

Multimodal Transportation Assessment

The Heights – Phase 2

Arlington, Virginia

March 31, 2022

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Executive Summary

The following report is a Multimodal Transportation Assessment (MMTA) for The Heights Phase 2, located in Arlington, Virginia.

Site Location and Study Area

The existing Heights building has five (5) above-grade and two (2) below-grade stories and houses the H-B Woodlawn Secondary Program and the Eunice Kennedy Shiver Program. The latter of these programs serves APS students who have special needs. The project site is located at 1601 Wilson Boulevard in Arlington, Virginia. The Heights building is bordered by Wilson Boulevard to the south, 18th Street N to the north, N Quinn Street to the west, and the Aubrey residential building and Rosslyn Highlands Park to the east. Phase 2 of the project is limited to the area bounded by The Heights building (H-B Woodlawn/Shriver) to the south, 18th Street to the north, Quinn Street to the west, and Rosslyn Highlands Park to the east.

The site is currently zoned as S-3A, Special District and is shown as a public land use in the General Land Use Plan (GLUP).

Proposed Project

Phase 2 of the project consists of the redevelopment of natural grass recreational space and the former fire station to provide ADA-compliant pick-up/drop-off areas, a covered entrance for the Shriver program, an above-grade athletic field, covered and secure bicycle parking, and permanent off-street parking that will help relieve curbside management issues observed under existing conditions.

Current plans for the below-grade structure proposed underneath the athletic field include a total of 61 parking spaces that will include use-specific designations for ADA parking and loading, maintenance and small parcel delivery vehicles, staff loading/unloading, long-term staff parking, and visitor parking. A single new curb cut will be added along 18th Street to access the off-street parking, while the curb cut previously used to access the fire station was removed in November 2021.

Policies and Goals

The Arlington County Master Transportation Plan (MTP), adopted in 2011 and updated in 2019, outlines goals to improve various modes of transportation throughout the County. Similarly, the Core of Rosslyn Transportation Study has a goal to create permanent multimodal improvements in the core of Rosslyn to provide a safe and accessible transportation network for all

users. The proposed development aligns with several of the goals and policies of both the MTP, Core of Rosslyn Transportation Study, and other guiding documents for the County.

Multi-Modal Overview

Transit

The Heights building is well-served by transit. The site is located less than 0.3 miles from the Rosslyn Metrorail Station which is served by the Silver, Blue and Orange lines. There are three (3) WMATA Metrobus routes and four (4) Arlington Transit (ART) routes serving bus stops approximately a quarter mile from the school. Most of these routes travel along Clarendon Boulevard and Wilson Boulevard. These routes connect to multiple Metrorail stations in Arlington County and the District.

Pedestrian

The site is surrounded by a well-connected pedestrian environment. In the vicinity of the site, sidewalks generally meet standards recommended by the Arlington County Master Transportation Plan with some gaps in the system.

Phase 1 of this project included sidewalk improvements that facilitate quality pedestrian access to the site under existing conditions. Additionally, the recent completion of the Rosslyn Highland Park has further improved pedestrian access to the site. As part of Phase 2 of the project, the parking lane on the south side of 18th Street between Quinn Street and the mid-block crosswalk will be removed and the sidewalk will be extended to the travel lane to reduce vehicle bus conflicts. This will provide additional space for student staging and bus matching, and to allow for additional street trees along the roadway.

Bicycle

The site has access to several on- and off-street bicycle facilities, including protected bike lanes on Wilson Boulevard and Clarendon Boulevard and bicycle lanes along N Rhodes Street, Key Boulevard, N Quinn Street, N Lynn Street, and 15th Street N which connect to the Custis Trail.

The Arlington Master Transportation Plan recommends existing bicycle facilities near the site be upgraded in the future including the addition of bicycle lanes along Langston Boulevard, Fort Myer Drive and N Nash Street, on-street routes along N Nash Street, and bicycle trail improvements along N Lynn Street.

Vehicular

The site is well connected via two arterials; Wilson Boulevard and N Quinn Street. The arterials create connections to the greater Washington region via I-66, US-29 (Langston Boulevard), US-50 (Arlington Boulevard), and VA-110 (Richmond Highway). Vehicular access to the site is facilitated from Wilson Boulevard, N Quinn Street, 18th Street N, and N Pierce Street. There are also other minor arterials, collectors, and local roads which can be used to access the site directly.

Existing Conditions

Although some transportation components are operating at acceptable conditions, field observations and collected data show that both the H-B Woodlawn and Shriver programs have difficulties accommodating competing multimodal needs.

- Full-time staff parking demands are generally met, as the building has access to 100 permanent spaces in the adjacent parking garage at the Aubrey residential development. These spaces are supplemented by 30 spaces leased at the 1776 Wilson Boulevard parking garage, approximately a 3-minute walk from the main office entrance to the H-B Woodlawn program.
- School bus boarding and alighting along 18th Street N generally works during arrival and dismissal; however, significant coordination is required between the two programs. Additionally, vehicles often ignore the existing restrictions prohibiting vehicles other than emergency vehicles and buses along 18th Street between N Quinn Street and N Pierce Street.
- The Shriver program faces significant challenges accommodating ADA-compliant loading and unloading for its students as well as ADA-compliant, short-term visitor parking. ADA-compliant curbside spaces recently constructed along the east side of Quinn Street have alleviated some of these challenges, but they often cannot accommodate all demands and/or are blocked by vehicles that do not require ADA-compliant spaces.
- Short-term parking needs are not well served under existing conditions. Teachers loading and unloading supplies have difficulty finding a short-term space near their program's front door. Additionally, there are no dedicated spaces for maintenance vehicles which often utilize the ADA-compliant spaces on Quinn Street or the 15-minute parking spaces along Wilson Boulevard meant to accommodate H-B Woodlawn pick-up/drop-off (PUDO).

- Bicycle parking is a challenge at the schools, with no covered bicycle racks or storage boxes provided. Where bicycle parking is provided along Wilson Boulevard, school staff discourages it due to frequent theft and conflicts with student PUDO.

Summary and Recommendations

This report concludes that Phase 2 of the Heights will not have a detrimental impact on the surrounding multimodal transportation network and will significantly improve observed transportation challenges under existing Phase 1 conditions, assuming that all planned site design elements are implemented.

Phase 2 has many positive elements contained within its design that minimize existing transportation challenges observed in Phase 1, including:

- Dedicated ADA-compliant loading/unloading and short-term parking spaces provided in the below-field structure which will provide covered parking within close proximity to the Shriver program's main entrance at the northwest side of the building.
- Dedicated parking spaces for short-term faculty and staff use provided in the below-field structure as well as dedicated spaces for maintenance vehicles. This will alleviate conflicts between maintenance vehicles and other curbside demands such as student PUDO and short-term retail parking for nearby businesses.
- Increased bicycle parking for the building in the below-grade structure. The inclusion of a secure bicycle storage room for commuters and covered bicycle racks for students will help the programs meet their Class I and Class II/III bicycle parking requirements. Additional bicycle parking will also help the programs make progress toward goals set in Arlington County's Master Transportation Plan.
- School bus operations will be improved through the addition of a covered walkway between 18th Street and the building. Phase 2 also includes proposed changes to the 18th Street streetscape by extending the southern curb between Quinn Street and the mid-block crosswalk at Rosslyn Highlands Park. APS is open to modifying the final design as long as the implemented streetscape improvements will provide the following functionality:
 - Sufficient space for students to queue during arrival and dismissal;
 - Ability for Shriver school buses to load and unload wheelchairs directly on the sidewalk;

- Adequate sidewalk widths to allow typical pedestrian activity to take place concurrently with arrival and dismissal; and
- The ability to meet the project's goals for tree planting, with the secondary benefit of providing shade for students boarding and alighting school buses.
- The below-field structure will allow The Heights to stop leasing parking spaces from the 1776 Wilson Boulevard parking garage, will accommodate visitor parking, and could be used for event parking on nights and weekends.
- Other operational improvements are also recommended, including ways to increase the efficiency and capacity of PUDO for both programs with slight changes to curbside management that will not decrease space used for non-school uses such as short-term retail parking and food trucks.

A comprehensive comparison of transportation accommodations reviewed in this report for both Phase 1 and Phase 2 is shown in Table 11.

Introduction

This report presents the findings of a Multimodal Transportation Assessment (MMTA) conducted for Phase 2 of the Heights building, located in Arlington, VA.

The Heights building has five (5) above-grade and two (2) below-grade stories and houses the H-B Woodlawn Secondary Program and the Eunice Kennedy Shiver Program. The latter of these programs serves APS students who have special needs.

The site does not include any on-site parking and has no covered pick-up/drop-off areas or accessible parking for students served by the Shiver program.

The programs occupy a 180,000-square-foot site that includes the Heights building, natural grass recreational space, and formerly the Arlington County Temporary Fire Station Number 10. This fire station was decommissioned and demolished in November 2021, and the associated curb cut along N Quinn Street was removed. The existing site plan is shown in Figure 6. As part of Phase 2 of the project, the existing natural grass recreational space and former fire station will be redeveloped and include:

- ADA-compliant pick-up/drop-off areas;
- A covered entrance for the Shriver program;
- An above-grade athletic field;
- Covered and secure bicycle parking; and
- Permanent on-site, off-street parking in a below-grade structure underneath the athletic field with 61 parking spaces to be designated as follows:
 - Seven (7) standard ADA-compliant spaces;
 - Two (2) van ADA-compliant spaces;
 - Six (6) maintenance van and small parcel delivery spaces;
 - Two (2) staff loading/unloading spaces;
 - 30 long-term staff parking spaces; and
 - 14 visitor parking spaces.

A single new curb cut will be added along 18th Street N to accommodate access to the below-grade structure. The site is currently zoned as S-3A, Special District and is shown as a public land use in the General Land Use Plan (GLUP).

Purpose of Study

The purpose of this study is to evaluate the transportation network in the vicinity of the site, to identify any potential transportation impacts that may result from the proposed project, and to incorporate transportation solutions that improve existing issues from Phase 1. Elements of this report include a review of the area and multimodal transportation network surrounding the site, a review existing Phase 1 conditions, and a review of the transportation components of the proposed Phase 2.

Study Tasks

The following tasks were completed as part of this study:

- A scoping form dated December 14, 2021, was submitted by Gorove Slade to Arlington County and also accepted via email on December 14, 2021. This scope includes discussions about the parameters of the study and relevant background information.
- Gorove Slade staff conducted field observations of the existing (Phase 1) conditions of the Heights building in October 2021 to review existing access, make general parking observations, and view arrival and dismissal procedures at the schools. A review of these observations is included in the Review of Existing Conditions – Phase 1 chapter.
- Curbside activity data and parking counts (inventory and occupancy) of the off-site parking garage at the nearby Aubrey residential building were collected on Thursday, December 16, 2021.
- Multimodal elements were analyzed, reviewing transit, pedestrian, and bicycle travel to and from the project.

Project Summary

Site Location

Figure 1 shows the location of the project in relation to regional transportation facilities. The project site is located at 1601 Wilson Boulevard in Arlington, Virginia. The Heights building is bordered by Wilson Boulevard to the south, 18th Street N to the north, N Quinn Street to the west, and the Aubrey residential building and Rosslyn Highlands Park to the east. Phase 2 of the project is limited to the area bounded by The Heights building (H-B Woodlawn/Shriver) to the south, 18th Street to the north, Quinn Street to the west, and Rosslyn Highlands Park to the east. The site location is shown in Figure 2.

Parcel Information

The existing site currently includes natural grass recreational space and formerly the Arlington County Temporary Fire Station Number 10 which was decommissioned and demolished in November 2021. A parcel map showing the location of the property is presented in Figure 3.

General Land Use Plan Recommendations

According to Arlington County's General Land Use Plan (GLUP), this site is listed as Public used for parks, schools, parkways, major unpaved rights-of-way, libraries, and cultural facilities. The GLUP map for the site is shown in Figure 4. The site is currently zoned S-3A, Public District as shown in Figure 5.

