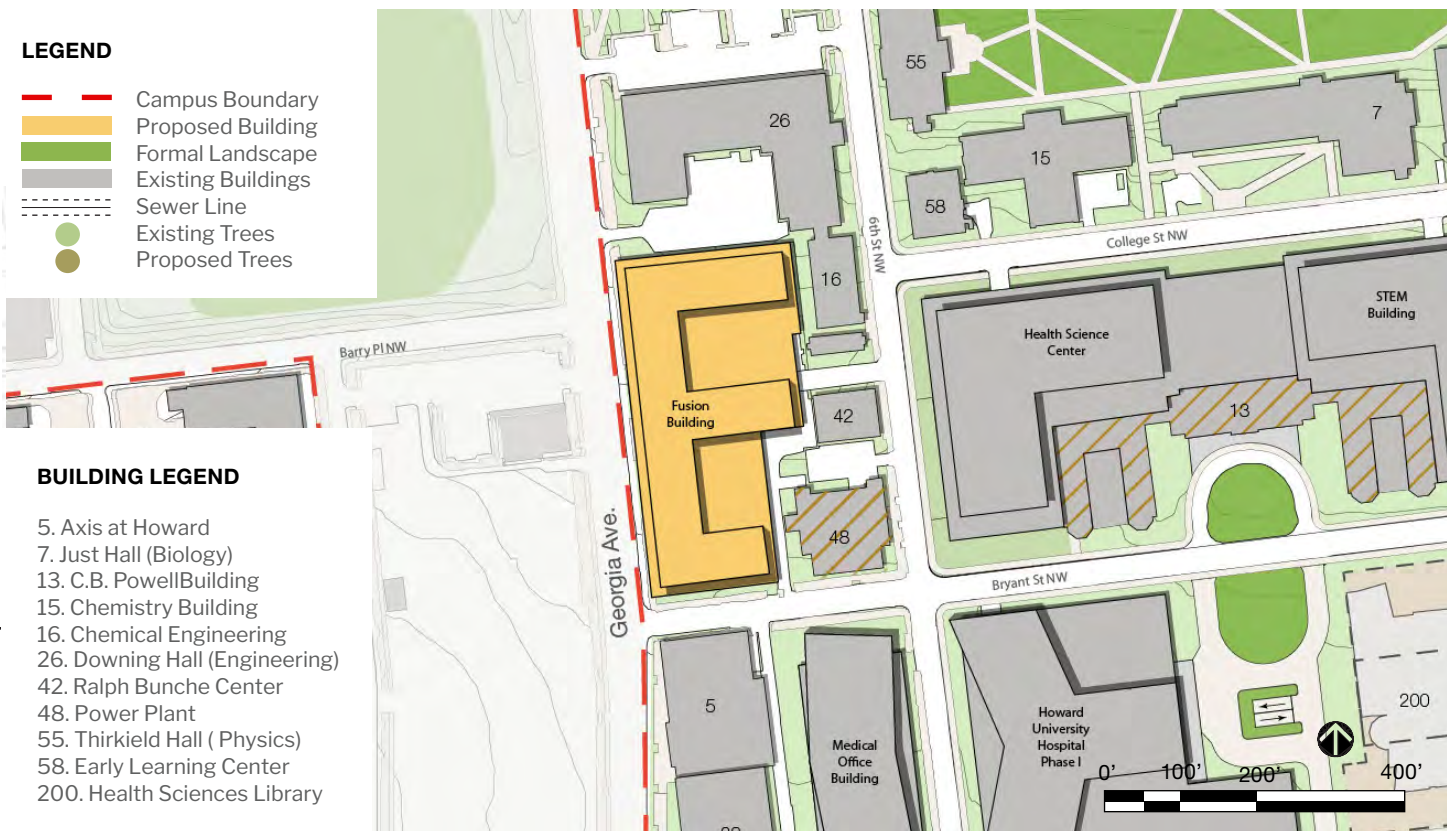


Figure 4.35: Fusion Building: Plan View

4.3 Historic Preservation Study

4.3.1 Purpose, Background & Scope

It is clear that the Howard University Central Campus contains a number of historic buildings and sites that are not currently designated as historic landmarks or as part of a historic district, but are nevertheless significant to the University and the District as a whole. Many of these resources are not widely recognized outside the campus boundaries today yet play an important role in telling a fuller and more complete history of the University and its role in our city and nation.

Howard University is a dynamic institution and, as its development history reflects, has adapted and changed over time to meet contemporaneous needs of its students, faculty, and in the case of the Howard University Hospital, its patients and medical professionals. To survive and remain competitive, the University must continue to meet the needs of its users and respond to constantly changing programming and market-driven influences. Its ability to adapt for the future is complicated by the restraints that come with an urban campus and the need to evolve and utilize its space to its highest potential.

Howard University understands that as it continues to evolve and develop it must consider the impact of proposed development on sites that are most important to the University's history. It also recognizes that it must balance educational, physical, and financial demands with appropriate stewardship of those historic resources.

As part of the 2020 Campus Planning process, Howard University commissioned a comprehensive analysis of the significance and integrity of the historic campus and its individual resources to inform the campus planning and potential for historic designation. This section provides an overview and summary of these efforts.

4.3.2 Methodology

To prepare the historic preservation element of the campus plan, an on-site survey of the campus resources, including buildings, sites, objects, and structures was completed to identify the natural and built resources and provide an understanding of the existing conditions. The on-site survey

took place in the fall of 2019 and spring of 2020. The survey resulted in the identification of 70 buildings, seven sites (designed landscapes), 17 objects (commemorative and artistic), and seven structures.

Simultaneously, archival research was conducted on campus planning efforts and individual resources through local repositories including the Moorland-Spingarn Research Center at Howard University; National Archives and Records Administration (NARA); Library of Congress (LOC); DC Public Library (DCPL), and others; however, the COVID-19 pandemic impacted accessibility of physical collections and thus analysis relied heavily upon available digital collections.

The Long Walk: The Placemaking Legacy of Howard University by Harry G. Robinson III and Hazel Ruth Edwards (1996) was a key resource to understanding and evaluating the history of the campus and its development periods and plans.

On-site survey documentation and archival research of the campus, development periods, individual resources, and architects of the campus buildings were recorded in an extensive resource inventory developed using a cloud-based database service (airtable.com).

The resulting database assisted in the recordation and understanding of campus development patterns and relationships. Findings were incorporated into a historic context for the campus, which is summarized in Section 3.2.1 of the campus plan. The context captures the critical events and patterns of development that define the University Central Campus. The context provides the framework for a more thorough understanding of the following:

- the role of The Freedmen's Bureau and African-American education during reconstruction;
- the founding of Howard University and early campus development;
- the impact of Mordecai Johnson, the University's first Black president, Albert Cassell, the University's first Black University Architect, and the federal governments New Deal on the physical makeup of the campus;
- the University's role in the American Civil Rights movement; and

- the impact of notable Black modernist architects and the General Services Administration on the physical growth of the campus during the mid-twentieth century.

Following the development of the historic context, the campus was evaluated for eligibility for listing in the National Register of Historic Sites and the DC Inventory of Historic Sites utilizing the methodology set forth in National Register Bulletins, *How to Apply the National Register Criteria for Evaluation*, *How to Evaluate and Nominate Designed Historic Landscapes*, *Guidelines for Local Surveys: A Basis for Preservation Planning*, *Defining Boundaries for National Register Properties*, and *How to Complete the National Register Registration Form*. A statement of significance, evaluation of integrity, and period of significance were developed to support the campus' listing as an historic district in the National Register.

Individual resources were evaluated to determine their contributing status to the significance of the potential historic district. To further aid in an understanding of the significance of the campus and its resources, Traceries completed an evaluation of the Relative Level of Significance (RLS) for each of the individual buildings to recognize each resource's comparative significance to the history and development of Howard University. The RLS for each resource was based on two factors: 1) its individual contribution to one or more of the various aspects of significance that have been identified in the historic context and 2) its historic integrity based on the National Register's seven aspects of integrity. A summary of this evaluation is included in Appendix 5.3 of this plan and shown in figure 4.36 Potential Howard University Historic District and Resource Relative Level of Significance Map.

Following the evaluation, recommendations were formulated for future historic district and landmark designation.

4.3.3 Summary of Findings

Based on the evaluation, as outlined above, it is clear that a portion of the Howard University Central Campus and the former Freedmen's Hospital merit listing as a historic district and holds sufficient integrity to convey this significance.

Statement of Significance

Founded in 1867, Howard University was created to expand educational opportunities for all races and genders, focusing specifically on African Americans, at a time when the country was undergoing an unprecedented political and social reconstruction following the Civil War. As originally envisioned by Oliver Otis Howard, the 1867 Congressional charter created six academic departments: Normal, Collegiate, Theological, Medical, Law, and Agriculture. The first buildings on the campus were funded by the federal government through the Freedmen's Bureau.

During the twentieth century, under the leadership of several prominent University presidents, the University continued to expand physically and in its academic offerings. Although technically a separate entity, a new Freedmen's Hospital complex was constructed at the southern end of the campus and served to provide the best possible learning environment for nurses and Howard University medical students and interns at a time when opportunities for Black medical professionals were limited. New campus buildings, including those constructed to serve Freedmen's Hospital, reflected a classical aesthetic. Campus buildings constructed during this period were largely constructed under the auspices of Albert Cassell, the University Architect, and reflected Georgian Revival and Classical Revival styles. By the mid-twentieth century, however, the University had transformed from a small, liberal arts college to a full-fledged research university that continued to promote the advancement of minorities. With funding provided by the Federal government and building designs by prominent Modernist Black architects, the campus transformed into the entity it is today.

Beyond this, as a predominantly Black university, the students and faculty of Howard University became increasingly vocal in protesting inequality within American society and within the institution. The Howard University chapter of the NAACP was established in 1937, as the University played an increasingly leading role in the Civil Rights Movement locally and nationally. Howard Law School dean Charles Houston and Thurgood Marshall, the school's most famous graduate, spearheaded an NAACP legal campaign that achieved victories establishing national legal

precedents in the areas of desegregation and racial discrimination. During the 1940s, graduates of the law school became leaders in the direct-action protest movement against discriminatory practices in the District of Columbia. In addition, Howard's School of Religion emerged as an intellectual center which formulated a non-violent approach to protest that was adopted by leaders such as Martin Luther King Jr. and others. By the mid-1960s, the Black Campus Movement called for a greater African American cultural perspective in the curriculum offered at HBCUs. The movement was national in extent, and one of the most important protests associated with it occurred at Howard in 1968 and 1969. These protests ultimately helped to redefine education for Blacks in America.

This rich history leads to a determination that there is a potential Howard University Historic District holding significance under the following areas of significance as identified by the National Register of Historic Places Bulletin How to Apply the National Register Criteria for Evaluation: Education, Ethnic Heritage: Architecture, Community (Campus) Planning and Development, Health and Medicine, and Social History.

The potential Howard University Historic District(s) meets **National Register Criterion A** for its association with the development of Howard University and Freedmen's Hospital and the respective contribution of these institutions to the education and training of African Americans. The potential historic district also meets Criterion A because it served as the location of demonstrations that contributed greatly to the Civil Rights Movement locally and nationally (Related Areas of Significance: Education, Ethnic Heritage: African American, Health and Medicine, and Social History).

The potential Howard University Historic District meets **National Register Criterion B** for its association with the lives of significant persons in our past. General O. O. Howard, commissioner of the Freedmen's Bureau and one of the founders of Howard University, is one such person. Mordecai Wyatt Johnson, the first African American to serve as the President of Howard University, is another.

The potential Howard University Historic District meets **National Register Criterion C** as it reflects several distinct architectural styles that define the campus' physical growth. Its earliest buildings,

of which only two pre-date the twentieth century, are Queen Anne and Romanesque Revival in style. During the first half of the twentieth century, new campus buildings adhered to the Classical, Georgian, and Colonial Revival Styles and were sited in accordance to master planning documents and largely constructed under the auspices of Albert I. Cassell, university architect. Following World War II, Howard University, under the auspices of the General Services Administration and in line with the changing standards for design, began to construct Modernist-style buildings designed by prominent Black architects such as Hilyard Robinson and Paul Revere Williams. The campus maintains possibly the largest group of Modernist buildings within a single campus in the District of Columbia. (Related Areas of Significance: Architecture and Community (Campus) Planning and Development).

Assessment of Integrity

In general, Howard University retains much of its historic integrity in terms of location, materials, workmanship, and association. The historic core of the central campus retains integrity of design, setting and feeling; however, property acquisitions, new additions, and urbanization of the campus along the campus periphery and west of Georgia Avenue during the late-twentieth century have diminished the once defined campus edges and have resulted in the blurring of the campus boundary. Integrity of feeling is diminished as a result of this blurred boundary.

Period of Significance

An appropriate Period of Significance for Howard University should extend from 1867 through 1969 to correspond to the year that the University was officially established through the year that President Dr. James Nabrit, Jr. officially resigned, thereby temporarily quelling civil unrest on the campus. This period of significance encompasses the years of physical growth on the Central Campus and the developments included as part of Albert Cassell's 1932 Master Plan, which established the conceptual framework for the physical characteristics of the campus that persists today. It also encompasses development on the campus during the 1950s and 1960s based on the 1951 Master Plan by the General Services Administration that followed the framework of Cassell's 1932 plan. It excludes later physical growth and development

that resulted in expansion of the campus boundaries and a clear departure from the vision of Cassell under the leadership of Dr. James E. Cheek, who served from 1969 through 1989.

Potential Howard University Historic District

Preliminary boundaries for the Potential Howard University Historic District and contributing and non-contributing buildings are illustrated in Figure 4.36. The preliminary boundary encompasses the historic core of the central campus and its contributing buildings and landscapes. The boundary is bound by Harvard Street to the north, Fourth Street, NW to the east, Bryant Street, NW to the south, and Georgia Avenue to the west. The preliminary boundary excludes buildings acquired and/or constructed outside the period of significance and resources that do not contribute to the areas of significance. Areas south of Bryant Street, including the former College of Nursing and Allied Health Building (Building #11), the Howard University Medica School, and the Howard University Hospital are excluded from the boundaries of the potential historic district due to construction outside the period of significance and diminished integrity.

4.3.4 Recommendations

As the 2020 Campus Plan is implemented, Howard University will continue to work with the DC Historic Preservation Office to identify, evaluate, rehabilitate, and sensibly redevelop historic resources on the campus.

In addition, the University should undertake the following actions:

1. Take into account historic preservation considerations in section 4.2 when implementing proposed development on the campus and the potential for development schemes to adversely effect potential historic resources. Consider alternatives that can achieve the University’s goals.
2. Implement maintenance and rehabilitation plans for existing designated historic resources including Andrew Rankin Memorial Chapel, Howard Hall, Miner Building, Frederick Douglass Memorial Hall, Founders Library, and the Carnegie Building.
3. Engage with University and community stakeholders and establish a committee to

communicate and discuss historic preservation findings and collect additional insights and context on the history of the campus and its resources.

4. Work with the DC HPO and stakeholders to refine and nominate the proposed Howard University Historic District to the DC Inventory of Historic Sites and National Register of Historic Places

