Scoping Attachments

University of the District of Columbia Lamond-Riggs Campus Master Plan

Washington, DC

June 13, 2023

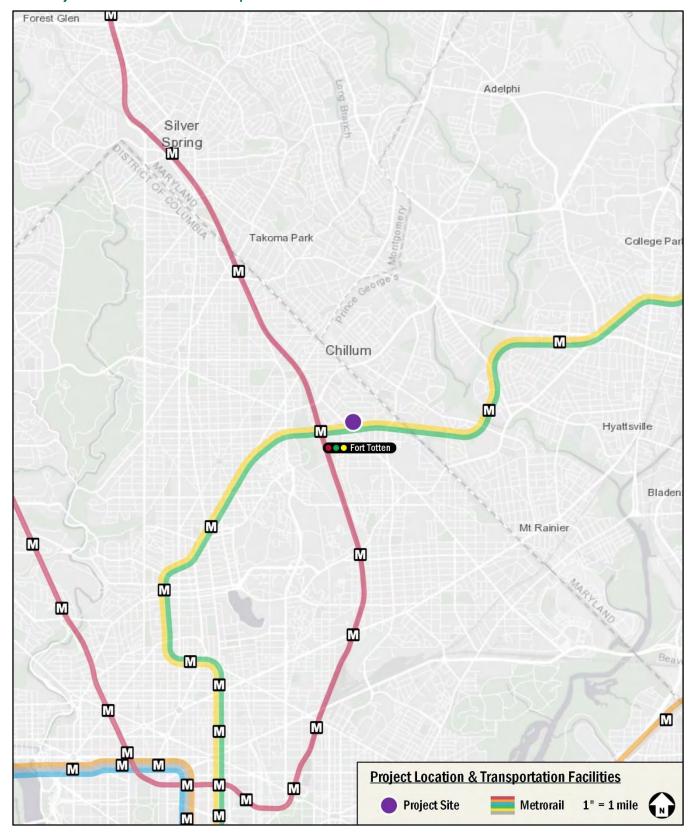


CONTENTS

(Note: Click on heading to navigate directly to each section of the Technical Attachments)

- A. Project Location & Transportation Facilities
- B. Site Aerial
- C. Anticipated Site Circulation
- D. Campus Topography
- E. Site Plats from the Office of the Surveyor
- F. Detailed Mode Split and Trip Generation Information
- G. Pedestrian Study Area
- H. Existing Bicycle Facilities
- I. Existing Transit Facilities
- J. Metrorail Buffers
- K. Other Priority Transit Buffers
- L. Study Area Intersections
- M. Background Developments
- N. Trip Distributions

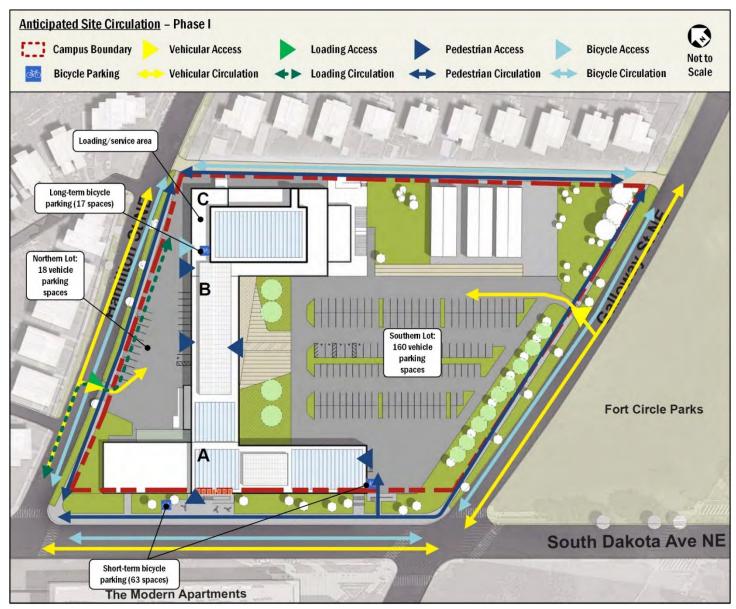
A. Project Location & Transportation Facilities