Proposed Site Plan

Phase 2 of the project consists of the redevelopment of natural grass recreational space and the former fire station to provide ADA-compliant pick-up/drop-off areas, a covered entrance for the Shriver program, an above-grade athletic field, covered and secure bicycle parking, and permanent off-street parking that will help relieve curbside management issues observed under existing conditions.

Current plans for the below-grade structure proposed underneath the athletic field include a total of 61 parking spaces that will include use-specific designations for ADA parking and loading, maintenance and small parcel delivery vehicles, staff loading/unloading, long-term staff parking, and visitor parking. A single new curb cut will be added along 18th Street to access the off-street parking, while the curb cut previously used to access the fire station was removed in November 2021.

The proposed site plan is shown in Figure 7.

Data Sources

Sources of data for this study include Arlington County, the Virginia Department of Transportation (VDOT), and the office files and field observation efforts of Gorove Slade.

Contents of Study

This report contains four (4) chapters as follows:

- Study Area Overview
This chapter reviews the area near and adjacent to the project and includes an overview of the site location.
- Review of Existing Conditions (Phase 1)
This chapter summarizes Phase 1 and the existing transportation components, including a review of vehicular

parking, student pick-up/drop-off operations, bus loading/unloading operation and bicycle parking.

- Project Design (Phase 2)
This chapter summarizes Phase 2 of the project including the site plan and access. Included is a review of the proposed transportation changes to vehicular parking, student pick-up/drop-off locations, bus loading/unloading area and bicycle parking.
- Summary and Conclusions
This chapter presents a summary of the existing conditions of the campus and presents overall findings and conclusions.

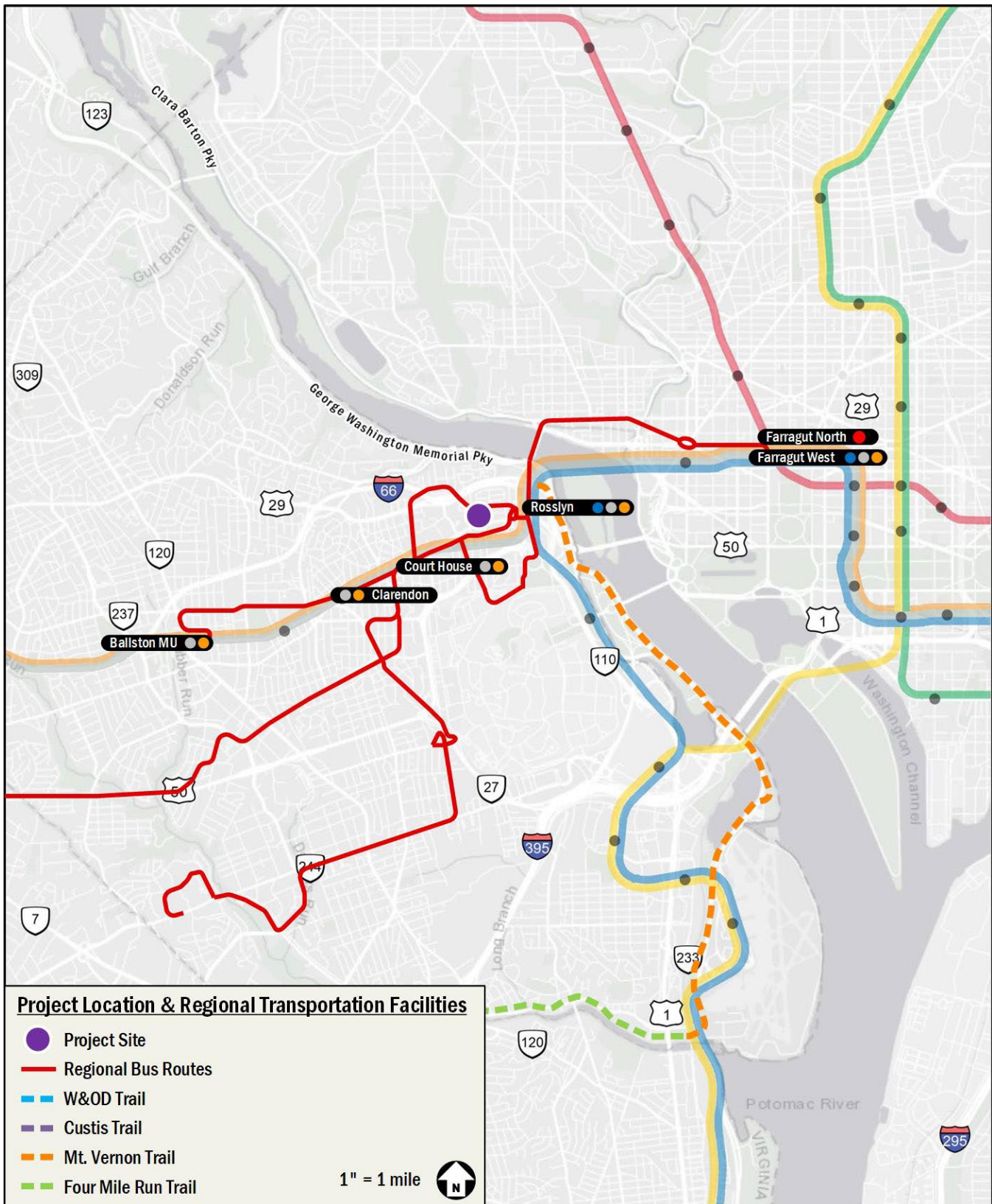


Figure 1: Project Location and Regional Transportation Facilities

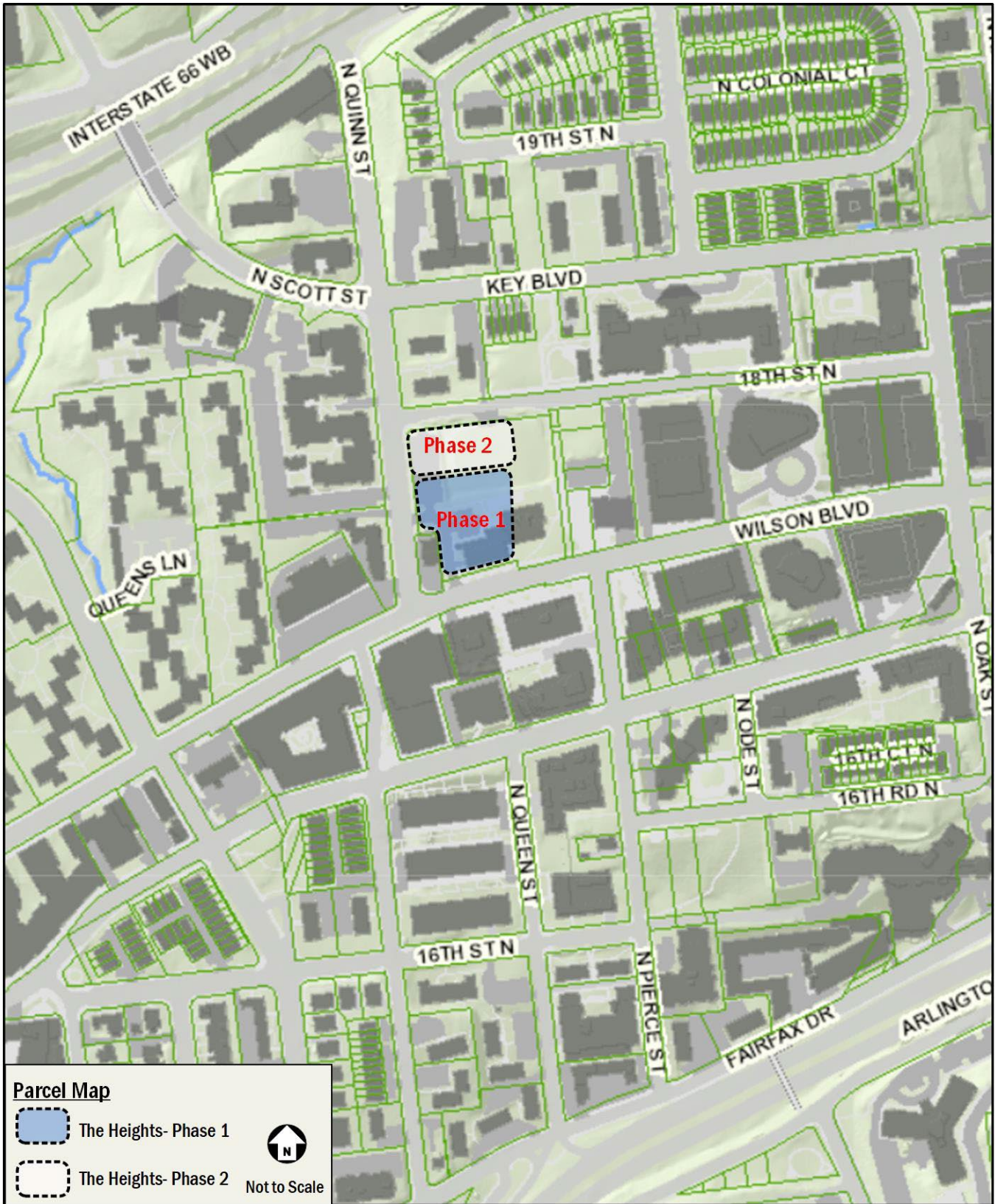


Figure 3: Parcel Map (Source: Arlington County Real Estate Map, September 2016)

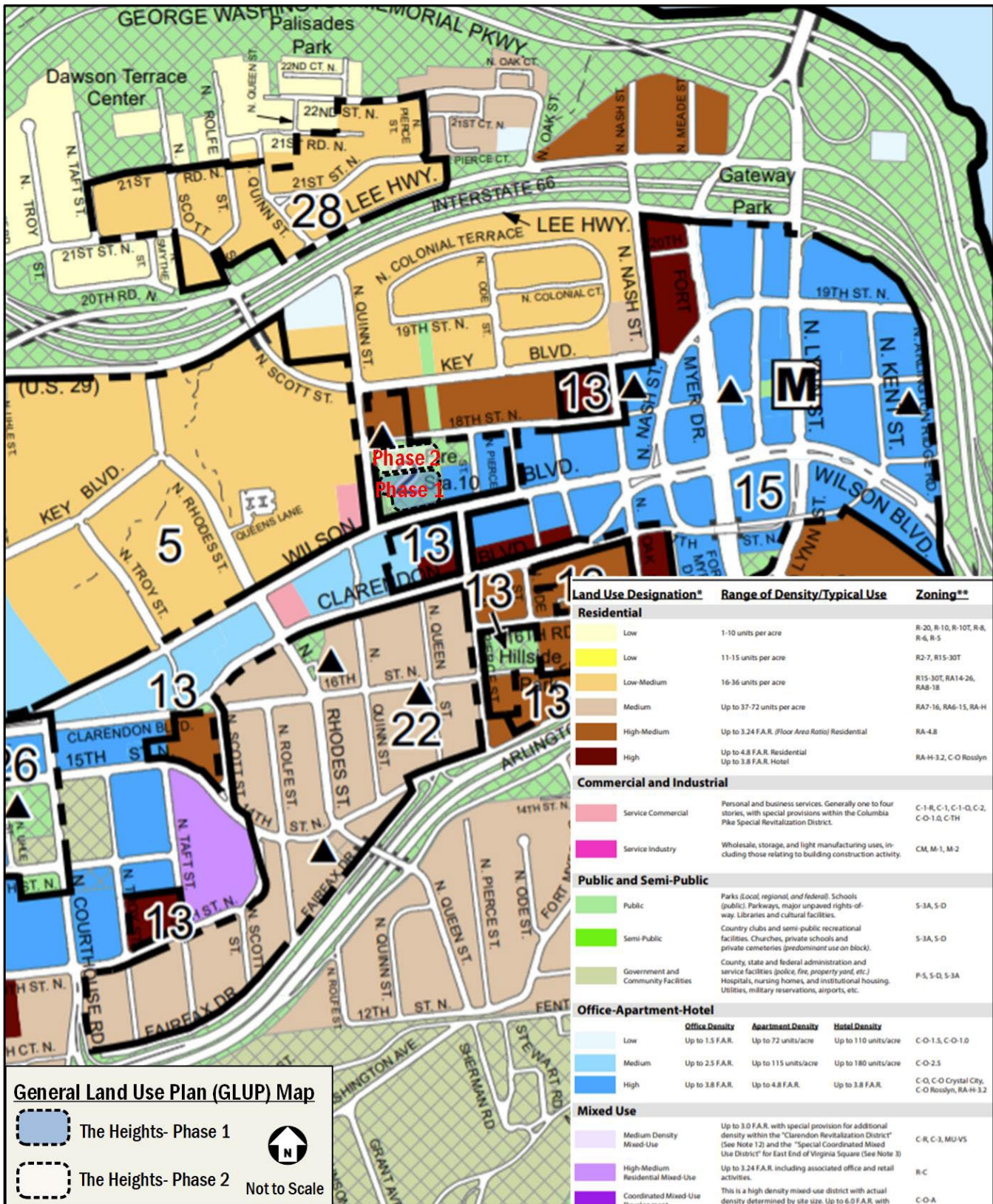


Figure 4: Planned Land Uses (Source: Arlington General Land Use Plan (GLUP), June 2017)



Figure 5: Zoning Map (Source: Arlington County)



Figure 6: Existing Site Plan



Figure 7: Proposed Site Plan

Study Area Overview

This chapter reviews the existing conditions of the surrounding transportation network and includes an overview of the site location, including a summary of the major transportation characteristics of the area.