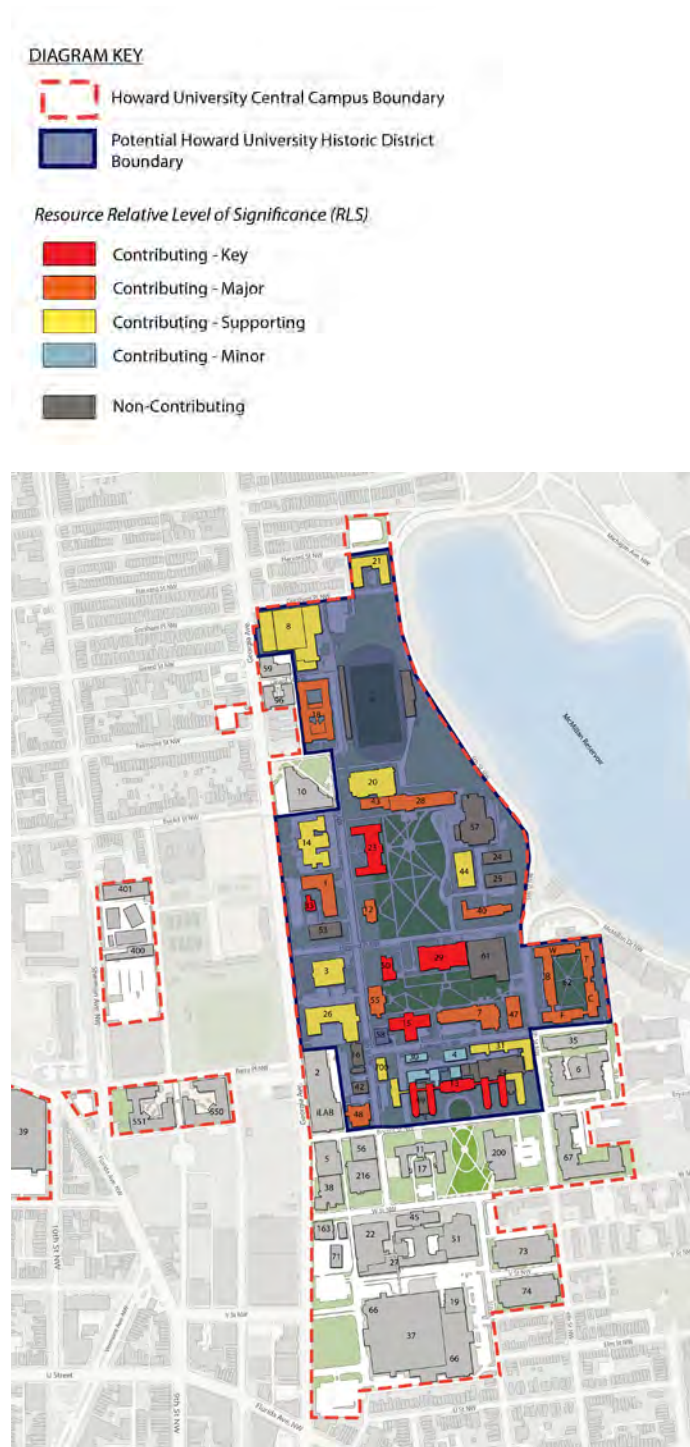


Figure 4.36: Potential HD Boundary and RLS

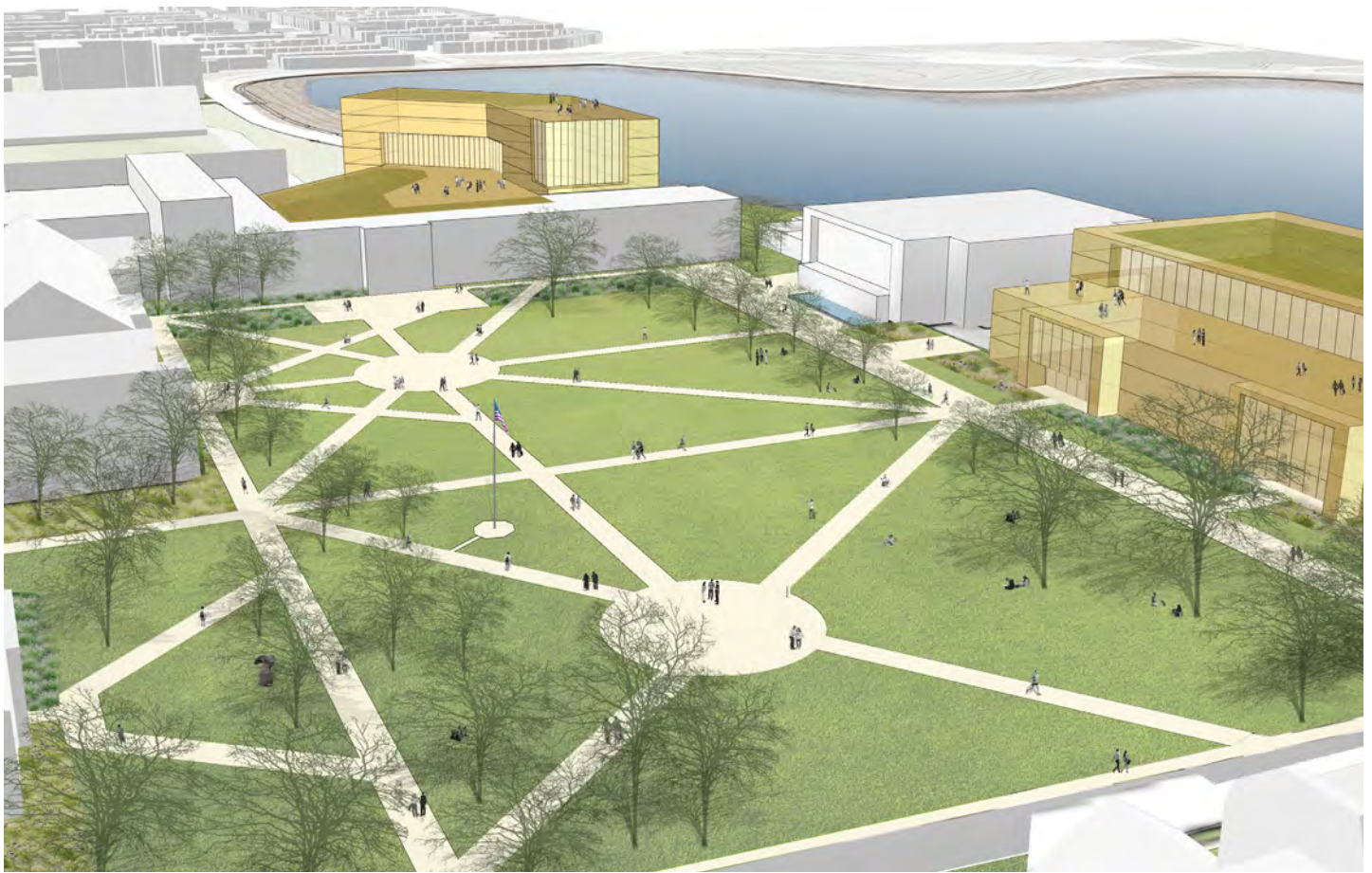


Figure 4.37: The Yard (Upper Quadrangle) Proposed Perspective

4.4 Campus Grounds

4.4.1 Proposed Landscape & Open Space

The campus landscape is a treasured amenity that is remembered by students, faculty and alumnae as a special quality of a university. The design of the landscape at Howard University is equally as important as the design of its buildings. The campus landscape plays many roles in academic life and should provide a rich variety of open spaces as a counterpoint to the intensity of urban and academic life.

Tree Canopy

During the design and further processing of each development project, a survey will be required of all trees with critical roots within the limit of disturbance. Trees located outside of the limit of disturbance should be surveyed if their root system extends into the disturbance zone. A tree protection plan will need to be prepared for review and approval.

Any trees identified to be removed should be evaluated for condition and canopy coverage. Proposed planting plans should promote meeting or exceeding the existing coverage at maturity. Transplant value should be evaluated during the tree survey.

The review process shall include an internal HU review of all trees to be removed or relocated, followed by a review by DC Urban Forestry of any Special or Heritage Trees located within the disturbance zone.

Heritage Trees should not be removed from the site. A tree protection construction plan and a three-year tree management plan should be submitted to Howard University and DC Urban Forestry Division.

Special Trees in fair condition or better should be protected in place when possible. If a Special Tree requires removal, a Special Tree permit must be submitted to DC Urban Forestry Division.

LEGEND

- Campus Boundary
- 2 ft. Topography Lines
- Proposed Trees
- Existing Trees



Figure 4.38: Existing and Proposed Trees

Trees under 14" Diameter at Breast Height (DBH) in good - excellent condition should be protected in place when possible and evaluated for transplant if they conflict with the future development.

Based on review, the following development impacts should be taken under consideration:

- Development site B has one Special Tree that is currently in fair/poor condition that will need to be removed.
- Development site C has two Heritage Trees that will require protection during construction.
- Development site D has one Special tree in good/fair condition that will need to be removed, and four others requiring protection
- Development site G has one Special Tree in fair condition that will require protection.

Enhanced Landscapes

Significant landscape improvements are proposed in the Landscape Plan to raise the general quality and first impressions of the Campus. The Landscape Plan reinforces the principal organizing elements of the Campus - the Upper, Lower, and Southern (Freedmen's) Quadrangles - and is designed to extend the picturesque quality of the best landscape area - the Upper Quadrangle, known as 'The Yard.'

The Yard (Upper Quadrangle)

The Landscape Plan reconfigures the existing service drive and expands the design of the historic Upper Quadrangle into the reclaimed space. Walkways are modified to focus on the pedestrian experience with additional nodes and areas for informal gathering, while still accommodating service and loading access to the current and future buildings.

The pathway materials of the new east walk should be reinforced to support emergency and service vehicles, while aesthetically matching the feel of the original pathways within the Upper Quad. The new extended quad could accommodate opportunities for smaller plazas for seating. Planted stormwater management swales and rain gardens should be integrated into the base building planting design to mitigate runoff and key paving areas. The Yard's lawn includes additional canopy trees

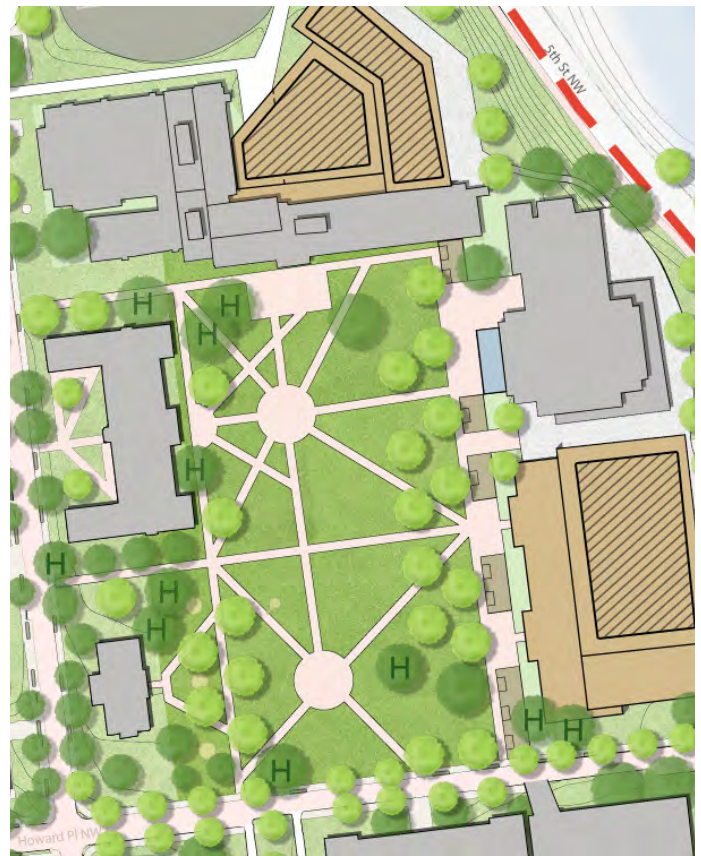


Figure 4.39: The Yard - Proposed Plan



Figure 4.40: Open Space

planted along the east and west perimeters in a formal arrangement. The main lawn should be maintained as an open lawn to accommodate large gatherings and functions, with minimal improvements that would impede the flexibility of event layout.

Transition spaces between the new Arts and Communications building, the Blackburn University Center, and the new Union building should offer glimpses of the McMillian Reservoir. Stormwater management structures or fountain features can help build the visual reference between the campus and the reservoir. The eastern building terraces will provide views overlooking a naturalized slope of native plant species and the reservoir.

Hospital Plaza

The Hospital Plaza supports pedestrian and vehicular circulation for doctors, patients and visitors. The entrance plaza should relate to the historic arched ambulatory driveway on the north side of Bryant Street. Hardscape, planting and site furnishings should be of a similar form, connected by a decorative mid-block pedestrian crossing.

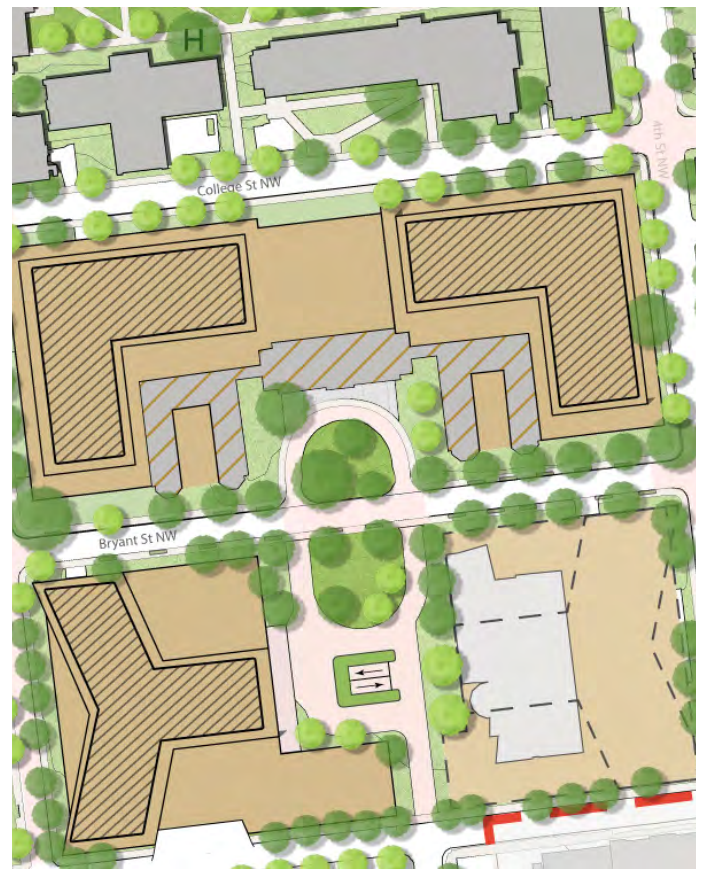


Figure 4.41: Hospital Plaza Landscape Plan

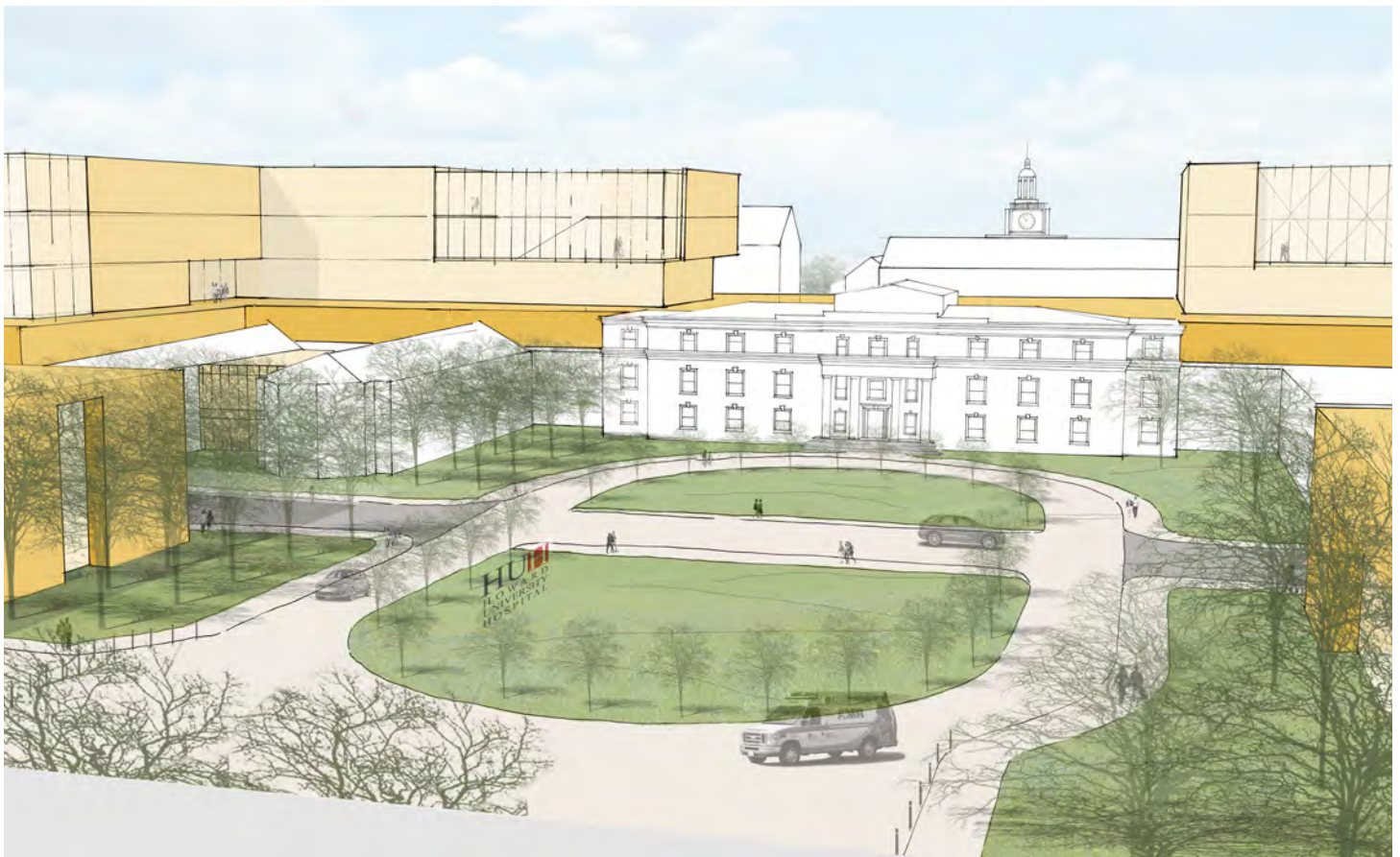


Figure 4.42: The Hospital Plaza Landscape Perspective

The entry plaza and central green space should offer inviting open spaces for seating, gathering and respite. Canopy shade trees and low growing buffer planting should be integrated into the planting to reinforce the softscape zone from the drive area. Consideration should be taken in the below grade garage design to accommodate trees and stormwater management structures. The hospital site should display legible directional signage and lighting elements to highlight vehicular and pedestrian zones within the space.

Remaining green space on this site should be activated for campus & community use to offset the proposed development footprint.

4.4.2 Gateways, Connections & Nodes

Streetscape enhancement strategies for all connective environments should include:

1. Comprehensive stormwater management through low impact strategies.
2. Wider sidewalks to accommodate pedestrian movements.
3. Accessible sidewalks and roadway crossings
4. Enhanced soils and expand the soil volume in tree pits to promote healthier tree growth.
5. A legible wayfinding system
6. Safety and security on and around campus.
7. Continued partnership with the DC Department of Transportation.

This master plan identifies three (3) types of connective environments: Edge Treatments, Campus Spines and Neighborhood Spines.

It also identifies two (2) types of focal environments: Gateways and Nodes.

Gateways & Nodes

Campus gateways are the visual identifiers that reflect main points of entry to the campus (edge gateways), and entrance thresholds into special spaces within the campus (internal gateways).

Originally, the primary gateways to Howard University were located at Sixth Street and Howard Place in the 1930's by Albert Cassell (Campus Architect).