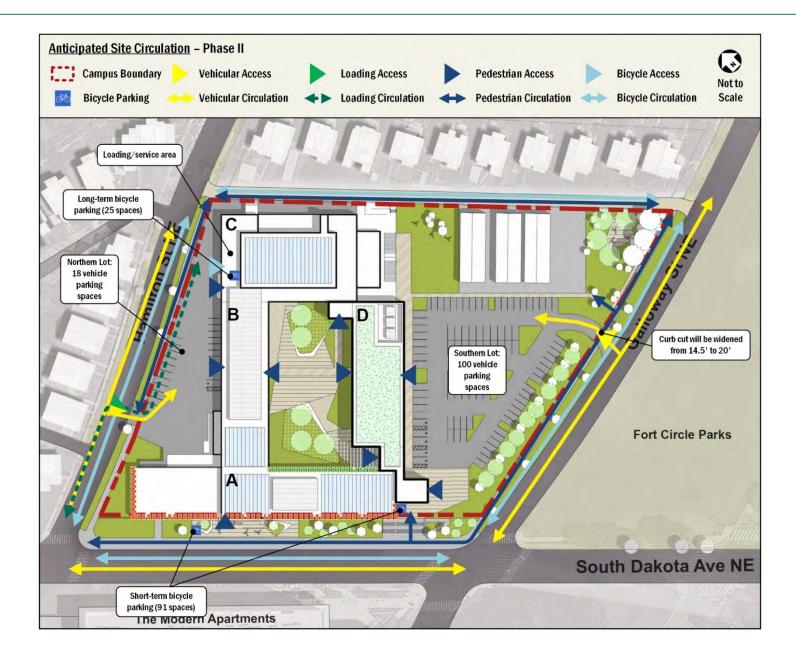


B. Site Aerial

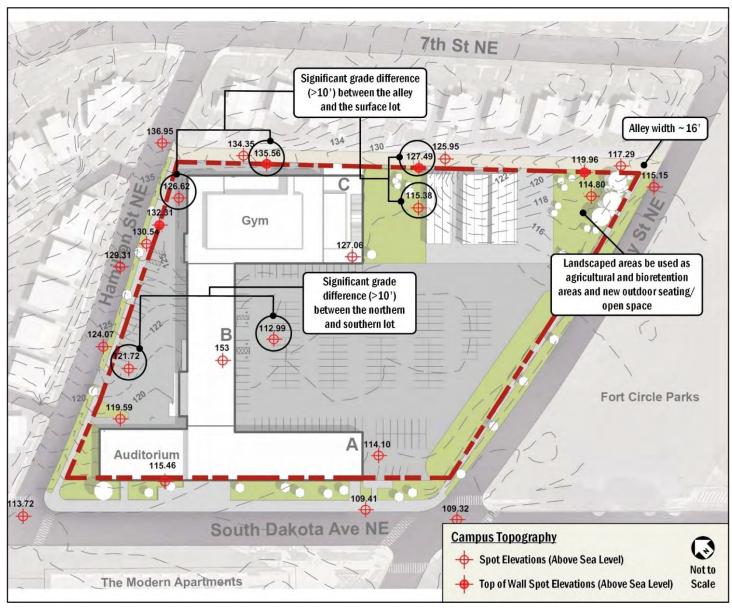


C. Anticipated Site Circulation

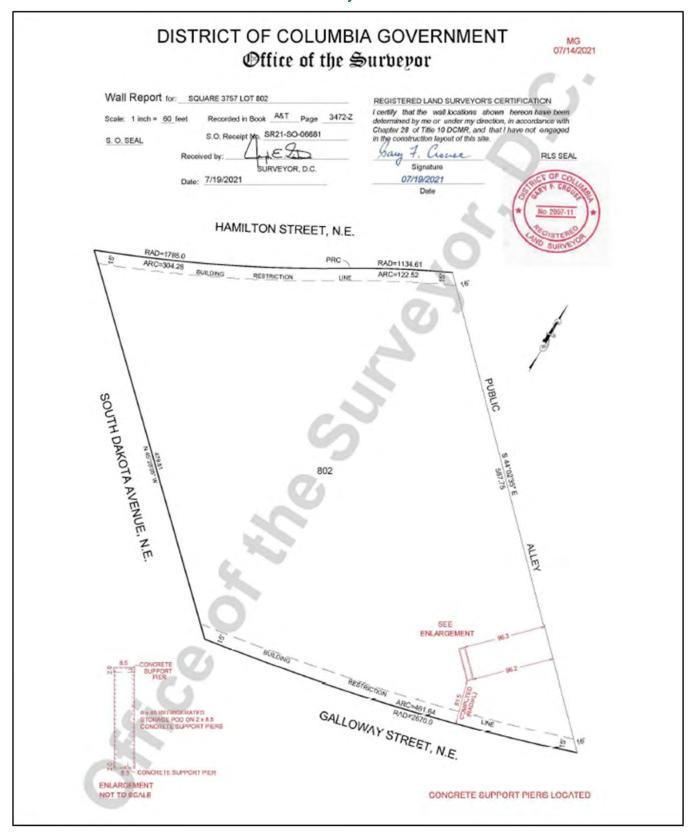




D. Campus Topography



E. Site Plats from the Office of the Surveyor



F. Detailed Mode Split and Trip Generation Information

Mode Split Assumptions

Student Component

<u>Description of residential component of project:</u>

The UDC Bertie Backus campus is anticipated to have 3,000 students by 2030.

Pertinent Mode Split data from other sources:

Information Source				Mode					
information Source	sov	Carpool	Transit	Bike	Walk	Telecommute	Other		
2011 UDC Student Center Market Research Campus Survey	27.8%		64.5%	2.0%	5.7%				
2016 UDC Campus TDM Survey	33.6%		59.4%	0.9%	3.9%		2.2%		
2022/2023 Bertie Backus Campus Survey Preliminary Result	17	.2%	F	Results to be updated once the survey is finalized					

Mode Split assumed in TIS:

Land Use	Mode									
Land Ose	Drive	Transit	Bike	Walk	Telecommute/Other					
Student Mode Split	17%	75%	2%	6%						

Faculty/Staff Component

<u>Description of residential component of project:</u>

The UDC Bertie Backus campus is anticipated to have 110 faculty/staff by 2030.

Pertinent Mode Split data from other sources:

Information Course		Mode										
Information Source	SOV	Carpool	Transit	Bike	Walk	Telecommute	Other					
2011 UDC Student Center Market Research Campus Survey	61.6%		31.5%	4.1%	1.4%							
2016 UDC Campus TDM Survey	53.7%		39.9%	1.3%	2.5%		2.6%					

Mode Split for Staff:

Usa	Mode								
Use	Drive	Transit	Bike	Walk	Telecommute/Other				
Faculty/Staff Mode Split	50%	45%	3%	2%					

Mode Split assumed in TIS:

Usa	Mode								
Use	Drive	Transit	Bike	Walk	Telecommute/Other				
Student/Faculty/Staff	20%	72%	2%	6%					

UDC Lamond-Riggs Campus- Proposed Site Trip Generation

Approximately 3,000 students

Step 1: Base trip generation using ITEs' 11th Edition *Trip Generation*

otep 21 Base and Beneration asing 112									
Land Use Land Use Code		Quantity		AM Peak Ho	our		PM Pea	ak Hour	
Land Ose	Land Ose Code	(x)	In	Out	Total	In	Out	Total	Total
Junior/Community College (students)	540	3000	267 veh/hr	63 veh/hr	330 veh/hr	185 veh/hr	145 veh/hr	330 veh/hr	3,450 veh
	Calc	ulation Details:	81%	19%	=0.11X	56%	44%	=0.11X	=1.15X