The following conclusions are reached within this chapter:

- The site is surrounded by an extensive regional and local transportation system that connects students, staff, and visitors of the Heights to the rest of Arlington County and surrounding areas.
- The Heights building is served by public transportation with access to several local and regional bus routes and three Metrorail lines via those bus routes.
- The site is surrounded by a well-connected pedestrian environment. In the vicinity of the site, sidewalks generally meet standards recommended by the Arlington County Master Transportation Plan with some gaps in the system.
- The site has access to several on- and off-street bicycle facilities, including protected bike lanes on Wilson Boulevard and Clarendon Boulevard and bicycle lanes along N Rhodes Street, Key Boulevard, N Quinn Street, N Lynn Street, and 15th Street N which connect to the Custis Trail.

Major Transportation Features

Overview of Regional Access

Under existing conditions, the site has ample access to regional vehicular, bicycle, and transit-based transportation options that connect the school to destinations within Virginia, the District of Columbia, and Maryland. The school is accessible from I-66, US highways such as US-50 (Arlington Boulevard) and US-29 (Langston Boulevard), as well as state routes like SR-110 (Richmond Highway). All of these roadways bring vehicular traffic within one-half mile of the school, at which point arterials and local roads can be used to access the campus directly. The main arterials in the vicinity of the campus are Wilson Boulevard and Clarendon Boulevard.

The site is located less than 0.3 miles away from the Rosslyn Metrorail station which serve the Orange, Blue and Silver Lines, and is approximately 0.6 miles away from the Courthouse Metrorail station which serves the Orange and Silver Lines. The

Blue, Orange, and Silver Lines connect Fairfax County, VA to Prince George's County, MD, via Arlington, Alexandria, and the District of Columbia. These lines connect to the Red Line at the Metro Center Metrorail station in Downtown DC, which provides a direct connection to Union Station, a hub for commuter rail – such as Amtrak, MARC, and VRE. This allows for broader access to much of the greater Washington region. Overall, the site has access to several regional roadways and transit options, making it convenient to travel between the site and destinations in the District, Virginia, and Maryland. The campus is also serviced by seven (7) major regional bus routes which connect to multiple Metrorail stations in Arlington County and the District.

The school is located within 0.7 miles of Fort Bennett Park and Palisade Trail, an 11-acre city park and green space as well as within two (2) miles of the Custis Trail. The latter is a hilly 4.5 miles-long shared use path which travels along Custis Memorial Parkway and provides connections to the District to the east and to the W&OD Trail and City of Falls Church to the west. This trail makes up part of the "Arlington Loop," which provides local and regional off-street connectivity for bicycles to and from the school.

Overall, the site has access to several regional roadways, transit, and bicycle options, making it convenient to travel between the site and destinations in Virginia, the District, and Maryland.

Overview of Local Access

There are several local transportation options near the school that serve vehicular, transit, walking, and cycling trips under existing conditions, as shown on Figure 8. The school is served by a local vehicular network of low volume neighborhood streets that provide connections from regional roads to the school.

Transit Facilities

Several bus routes provide local transit service in the vicinity of the site, including connections to several neighborhoods within Virginia, the District, and additional Metrorail stations. There are three (3) WMATA Metrobus routes and four (4) Arlington Transit (ART) routes serving bus stops approximately a quarter mile from the school. Most of these routes travel along Clarendon Boulevard and Wilson Boulevard.

Table 1 shows a summary of the bus route information for the routes that serve the site, including service hours, headway, and distance to the nearest bus stop.

Table 1: Bus Route Information

Route Number	Route Name	Service Hours	Headway	Walking Distance to Nearest Bus Stop
4B	Pershing Dr-Arlington Blvd	Weekdays: 5:05AM-12:01AM Weekend: 6:20AM-11:31PM	30-60 min	<0.1 miles, 1 minutes
5A	DC-Dulles Line	Weekdays: 5:30AM-12:18AM Weekend: 5:30AM-12:18AM	60-95 min	0.4 miles, 6 minutes
38B	Ballston-MU Station	Weekdays: 5:30AM-2:31AM Weekend: 5:30AM-2:28AM	15-30 min	<0.1 miles, 1 minutes
ART 43	Courthouse-Rosslyn-Crystal City	Weekdays: 6:02AM-11:51PM	10-20 min	0.3 miles, 6 minutes
ART 45	Columbia Pike-DHS/Sequoia-Rosslyn	Weekdays: 5:45AM-11:40PM Weekend: 6:50AM-12:21AM	20-30 min	<0.1 miles, 1 minute
ART 61A,61B	Rosslyn-Court House Metro Shuttle	Weekdays: 6:15AM-9:33 AM, 3:15PM-7:06PM	25 min	0.2 miles, 4 minutes

Bicycle Facilities

There are existing bicycle facilities that connect the school to areas within Arlington, Virginia, and the District, most notably the Custis Trail which travels along Custis Memorial Parkway and provides connections to the District to the east and to the W&OD Trail and City of Falls Church to the west. There is a protected bicycle lane on Wilson Boulevard and Clarendon Boulevard and bicycle lanes along N Rhodes Street, Key Boulevard, N Quinn Street, N Lynn Street, and 15th Street N.

Pedestrian Facilities

The school is accessible to transit options such as the bus stop adjacent to the school on Wilson Boulevard. In general, existing pedestrian facilities surrounding the site provide comfortable walking routes to and from nearby transit options. However, there are some areas of concern within the study area that negatively impact the quality and attractiveness of the walking

environment. This includes curb ramp and sidewalk width deficiencies.

In the vicinity of the school, most sidewalks meet Americans with Disabilities Act (ADA) standards and standards recommended by the Arlington Master Transportation Plan. Anticipated pedestrian routes, such as those to public transportation stops, retail zones, nearby residential areas, and community amenities, provide well-connected pedestrian facilities. A detailed review of existing and proposed pedestrian access and infrastructure is discussed in later chapters of this report.

Overall, the site is surrounded by an extensive local transportation network that allows for efficient transportation options via transit, bicycle, walking, or vehicular modes.

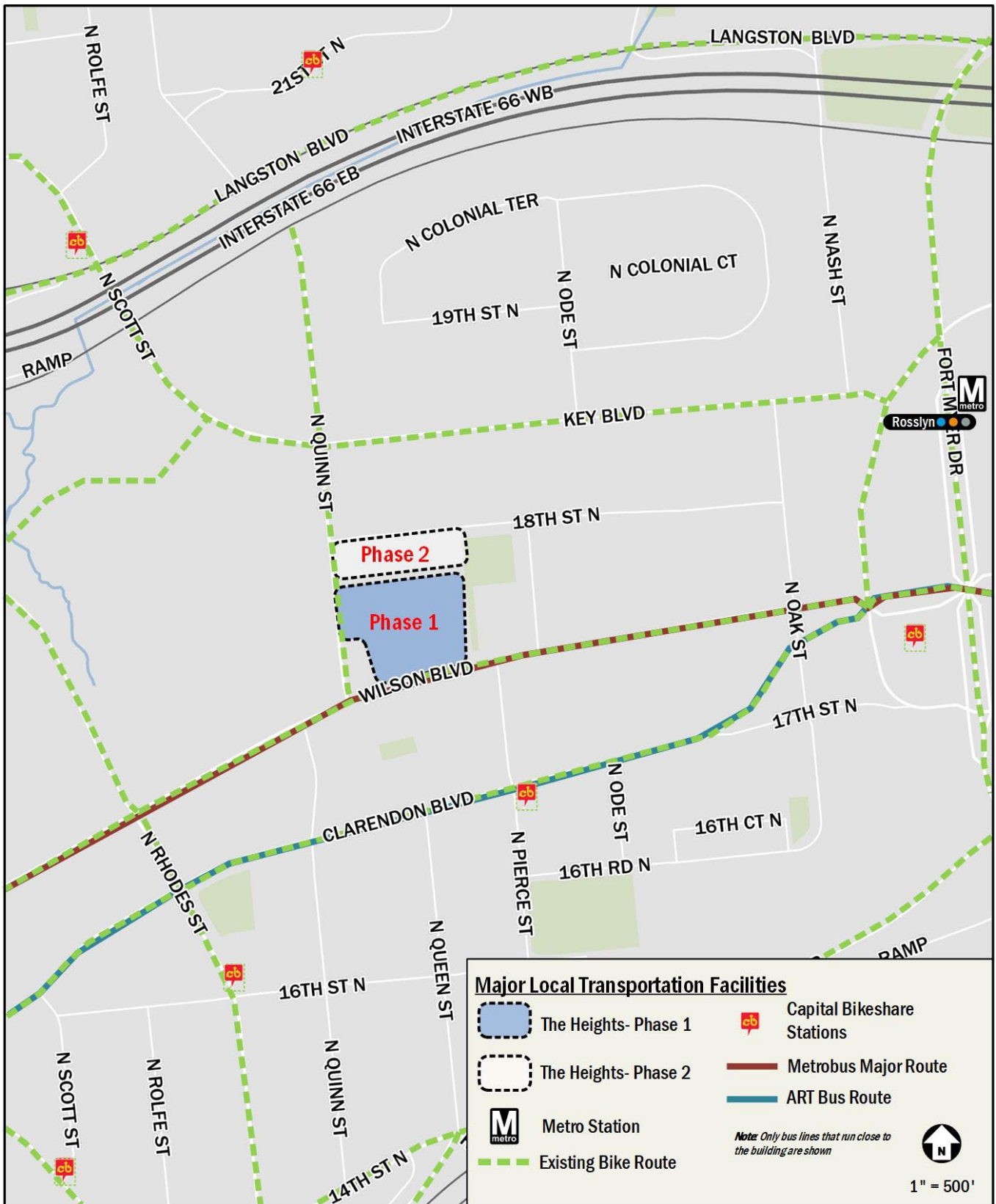


Figure 8: Major Local Transportation Facilities

Car-sharing

Zipcar is the only car-sharing company currently serving Arlington County and is a private company that provides registered users access to a variety of automobiles. Zipcar has designated spaces for their vehicles, and a total of three (3) such Zipcar locations are within a quarter mile of the school. One (1) Zipcar location is located near N Oak Street and 17th Street N intersection, one near Clarendon Boulevard and N Rhodes Street while the Zipcar location closest to the school building is located on N Quinn Street, just across The Heights loading area.