Albert Cassell collaborated with Landscape Architect David Williston, and Architect Louis Frey to integrate landscape elements into the development plans.

These impressive gateways were intended to provide visual first impressions of the Campus at strategic locations and offer a sense of welcome and openness while delineating the boundaries of "sacred" space. As the Campus has grown, these gateways are no longer on the perimeter of the Campus and serve as internal pedestrian gateways to the Upper Quad.

Nodes are focal points of intersection that present unique placemaking and wayfinding opportunities.

Edge Treatments

Important street corridors, such as Georgia Avenue and streets shared with the neighborhoods provide the primary initial impression and public edge for the University.

Edge gateways should reinforce campus identity and serve as opportunities to expand campus placemaking into the public realm. Amenities to consider integrating into edge gateway design include plaza spaces, seating elements, public art, interpretive/interactive signage, and enhanced planting treatments

There are two (2) Edge Treatments in the study area:

1. The Georgia Avenue Edge serves as the main commercial spine to the campus. Where there is opportunity, create open spaces that fosters engagement between campus life and the neighborhood. A key location to consider is the intersection of Georgia Avenue and Howard Place, in front of the College of Engineering and Architecture.
2. The 4th Street/McMillan Reservoir Edge serves as a currently under-realized opportunity to create a safer and more harmonious pedestrian connection along the eastern edge of the campus boundary. This corridor should take advantage of views to the adjacent McMillan Reservoir site and connect the northern and southern ends of campus to the campus core.

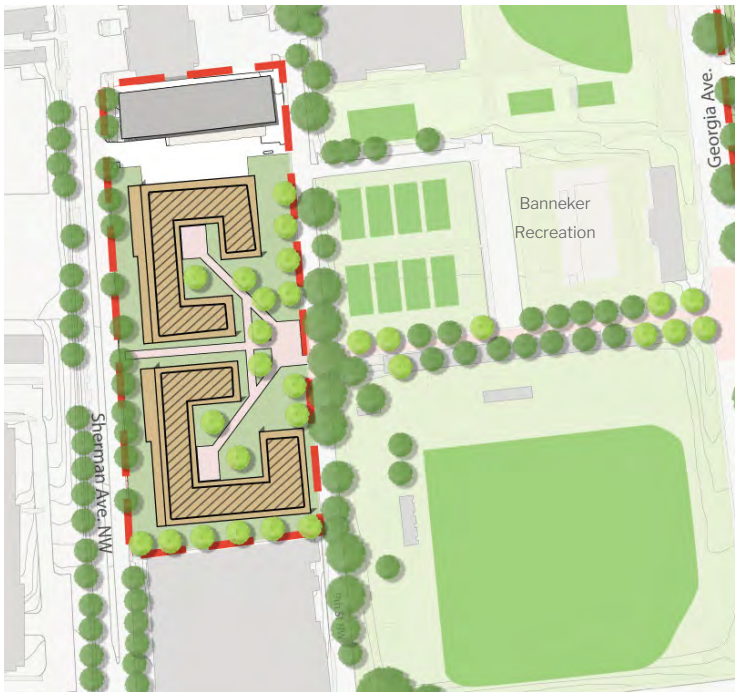


Figure 4.43: Gateway Connection to the Apartments

Campus Spines

There are three (3) Campus Spines in the study area that support intra-campus pedestrian, vehicular and bicycle movements:

1. 6th Street runs north and south, and weaves together all functions of the campus. This spine is the only continuous way to walk through campus from one end to the other. Wayfinding, signage, and tree planting efforts should continue to reinforce this as a greenway.

2. Howard Place runs west to east, connecting 4th Street to Banneker Park. The pedestrian connection continues through Banneker Park to the future residential halls on 9th Street, and further to the Sherman Avenue corridor.

3. College Street runs west to east, connecting 6th Street to 4th Street. Reclaim surface parking and create open spaces that further articulate the link into the Lower Quad. Consider placing a sculptural art piece in the Lower Quad that is visible from College Street to draw attention up the stairway connection into the space.

Neighborhood Spines

There are two (2) Neighborhood Spines in the study area that support extra-campus pedestrian, vehicular, and bicycle movements:

1. Bryant & W Streets should be two-way streets between Georgia Avenue and 4th Street, and serve as primary vehicular access to the future hospital. Both streets should serve as primary pedestrian and bicycle cross-campus connections.



Figure 4.44: McMillan Reservoir Edge - Aerial Perspective



Figure 4.45: Campus Edge Corridor Treatments

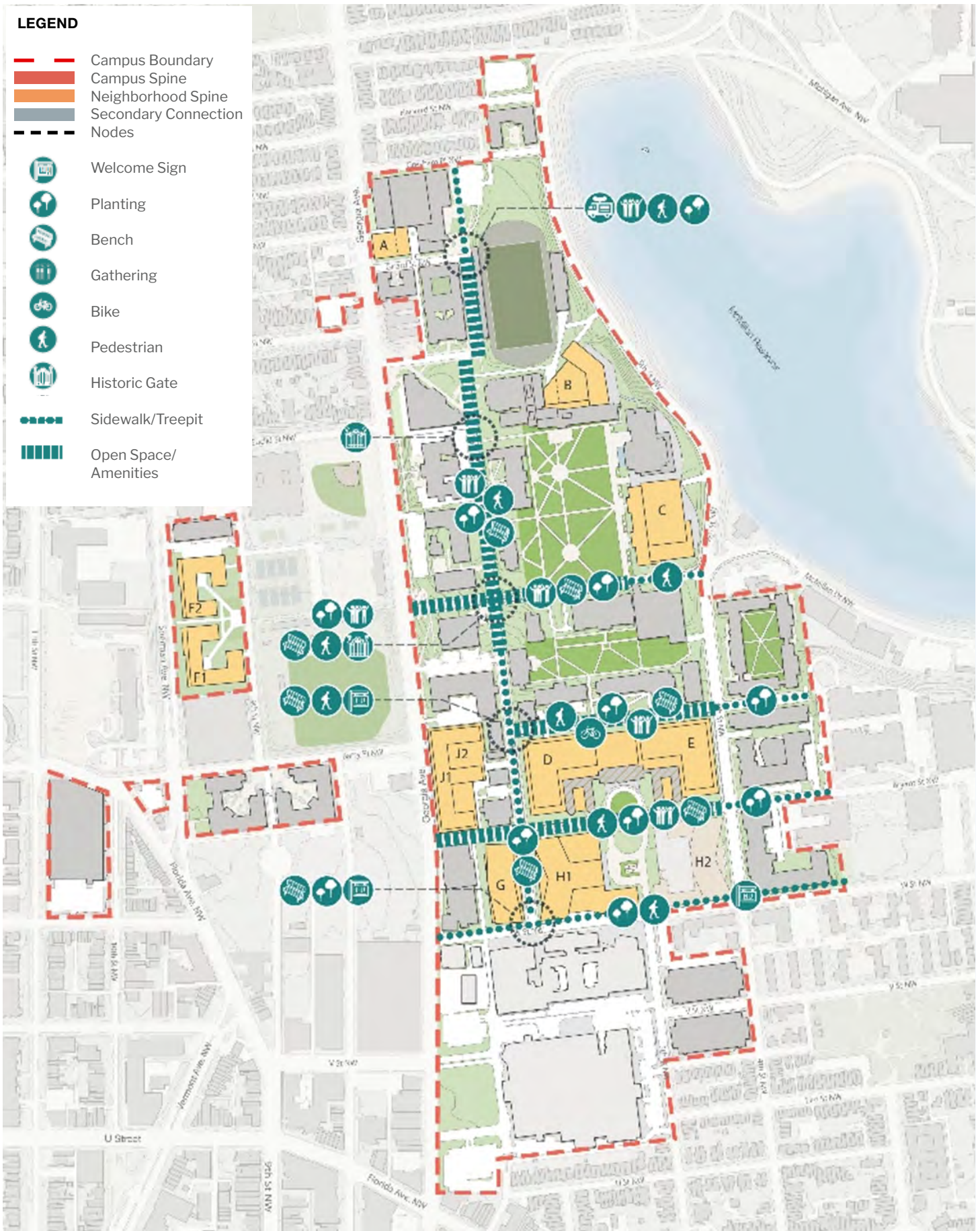


Figure 4.46: Campus & Neighborhood Spine Treatments



Figure 4.47: Proposed Pervious vs. Impervious Surface

4.4.3 Permeable Surface

- Main campus: 3,896,842 sf
- Proposed Building Footprint: 1,458,068 sf
- Proposed Greens: 436,693
- Proposed Permeable / Hardscape: 8.92

4.4.4 Sustainability Considerations

Vision & Purpose

Howard University is a catalyst for change within our society. It embodies the fundamentals of resilience and vision for a sustainable future through its pursuit of human development, and of improving the human condition. As a physical manifestation of such ideas, the campus should reflect these goals in its academics, infrastructure, buildings, operations, administration, and culture of engagement.

As the University prepares students for leadership amid a changing climate, it needs to infuse the student experience with sustainable thinking at every scale. The 2011 Master Plan identified a key planning principle for the University as “Embrace Sustainability.” The challenge for this updated version of the Master Plan would be to “Prioritize Sustainability” in all development, plans, and projects.

Summary

The sustainability guidelines include recommendations for stormwater management, carbon and energy use reduction, sustainable buildings, and recommendations for implementation.

Partnership and collaboration with the HU Office of Sustainability and other key stakeholders should be prioritized in during the design and further processing projects to implement these recommendations. This Master Plan should also consider the outcomes of the resilience planning under way by the DC Mayor’s College and University Sustainability Pledge and Second Nature.

These guidelines support previous recommendations for the University to explore the possibility of participating in the Sustainability Tracking, Assessment and Rating Systems (STARS program) developed by the Association of the Advancement of Sustainability in Higher Education (AASHE). This framework is designed specifically for Universities to implement sustainability in all sectors of higher education, from education to research to operations and administration. Even without certifying, the categories serve as a valuable framework for long range planning, measurements, and improvement.

Energy

- New buildings should be designed to LEED / green building code standards & be required to use energy modeling as a design tool.
- Existing buildings should be benchmarked in the Energy Star system.
- Evaluate modernization of existing central utilities for cost, flexibility, asset monitoring, and sustainability criteria.



Table 4.20: Sustainability Wheel

Community

Develop & improve campus strategy for education, research, and employee development in campus sustainability strategies.

- Create more usable space for gathering.
- Prioritize projects that improve safety.
- Integrate USDOTs complete streets strategies.

Materials

- Implement waste audit to benchmark existing waste streams and identify opportunities for improvement.
- Evaluate building materials (foundation and structure) to reduce embodied CO2 emissions.

Ecology

- Replace turf grass with native & adaptive vegetation.
- Evaluate integrated pest management strategies.

Resilience

- Resilience assessment to evaluate economic, social, cultural, and physical issues of risk analysis / mitigation.

Wellness

- Sustainable food systems
- Expand or improve community garden with green house for year round use.
- Improve walk ability of campus

Water Management

- Replace or adapt existing fixtures (lavatories, shower heads)
- Condensate capture and reuse.
- Meter & track water usage by building.
- Incorporate low-impact development strategies.

Engagement & Administration

The primary focus of this document is on the buildings, infrastructure and built environment. It is recommended to have expand the role of the sustainability committee, office, and/or officer tasked by the administration or governing body. The University’s holistic approach to sustainability is not readily available and clear to students and there should be increased opportunity for this group to advise and implement policies and programs related to sustainability on campus and to develop a plan that includes measurable sustainability objectives and/or include the integrated concept of sustainability in the institution’s highest guiding document.

There is interest from the student body in improving the culture and awareness of sustainability issues on campus. It is recommended that the University conduct an assessment of campus sustainability culture that focuses on sustainability values, behaviors and beliefs. A strategy for campus engagement can be developed through student educators, programs for student life, research opportunities, and employee development. With student and community buy-in, the likelihood of the initiatives being accepted by most is high as the implementation will closely match the needs of the campus community.

Curricular Enhancement

The University should support curriculum that furthers sustainable education. Howard University has a Green Teaching Certificate that is being piloted. This initiative aims to reward faculty members who are green teachers and to enable students to select green courses. Inventory of those programs should be conducted and identified improvements to programs. Majors, degree programs, minors, or concentrations should be catalogued for students to easily access as part of enrollment and recruitment.

Emissions

With climate change being of utmost importance over the next 10 years, it is imperative that the University understand the climate impact of their campus. A first step would be to create an inventory to quantify the institution's greenhouse gas (GHG) and/or air pollutant emissions should be conducted to understand key pollutant liabilities and opportunities for improvement. A more detailed inventory to quantify the institution's Scope 1 and Scope 2 GHG emissions could also be completed to define a robust approach to addressing the Universities impact on climate change. As part of the larger GHG emissions evaluation, the University should develop a data management plan to collect and track information on grid-purchased electricity, electricity from on-site renewables, utility-provided steam and hot water, and stationary fuels and other energy products.

Transportation & Access

The campus has a very high Walk Score with public transit available for most basic needs but safety on the campus is still a concern for students and employees. There are opportunities to improve non-car access on the campus, both for both safety, infrastructure, and sustainability.

With parking being consolidated on the campus, the streets should be reevaluated for opportunities to model USDOT's Complete Streets guidance which promote safety, comfort, and integration of transit networks. The 2011 Master Plan made many recommendations for Transportation Demand Measures (TDM) including increased access to the HU shuttle, bicycling, and pedestrian connectivity; this work should be re-evaluated in the next phase

of this Master Plan and measured to identify where additional improvements can be made.

A concerted effort to improve wayfinding on campus will lead to better utilization of spaces and a safer environment for students with better lighting of pathways, more greenspace along walking pathways and crosswalks on sections of busy streets.

Energy

New or renovated buildings should be designed and built at minimum, in accordance with a published green building code, policy/guideline, or rating system. To meet climate change targets and progressive code development, the University should take a more proactive approach to high performance buildings with the goal of designing to Net Zero for all new projects by 2030. New projects should be required to use energy model as a design tool; when an energy model is performed, higher performance is a typical outcome. An energy model done early in the project might be rough and include many assumptions, versus a more detailed model later in the design process. It can also be used as a cost-control measure, not as an add-on for sustainability.

Existing buildings should be benchmarked in the Energy Star system to measure energy use and identify improvements. It is understood that the campus is undergoing modernization of the existing steam plant as the steam plant is fragile but stable. Assessment is being undertaken by Engie to assess the University's steam plant operations and equipment, and steam tunnel in order to inform decision making related to steam plant modernization, cost, utility Master Planning, asset monitoring, and sustainability.

The University is working to develop the largest renewable energy project of any historically black College and University. A large on-site solar plan for 1.3MW was proposed. College Hall has been outfitted with solar panels but it not clear how much of that plan has been implemented and identification of next steps.

There are significant opportunities for energy retrofits and building energy improvements of existing building stock. In 2017, the University completed an exterior LED retrofit project which not only improve efficiency but improve safety and

reduce maintenance costs. DCSEU (DC Sustainable Energy Utility) proved to be a key partner in this project. The University should define next phase projects and utilize rebate opportunity with the DCSEU for strategies such as interior lighting retrofits, HVAC retrofits, VFD fan improvements, and Energy Star Equipment to improve existing building performance.

Campus Grounds & Open Space

Howard University's grounds and open space not only serve as natural gathering places and moments of respite for students and faculty but also create an opportunity for the University to make these spaces serve a functional purpose in its operation management. Priority should be given to project that create more usable space for gathering. Specific plans should be developed to improve the area behind the stadium, across the street from the reservoir, and behind the fence as it is largely unused and unlit space.

Where possible, turf grass should be replaced with native and adaptive vegetation. The 2011 Master Plan recommends improved stormwater management and integration of Low-Impact Development Practices. Further investigation should be done into the effectiveness of those projects, maintenance issues, and opportunities to make improvements as part of a complete streets approach to campus infrastructure. It is unclear if an integrated pest management plan has been created for the campus; a campus wide pest management plan is recommended to inform best practices for building boundaries, plant selection, and maintenance methods.

Water

Similar to energy retrofits, the campus had tremendous opportunity to reduce water use when replacing fixtures to low-flow models or by adapting existing flow fixtures (such as aerators of lavatories and lower-flow showerheads). Opportunities to capture condensate in new facilities for reuse or find ways to recycle water for non-potable water demands, such as irrigation, should also be explored further. If it's not already, the University should collect data on potable and non-potable water use. This data can inform a larger water balance analysis identifying water

demands and sources to reduce the campus' potable water footprint.

Waste

Where possible, waste should be diverted from the landfill. If it's not already, the University should collect data on waste diversion and recycling on campus or conduct a waste audit to benchmark current diversion rates and identify opportunities for improvement. Recycling education and signage should be evaluated and improved. The University should investigate opportunities for composting within food facilities where it can be properly managed and controlled for pests.

Food & Purchasing

The University should have programs and initiatives to support sustainable food systems and minimize food waste. The University has an initiative with Sodexo to purchase local seasonal produce whenever possible and reduce inorganic and organic waste. Opportunities to measure, educate, and replicate this further should be explored. The University can help address food insecurity in the local area, specifically within the LeDroit-Shaw community, by supporting local community insecurity initiatives and new sources of healthy food access.

The current on-campus community garden should be expanded and include a greenhouse for year-round healthy food production that can be served in the two dining halls on campus. Cooperation with local CSAs and other farms will help in reducing the cost of healthy food options. By providing more opportunities for healthy food options on campus, there may be more upperclassmen willing to remain on the food plan.

There are opportunities to apply sustainability criteria when making procurement decisions, whether that's paper goods or cleaning supplies for the University. As those purchasing contracts are up for renewal, the University should pursue environmentally and socially preferable products where available.