Step 2: Convert to people per hour, before applying mode splits

Landilla	People/Car		AM Peak Hour			PM Pea		
Land Use	(from 2017 NHTS, Table 16)	In	Out	Total	In	Out	Total	Total
Junior/Community College (students)	1.18 ppl/veh	315 ppl/hr	74 ppl/hr	389 ppl/hr	218 ppl/hr	171 ppl/hr	389 ppl/hr	4,071 ppl

Step 3: Split between modes, per assumed Mode Splits

Land Use Mode		Colit		AM Peak Ho	our		PM Pea		
Land Ose	Mode	Split	In	Out	Total	In	Out	Total	Total
Junior/Community College (students)	Auto	20%	63 ppl/hr	15 ppl/hr	78 ppl/hr	44 ppl/hr	34 ppl/hr	78 ppl/hr	814 ppl
Junior/Community College (students)	Transit	72%	227 ppl/hr	53 ppl/hr	280 ppl/hr	157 ppl/hr	123 ppl/hr	280 ppl/hr	2,931 ppl
Junior/Community College (students)	Bike	2%	6 ppl/hr	2 ppl/hr	8 ppl/hr	4 ppl/hr	4 ppl/hr	8 ppl/hr	81 ppl
Junior/Community College (students)	Walk	6%	19 ppl/hr	4 ppl/hr	23 ppl/hr	13 ppl/hr	10 ppl/hr	23 ppl/hr	245 ppl

Step 4: Convert auto trips back to vehicles/hour

Land Haa	Land Use People/Car (from 2017 NHTS, Table 16)		AM Peak Hour			PM Pea		
Land Ose			Out	Total	In	Out	Total	Total
Junior/Community College (students)	1.18 ppl/veh	53 veh/hr	13 veh/hr	66 veh/hr	37 veh/hr	29 veh/hr	66 veh/hr	690 veh

Trip Gen Summary for proposed development

Mode	AM Peak Hour				PM Pea		
Mode	In	Out	Total	In	Out	Total	Total
Auto	53 veh/hr	13 veh/hr	66 veh/hr	37 veh/hr	29 veh/hr	66 veh/hr	690 veh
Transit	227 ppl/hr	53 ppl/hr	280 ppl/hr	157 ppl/hr	123 ppl/hr	280 ppl/hr	2,931 ppl
Bike	6 ppl/hr	2 ppl/hr	8 ppl/hr	4 ppl/hr	4 ppl/hr	8 ppl/hr	81 ppl
Walk	19 ppl/hr	4 ppl/hr	23 ppl/hr	13 ppl/hr	10 ppl/hr	23 ppl/hr	245 ppl

UDC Lamond-Riggs Campus- Existing Site Trip Generation

Approximately 1,499 students

Step 1: Base trip generation using ITEs' 11th Edition *Trip Generation*

Step 1. Base trip generation asing inte	TI Lardon Imp	Generation							
Land Use Land Use Code		Quantity		AM Peak Ho	our		PM Pea	ak Hour	
Land Ose	Land Ose Code	(x)	In	Out	Total	In	Out	Total	Total
Junior/Community College (students)	540	1499	134 veh/hr	31 veh/hr	165 veh/hr	92 veh/hr	73 veh/hr	165 veh/hr	1,724 veh
	Calc	ulation Details:	81%	19%	=0.11X	56%	44%	=0.11X	=1.15X

Step 2: Convert to people per hour, before applying mode splits

People/Car		AM Peak Hour				PM Pea		
Land Use	(from 2017 NHTS, Table 16)	In	Out	Total	In	Out	Total	Total
Junior/Community College (students)	1.18 ppl/veh	158 ppl/hr	37 ppl/hr	195 ppl/hr	109 ppl/hr	86 ppl/hr	195 ppl/hr	2,034 ppl

Step 3: Split between modes, per assumed Mode Splits

land Han	Mode	Split	AM Peak Hour			PM Peak Hour			
Land Use			In	Out	Total	In	Out	Total	Total
Junior/Community College (students)	Auto	20%	32 ppl/hr	7 ppl/hr	39 ppl/hr	22 ppl/hr	17 ppl/hr	39 ppl/hr	407 ppl
Junior/Community College (students)	Transit	72%	114 ppl/hr	26 ppl/hr	140 ppl/hr	78 ppl/hr	62 ppl/hr	140 ppl/hr	1,464 ppl
Junior/Community College (students)	Bike	2%	3 ppl/hr	1 ppl/hr	4 ppl/hr	2 ppl/hr	2 ppl/hr	4 ppl/hr	41 ppl
Junior/Community College (students)	Walk	6%	9 ppl/hr	3 ppl/hr	12 ppl/hr	7 ppl/hr	5 ppl/hr	12 ppl/hr	122 ppl

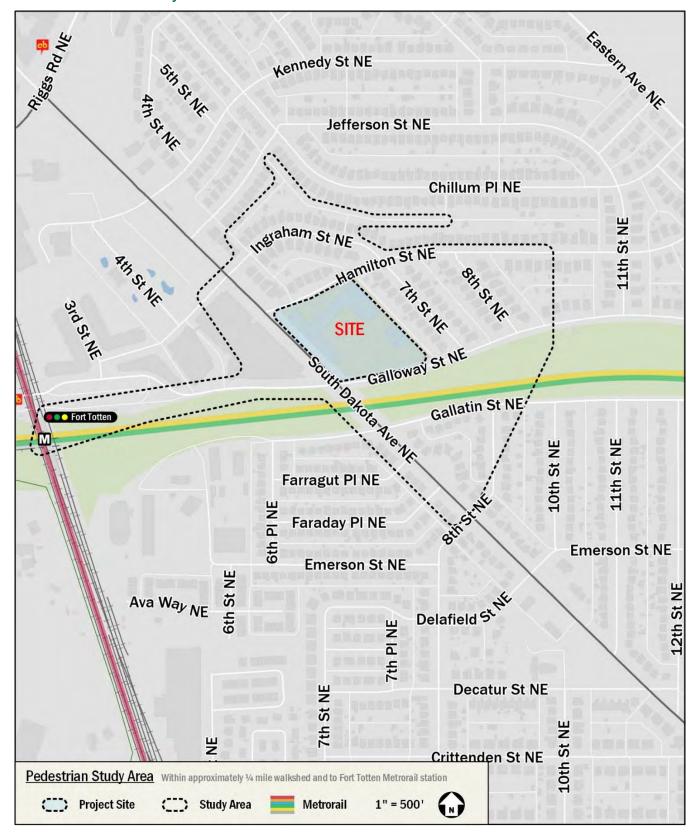
Step 4: Convert auto trips back to vehicles/hour