E-Scooters and Dockless E-Bicycles

Five (5) electric-assist scooter (e-scooter) and electric-assist bicycle (e-bike) companies provide Shared Mobility Device (SMD) service in Arlington County: Bird, Helbiz, Lime, Link and Spin. These SMDs are provided by private companies that give registered users access to a variety of e-scooter and e-bike options. These devices are used through each company-specific mobile phone application. Many SMDs do not have designated stations where pick-up/drop-off activities occur like with Capital Bikeshare; instead, many SMDs are parked in public space, most commonly in the “furniture zone” (the portion of sidewalk between where people walk and the curb, often where you’ll find other street signs, street furniture, trees, parking meters, etc.). At this time, SMD pilot/demonstration programs are underway in Arlington County, the District, Fairfax County, the City of Alexandria, and Montgomery County.

Walk Score and Bike Score

Walkscore.com is a website that provides scores and rankings for the walking, biking, and transit conditions for an area. This school location has a walk score of 93 (or “Walker’s Paradise”), a bike score of 84 (or “Very Bikeable”) and transit score of 55 (or “Good Transit”). Figure 9 shows the neighborhood borders in relation to the school location and displays a heat map for walkability and bikeability.

Walk Score’s methodology analyzes hundreds of walking routes to nearby amenities. Points are awarded based on the distance to amenities in each category. Amenities within a 5-minute walk (.25 miles) are given maximum points. Walk Score also measures pedestrian friendliness by analyzing population density and road metrics such as block length and intersection density. It does not incorporate details such as crosswalk or

sidewalk quality. The school is situated in an area with a “Walker’s Paradise” walk score because of the abundance of neighborhood serving retail locations that are in close proximity, where most errands can be completed by walking.

Bike Score’s methodology measures whether an area is good for biking. For a given location, a bike score is calculated by measuring bike infrastructure (lanes, trails, etc.), hills, destinations and road connectivity, and the number of bike commuters. The school is situated in an area with a “Very Bikeable” bike score due to its proximity to low volume residential roadways, number of bike lanes and trails, and flat topography.

Transit Score’s methodology measures how well a location is served by public transit. Transit score assigns a “usefulness” value to nearby transit routes based on the frequency, type of route (rail, bus, etc.), and distance to the nearest stop on the route. The “usefulness” of all nearby routes is summed and normalized to a score between 0 - 100. The school is situated in an area with “Good Transit” transit score based on the neighborhood’s proximity to multiple bus lines and distance to the nearest Metrorail station which is located approximately 0.3 miles from the school.

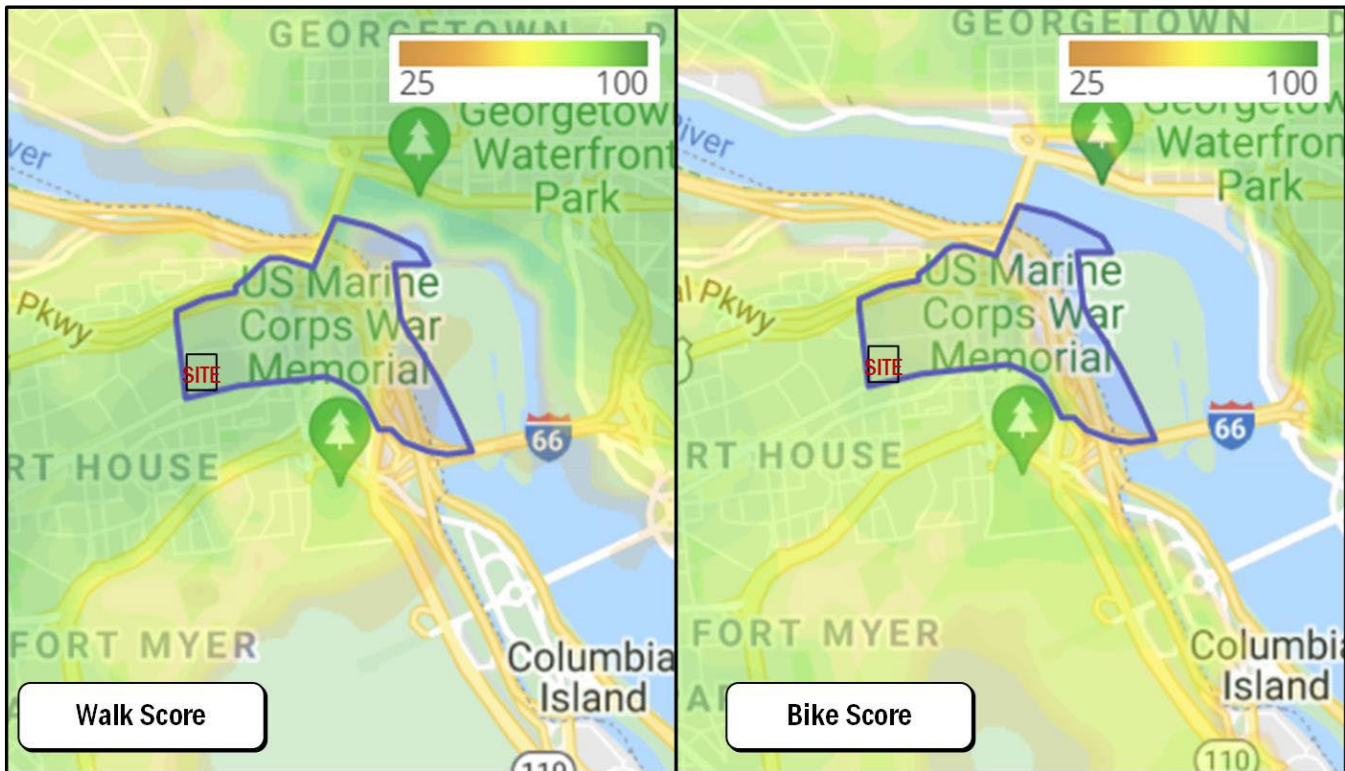


Figure 9: Summary of Walkscore and Bikescore

Future Projects

There are several County-wide initiatives and local initiatives located in the vicinity of the site. These planned projects are summarized below.

County-wide Initiatives

Arlington Master Transportation Plan (2019)

The Arlington County Master Transportation Plan (MTP), adopted in 2011 and updated in 2019, outlines goals to improve various modes of transportation throughout the County. The MTP identifies goals and objectives for each mode to improve safety and access for all users, particularly for pedestrians, bicyclists, and transit users. The Arlington Master Transportation Plan's recommended policies for transportation in the County that apply to the Arlington Career Center campus are outlined as follows:

- Streets (2016) – The County will address the street system and enhance the transportation network by: (1) Utilizing the plan's street typology to guide street planning and ensure each street type supports the general policies

of complete streets and adjacent land uses; (2) Including appropriate facilities to meet and balance the needs of all modes; (3) Constructing/converting some local streets to a pedestrian priority or a shared street; (4) Accommodating travel growth through shifts to non-auto modes; (5) Designing streets to favor lower vehicular speeds; and (6) Maintaining a grid-style network to enhance connectivity. The planned improvements included in the MTP in the vicinity of the site are shown in Figure 10.

- Transit (2016) – The County will address the transit system by: (1) Developing a Premium Transit Network of high-frequency service connecting major destinations; (2) Operating a Secondary Transit Network of fixed route services that improves access to destinations across Arlington; (3) Making transit more accessible and convenient to all through enhanced facilities and transit-oriented land use policies; (4) Improving Metrorail services and stations; and (5) Expanding pedestrian access to transit facilities.
- Pedestrian (2011) – The County will address the pedestrian system by: (1) Completing the walkway

network with appropriate facilities on both sides of arterial streets and at least one side of neighborhood streets; (2) Upgrading existing pedestrian facilities to comply with current standards; (3) Implementing measures aimed at changing motorist behavior to manage vehicular speed and minimize vehicle/pedestrian conflicts; and (4) Developing strategies to encourage more people to walk.

- **Bicycle (2019)** – The County will address the bicycle system by: (1) Making existing streets safer and more comfortable for bicycling by all users; (2) Expanding travel safety education programs; (3) Providing a network of low-traffic-stress bicycle routes that connect all land uses; (4) Accommodating bicycle infrastructure as part of all street improvement projects; (5) Establishing bicycles as a mainstream travel mode; and (6) Encouraging bicycle facilities, including parking, showers, and lockers. The improvements planned for the bicycle facilities surrounding the site as part of the Plan are shown in Figure 11.
- **Parking and Curb Space (2009)** – The County will address the parking system by: (1) Prioritizing the use of curb space, matching the various types of uses to the most appropriate locations; (2) Promoting on-street parking within residential neighborhoods and on commercial streets to calm traffic; (3) Ensuring the minimum parking needs are met and limit excessive parking; (4) Discouraging off-street surface parking; and (5) Allowing reduced parking space requirements for new developments in close proximity to frequent transit service and requiring enhanced TDM measures.
- **Transportation Demand Management (2008)** – The County will address transportation demand management by: (1) Incorporating comprehensive TDM plans for all site plans to minimize vehicular trips and maximize the use of other modes; (2) Exploring strategies and incentives to achieve TDM measures in existing private buildings; and (3) Applying TDM programs to non-work travel, as well as commuting, through marketing strategies.

In direct relation to the Heights, these recommendations would create additional multimodal capacity and connectivity to and from the school.

Local Initiatives

Core of Rosslyn Transportation Study

As part of the Rosslyn Sector Plan for a coordinated redevelopment district, this project's goal is to create permanent

multimodal improvements to the street network in the core of Rosslyn to provide safe and accessible network for all users.

Specific project elements include:

- Removal of Fort Myer Drive Tunnel to increase pedestrian crossing option and reduce vehicle speed;
- Conversion of Fort Myer Drive into a two-way street, after the tunnel is closed;
- Enriching bicycle network by including new protected bicycle facilities on Fort Myer Drive, North Lynn Street, Nash Street, and Wilson Boulevard;
- Removal of slip lanes, enhancement of 18 existing or new crosswalk, and inclusion of wider sidewalk to improve pedestrian experience; and
- Reconfiguration and signalization of the intersection of westbound US-50 and Meade Street to allow for northbound traffic flow on Fort Myer Drive.

Clarendon Boulevard Resurfacing Project for Complete Streets

This project's goal was to create a safe street network that can be accessible for walking, taking transit, biking, and driving. This project included the repaving and upgrading of the existing bike lanes to provide additional separation between people biking and people driving on Clarendon Boulevard between N Rhodes Street and N Oak Street. Complete Streets "enable safe access by all user groups including pedestrians, bicyclists, transit vehicles and users, and motorists of all ages and abilities." One of the ways Arlington County delivers on the Master Transportation Plan's Complete Streets policy is to review the annual list of streets up for routine maintenance and identify those that might benefit from improvements to provide safe access for all people using the street.

Courthouse-Rosslyn Multimodal Connectivity Improvements

This project's goal was to improve connectivity between the Courthouse and Rosslyn Metrorail stations for all users. Protected bicycle lane is proposed between Wilson/Clarendon Corridor and the Custis Trail to create a more bike-friendly connection. Minor reconfigurations were made to the Wilson Boulevard streetscape between N Quinn Street and N Courthouse Road to create space for elongation of the protected bike lane from Oak Street to Quinn Street into Courthouse neighborhood. This project was completed in 2018.



Figure 10: Street Typology (Source: Arlington Master Transportation Plan, 2011)



Figure 11: Existing and Planned Bike Facilities (Source: Arlington Master Transportation Plan, 2019)

Review of Existing Conditions – Phase 1

This chapter reviews the existing transportation components of Phase 1 of The Heights. This includes an overview of how the site is currently accessed by various users and how each mode is accommodated. This chapter is based on the approved school use permit ([U-3468-16-1](#)) for Phase 1 as well as field observations conducted by Gorove Slade staff in October 2021 and traffic data collected in December 2021. The approved school use permit was amended by the County Board in March 2021 to incorporate updated Transportation Demand Management (TDM) and bicycle parking requirements which will be detailed in the next chapter reviewing Phase 2 of the project. This chapter reflects the requirements from the school use permit that were in place during Phase 1.