Resilience

To accurately assess how to respond to a changing education landscape, the University needs to perform an initial resilience assessment of the risks

associated to the campus. Resilience should start with an underlying evaluation of climate change risks but can also be defined more broadly to address economic, social, and cultural resilience. With ever decreasing public funding for education and research, some campuses are utilizing creative approaches to fund capital projects as well as long term maintenance. Adequately supporting the physical campus without overburdening students through tuition and fees is an increasing challenge. Higher education leaders also need to take steps to understand and increase their adaptive capacity and partner with communities to assess and enhance regional resilience.

Financial Incentives

The District of Columbia has a number of financial incentives for pursuing sustainable building and land practices. Two programs that fit in well with the project location and planned project design is the Stormwater Retention Credit trading program and the RiverSmart Rewards program.

Projects are eligible to pursue both the Stormwater Retention Credit Trading Program and the RiverSmart program. The intent of both programs is to encourage property owners and building owners to utilize green infrastructure on site using low impact development strategies such permeable pavers, rain gardens, green roofs, shade trees, and rain barrels. The stormwater retention credit trading program is more focused on limiting impervious surfaces to focus on the volume of captured water while the RiverSmart program is centered on how these low impact development strategies can improve water quality.

Stormwater Retention Credit Trading Program

The project is located in the Combined Sewer System (CSS) which means the project is not eligible to participate in the SRC Price Lock Program but can still participate in trading their stormwater retention credits to other CSS projects located in the district. The project is not eligible to trade with projects located in the MS4 area. Please refer to the map which shows Howard as located within the CSS region.

For more details about the program, please refer to the program on the DOEE website: <https://doee.dc.gov/src>

RiverSmart

The project may be eligible for a number of RiverSmart Rewards based upon the strategies identified by the team for managing stormwater on site.

Green Building Requirements (Guidance Provided Courtesy of DOEE)

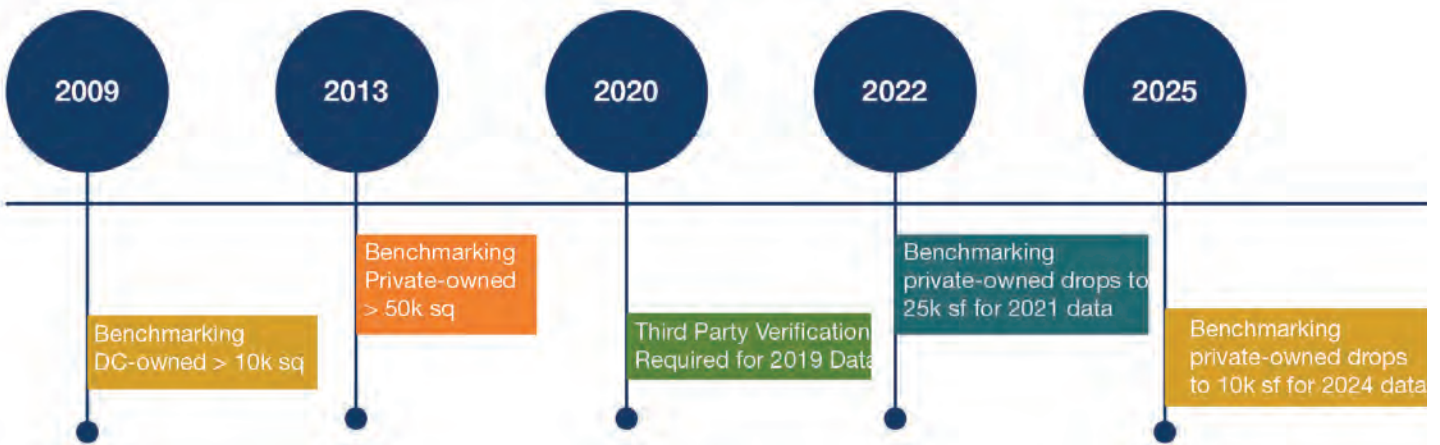
In accordance with the Green Building Act of 2006, buildings in the district must be LEED certified. The below flowchart that helps a project determine if the type and level of certification the project will need to pursue: Enterprise Green Communities, LEED Certified, LEED Silver, or LEED Gold.

All new projects, alterations or new construction, should follow the guidance provided by the following flowchart to define certification requirements.

The Clean Energy DC Omnibus Act was passed in 2018 which established the District's Building Energy Performance Standards. These requirements focus primarily on energy use reduction and tracking in building operations and must be met in addition to those outlined in the Green Building Act of 2006. This new act will require new buildings to be designed for future energy requirements and may require existing buildings to be renovated to meet performance standards.

According to the Building Energy Performance Standards (BEPS), starting in 2021, privately owned buildings that are at least 50,000 SF must submit benchmarking data for the first full calendar year of data after a certificate of occupancy is secured. Publicly owned buildings that are at least 10,000 SF must submit benchmarking data for the first full calendar year of data after a certificate of occupancy is secured. This means, if a private building greater than 50,000 or a public building greater than 20,000 sf building receives its certificate of occupancy any time in 2019, it will need to submit benchmarking data for calendar year 2020 by April 1, 2021. If the project reports energy performance below a specific energy performance threshold, it will be required to improve their energy efficiency over the next 5 years. Projects below the performance threshold will be able to choose between a performance

BENCHMARKING CHANGES
(Changed in Clean Energy Act)



BEPS COMPLIANCE CYCLES

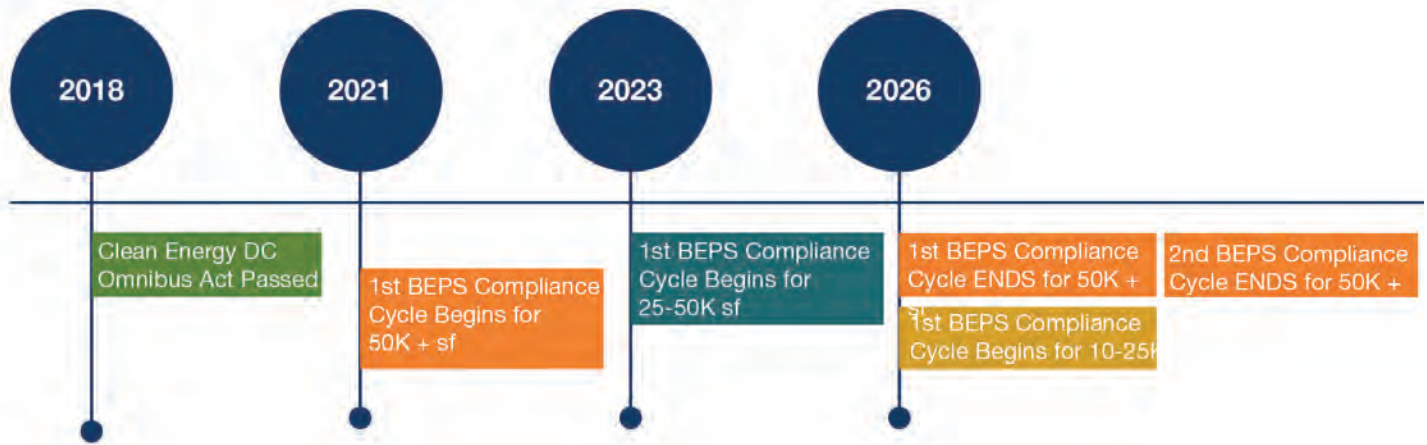


Table 4.21: Sustainability Benchmark

pathway, which requires that they document a 20% reduction in energy usage over the 5-year

These benchmarking requirements are evolving and becoming more stringent over time and as outlined the graphic above.

Renovations are still regulated by the Green Construction and Energy Conservation Codes.

Non-residential tenants are required to provide the building owner (or designee) all energy and water

use data within 30 days of request, though they are not personally responsible for submitting a benchmarking report.

4.4.5 Proposed Infrastructure & Utilities

Stormwater Management Strategy

The Department of Energy and Environment (DOEE) Stormwater Management (SWM) requirements are applicable to:

A. New buildings that will disturb more than 5,000 square feet of soil and as such, these sites shall be required to retain the 1.2-inch storm event.

B. Buildings that will be renovated (provided the cost of the sites renovation exceeds 50% of the assessed market value of the structure for the most recent year, as recorded in the real property assessment database maintained by the District of Columbia's Office of Tax and Revenue) shall be required to retain the 0.8-inch storm event.

For this study it is assumed that the 100% of the stormwater management requirement can/will be attained on-site. If this is not the case, offsite stormwater management retention credits (SRCs) will be required, and the owner will acquire these credits or agree to pay DOEE's annual in-lieu fee. Currently, there are over 1.1 million credits in the DOEE SWM Database and the 2017 average SRC price was \$2.02 per credit. The DOEE in-lieu fee is currently \$3.78 per credit. These fees or credits need to be paid/acquired every year for the life of the project.

Current designs on most buildings in the District utilize one or a combination of the following DOEE approved SWM facilities (depending on the final computations):

Intensive and/or Extensive Green Roof DOEE currently allows additional impervious area to drain to the green roof, so long as the area does not exceed the area of the green roof itself. This will help reduce the amount of green roof that is required to be installed

Bioretention (Rain Gardens) Facilities These require more excavation and work, but they can handle a larger amount of stormwater within a smaller footprint than a Green Roof. Infiltration testing will be helpful in determining overall efficiency.

Cisterns Storm water could be used for cooling towers, and/or irrigation of grass areas and plants (but not green roofs or bioretention facilities), and/or flushing toilets, etc.

Permeable Pavers PaveDrain Blocks or similar product could provide a suitable permeable surface that provides a walkable and/or drivable surface. Pavers can also be used to collect runoff and convey it to a bioretention in a more aesthetic way than a trench or area drain.

Tree Planting and Tree Preservation DOEE allows stormwater management credit for both small and large trees

The entire Howard University Central Campus is located within the Combined Sewer System (CSS) Tunnel sewershed.

Normally, a building that needs to meet the DOEE SWM requirement will need to meet a minimum of 50% of the sites' SWM requirement on-site and the remaining requirement could be met by paying a fee to DOEE or by buying Stormwater Retention Credits (SRC's) from another project in the city which exceeded its site's requirement. Per the 2020 Stormwater Guidebook, if a building site drains to the CSS from a sewershed where CSOs will be reduced with storage tunnels (which is the entire Howard Central Campus), there is no minimum on-site SWM retention requirement. There is still the SWM detention requirements that must be met on-site, however.

Projects that use SRCs to meet their Off-site Retention Volume (Offv) for a site in the CSS areas where CSOs will be reduced with storage tunnels and that achieve less than 50% of the Stormwater Retention Volume (SWRV) on site may use SRCs for projects that are part of the same common plan of development. This means we can design a new building (or building renovation) and not meet the normal 50% of the Stormwater Management requirement at that building, as long as another part of the campus is designed to make up the difference in the SWM requirement. This provides us with the flexibility to utilize any of the below approaches on a case by case basis to maximize the design's efficiency.

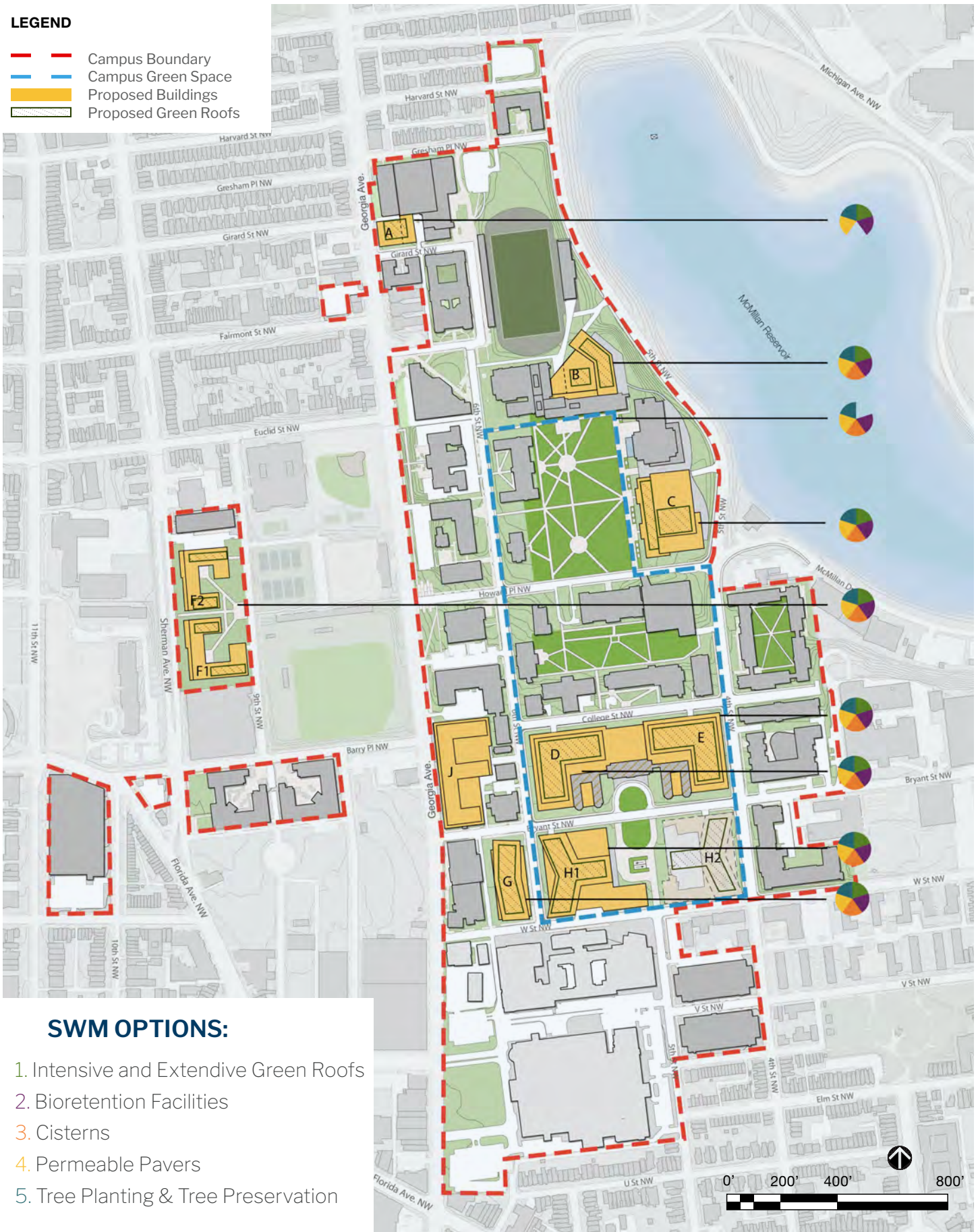
Each individual site that is required to meet the DOEE SWM requirement could be designed with one or a combination of the previously mentioned SWM facilities.

OR

One site could be oversized and generate SRC's that could be used for a site that does not meet its onsite requirement.

LEGEND

- Campus Boundary
- Campus Green Space
- Proposed Buildings
- Proposed Green Roofs



SWM OPTIONS:

1. Intensive and Extensive Green Roofs
2. Bioretention Facilities
3. Cisterns
4. Permeable Pavers
5. Tree Planting & Tree Preservation

Figure 4.48: Stormwater Management

OR

A regional approach could be used to collect stormwater and have it be retained.

OR

A combination of any of the above.

4.4.6 Green Area Ratio

The Green Area Ratio (GAR) requirements are applicable to:

1. Depending on the zoning of the property, all new buildings shall be required to meet the Green Area Ratio (GAR).
2. Buildings that will be renovated (provided the cost of the sites renovation exceeds 100% of the assessed market value of the structure for the most recent year, as recorded in the real property assessment database maintained by the District of Columbia's Office of Tax and Revenue) shall be required to meet the zoning imposed Green Area Ratio (GAR).

Green Area Ratio Optional SWM Strategy for Campus Green:

Cisterns to Irrigate Campus Green Space:

An optional stormwater management program could be designed on a large scale that provides collection of storm water from not only the current landscaped area boundaries but could also capture runoff from existing adjacent university buildings. This could be achieved by the use of large underground cisterns. The stormwater is captured, filtered (through pretreatment facilities), directed to the cistern, and reused using a drip irrigation system. This collected stormwater could feed the trees, plants, and grass areas in the universities network of green spaces while reducing the demand of water utilized from DC WATER mains. It is anticipated that the storm water system will generate enough reused water annually and fulfil up to 80% of the green spaces water demand. This stormwater reuse system could hold and treat at least the first 1.2 inches of rainfall to meet applicable Department of Energy and Environment's (DOEE) stormwater management regulations.