tep 4. convert date anys back to venicies/nour									
land Haa	People/Car	AM Peak Hour			PM Peak Hour				
Land Use	(from 2017 NHTS, Table 16)	In	Out	Total	In	Out	Total	Total	
Junior/Community College (students)	1.18 ppl/veh	27 veh/hr	6 veh/hr	33 veh/hr	19 veh/hr	14 veh/hr	33 veh/hr	345 veh	

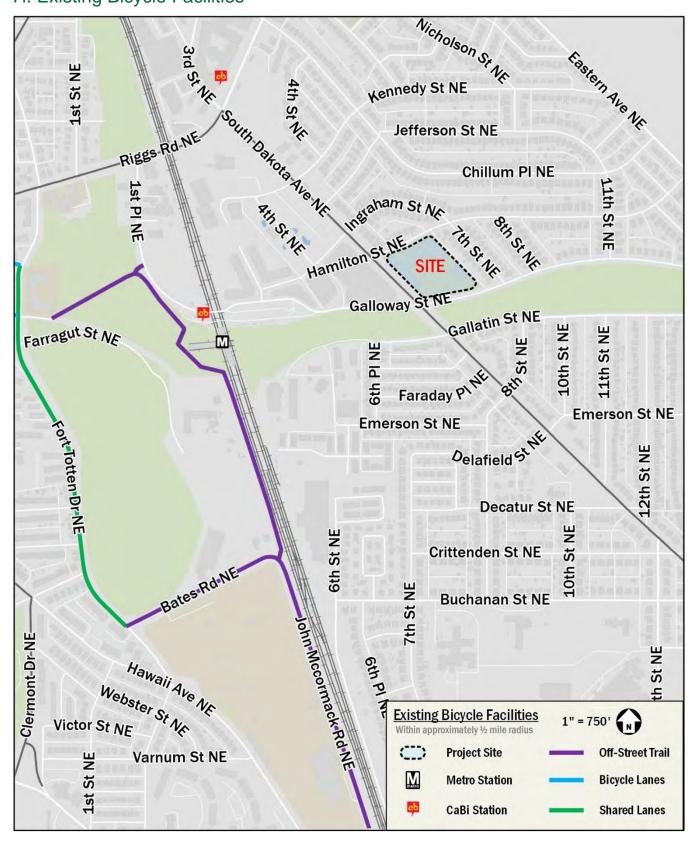
Trip Gen Summary for proposed development

Mode	AM Peak Hour			PM Peak Hour			
	In	Out	Total	In	Out	Total	Total
Auto	27 veh/hr	6 veh/hr	33 veh/hr	19 veh/hr	14 veh/hr	33 veh/hr	345 ppl
Transit	114 ppl/hr	26 ppl/hr	140 ppl/hr	78 ppl/hr	62 ppl/hr	140 ppl/hr	1,464 ppl
Bike	3 ppl/hr	1 ppl/hr	4 ppl/hr	2 ppl/hr	2 ppl/hr	4 ppl/hr	41 ppl
Walk	9 ppl/hr	3 ppl/hr	12 ppl/hr	7 ppl/hr	5 ppl/hr	12 ppl/hr	122 ppl