Phase 1 Overview

Phase 1 of The Heights included the construction of the current building which has five (5) above-grade and two (2) below-grade stories and houses the H-B Woodlawn Secondary Program and the Eunice Kennedy Shriver Program. The latter of these programs serves APS students who have special needs. An

Table 3: Overview of The Heights Programs

H-B Woodlawn Secondary Program	A student choice-based secondary program designed to provide students with more control over their education than traditional comprehensive schools permit. (Grade 6-12) Bell Times: 9:24 AM to 4:06 PM
Shriver Program	Program designed for secondary-aged students between 12 to 22 years of age who require extensive program applications. As a program serving students with specialized educational needs, Shriver utilizes both classroom and community resources. (Age 12-22) School buses that are ADA compliant are provided for students that are a part of the Shriver Program. Bell Times: 9:15 AM to 4:06 PM

overview of the school programs provided in the Heights building is shown in Table 3.

Parking for staff and visitors occurs on-street and in reserved off-site parking garage spaces at 1788 N Pierce Street (the Aubrey residential building) and 1776 Wilson Boulevard as Phase 1 did not include dedicated parking for the school. The building does not have a designated bus loading/unloading zone. School bus boarding and alighting currently occurs along 18th Street N which is temporarily closed to traffic. Table 2 provides an overview of the existing student and staff populations at the Heights.

Table 2: Existing Heights Populations

Program	Grades	Existing Population (September 2021)
H-B Woodlawn	6-8	243 students
	9-12	446 students
Shriver	6-8	6 students
	9-12	18 students
Total Students		713 students
Heights Staff		130 staff ¹

¹ Staff numbers are based on posted staff directories for both H-B Woodlawn and Shriver as of February 2022

Existing Observations

Gorove Slade staff conducted field observations of the existing (Phase 1) conditions of the Heights building in October 2021 during both morning arrival and afternoon dismissal periods for the two programs. These observations revealed that although some transportation components are operating at acceptable conditions, both the H-B Woodlawn and Shriver programs have difficulties accommodating competing multimodal needs.

School Buses

School bus boarding and alighting along 18th Street N was observed to generally work during arrival and dismissal; however, significant coordination is required between the two programs. Additionally, vehicles often ignored the existing restrictions prohibiting vehicles other than emergency vehicles and buses along 18th Street between N Quinn Street and N Pierce Street.

H-B Woodlawn Pick-Up/Drop-Off

H-B Woodlawn student pick-up/drop-off (PUDO) was also observed functioning reasonably well during morning arrival with some challenges during afternoon dismissal. Student PUDO was observed to occur in short-term parking spaces on Wilson Boulevard with space for approximately five (5) vehicles at a time. During afternoon dismissal, demand was observed to exceed the PUDO capacity with vehicles spilling over into adjacent travel lanes and occasionally blocking traffic. Additionally, vehicles that park for longer periods of times in the short-term parking spaces used for PUDO (e.g., food trucks, mail/parcel delivery vehicles, and nearby retail patrons' vehicles) further limited the number of spaces that could be used for student PUDO. Additionally, H-B Woodlawn students with accessibility needs (e.g., students who use wheelchairs or crutches) were observed facing difficulties using the PUDO spaces and accessing the building.

Shriver Pick-Up/Drop-Off

Significant challenges were observed regarding the Shriver program's ability to accommodate ADA-compliant loading and unloading for its students as well as ADA-compliant, short-term visitor parking. While ADA-compliant curbside spaces recently constructed along the east side of Quinn Street have alleviated some of these challenges, these spaces often could not accommodate all demands and/or were blocked by vehicles that

do not require ADA-compliant spaces as shown in Figure 12. Additionally, there was no covered path between the curbside spaces and building entrances.

Bicycle Parking

Bicycle parking was observed to be a challenge at the site, with no covered bicycle racks or storage boxes provided. Where bicycle parking is provided along Wilson Boulevard, bicycle racks were roped off and signs were posted discouraging students from parking along Wilson Boulevard due to frequent theft and potentially conflicts with student pick-up/drop-off (PUDO) as well. Moreover, bicycle racks placed by the Shriver main entrance were generally not used, possibly due to the distance from the primary H-B Woodlawn entrances or the lack of protection from the elements. As a result of the lack of use of these two pools of bicycle parking, the available bicycle racks adjacent to the main H-B Woodlawn office entrance was observed to be over capacity.

Parking & Loading

Feedback received from faculty and staff during field observations suggested that short-term parking needs are not well served under existing conditions. Teachers loading and unloading supplies were reported to have difficulty finding a short-term space near their program's front door. Moreover, there are no dedicated spaces for maintenance vehicles which were both reported and observed utilizing the ADA-compliant spaces on Quinn Street or the 15-minute parking spaces along Wilson Boulevard meant to accommodate H-B Woodlawn PUDO. Potentially as a result, the loading area accessed from Quinn Street was observed to be more commonly used for short-term parking rather than trash removal and larger cafeteria deliveries as intended.

Data Collection

Data collected on Thursday, December 16, 2021, focused on arrival/dismissal operations (i.e., school buses, student pick-up/drop-off, and parking demand). The findings were as follows:

- **School Buses.** A maximum of 12 H-B Woodlawn buses and six (6) Shriver buses were counted along 18th Street during the morning arrival or afternoon dismissal periods. One (1) Shriver bus conducted arrived and departed approximately one (1) hour before dismissal. Shriver buses arrived earlier and took longer for student loading/unloading. Bus arrival and dismissal data are

shown in Figure 13 and Figure 14, respectively, including the time that each bus entered 18th Street and the duration of its stay.

- Average bus duration during morning arrival:
 - H-B Woodlawn – three (3) to four (4) minutes
 - Shriver – six (6) to seven (7) minutes
- Average bus duration during afternoon dismissal:
 - H-B Woodlawn – seven (7) to eight (8) minutes
 - Shriver – 14 to 15 minutes
- **Student PUDO.** Along Wilson Boulevard, more than 145 vehicles and 180 vehicles were counted during morning arrival and afternoon dismissal, respectively, as shown in Figure 15. Vehicle PUDO demand exceeded the available

capacity of the short-term parking spaces in some time periods during school dismissal hours with up to three (3) vehicles spilling over into adjacent travel lanes.

- **Off-Street Parking.** Of the 100 parking spaces reserved for staff and visitors inside the Aubrey residential building, the highest occupancy occurred during school hours (8:30 AM to 4:00 PM) with a daily peak at 11:00 AM (84 spaces) as shown in Figure 16. Of the remaining 124 spaces in the garage, 38 spaces are reserved for 2-hour retail parking and 88 spaces for all other parking. At least half of retail parking spaces were always occupied throughout the day, while less than half of other non-school parking spaces were occupied at any given time.
 - Occupancy counts of the additional 30 spaces leased in parking garage at 1776 Wilson were not conducted.



Figure 12: Quinn Street ADA Loading Conflicts (Data Collection Video, December 2021)