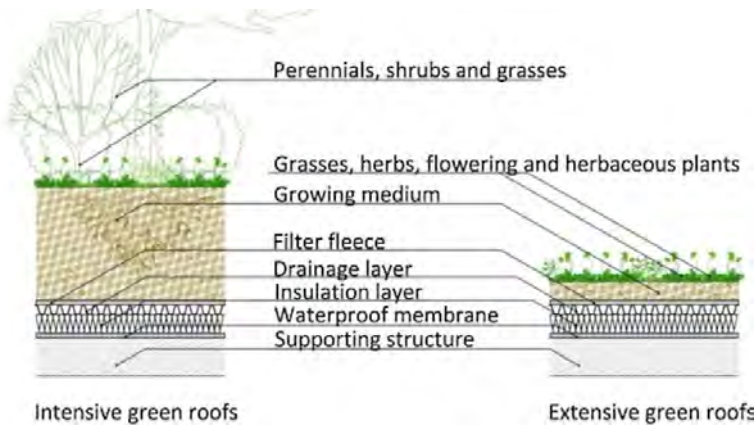


Figure 4.49: Intensive vs. Extensive Green Roofs

1

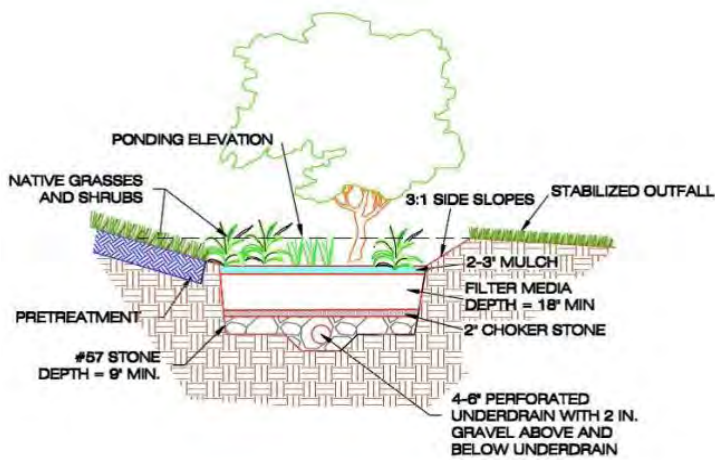


Figure 4.50: Bioretention Diagram

2

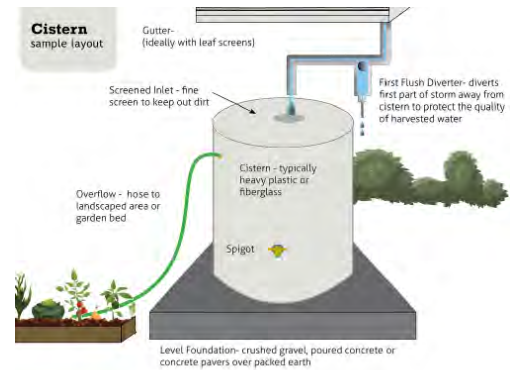


Figure 4.52: Cistern Diagram

3

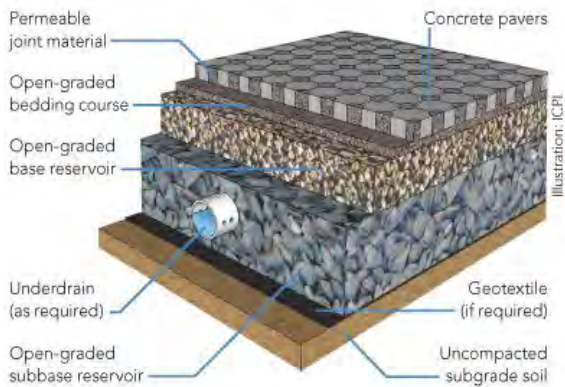


Figure 4.51: Permeable Pavers

4



Figure 4.53: Tree Planting

5

LEGEND

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

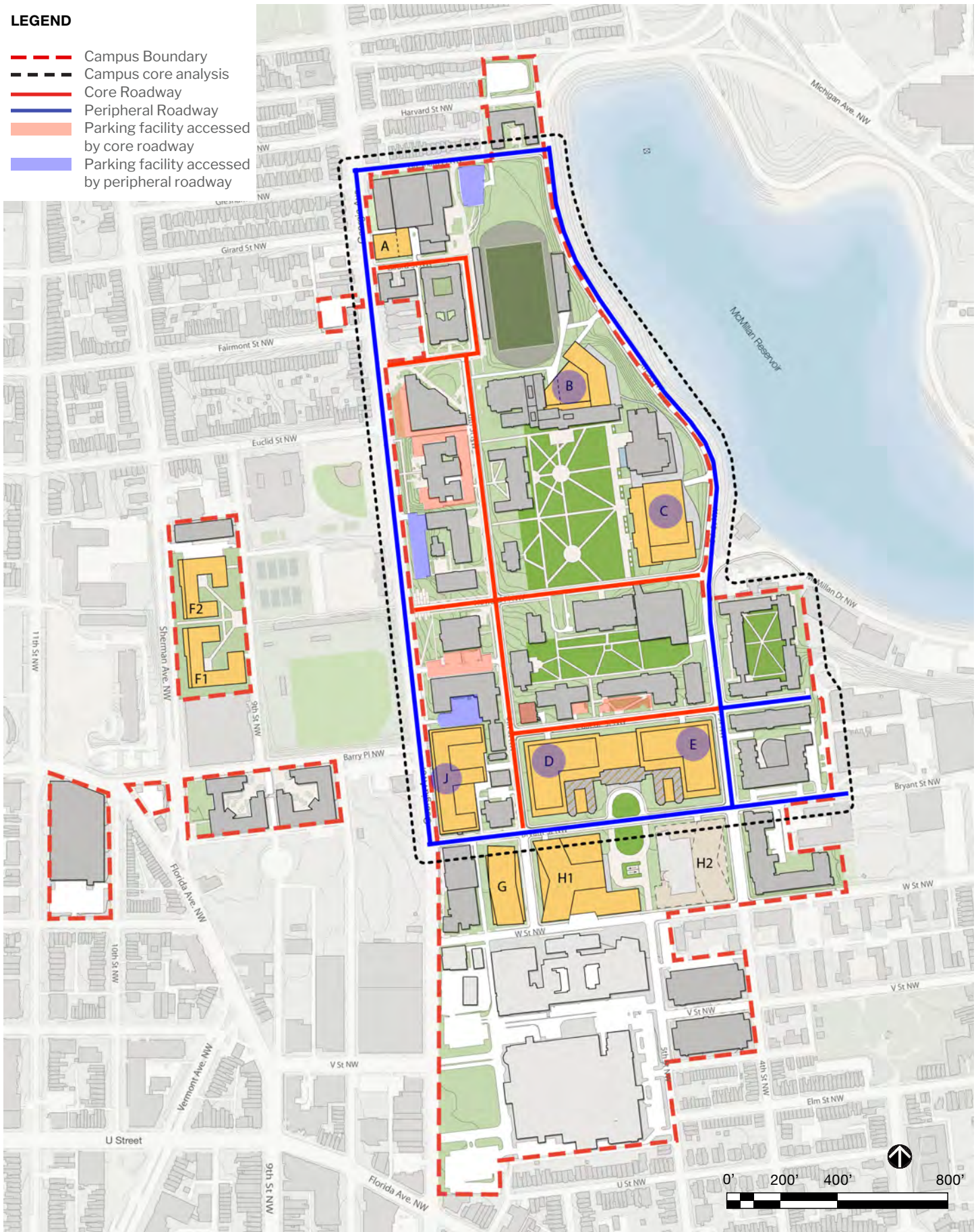


Figure 4.54: Proposed Parking by Core vs. Peripheral Access

4.5 Transportation & Parking Strategy

4.5.1 Transportation Planning Principles

The Central Campus Master Plan’s transportation strategy is guided by its Planning Principles, notably of improving quality of life, improving the public realm, and enhancing physical access and connectivity. This strategy is comprised of five elements, outlined below.

Manage Parking Supply

Element 1: No net increase in parking supply.

Historical parking supply data of the campus core shows a decrease in the academic parking from approximately 2,300 to 1,960 spaces from 2011 and 2020. With the inclusion of the HU hospital parking supply, the existing parking supply in the campus core includes approximately 3,580 spaces.

As part of the 2020 Plan, parking lots will be removed from the campus core and replaced with structures on the campus periphery. Parking to be removed includes spaces located at sites planned for redevelopment, extracted parcels that fall outside of the proposed campus boundary, and portions of surface lots along Georgia Avenue between Bryant Place and Fairmont Street. On-street parking is not included in the campus supply; however, there are opportunities to improve multimodal access and facilities with the removal of on-street parking in the campus core, particularly along 6th Street.

Parking removed from the campus core is planned to be replaced with new parking on the periphery of campus. The Central Campus Master Plan aims to replace minimal parking, utilizing ongoing Transportation Demand Management (TDM) measures to reduce the campus parking demand, without constructing any net new parking. Additional parking supply and demand analyses will be performed as part of Further Processing for sites, at which point the amount of new parking and access points associated with each site will be determined.

LEGEND

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

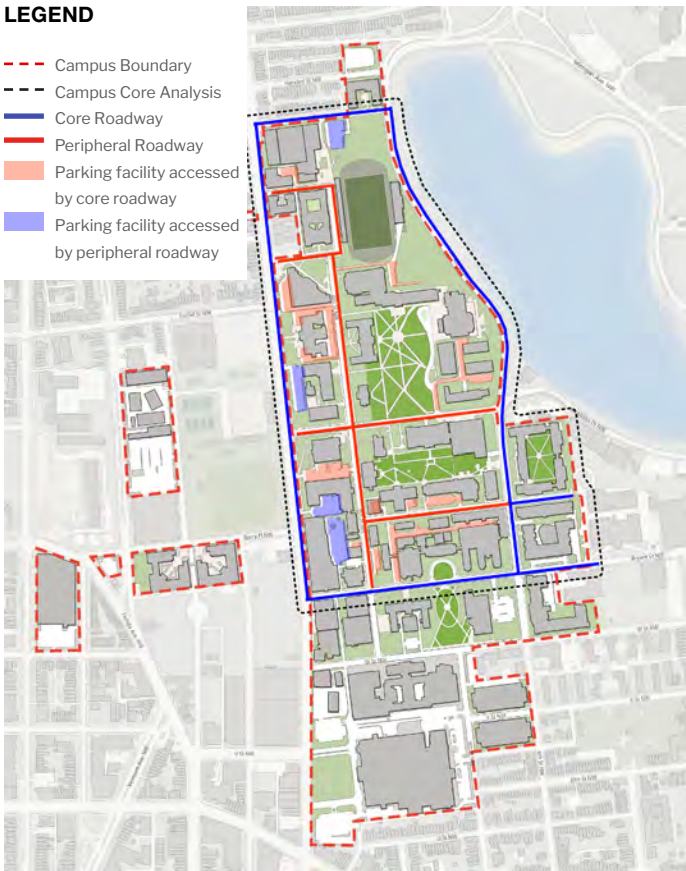


Figure 4.55: Existing Parking by Core vs. Peripheral Access

LEGEND

- - - Campus Boundary
- Removed
- Remaining
- ⊗ Lot Code

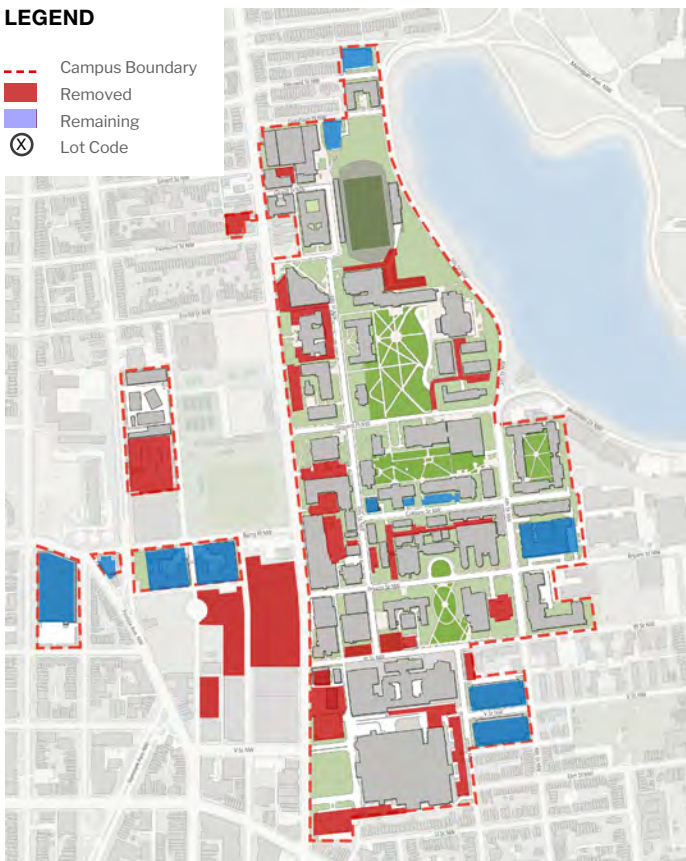


Figure 4.56: Removed and Remaining Parking Lots

Pedestrian Connectivity

Element 2: Improve pedestrian conditions and connectivity.

The Central Campus Master Plan aims to improve pedestrian conditions within the campus boundary, as well as create a porous, connective overall pedestrian network within the campus that integrates seamlessly with the surrounding neighborhoods. To this end, three pedestrian areas of focus are identified:

- In the campus core, the Plan proposes to remove a substantial amount of surface parking, replacing it with new parking facilities accessed from peripheral roads. Reducing the amount of vehicles accessing parking from campus core roadways will result in a more inviting pedestrian experience in this area.
- At the old Howard University Hospital site and other parcels recently extracted from the campus boundary, the Plan proposes working closely with the eventual developers to ensure that new public spaces along Georgia Avenue incorporate wide sidewalks and generous pedestrian facilities, and that the new street pattern at the old hospital site breaks up the existing superblock, creating a more porous, connected pedestrian network.

Multi-modal Access

Element 3: Increase multi-modal access and facilities in the campus core.

With the replacement of parking lots in the campus core with new parking facilities on the periphery, vehicle access points will similarly shift from the core to the periphery.

In existing conditions, most of the parking serving the campus core is accessed from core roadways like 6th Street, Howard Place, and College Street, as opposed to peripheral roadways like Georgia Avenue, Gresham Place, and 4th/5th Street. In proposed conditions, the opposite will be true. The resulting reduced vehicular activity on core roadways will make space available for multi-modal improvements like bike/scooter parking corrals, bike lanes, or curb extensions.

Hospital Access

Element 4: Provide safe, efficient access to the new Howard University Hospital.

The Plan proposes to develop a transportation and access scheme for the new hospital that meets the facility's needs while maintaining a safe, orderly, and pleasant environment for all modes on the roadways surrounding the hospital. This scheme, informed by transportation data collected at the old hospital site, will include ride-hailing pick-up/drop-off operations, shuttle operations, parking access, loading access, and ambulance/emergency access.

The plan recommends the conversion of Bryant Street NW and W Street NW from on-way to two-way streets between Georgia Avenue and 4th Street. On-street parking would be removed from the north and south curbs of Bryant and W streets.

Ongoing Engagement

Element 5: Be a good transportation neighbor.

The Plan proposes to continue Howard University's commitment to being a good neighbor to the surrounding community regarding transportation. This goal will be served by the following measures:

- Continuing and expanding the University's Transportation Demand Management (TDM) efforts, which are aimed at reducing vehicle trips to and from the campus and mitigating the impact of vehicle trips on the surrounding community;
- Carefully considering multimodal impacts when planning new vehicle access points on campus and at the new hospital.

4.5.2 Parking Supply

Proposed lot locations are displayed in Figure 4.55 and are delineated into three basic zones.

4.5.3 Loading & Access

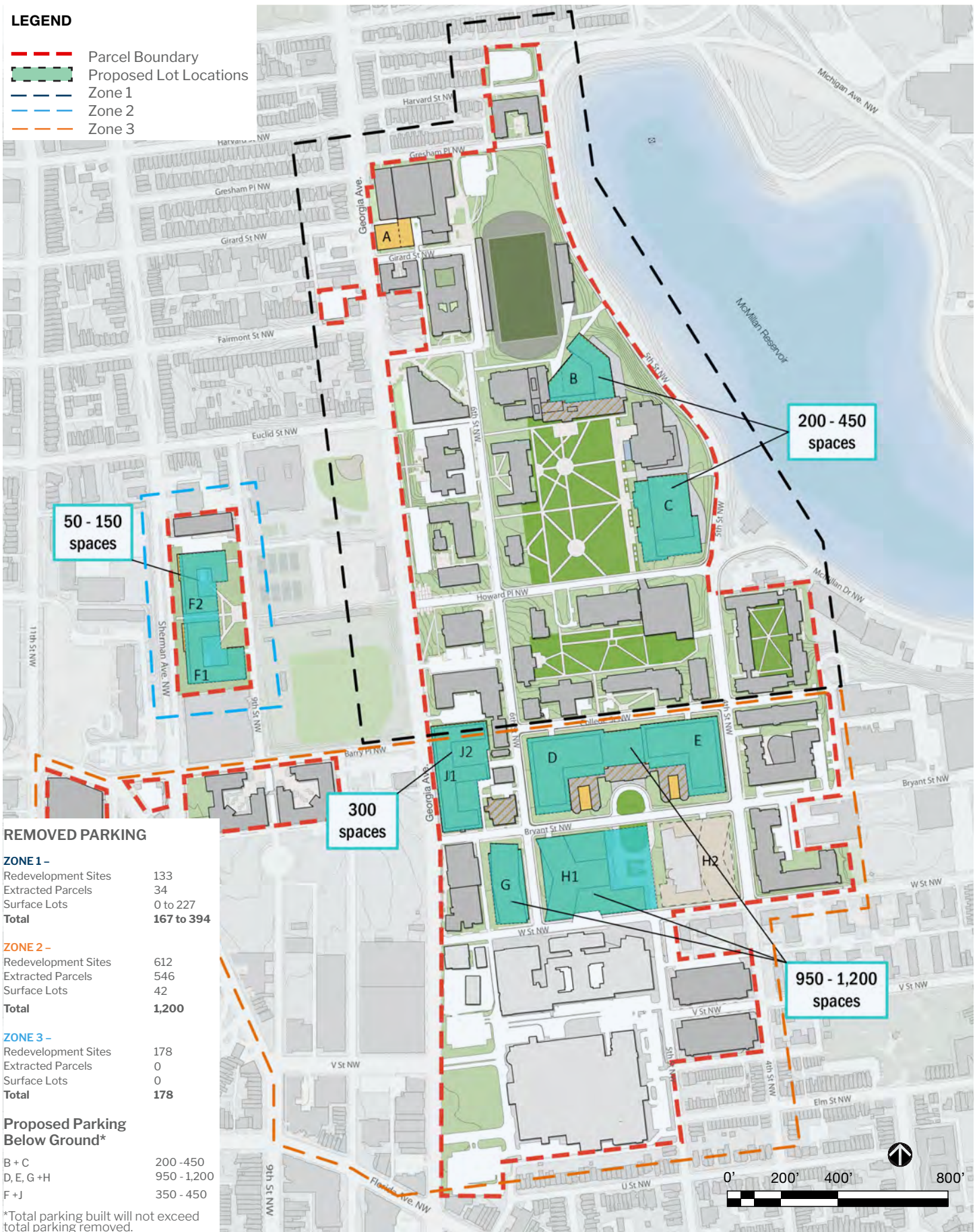
Correlated loading and access diagrams can be found on the proceeding pages (Fig. 4.56-4.57).