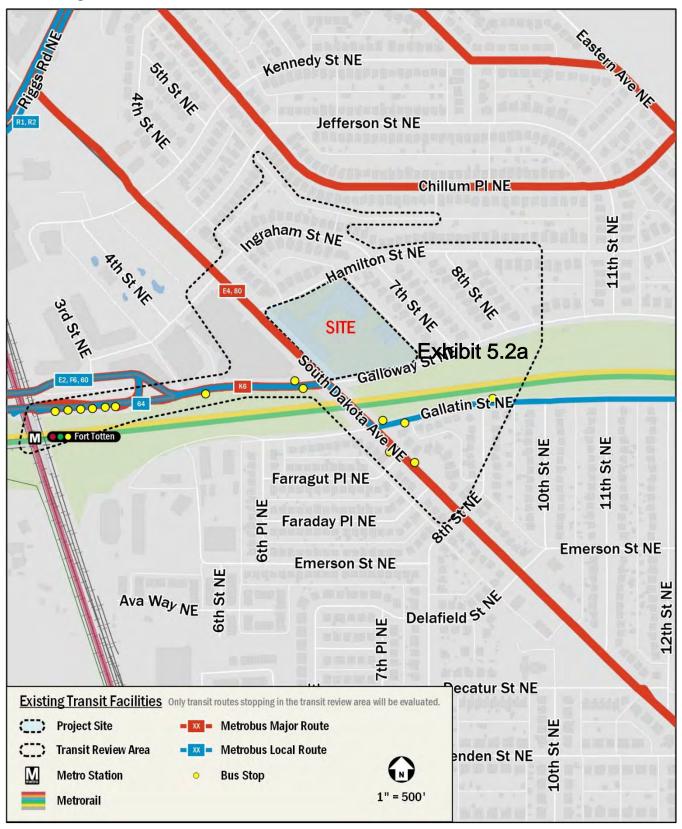
G. Pedestrian Study Area



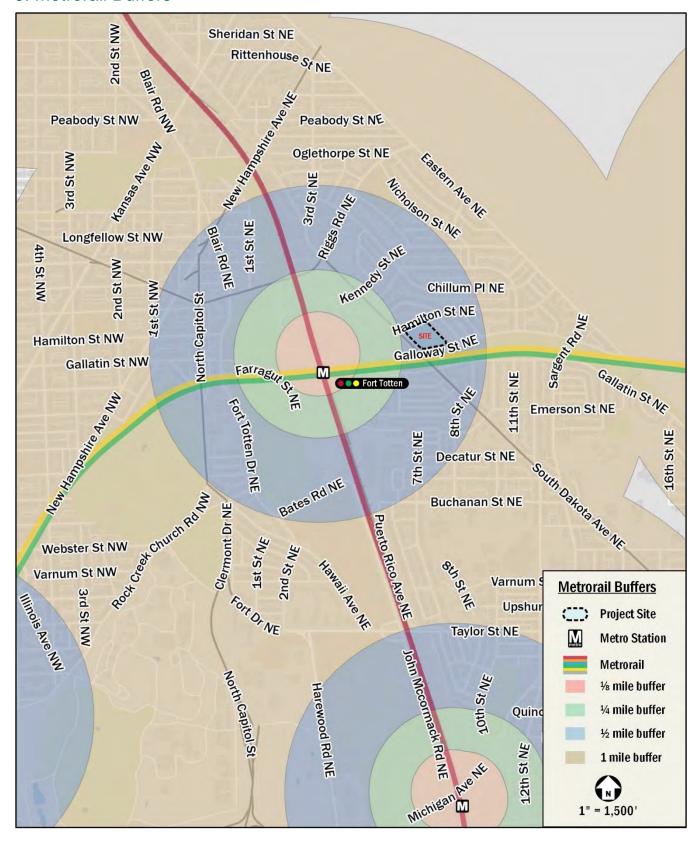
H. Existing Bicycle Facilities



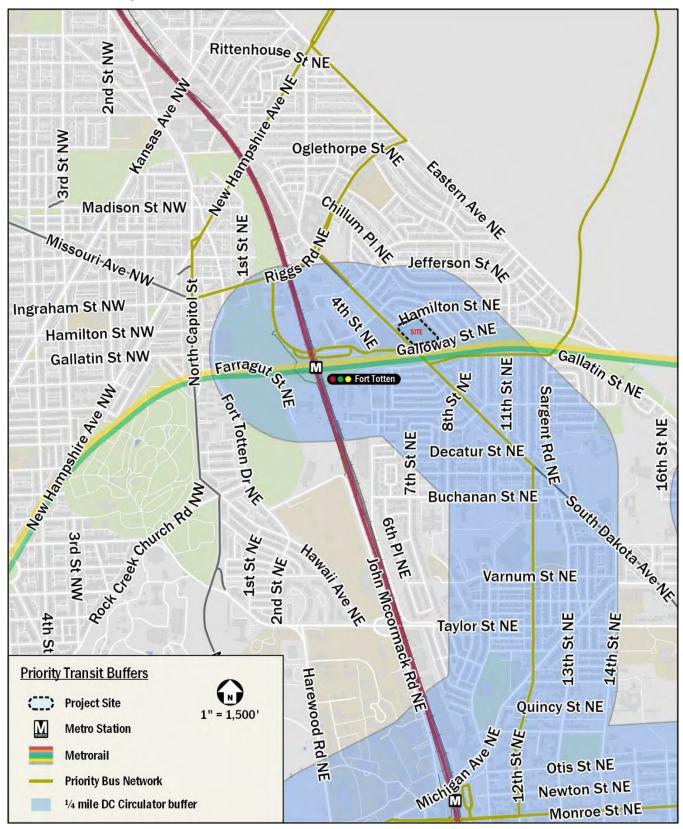
I. Existing Transit Facilities



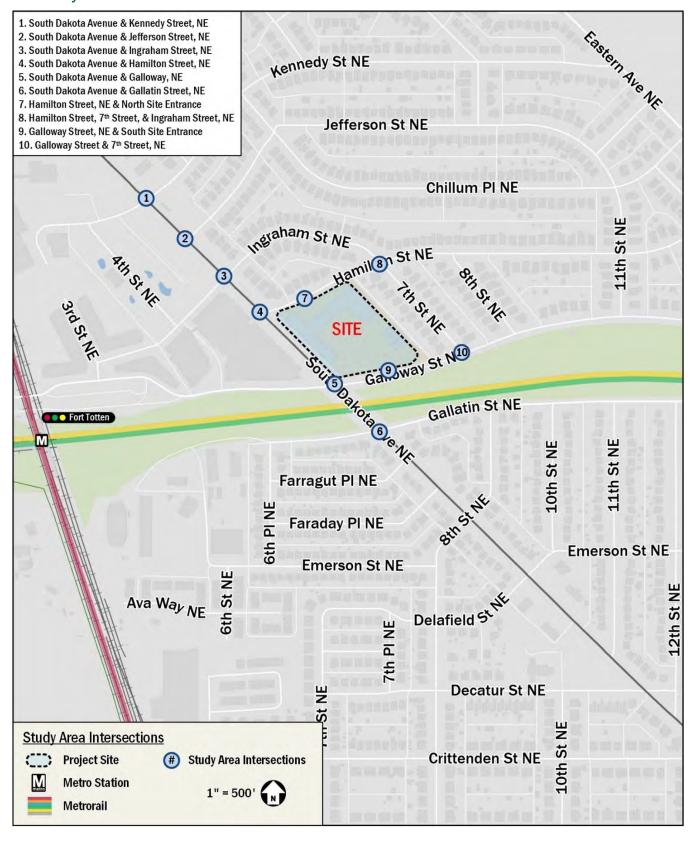
J. Metrorail Buffers



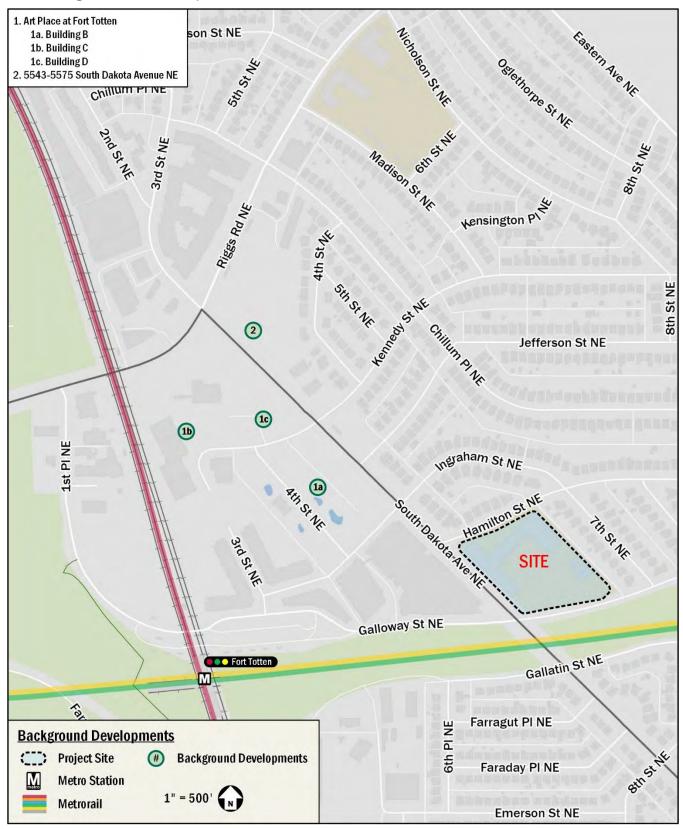
K. Other Priority Transit Buffers



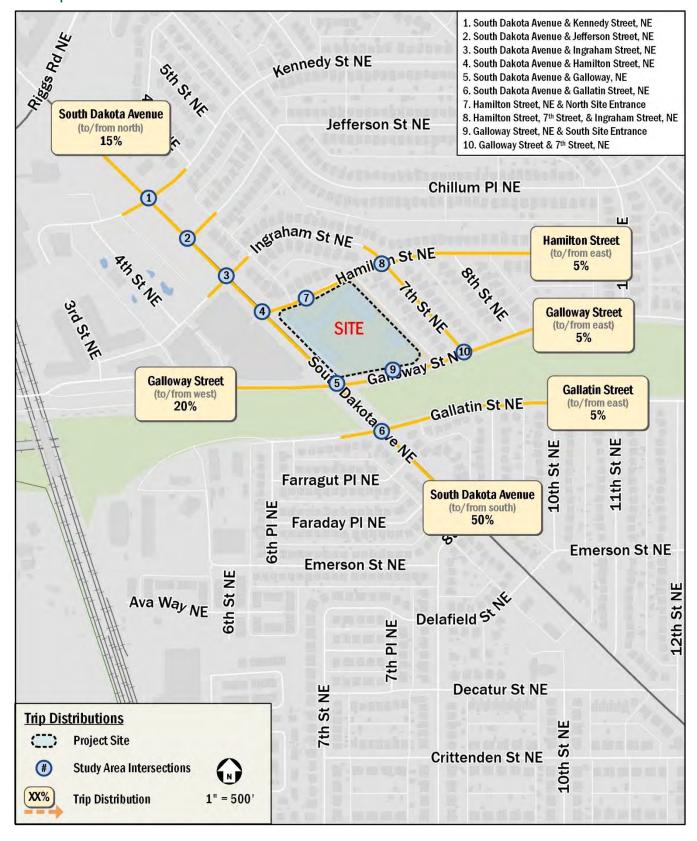
L. Study Area Intersections



M. Background Developments



N. Trip Distributions



LAMOND-RIGGS CMP PROPOSED PEDESTRIAN CIRCULATION DIAGRAM

LEGEND

Campus Boundary

Pedestrian Paths Proposed Tree Canopy

Existing Tree Canopy

Main Pedestrian Points **Entry Points**

ADA Entry Point

Equipment Service Area

(2) (3) (4) **Outdoor Seating Area**

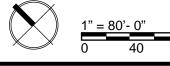
Green Houses

Pocket Park

(5) Bio-Retention Area