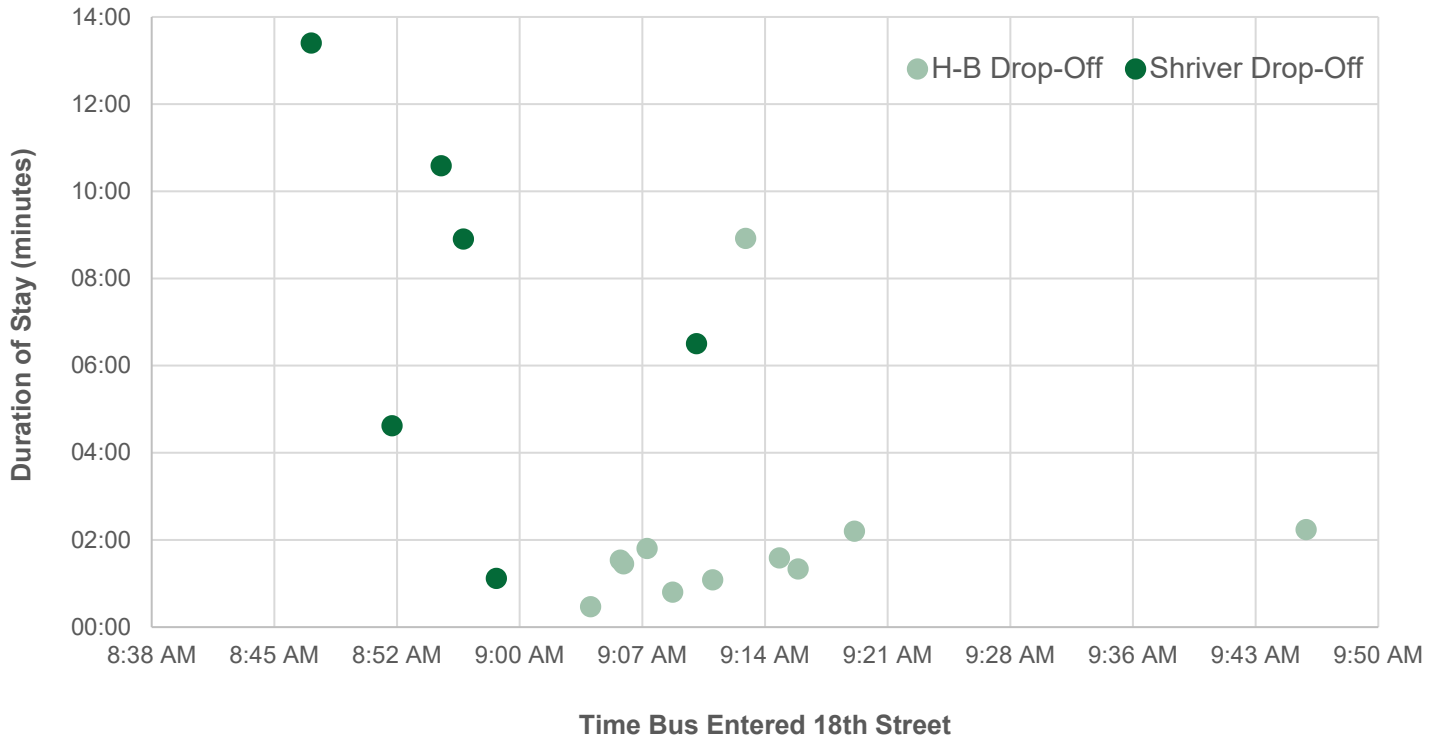


Figure 13: School Bus Arrival Data

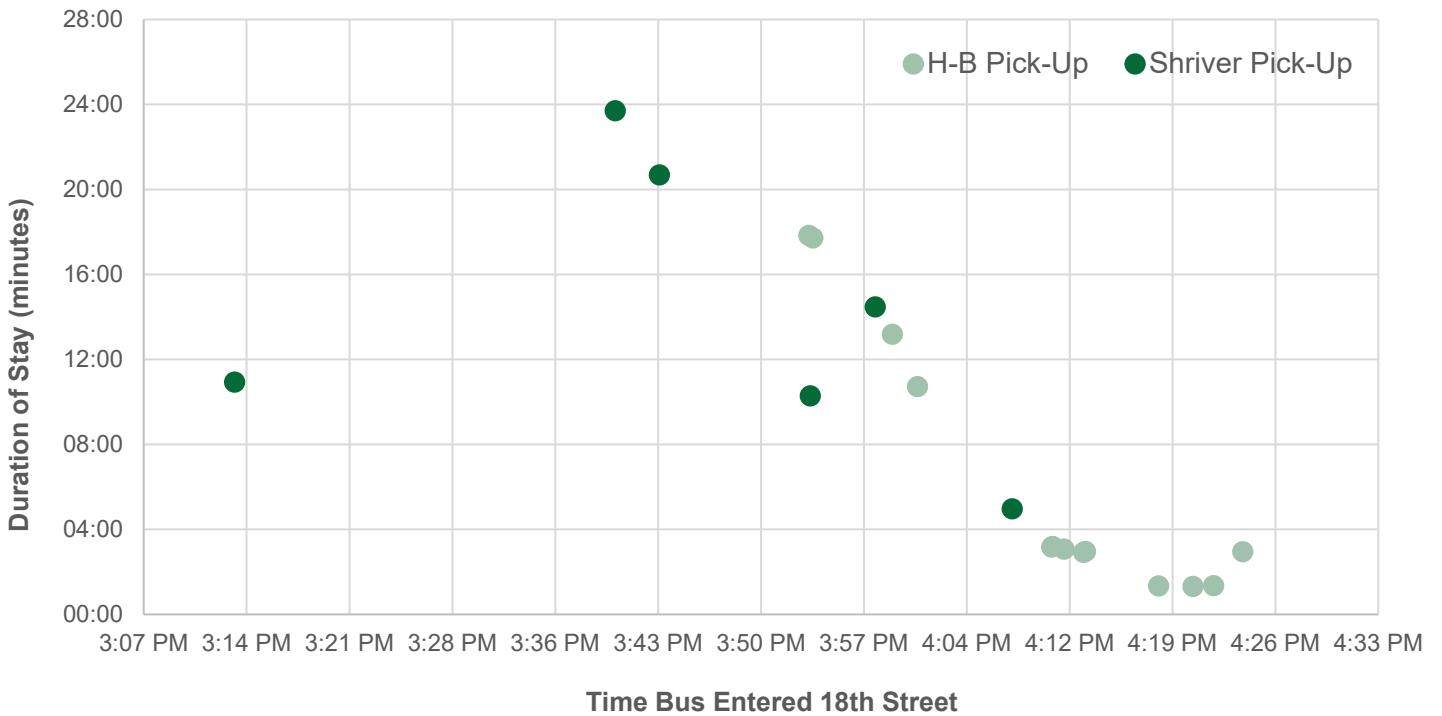


Figure 14: School Bus Dismissal Data

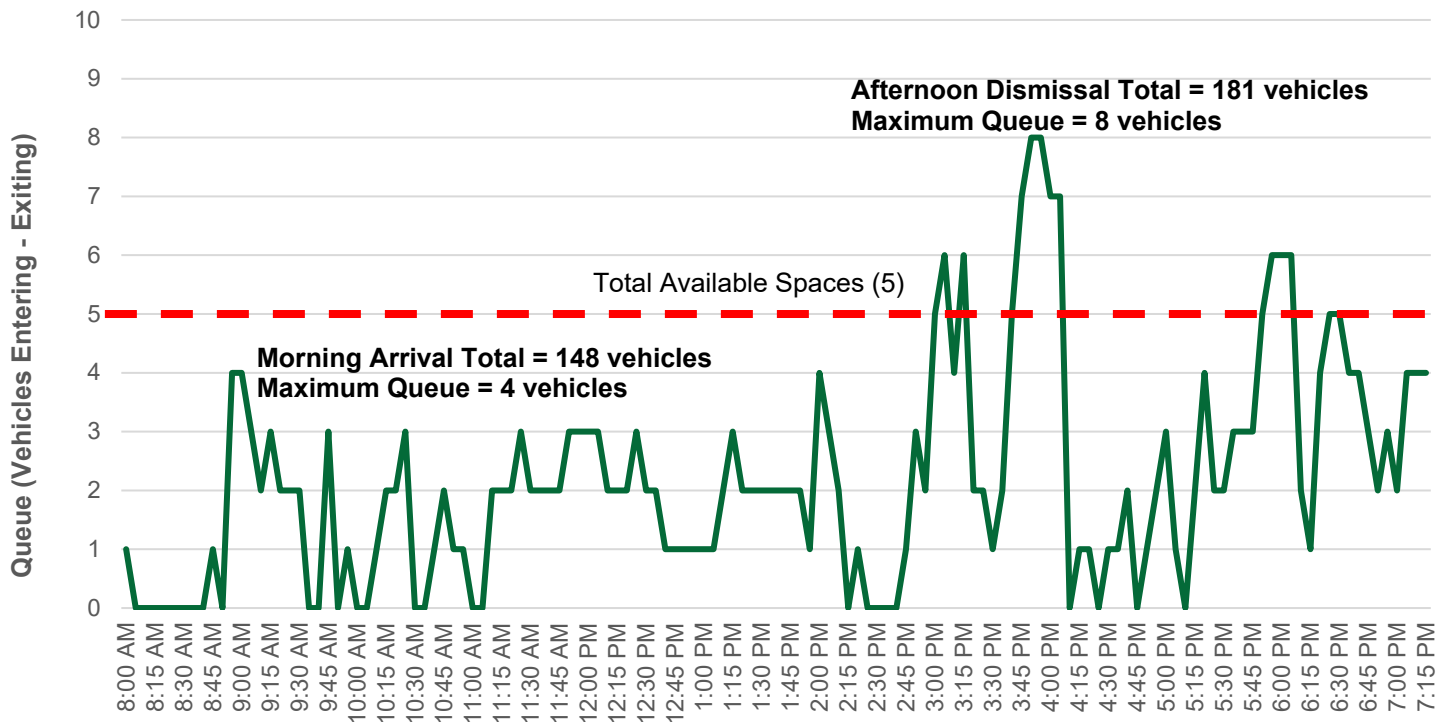


Figure 15: Queuing Data – Wilson Boulevard Short-Term Parking

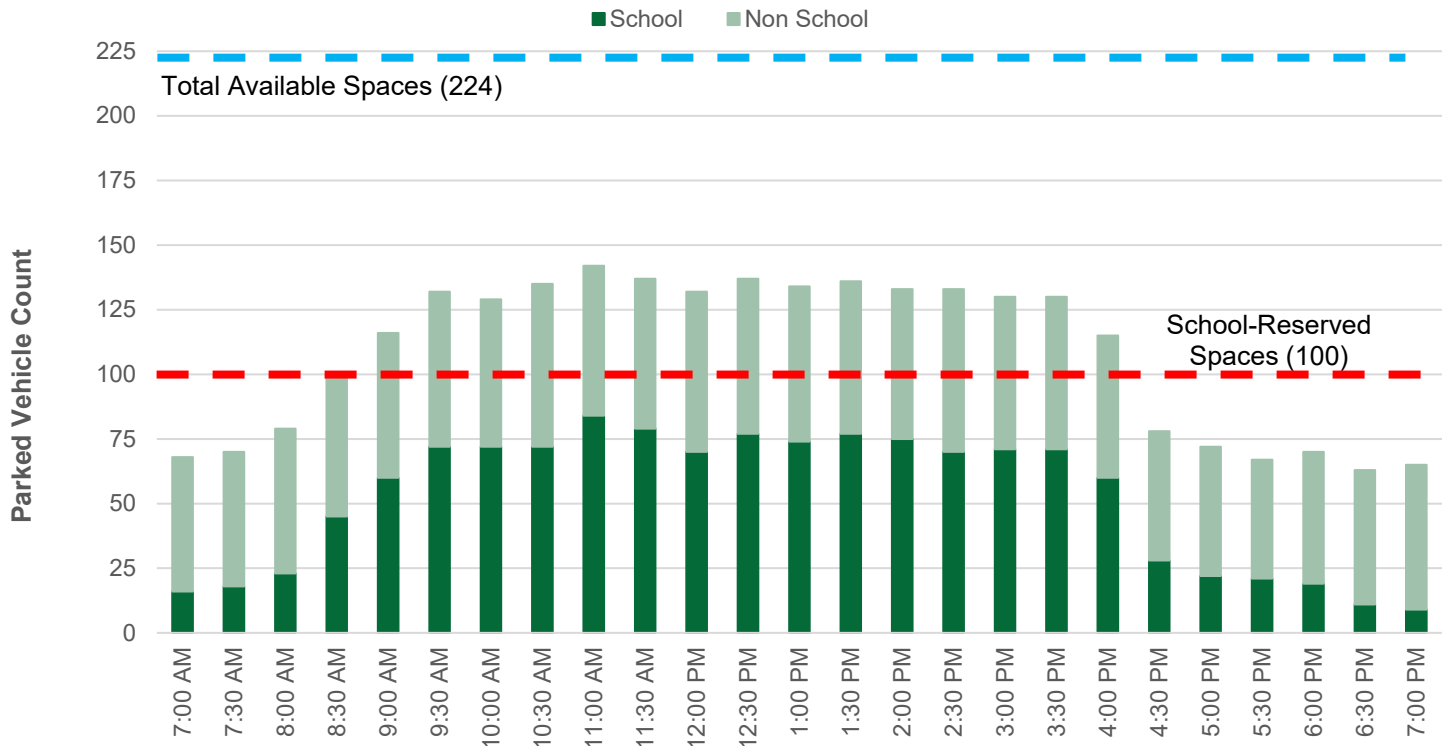


Figure 16: Parking Occupancy Data – The Aubrey

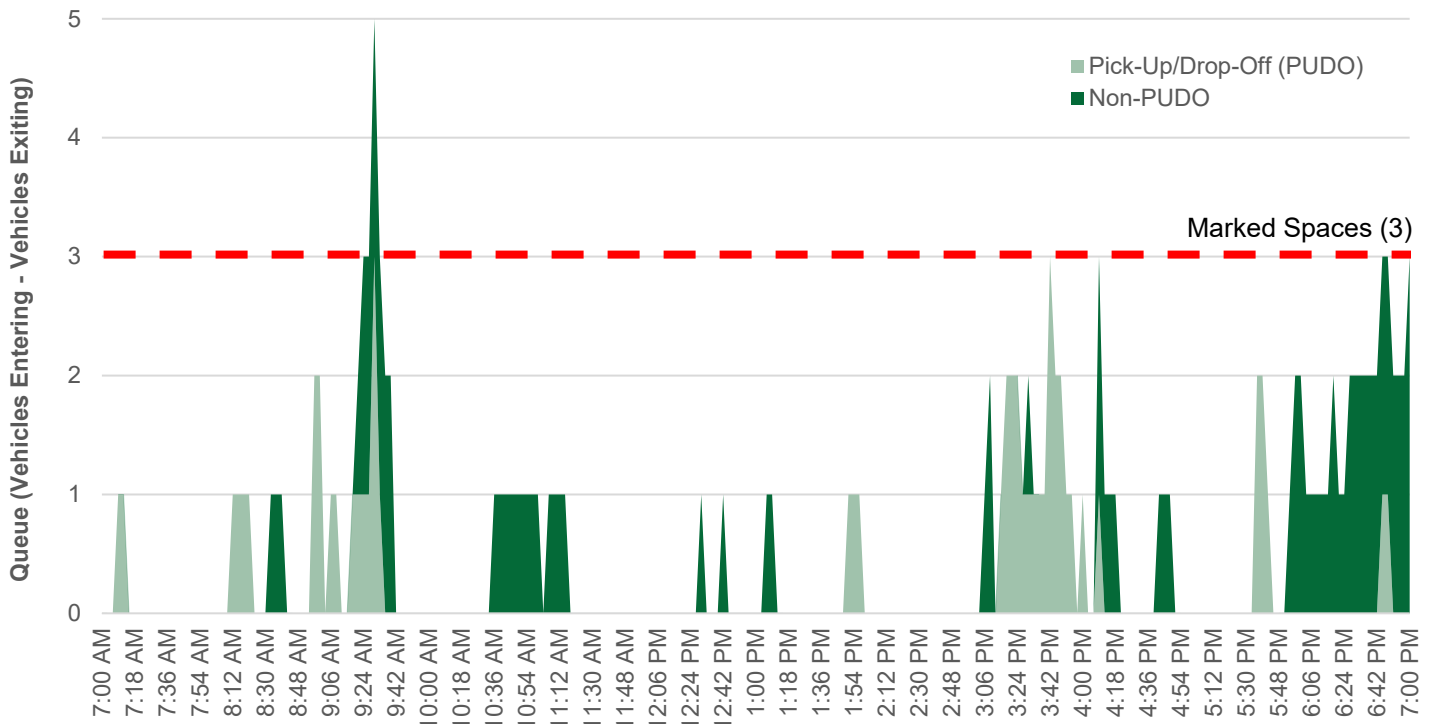


Figure 17: Queuing Data – Quinn Street ADA Loading

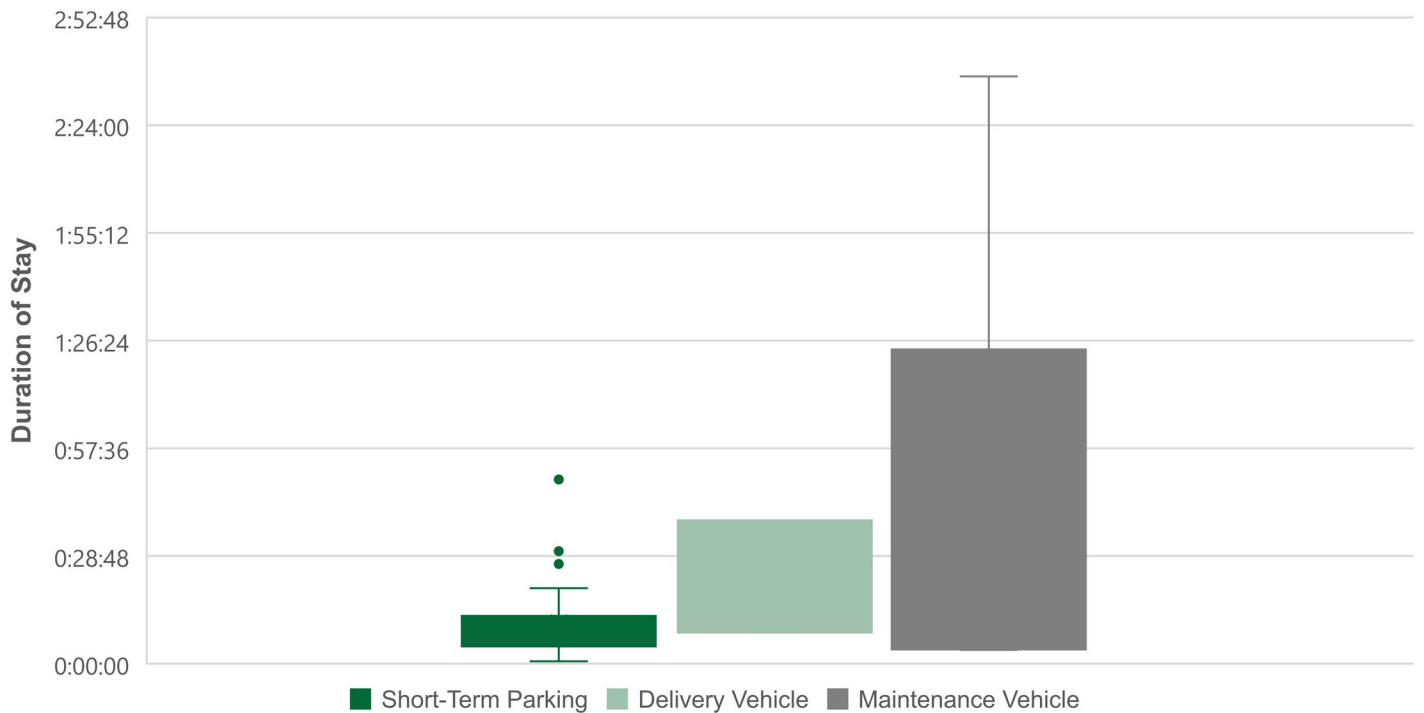


Figure 18: Non-PUDO Activity on Wilson Boulevard

Site Access and Circulation

Pedestrian Access

Staff and H-B Woodlawn visitors enter on the east side of the building through the main H-B Woodlawn office entrance. Sidewalks connect this entrance to 18th Street N, N Pierce Street, and Wilson Boulevard as well as a shuttle elevator from the Aubrey parking garage. H-B Woodlawn students enter on the south side of the building from Wilson Boulevard, while Shriver students enter on the northwest side of the building from N Quinn Street. A circulation plan showing primary pedestrian access to the building and existing pedestrian routes is shown in Figure 19.

Bicycle Access

Primary bicycle access to the site is from on-street bicycle lanes on Wilson Boulevard. Short-term bicycle racks are available on the east, south, and northwest sides of the building; however, students are discouraged from using racks available on the south side along Wilson Boulevard due to frequent theft. A circulation plan showing existing bicycle routes is shown in Figure 19.

Vehicular Access

Vehicular access to the site is facilitated from Wilson Boulevard, N Quinn Street, 18th Street N, and N Pierce Street. According to the [Street Typology map](#) in the Arlington County Master Transportation Plan (MTP) updated in April 2019, Wilson Boulevard and Quinn Street are classified as Type A (Primarily Retail Oriented Mixed-Use) and Type B (Primarily Urban Mixed-Use) Arterial roadways, respectively, along the site's frontage. They provide connections to the greater Washington region via I-66, US-29 (Langston Boulevard), US-50 (Arlington Boulevard), and VA-110 (Richmond Highway). Along the site's frontage, 18th Street is classified as an Urban Center Local roadway, while Pierce Street is classified as a Residential or Commercial Local Street. Surrounding land uses are largely residential, commercial, and institutional. Under existing conditions, 18th Street between Quinn Street and Pierce Street is closed to traffic with the exception of buses and emergency vehicles. During arrival and dismissal periods at H-B Woodlawn and Shriver, this segment of 18th Street currently acts as a one-way street for bus boarding and alighting.

Loading

Per the [Arlington County Zoning Ordinance](#), the following outlines the loading facility requirements for the land uses of the development:

- School
Schools with more than 6,000 square feet are required to provide one (1) loading space.

Phase 1 of the Heights building provided one (1) on-site loading space for a service vehicle with dimensions up to 12 feet by 25 feet via the loading area accessible from Quinn Street. Based on field observations and information provided by the schools, trash removal services and cafeteria deliveries are the major truck trips generated for the loading space. Mail and parcel delivery vehicles (e.g., UPS, USPS, and FedEx) also utilize the loading area but more often park in the short-term parking zone on Wilson Boulevard.

Figure 6 shows the location of the loading area in relation to the Heights building and surrounding streets.

Truck Routes and Access

Truck routing to and from the building is primarily via Quinn Street from an existing curb cut to the loading area, consistent with the school's approved use permit.

Parking

Based on the [Arlington County Zoning Ordinance](#), the following outlines typical vehicular parking requirements for a building under S-3A, Public District requirements:

- High School
One (1) space per 10 students of design capacity; plus, one (1) space per 10 fixed seats, or other vantage accommodations for spectators, for public assembly; plus, one space (1) per 50 square feet of floor area for auditoriums, multipurpose rooms, gymnasium, or other facilities used for public assembly but having no fixed seating arrangement specified
- Middle School
One (1) space per 7.5 students of design capacity for employee parking; plus, one (1) space per 40 students of design capacity for visitor parking

With a Phase 1 design capacity of 275 middle school and 500 high school students, this equates to 87 vehicle parking spaces for staff parking. Additionally, 275 middle students as well as

approximately 400 fixed seats and 12,200 square feet of public assembly space equates to 291 vehicle parking spaces for assembly and visitor parking. Overall, these requirements equate to 378 parking spaces; however, the approved use permit for Phase 1 of the Heights building did not include on-site parking requirements. Rather, the County recommended that 100 permanent parking spaces be located off-site at the adjacent residential redevelopment project under construction by Penzance at the time of approval (i.e., the Aubrey), and consideration of on-site parking spaces was deferred to Phase 2 after the removal of the temporary fire station.