4.5.4 Streetscape Treatment

The following conveys general themes for the two (2) roadways over which the University has private control.

LEGEND

- - - Parcel Boundary
- - - Proposed Lot Locations
- - - Zone 1
- - - Zone 2
- - - Zone 3



REMOVED PARKING

ZONE 1 -

Redevelopment Sites	133
Extracted Parcels	34
Surface Lots	0 to 227
Total	167 to 394

ZONE 2 -

Redevelopment Sites	612
Extracted Parcels	546
Surface Lots	42
Total	1,200

ZONE 3 -

Redevelopment Sites	178
Extracted Parcels	0
Surface Lots	0
Total	178

Proposed Parking Below Ground*

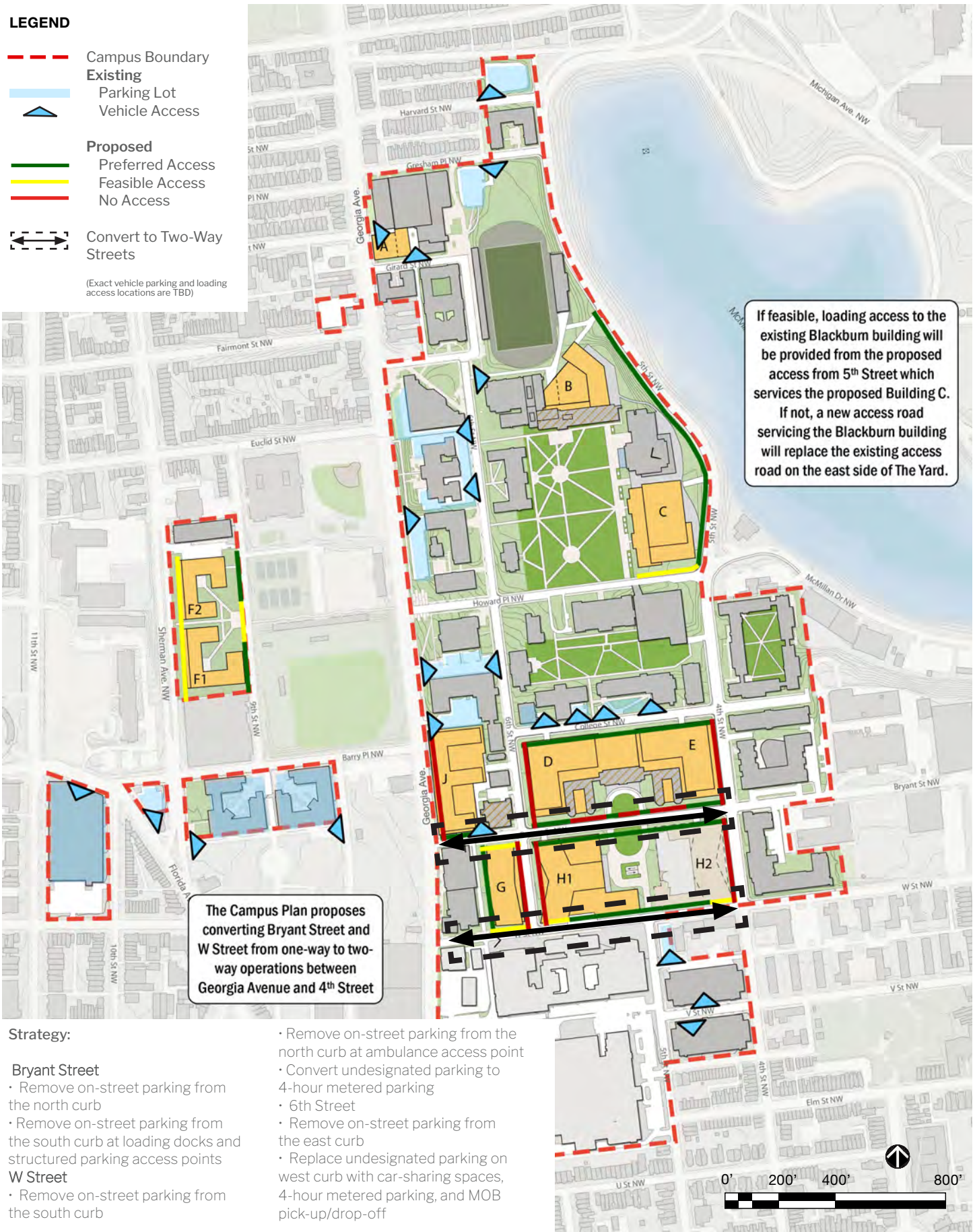
B + C	200 - 450
D, E, G + H	950 - 1,200
F + J	350 - 450

*Total parking built will not exceed total parking removed.

Figure 4.57: Proposed Underground Parking

LEGEND

- - - Campus Boundary
 - Existing**
 - ▭ Parking Lot
 - ▲ Vehicle Access
 - Proposed**
 - Preferred Access
 - Feasible Access
 - No Access
 - Convert to Two-Way Streets
- (Exact vehicle parking and loading access locations are TBD)



If feasible, loading access to the existing Blackburn building will be provided from the proposed access from 5th Street which services the proposed Building C. If not, a new access road servicing the Blackburn building will replace the existing access road on the east side of The Yard.

The Campus Plan proposes converting Bryant Street and W Street from one-way to two-way operations between Georgia Avenue and 4th Street

Strategy:

Bryant Street

- Remove on-street parking from the north curb
- Remove on-street parking from the south curb at loading docks and structured parking access points

W Street

- Remove on-street parking from the south curb

- Remove on-street parking from the north curb at ambulance access point
- Convert undesignated parking to 4-hour metered parking
- 6th Street
- Remove on-street parking from the east curb
- Replace undesignated parking on west curb with car-sharing spaces, 4-hour metered parking, and MOB pick-up/drop-off

Figure 4.59: Proposed Vehicle and Loading Access

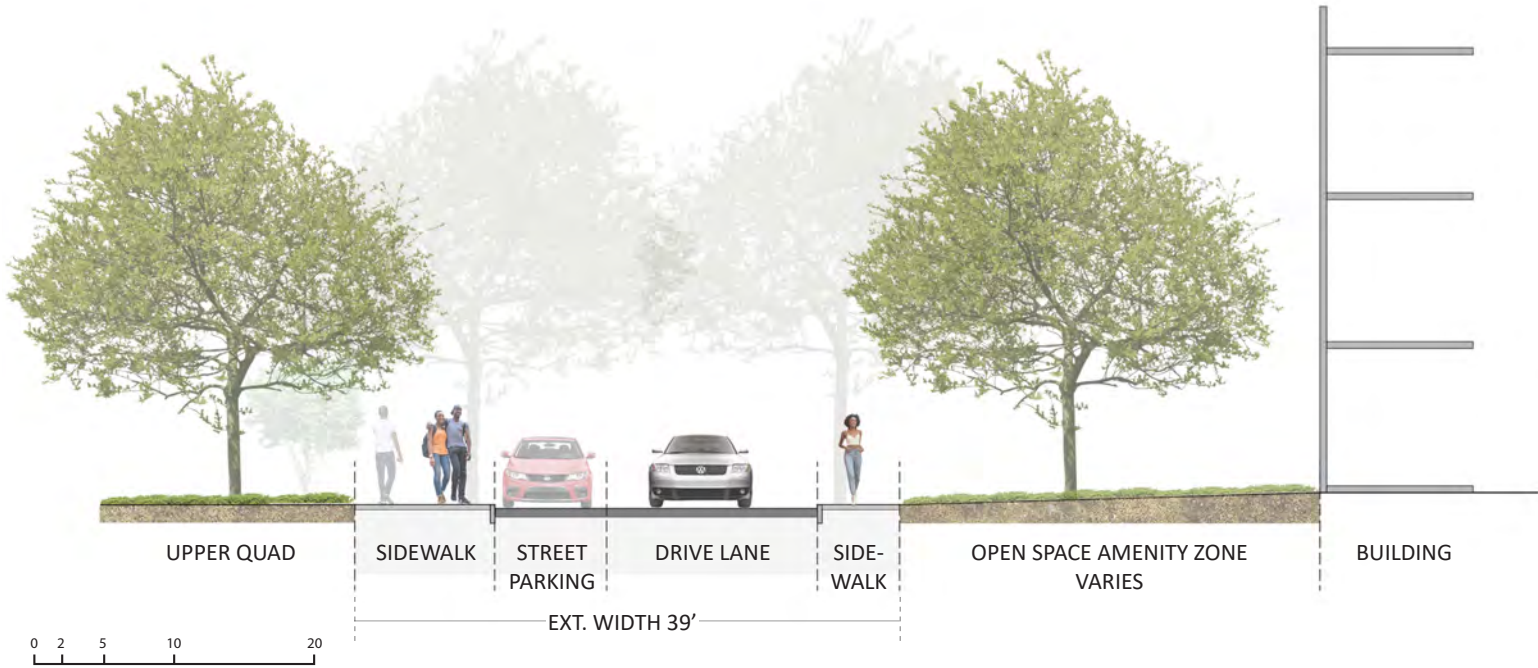


Figure 4.60: Existing Howard Place Section

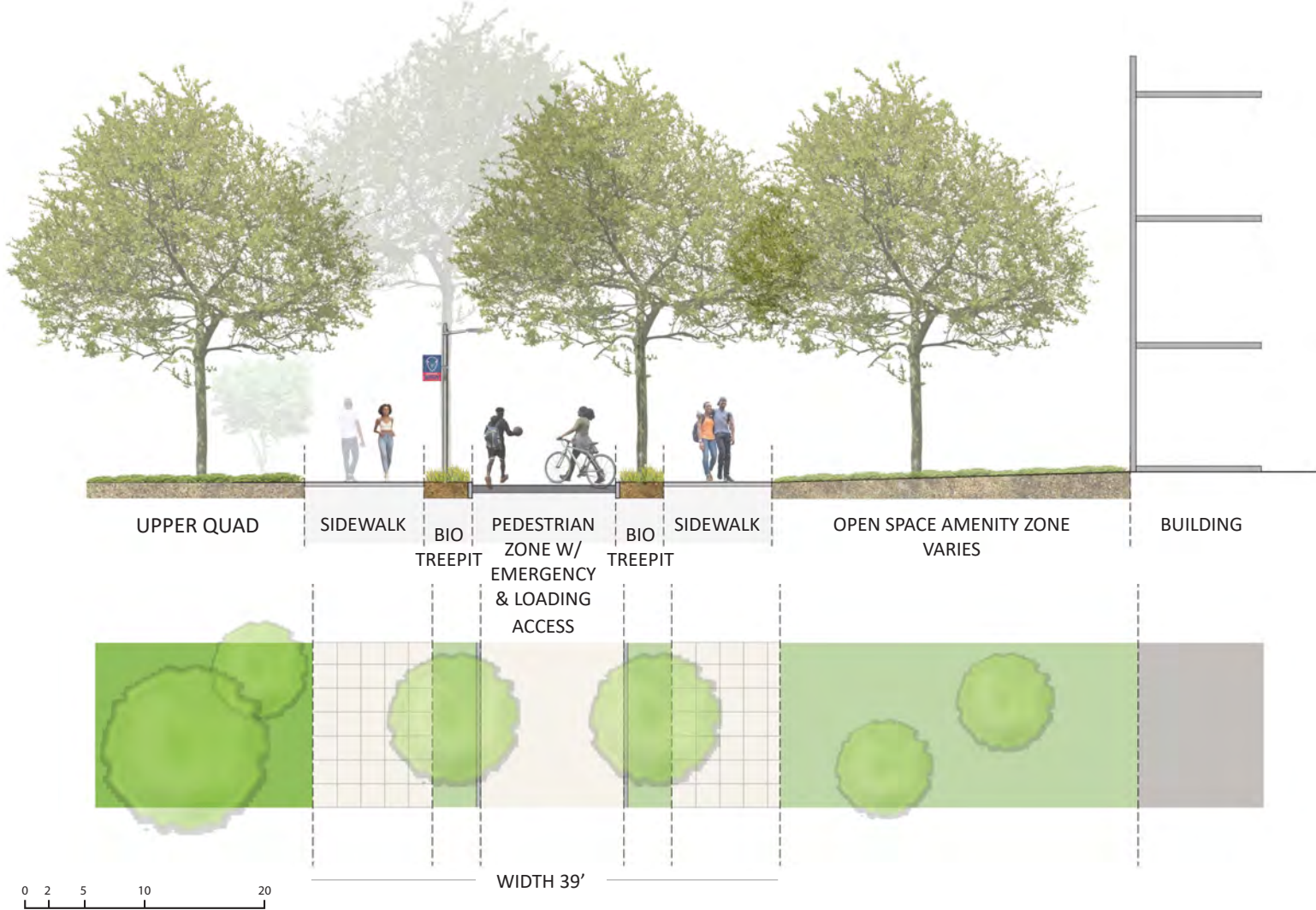


Figure 4.61: Proposed Howard Place Section

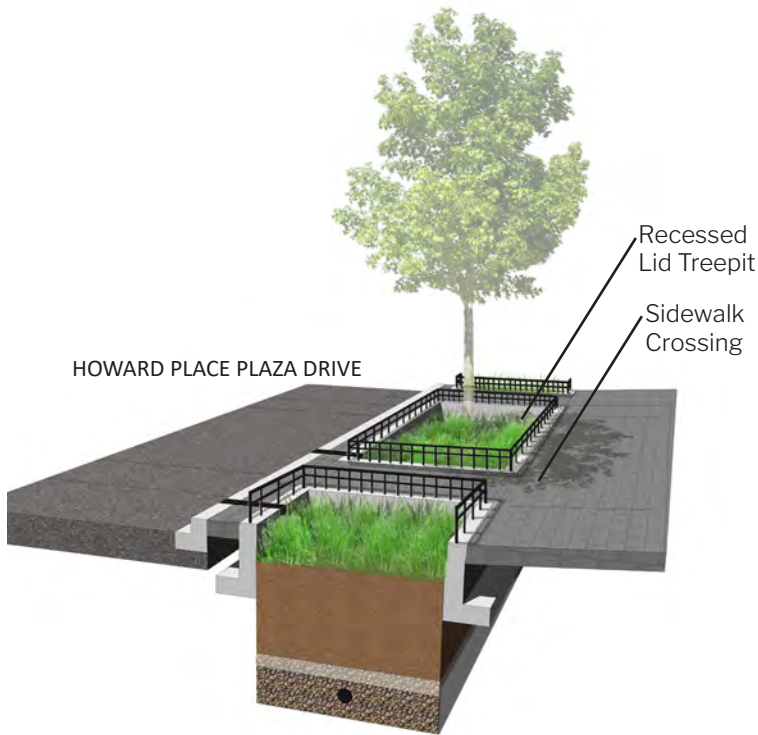


Figure 4.62: Tree Pit Bioretention

Howard Place

Howard Place between 6th Street and 4th Street is envisioned as a pedestrian plaza drive that extends environment of the Upper Quad. Special paving material should be integrated to distinguish the area as a pedestrian priority zone over vehicular traffic. Paving joint lines may take inspiration from the Upper Quad sidewalk paving patterns. The new plaza will facilitate pedestrian, bicycle and scooter movements, while accommodating delivery and emergency vehicle access.

Stormwater runoff from the plaza drive can be captured in several ways, including recessed low impact development (LID) tree pit planters aligning both sides of the plaza drive. The continuous below grade tree pits could have sidewalk crossings to promote pedestrian circulation throughout the plaza. Raised curbs or tree pit fences could be used to mitigate the tree pit LID drop-off hazard from the sidewalk and the plaza. New trees should be large species canopy trees.

Wider sidewalks on both sides of the plaza could accommodate additional pedestrian movement. The open space areas offer opportunities for expanded planting and furnishings such as bike rack, benches, site lighting and monuments.