6 Loading /Service Area







PROPOSED SUSTAINABILITY IMPROVEMENT DIAGRAM (PHASE 2)

LEGEND

— — Campus Boundary

Storm-water Management
Photovoltaic Panels: 26,525 F

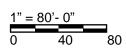
Green Roof: 13,100 SF

Proposed Tree Canopy

Existing Tree Canopy









LAMOND-RIGGS CMP PROPOSED LANDSCAPE IMPROVEMENT DIAGRAM (PHASE 2)

LEGEND

— — Campus Boundary

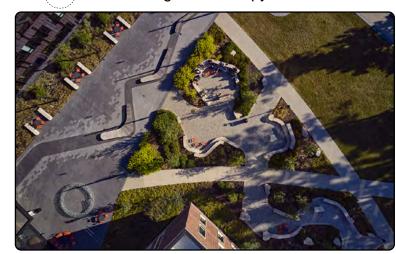
Storm-water Management

Photovoltaic Panels

Green Roof

Existing Tree Canopy

Proposed Tree Canopy







LAMOND-RIGGS CMP HYDROPONIC VERTICAL FARMING SYSTEMS











LAMOND-RIGGS CMP FUTURE BICYCLE FACILITIES (PHASE 2)

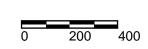
LEGEND

Campus Boundary
Existing Bicycle Paths
Unfunded Bicycle Protected Lanes
Unfunded Bicycle Collector Facility
Capital Bicycle Station