Staff Parking

As described in the previous section, typical parking requirements for Phase 1 of the Heights would have required a total of 87 vehicle parking spaces for staff parking. The traffic engineering consultant for Phase 1 of the Heights projected that the typical parking demand would range from 90 to 140 total spaces based on transit utilization by faculty and staff, estimating that 40 to 50 off-street spaces may need to be rented in nearby garages. Under existing conditions, reserved off-site parking for staff consists of the following:

- 1788 N Pierce Street (The Aubrey)**
 The Aubrey, located at 1788 N Pierce Street is approximately a one (1) minute walk from the building. This garage has parking spaces reserved for the school, 2-hour retail and other parking uses. Out of the total 226 parking spaces, 100 parking spaces are provided to staff and visitors, of which four (4) spaces are reserved for ADA. A summary of parking space allocation in the Aubrey garage is shown in Table 4 alongside the corresponding peak parking occupancy for each use based on the data shown in Figure 16.

Table 4: Aubrey Parking Allocation and Demand

Use	Total Spaces	Peak Occupancy	Peak Hour
School Reserved	100 spaces	84 spaces	11:00AM
2-hr Retail	38 spaces	29 spaces	2:30PM
Other Uses	88 spaces	38 spaces	12:00PM
Total	226 spaces	151 spaces	

- 1776 Wilson Boulevard**
 This garage is located less than 0.1 miles from the building and has 30 spaces reserved for staff and visitors.

Only vehicles with staff or guest parking passes are permitted to park in the reserved off-site parking spaces.

Student Parking

Due to the high cost of parking and the building's proximity to the Rosslyn Metrorail station, parking is not provided to students that wish to drive and park at the school. Based on information provided by the schools, students typically utilize unrestricted on-street parking spaces north of Quinn Street.

Existing Curbside Management

A review of the existing curbside management was conducted and is shown on Figure 20. Currently, on-street parking is provided along Wilson Boulevard and Quinn Street. The 15-minute parking on Wilson Boulevard is used for H-B Woodlawn student pick-up and drop-off (PUDO) during school arrival and dismissal hours, and the 30-minute ADA parking on Quinn Street is used for Shriver students PUDO.

A summary of the available on-street parking spaces is shown in Table 5. As these spaces are not marked, an approximate value is presented in the table.

Table 5: On-Street Parking Availability

Use ¹	Approximate Spaces	Location
2-Hour Metered	4 spaces	East side of Quinn Street; north of the loading area and 30-minute ADA parking spaces
	9 spaces	South side of Wilson Boulevard; opposite H-B Woodlawn student entrance
2-Hour Metered (ADA)	1 space	East side of Quinn Street; south of the loading area
	1 space	South side of Wilson Boulevard; opposite H-B Woodlawn student entrance
30-Minute ADA	3 spaces ²	East side of Quinn Street; north of the loading area
15-Minute (PUDO)	5 spaces	North side of Wilson Boulevard; adjacent to the opposite H-B Woodlawn student entrance
Total	23 spaces	

¹ During school hours

² Three (3) spaces are marked; however, the functional capacity may be closer to four (4) vehicles based on observations.

Student Pick-Up/Drop-Off

Currently during arrival and dismissal times, parents (or guardians) of H-B Woodlawn are expected to use the 15-minute

parking spaces on Wilson Boulevard, which are not designated for exclusive school use. Parents and guardians of Shriver students are expected to utilize the 30-minute ADA parking on Quinn Street. The locations of these areas are shown Figure 20. It should be noted that most Shriver students are picked up and dropped off via school bus or County-operated van rather than a parent/guardian PUDO trip.

Shriver PUDO

The curbside ADA parking area along Shriver's frontage on Quinn Street accommodates up to four (4) vehicles or two (2) ADA vans. These spaces are restricted to 30-minute ADA parking from 7:00 AM to 6:00 PM, Monday through Friday, and are unrestricted ADA parking at all other times. There is no covered path from this curbside PUDO area to any of the Shriver entrances. As noted by school staff, this presents a challenge since the special needs of Shriver students often require longer loading and unloading times compared to H-B Woodlawn students. As such, these longer unloading and loading times expose the Shriver students to the elements for longer periods of time compared to H-B Woodlawn students.

Data collected in December 2021 showed that up to two (2) non-ADA vehicles occupied these spaces, at times during arrival or dismissal as shown in Figure 17. These conflicts with non-ADA vehicles diminish the ability of the Shriver program to unload students safely and efficiently. Additionally, the data showed there were periods where demand exceeded capacity. This led to vehicles queuing or loading/unloading in the street at times.