Figure 4.63: Continuous Tree Pit



Figure 4.64: Existing Bryant Street Section

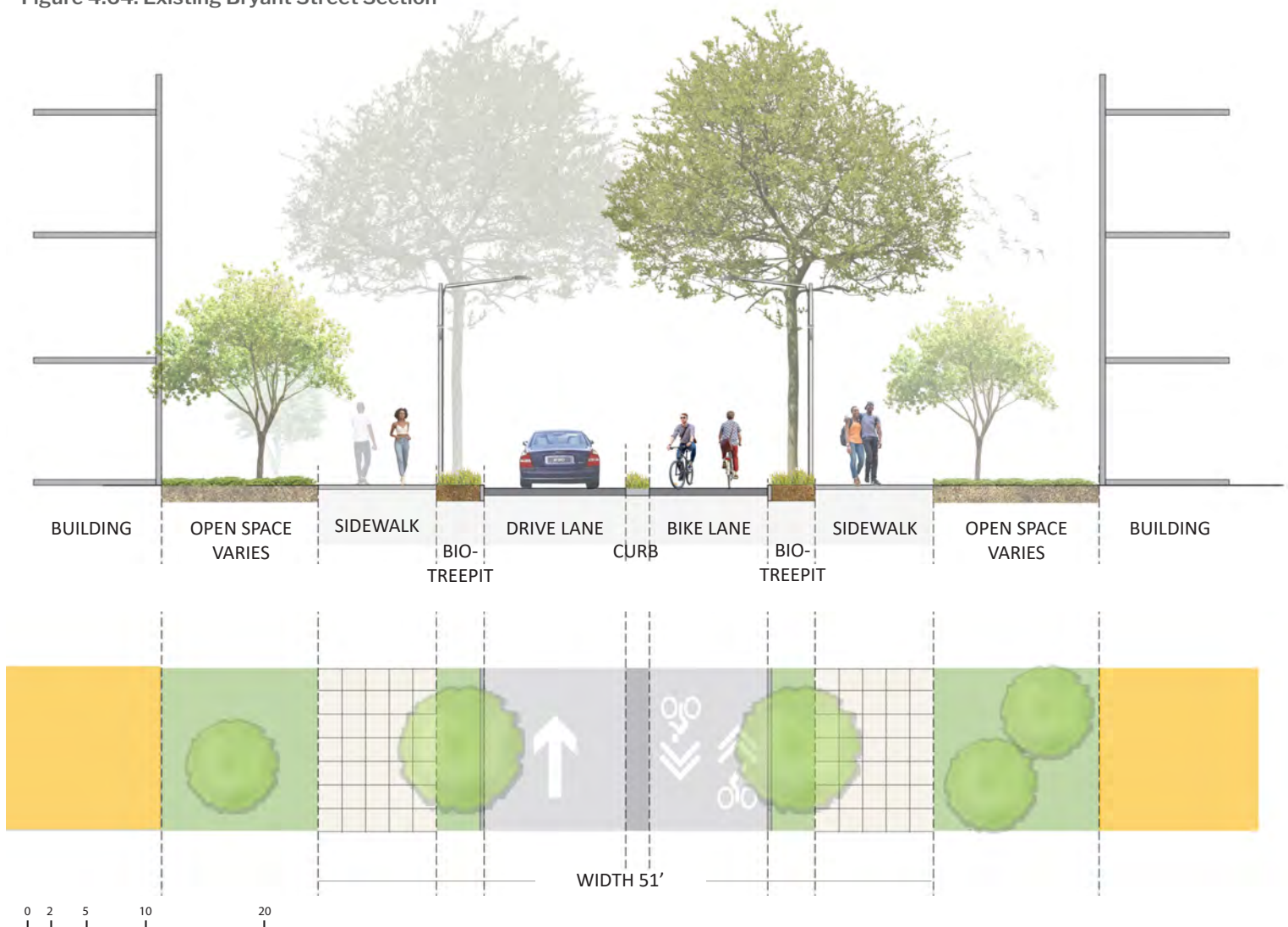


Figure 4.65: Bryant Street Proposed Section



Bryant Street

Bryant Street between 6th Street and 4th Street is envisioned as a one-way street for vehicular traffic, with a two-way bicycle/scooter cycle track on the south side of the street. The mid-block crossing should be a special paving material that alerts all modes of traffic to slow down when crossing. This will also reinforce the connection between the new hospital plaza drive and the existing entry drive on the north side of Bryant.

As elsewhere, stormwater runoff from the road and sidewalks can be captured in the continuous recessed low impact development (LID) tree pit planters aligning both sides of the street. Planted Bioswales located in the round about planting areas will also capture roadway runoff. The street trees should be a large canopy species.

Figure 4.66: Continuous Tree Pit - Lid Planter



Figure 4.67: Planting Bio Swale at Hospital Drive



Figure 4.68: Georgia Avenue at the School of Architecture & Planning

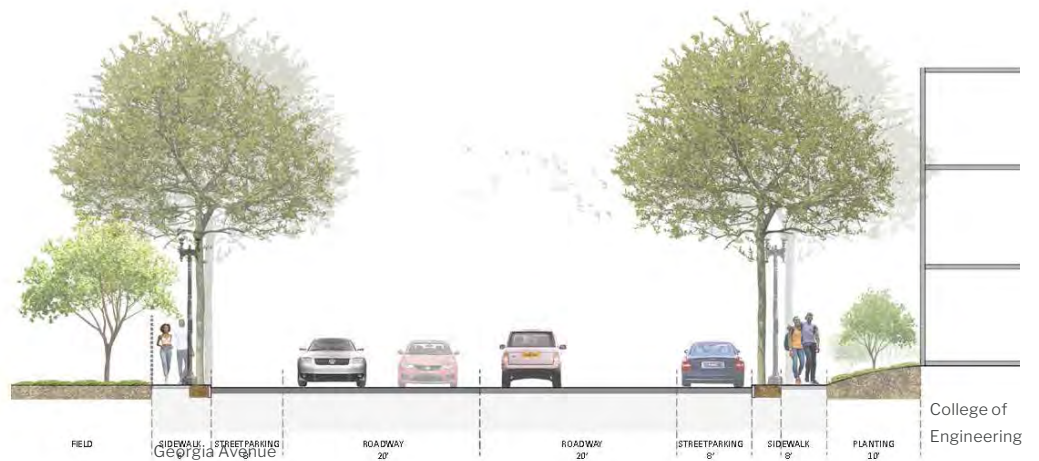


Figure 4.69: Georgia Avenue at the College of Engineering

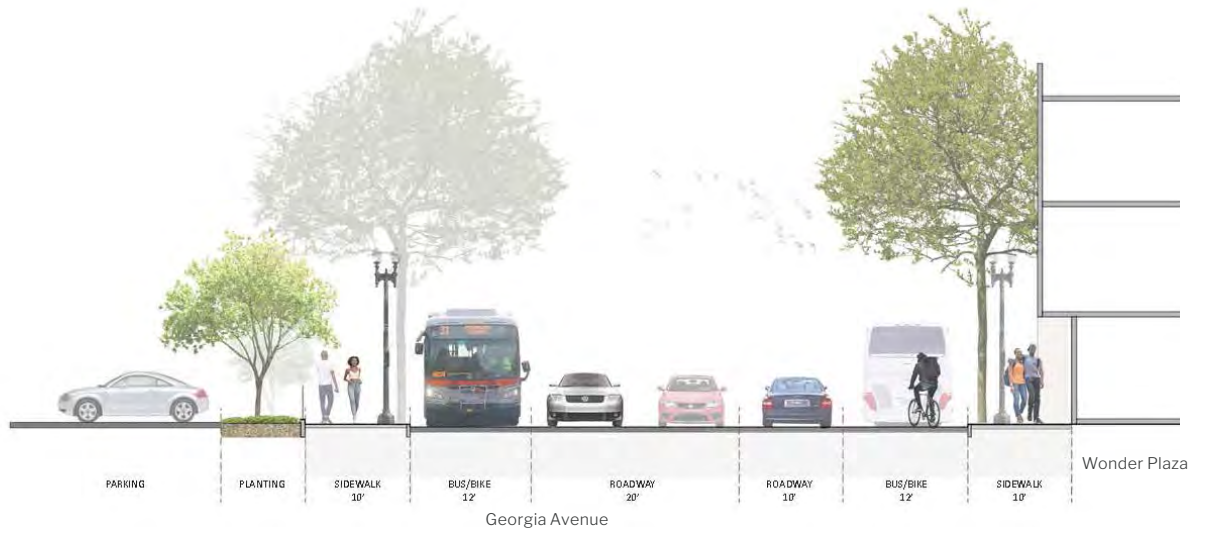


Figure 4.70: Georgia Avenue at Wonder Plaza



Figure 4.71: Georgia Avenue at the Miner Building



4.5.5 Signage & Wayfinding

The University is in the final stages of a process to plan and design a signage and wayfinding system for Howard University in Washington, DC and Maryland. The signage system is split into vehicular and pedestrian wayfinding.

Some wayfinding solutions and locations may require coordination with regulatory agencies regarding placement in public space. Figures 4.70 through 4.72 demonstrate the signage system, and the proposed placement of signs, by sign type.

LEGEND

SIGNS:

- Campus Identification
- Vehicular Wayfinding
- Parking Identification
- Shuttle Bus Identification
- Orientation
- Pedestrian Wayfinding
- Building Identification

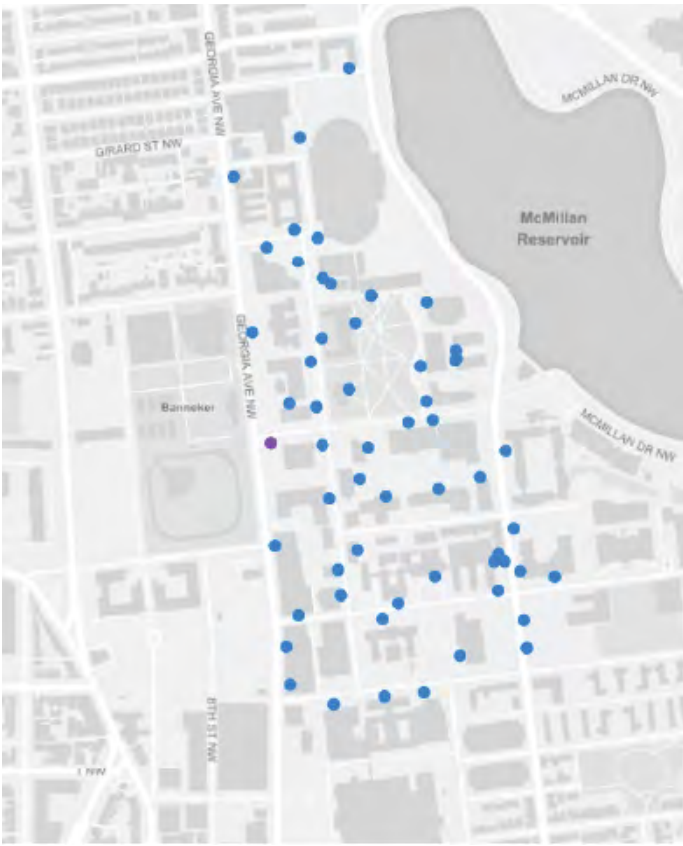


Figure 4.72: Campus and Building Identification Signs



Figure 4.73: Vehicular, Parking and Shuttles Identification Signs

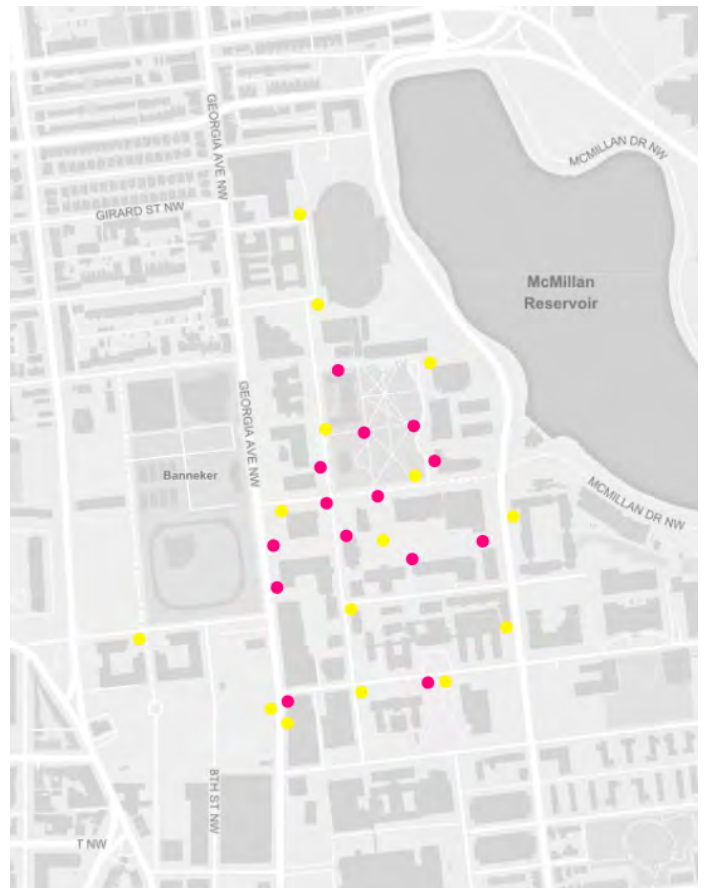


Figure 4.74: Orientation and Pedestrian Wayfinding Signs

Vehicular sign types include:

- Campus gateways (CID)
- Vehicular directional (VDR)
- Parking lot identification (PID)

Pedestrian sign types include:

- Shuttle bus stop identification (STB)
- Pedestrian digital kiosks (KSK)
- Pedestrian directional (PDR)
- Building identification (BLD)

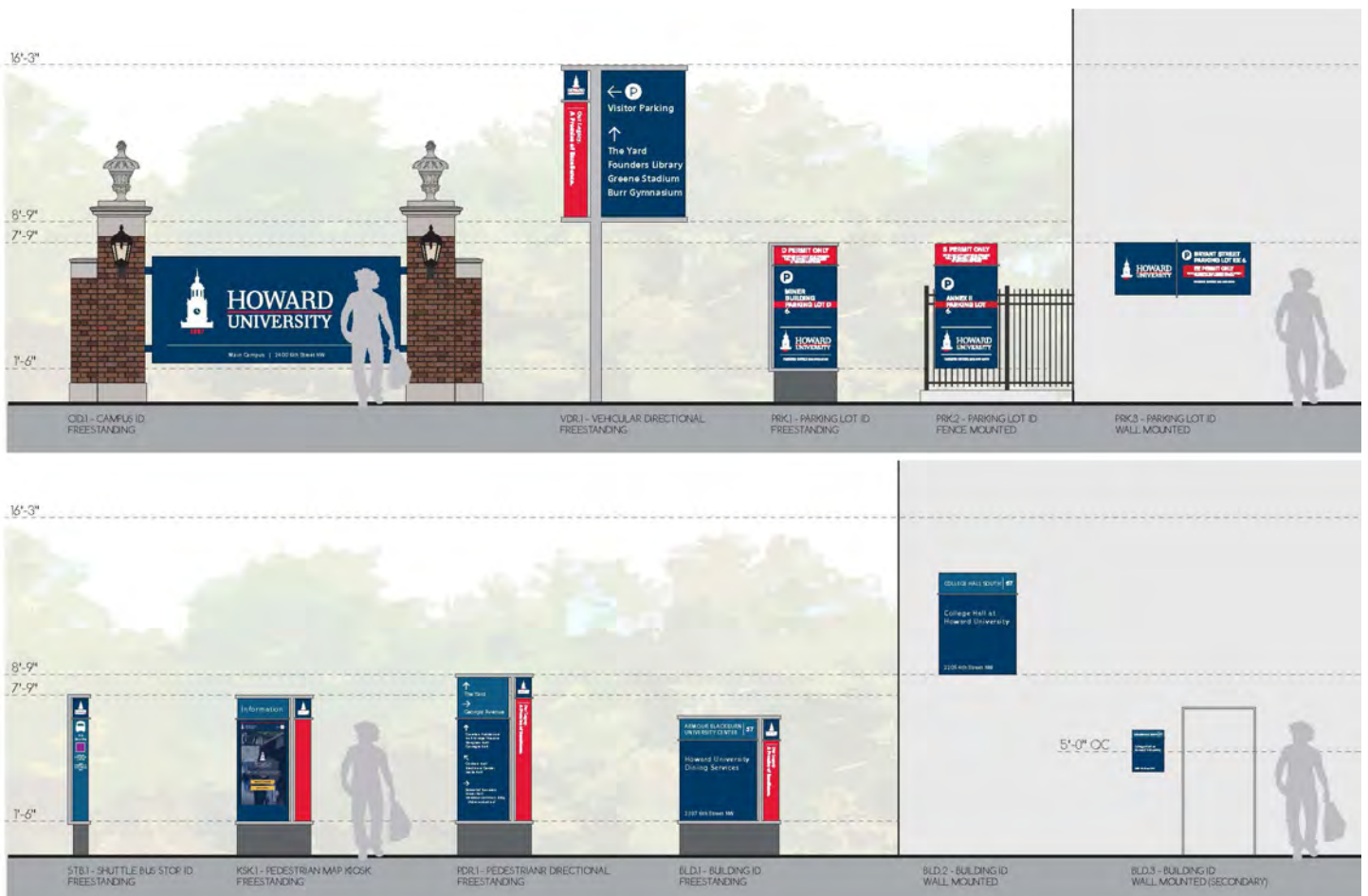


Figure 4.75: Elevations of Proposed Orientation and Pedestrian Wayfinding Signs

4.5.6 Comprehensive Transportation Review

Through coordination with the District Department of Transportation (DDOT), a full Comprehensive Transportation Review (CTR) will be submitted as an addendum to the Central Campus Master Plan. The CTR will contain an in-depth analysis of the plan on all modes of transportation and will include a set of action items that HU will commit to help achieve the transportation goals of the plan. This includes specific measures to mitigate any impacts identified in the analysis and a list of transportation items to be detailed in the Further Processing of the plan's development sites.

4.5.7 Transportation Demand Management

A Transportation Demand Management (TDM) plan will be incorporated into the CTR, addressing the University's progress on goals and commitments set in its 2012 TDM plan, as well as proposing new TDM efforts to build upon this progress.