New Proposed Capital Bicycle Station

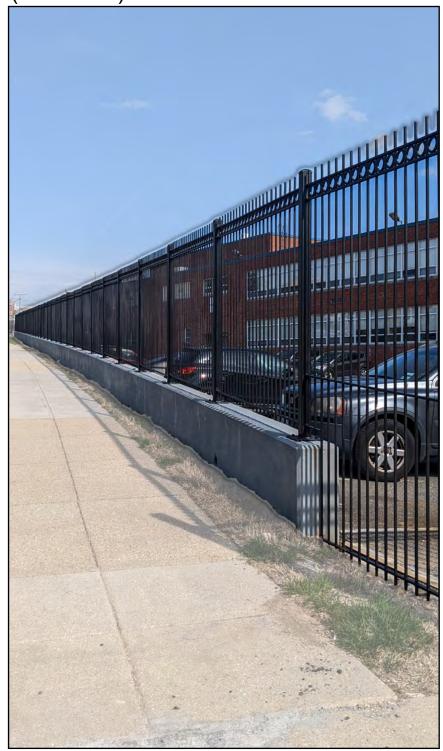








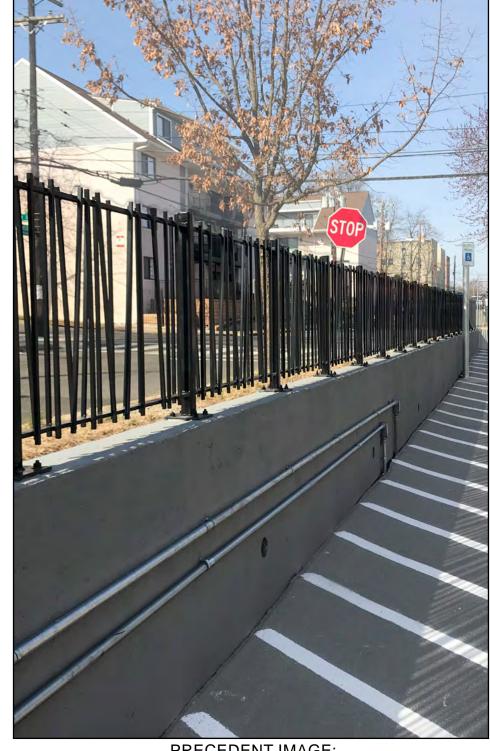
PROPOSED CAMPUS PERIMETER IMPROVEMENT DIAGRAM (PHASE 1)



(EXSITING) 6'-8' PICKET FENCE ON TOP OF CONCRETE WALL



(EXSITING) 10' CHAIN-LINK FENCE ON GALLOWAY ST & SOUTH DAKOTA TO BE REMOVED



PRECEDENT IMAGE: 3' FENCE ON TOP OF CONCRETE WALL



PROPOSED CAMPUS PERIMETER IMPROVEMENT DIAGRAM (PHASE 2)

LEGEND

— — Campus Boundary

Perimeter Condition A - South Dakota Ave. NE

- Add removable Planters and Seating at South Dakota Avenue Frontage
- Provide campus standard signage.
- Improve Facade with Decorative Metal Panels

Perimeter Condition B - Hamilton St. NE

- Improve pedestrian access and consolidate vehicular driveways
- Provide campus standard signage.

Perimeter Condition C - Public Alley

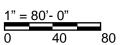
- Redesigned perimeter edge fencing
- Secure campus boundary with Lighting
- Eliminate alley access gate

Perimeter Condition D - Galloway St. NE

- New planting and storm water Devices parallel to Galloway St.
- Improve pedestrian and vehicular access to the core of the campus.
- Provide campus standard signage.
- Provide permeable campus edge to connect campus plaza & green space and Fort Circle Park.
- Improve Edge with Additional Vegetation to Screen Parking Lot.







PROPOSED CAMPUS BUILDING FACADE IMPROVEMENT DIAGRAM (PHASE 1)

LEGEND

Campus Boundary

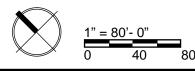
Decorative Panels / Screens

Proposed Tree Canopy

Existing Tree Canopy









PROPOSED CAMPUS BUILDING FACADE IMPROVEMENT DIAGRAM (PHASE 2)

LEGEND

— — Campus Boundary

Decorative Panels / Screens

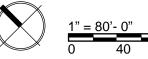
Green Walls

Proposed Tree Canopy

Existing Tree Canopy



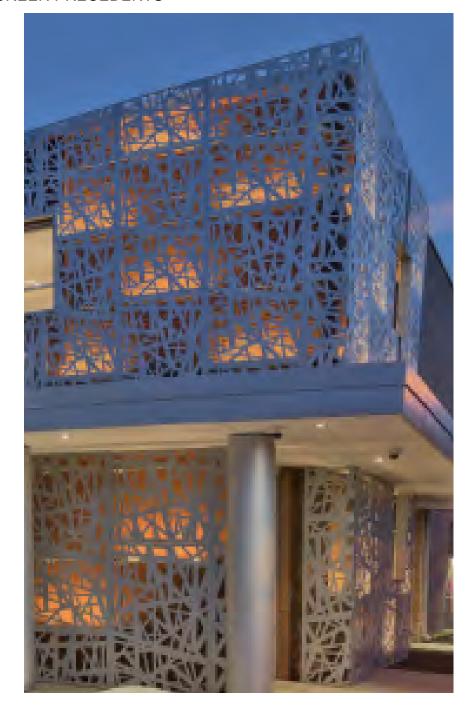








CAMPUS BUILDING FACADE IMPROVEMENT PRECEDENTS (PHASE 2)
SCREEN PRECEDENTS





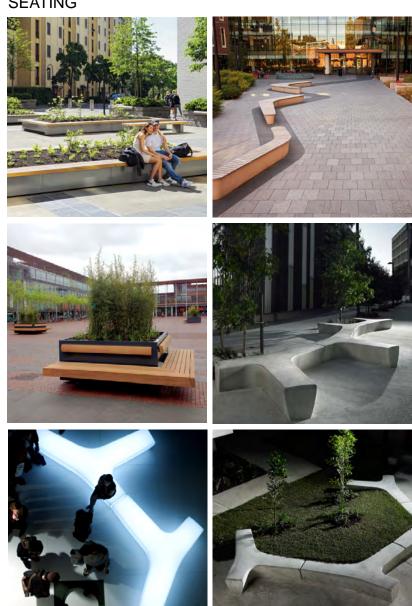




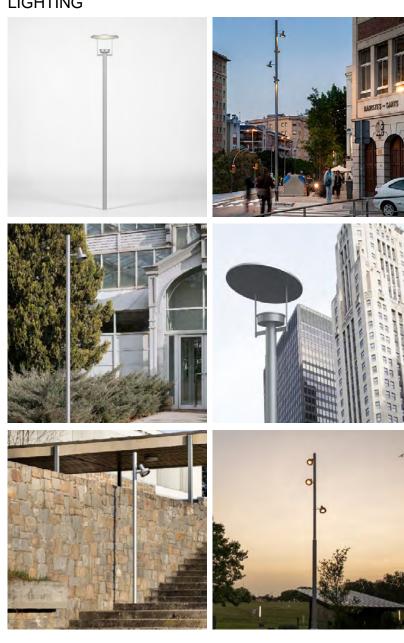


LAMOND-RIGGS CMP CAMPUS SITE MATERIALS (PHASE 2)

SEATING



LIGHTING



PAVER'S





FURNISHING







PROPOSED CAMPUS WAYFINDING DIAGRAM (PHASE 1)

LEGEND

— — Campus Boundary

Proposed Tree Canopy

Existing Tree Canopy

MAJOR PATHWAYS

Red Path
Gold Path

POTENTIAL SIGN LOCATION

Sign A - UDC Campus Sign

Sign B - UDC Campus Street Sign

Sign B2 - UDC Campus Banner

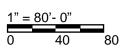
Sign C - UDC Campus Map

Sign D - Campus Wayfinding Path



The Modern Apartments





PROPOSED CAMPUS WAYFINDING DIAGRAM (PHASE 2)

LEGEND

Campus Boundary

Proposed Tree Canopy

Existing Tree Canopy

MAJOR PATHWAYS

Red Path Gold Path

POTENTIAL SIGN LOCATION

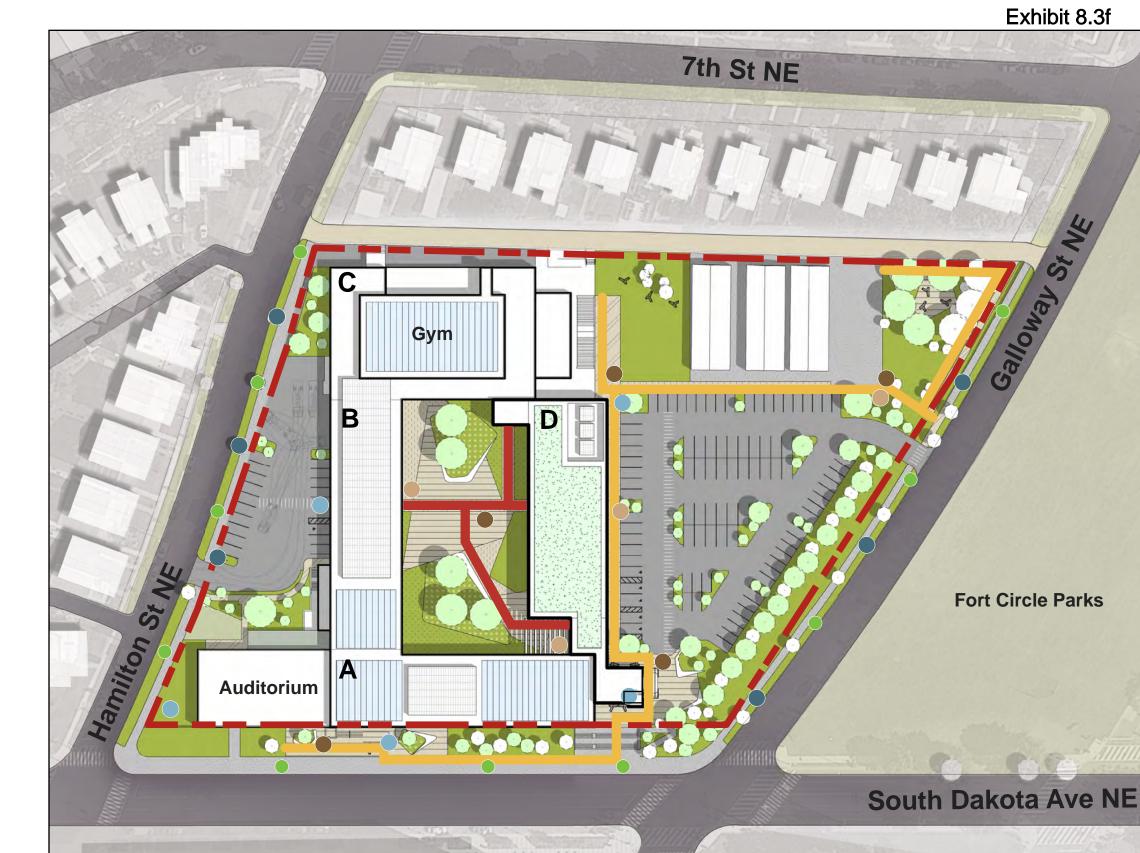
Sign A - UDC Campus Sign

Sign B - UDC Campus Street Sign

Sign B2 - UDC Campus Banner

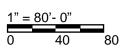
Sign C - UDC Campus Map

Sign D - Campus Wayfinding Path

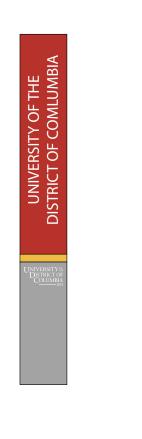


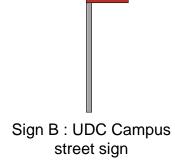
The Modern Apartments

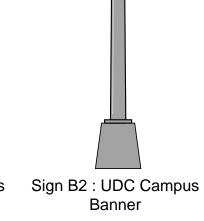


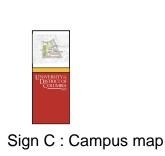


Sign A: UDC Campus sign











Sign D : Campus wayfinding paths