The 2012 TDM plan included actions whose goal is enhancing multimodal, non-vehicular transportation options in and around the Howard University campus. These actions included increasing parking rates, improving HU shuttles, funding a Capital Bikeshare station, conducting annual TDM and parking surveys, and others.

The forthcoming TDM plan update will build upon these actions and propose new actions that enhance multimodal transportation as guided by the preceding Master Plan principles.

4.6 Implementation Considerations

4.6.1 Overview of Action-Based Sequencing

The future campus development program includes a mixture of new construction, the repair and renovation of existing buildings, and the decommissioning, preservation, and demolition of select facilities. The Campus Plan describes the proposed developments as a categorization of specific and conditional actions tied to Howard's priorities, rather than a specific timeline. Timing is addressed using two sequential periods over the ten-year timeline: Period 1 ("Ph1") includes years 2021 through 2025, while Period 2 ("Ph2") includes years 2026 through 2030.

The proposed actions that would occur over the ten-year timeline are described below and are tagged with their respective planning periods.





4.6.2 Modernizing the Power Plant (Ph1)

The highest priority project for Howard is the overhaul and modernization of the existing steam plant and associated utility distribution system. In 2018, extreme winter weather caused a plant failure and tunnel ruptures which resulted in damage to the system and some campus facilities. Since this time, most of the campus has been fed by a series of temporary boilers. The rehabilitation of the plant is critical to ensure that mission-critical buildings are not damaged and taken off-line in the future. Another important and related factor is the remediation and renovation of Douglass Hall, which was substantially impacted by the incident.

The University has engaged partners to assess the steam plant operations, equipment, and steam

LEGEND

4.6.2 – Power Plant

-  Campus Boundary
-  Existing Buildings
-  Renovate: # 23, 48
-  Decommission: # 11, 17, 56, 216

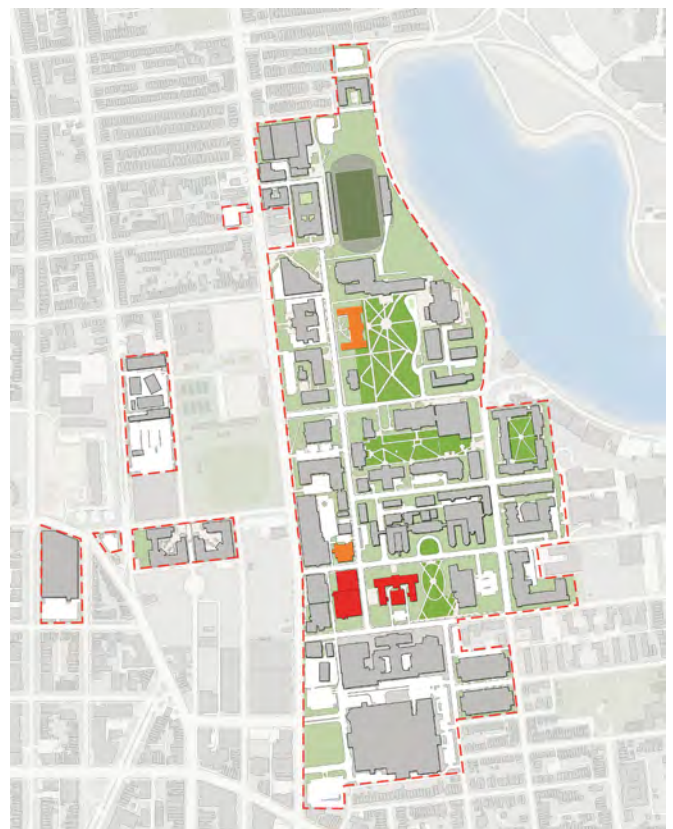


Figure 4.76: Power Plant

tunnel to inform decision making related to steam plant modernization, cost, utility master planning, asset monitoring, and sustainability. Current concepts include modernization and transition to a combined heat and power (CHP) plant, to include a replacement of tunnel infrastructure. Since its completion in the 1934, the Power Plant (48) has been limited to steam production. This would enable the facility to live up to its original namesake.

4.6.3 Advancing Healthcare, Health Sciences and STEM

4.6.3.1 Building a New Hospital & MOB (Ph1)

To realize the new HU Hospital, the University would first need to demolish the vacant Freedmen’s Annex I and II (11 & 17) that currently occupy the proposed hospital site. The two facilities have significant damage resulting from the 2018 steam tunnel rupture, which rendered them uninhabitable. Optimally, the University would have also modernized the Power Plant in order to service the new development.

The proposed Medical Office Building site is currently home to two facilities, the PFM Storage Building (56) to the north and the Old PFM/ISES

building (216) to the south. The University would decommission/demolish these buildings to enable the construction of the Medical Office Building. Both the HU Hospital and the Medical Office Building are programmed to have below-grade structured parking, with the number of spaces determined within the project design phase of the facilities.

Once the new HUH and MOB are near complete, facilities at the existing HUH site (Bldgs. 19, 37, 66, 71, and 163) can begin a decommissioning and migration process, leading to their eventual demolition.

Beyond the 10-year planning period, the construction of a new “future expansion” of the Hospital would require the demolition of the Stokes Health Sciences Library (200).

4.6.3.1 – Healthcare Precinct

- Campus Boundary
- Existing Buildings
- Renovate: # 47
- Decommission: # 19, 37, 66, 71, 163
- Demolition: # 11,17, 56, 216
- New: # G, H1



Figure 4.77: Healthcare ‘Precinct’

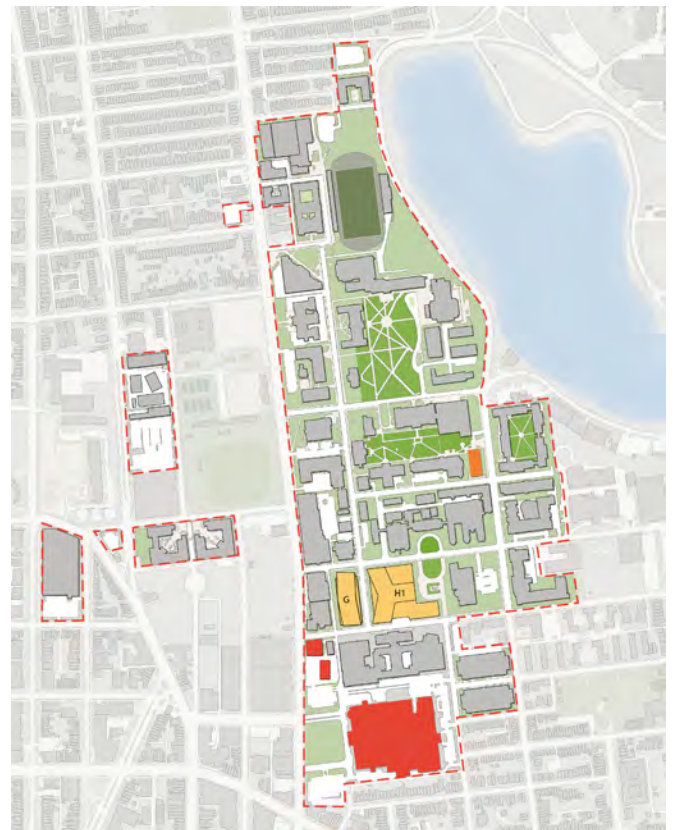


Figure 4.78: Healthcare ‘Precinct’

4.6.3.2 Achieving New Health Sciences and STEM

Swing-Space for the C.B. Powell Site (Ph1)

The Freedmen’s Hospital, now the C.B Powell Building (13) includes the facility’s central area and two wings to both the east and west. The historically significant building will be an integral part of the proposed new Health Sciences Complex (HSC) and STEM Center. For the two structures to occupy the areas to the west, north and east of C.B. Powell, building 13 will need extensive renovations to function as part of the future interdisciplinary academic complex. As a result, the University will need to identify on and off-campus swing-space solutions for the temporary relocation of the programmatic functions that currently occupy the C.B. Powell site, including the School of Communications and WHUR (49).

A New Center for Arts & Communications (Ph2)

The proposed Arts & Communications facility will occupy a vacant green site directly east of the Cramton Auditorium (20), and north of Childers Hall (28). The new facility will house the School of Communications that currently occupy facilities slated for demolition located on the C. B. Powell site. The new facility will also house the architecture program, which will enable the University to renovate or potentially decommission/ demolish the Mackey Building (3). Once complete, fine and performing arts programs will temporarily relocate to the new facility to perform a renovation of Childers Hall to suit the Center’s interdisciplinary paradigm.

The Health Sciences Complex (Ph2)

The site for the new Health Sciences Complex (HSC) is adjacent to the C. B. Powell Building, north and west of the facility. Before the construction of the HSC can begin, the University will need to relocate any remaining programs located within the Laser Chemistry Building (4), People Soft Work Site (30), and the Mental Health Center (700), and decommission/demolish the three structures.

Once the HSC is completed and occupied, the University may decommission/demolish the former buildings that housed health sciences schools and colleges (Bldgs. 22, 27, 45, 47, and 51).



Figure 4.79: Health Science + STEM ‘Precinct’

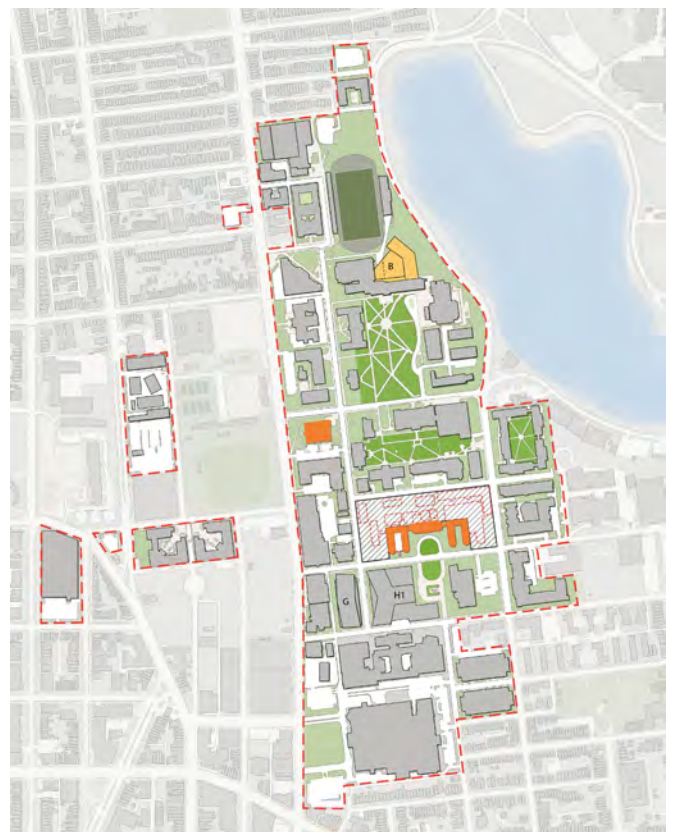


Figure 4.80: Health Science + STEM ‘Precinct’

The STEM Center (Ph2)

The site for the proposed STEM Center is also adjacent to the C. B. Powell Building, north and east of the facility. Similar to the HSC development, the University will need to relocate any remaining programs that occupy buildings slated for demolition, which includes: Freedmen’s Annex III (31) and WHUT (54).

Once completed and occupied, the University may renovate or decommission/demolish the former buildings that housed relocated STEM programs, (Bldgs. 7, 15, 16, 26, and 55).

4.6.3.2 – Healthcare Precinct

- - - Campus Boundary
- Existing Buildings
- Renovate: # 3, 13, 7, 15, 16, 26, 55
- Decommission: # 4, 13, 30, 31, 49, 54, 700
- Demolition: # 4, 13, 30, 31, 49, 54, 700
22, 27, 45, 51
- New: # B, D & E



Figure 4.82: Health Science + STEM ‘Precinct’



Figure 4.81: Health Science + STEM ‘Precinct’



Figure 4.83: Apartment-Style Residences Part 1

4.6.4 Apartment-Style Residences (Ph1/2)

The site for the development of the first phase of the new student residences is currently the Banneker surface parking lot, located along Sherman Avenue NW. Construction of Phase I will result in the loss of 178 parking spaces from the HU inventory.

The site for the development of the second phase of the new student residences is north of the Banneker surface parking lot between the Doors & Moore and Harrison Brothers buildings (400 & 401). The area is currently occupied by three temporary modular facilities – Banneker North Modular Buildings A, B, and C – used for academic and support functions. Development of phase 2 of the Residences is contingent on the relocation or demolition of the modular units, which is contingent upon the University’s overall swing space requirements over the 10-year planning period.

LEGEND

4.6.4 – Apartment Style Residences

- - - Campus Boundary
- Existing Buildings
- Decommission: Modular @ Banneker
- Demolition: Modular @ Banneker
- New: # F1, F2



Figure 4.85: Apartments-Style Residences



Figure 4.84: Apartments-Style Residences



Figure 4.86: Apartments-Style Residences Part 2

4.6.5 Howard University Union (Ph2)

The proposed HU Union building will front the eastern edge of the Yard, directly south of the Blackburn University Center (57) and north of the Undergraduate Library (61). Four academic facilities currently occupy the proposed site, including: the Center for Academic Reinforcement (24), the School of Education (25), HU Middle School (40), and Locke Hall (44).

Although the University needs to demolish the four facilities to make way for the new Student Union, this effort cannot be undertaken until the Miner Building (14) is renovated, and the new STEM and Arts & Communications Centers (E & B) are completed and occupied.

The Student Health Center unit currently located in the Medical Arts Building (163) may relocate into the new Union building, which will allow the University to decommission/demolish Building 163. While hosting this function within the Union would be optimal, the student clinic may also relocate to the new HUH/MOB or new Recreation Center sites.

Once constructed, campus recreation and academic functions from Burr Gymnasium will be housed in this facility. This will enable the University to relocate athletic functions currently housed in the Bank Building (59) to Burr.

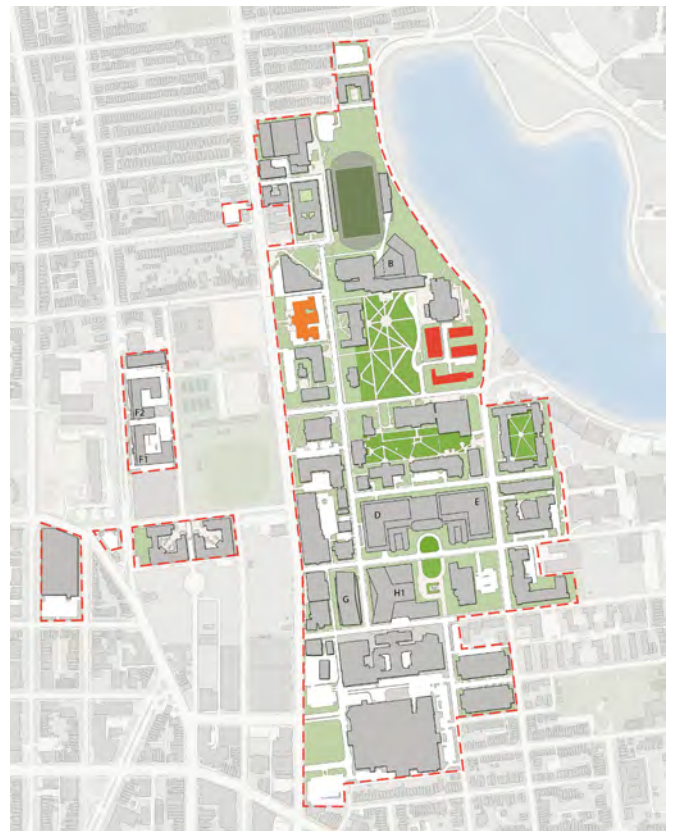


Figure 4.87: Student Union



Figure 4.88: Student Union

4.6.5 – Union

- - - Campus Boundary
- Existing Buildings
- Renovate: # 14
- Decommission: # 59
- Demolition: 24, 25, 40, 44
- New: # C



Figure 4.89: Union

4.6.6 Intercollegiate Athletics Annex (Ph2)

The new Athletics Annex building will be adjacent to the Burr Gymnasium and occupy the site of the existing University Warehouse #2 (59), also known as the Bank Building. The new facility will programmatically function as an extension of Burr as it transitions from a Recreation and Athletics Gymnasium into an Intercollegiate Athletics facility. However, Building 59 currently houses several functions that require relocation in order to raze.

LEGEND

4.6.6 – Athletics

- Renovate: # 8
- Decommission: # 59
- Demolition: 59
- New: # A



Figure 4.90: Athletics



Figure 4.91: Athletics

The University will relocate recreation and academic functions from Burr to other appropriate campus facilities, including the new HU Student Union. Hence, the Athletics Annex cannot commence until the Union facility is completed and occupied, as the Union will house recreation programs relocated from Burr. Once the Union project is complete, the newly vacated swing space in Burr can be used to house selected programs from Building 59. This will allow Howard to decommission/demolish Building 59 with minimal economic and operational impact.

4.6.7 Fusion Building (Ph1)

The new mixed-use “Fusion” building will occupy the current Wonder Plaza site at the corner of Georgia Avenue and Bryant Street NW. The new facility will house a broad array of recreation and wellness facilities, an improved iLab and additional learning environments, retail, and student housing. The existing Wonder Plaza building will need to be razed or selectively demolished to make way for this important campus, and community serving facility. The University will explore possible ways to retain some of the key facade elements.

Once the building is completed Howard will have a permanent home for the recreation functions that will vacate the Burr Gymnasium.

4.6.6 – Fusion Building

- Decommission: Wonder Plaza
- Demolition: Wonder Plaza
- New: # J



Figure 4.92: Recreational + Student Residences



Figure 4.93: Recreational + Student Residences