H-B Woodlawn PUDO

The curbside parking area along the H-B Woodlawn frontage of Wilson Boulevard accommodates up to five (5) vehicles and is shared with other uses. These spaces are restricted to 15-minute parking from 8:00 AM to 6:00 PM, Monday through Friday, and are unrestricted parking at all other times. These spaces are not ADA-compliant and do not have a clear accessible path to the building entrances. H-B Woodlawn students who use crutches or wheelchairs must use either the bicycle lane or the travel lane to walk to the crosswalk at the nearby floating bus stop and back track to a building entrance.

Data collected in December 2021 showed that these curbside spaces on Wilson Boulevard accommodate most PUDO needs with some exceptions. During morning arrival, a total of 148

vehicles were processed with no spillover into travel lanes. In fact, demand did not exceed capacity at any time before 3:00 PM on the day of data collection; however, the 181 total vehicles processed during afternoon dismissal resulted in one (1) to three (3) vehicles spilling over into travel lanes at times as shown in Figure 15. This spillback causes congestion and may negatively impact nearby transit operations. The most intense vehicle PUDO demand occurs between 3:15 PM and 4:15 PM in the hour before H-B Woodlawn classes officially end. This is likely due to parents and guardians of students waiting for school to let out, with queues quickly clearing by 4:15 PM. Additionally during field observations, H-B Woodlawn staff noted that students have flexible schedules and that some students leave earlier for jobs and other extracurricular activities which could also contribute to peak PUDO dismissal occurring prior to official dismissal.

Additionally, field observations revealed that non-PUDO vehicles using the short-term parking spaces during peak PUDO periods significantly impacted operations. Traffic data collected in December 2021 confirmed that, despite representing an overall lower number of vehicles present in the short-term parking area on Wilson Boulevard, non-PUDO vehicles tended to park for longer periods of time as shown in Figure 18. This non-PUDO short-term parking was observed to likely be for nearby retail as well as frequent maintenance and commercial vehicles that service nearby properties. These non-PUDO activities during arrival and dismissal periods negatively impact PUDO operations and, as a result, the flow of traffic along Wilson Boulevard.

School Bus Loading/Unloading

Existing school bus operations for both Shriver and H-B Woodlawn are currently accommodated along 18th Street N between N Quinn Street and N Pierce Street which is closed to traffic during arrival and dismissal periods. A maximum of 12 H-B Woodlawn buses and six (6) Shriver buses are used for student loading and unloading; however, fewer than 10 buses were observed occupying 18th Street at any given time due to varying arrival and departure times. The existing bus loading/unloading area is shown in Figure 21.

As noted in the Existing Observations section, school bus operations work reasonably well under existing conditions; however, significant coordination between the two school programs is required. Conflicts with vehicles that ignore bus/emergency-vehicle-only restrictions were observed, and the

narrow sidewalk along the school's frontage on 18th Street limits space for wheelchair access as well as student-bus matching during dismissal. Moreover, there is no covered path from the loading area to the building, which is particularly challenging for the special loading needs of Shriver students which typically requires more time.

Data collected in December 2021 confirmed that Shriver buses stay for longer periods of time along 18th Street compared to H-B Woodlawn buses as shown in Figure 13 and Figure 14. Each H-B Woodlawn bus stays three (3) to four (4) minutes on average during morning arrival, occupying space from approximately 9:00 AM to 9:25 AM, while each Shriver bus stays seven (7) to eight (8) minutes on average, occupying space from approximately 8:45 AM to 9:20 AM. Similarly, during afternoon dismissal, each H-B Woodlawn bus stays six (6) to seven (7) minutes on average, occupying space from approximately 3:50 PM to 4:30 PM, while each Shriver bus stays 14 to 15 minutes on average, occupying space from approximately 3:40 PM to 4:15 PM. Outside of morning arrival and afternoon dismissal, one (1) Shriver bus used 18th Street approximately an hour before afternoon dismissal. Off-peak bus needs are generally well accommodated with minimal issues observed or reported.

Existing Bicycle Facilities

The site has good connectivity to existing on- and off-street bicycle facilities. East-west connectivity is provided via protected bicycle lanes on Wilson Boulevard and Clarendon Boulevard and bicycle lanes on Key Boulevard. Protected bicycle lanes provide physical separation such as an on-street parking lane between bicycles and motor vehicles (also known as a cycle track).

North-south connectivity is provided via bicycle lanes on N Quinn Street and signed routes on N Nash Street and Fort Myer Drive. These bicycle facilities connect to the nearby Custis Trail to the north. This trail provides regional connectivity for bicycles including the District of Columbia to the north and east via Key Bridge and the Mount Vernon Trail, the City of Alexandria to the south via the Mount Vernon Trail, and Falls Church and Fairfax County to the west via the Washington and Old Dominion Trail. Figure 22 shows the existing facilities within the study area.

Arlington County publishes an annual Bicycle Comfort Level Map highlighting the most comfortable bicycle routes throughout Arlington County. The map uses a rating system of "perception of comfort" to show which routes are most comfortable. Routes

are rated as "Easy," "Medium," "Challenging," "Expert Level," or "Prohibited." The most recent publication of the map (2020) shows most bicycle routes in the vicinity of the site rated as "Easy" and "Medium." While Langston Boulevard is rated as "Expert Level," Wilson Boulevard and Fort Myer Drive are ranked as "Medium." Multiple low-speed and low-traffic roads located in the vicinity of the campus provide appropriate levels of access to bicyclists.

Capital Bikeshare

In addition to personal bicycles, the Capital Bikeshare program provides additional bicycling options for students, staff, and visitors of the Heights. The program has placed over 600 Bikeshare stations across the District of Columbia, Arlington County, the City of Alexandria, Montgomery County, Fairfax County, Prince George's County, and most recently, the City of Falls Church, with over 5,000 bicycles provided. There is a Capital Bikeshare station approximately 400 feet west of the primary student entrance on Wilson Boulevard, on the north side of the Wilson Boulevard and Quinn Street intersection. This capital Bikeshare station houses a total of 11 docks. There are two other stations, one approximately 0.1 miles away at Clarendon Boulevard and N Pierce Street with 15 docks and the other approximately 0.2 miles away at Wilson Boulevard and N Oak Street with 17 docks.

Bicycle Parking, Showers, and Lockers

The Standard Site Plan Conditions for bicycle facilities have changed since the completion of Phase 1, and the latest bicycle requirements will be discussed in the next chapter. This section details the requirements that were in place for the construction of Phase 1.

Class I (Long-Term, Secure Storage) Bicycle Parking

- Provide a minimum of one (1) bicycle space per 10 staff in Class I secure facilities, which shall meet the standards for Class I storage as defined in the Arlington Bicycle Parking Standards in effect on the date of approval of the Use Permit.
 - Per the 2016 Arlington Bicycle Parking Standards, at least 30% of these spaces must be horizontal and at ground level.

Based on these requirements and the 130 total staff across both buildings as of February 2022, existing Phase 1 conditions should include at least 13 Class I spaces.

The existing building provides three (3) bicycle lockers (six spaces) by the ramps down to the main Shriver entrance. These lockers are intended to serve as Class I spaces; however, they are largely unused, possibly due to their distance from the main H-B Woodlawn entrance or the lack of protection from the elements. Moreover, the number of spaces provided does not meet Phase 1 requirements.

Class II/III (Short-Term, Outdoors) Bicycle Parking

- Provide a minimum of one (1) bicycle space per 20 students, and a minimum of one (1) bicycle space per 10 students for middle and high schools, and adult learning centers conveniently located throughout the site, under weather cover where possible.
 - These are considered Class II if covered by a roof or overhang and Class III otherwise.

Based on these requirements and the design capacity of 775 middle and high school students across both programs, existing Phase 1 conditions should include at least 78 Class II/III spaces for students.

The existing building provides a total of 40 bicycle racks or 80 Class III (outdoors and uncovered) bicycle parking spaces along its perimeter, exceeding Phase 1 requirements. There are 10 bicycle racks (20 spaces) by the main office entrance to H-B Woodlawn, nine (9) bicycle racks (18 spaces) along H-B Woodlawn's Wilson Boulevard frontage, and 21 bicycle racks (42 spaces) by the ramps down to the main Shriver entrance. The spaces by the Shriver entrance are largely unused, possibly due to their distance from the main H-B Woodlawn entrance or the lack of protection from the elements, and H-B Woodlawn staff discourage use of the bicycle racks on Wilson Boulevard due to frequent theft. As a result, the bicycle racks by the main H-B Woodlawn entrance are over capacity under existing conditions.

Showers and Lockers

- Provide a minimum of one (1) shower per gender.
- Provide a minimum of one (1) clothes storage locker for each required staff bicycle parking space.

- These should be located adjacent to showers in a safe and secured area, measure at least 12 inches in width by 18 inches in depth by 36 inches in height and be available to bicycle commuters during normal building operating hours. They should, however, be available for storage 24/7.
- Showers and lockers may be provided with gymnasium facilities and should be available to all school staff.

Per the 2016 requirements, two (2) showers and 13 lockers should be available to school staff in the building. Under existing conditions, two (2) showers and 16 lockers are available to commuters.

Existing Pedestrian Facilities

Sidewalks, crosswalks, and curb ramps are evaluated based on the guidelines set forth by Arlington County and ADA standards. ADA standards require that curb ramps be provided wherever an accessible route crosses a curb and must have a detectable warning. Additionally, curb ramps shared between two crosswalks is not desired. Under existing conditions, the majority of curb ramps surrounding the school meet ADA standards. The existing pedestrian facilities around the building provide a quality walking environment with minimal sidewalk width deficiencies. The site is accessible to transit options such as the Rosslyn Metrorail station and bus stops adjacent to the site. In general, existing pedestrian facilities surrounding the site provide comfortable walking routes to and from nearby transit options. However, there are some areas of concern within the study area that negatively impact the quality and attractiveness of the walking environment. This includes curb ramp and sidewalk width deficiencies. Despite some deficiencies, all primary pedestrian destinations are accessible via routes with sidewalks, most of which meet Arlington County and ADA standards. Figure 23 shows the existing pedestrian facilities within a quarter mile of the heights building.

Overall, the site is situated within a well-connected, urban transportation network with quality pedestrian access.

Table 6: Sidewalk Recommendations per Arlington County Master Transportation Plan

Street Name	Section	Minimum Sidewalk Width	Minimum Sidewalk Width Met	Sidewalk Width*	Minimum Buffer Width	Minimum Buffer Width Met	Buffer Width*
N Rhodes St	Wilson Blvd to Clarendon Blvd	6-8 ft	N	5 ft	5-6 feet	N	None
Wilson Blvd	N Troy St to N Quinn St	6-12 ft	Y	7 ft	6 feet	N	None
Wilson Blvd	N Quinn St to Fort Myer Dr	10-16 ft	N	7ft	6 feet	N	None
Clarendon Blvd	N Scott St to N Oak St	6-12 ft	N	5 ft	6 feet	N	None
18 th St N	N Quinn St to N Oak St	6-8 ft	Y	8 ft	4-6 feet	Y	5 ft
Key Blvd	N Scott St to N Nash St	6-8 ft	N	5 ft	4-6 feet	N	3 ft
N Colonia Ct	N Ode St to N Colonial Ter	4-6 ft	Y	4 ft	2-4 feet	N	None
N Quinn St	Interstate 66 WB to 16 th St N	6-12 ft	N	5 ft	6 feet	N	3 ft
N Queen St	Clarendon Blvd to 16 th St N	4-6 ft	Y	8 ft	2-4 feet	Y	5 ft
N Pierce St	18 th St N to 16 th St N	4-6 ft	Y	8 ft	2-4 feet	Y	5 ft
N Ode St	19 th St N to 16 th Rd N	4-6 ft	Y	4 ft	2-4 feet	Y	3 ft
N Oak St	Key Blvd to Clarendon Blvd	6-8 ft	Y	6 ft	4-6 feet	Y	5 ft
N Nash St	Key Blvd to Wilson Blvd	6-8 ft	Y	11 ft	4-6 feet	N	None
Fort Myer Dr	18 th St N to Wilson Blvd	6-12 ft	Y	7 ft	6 feet	Y	7 ft

* Widths based on most narrow measurement along either side of roadway section

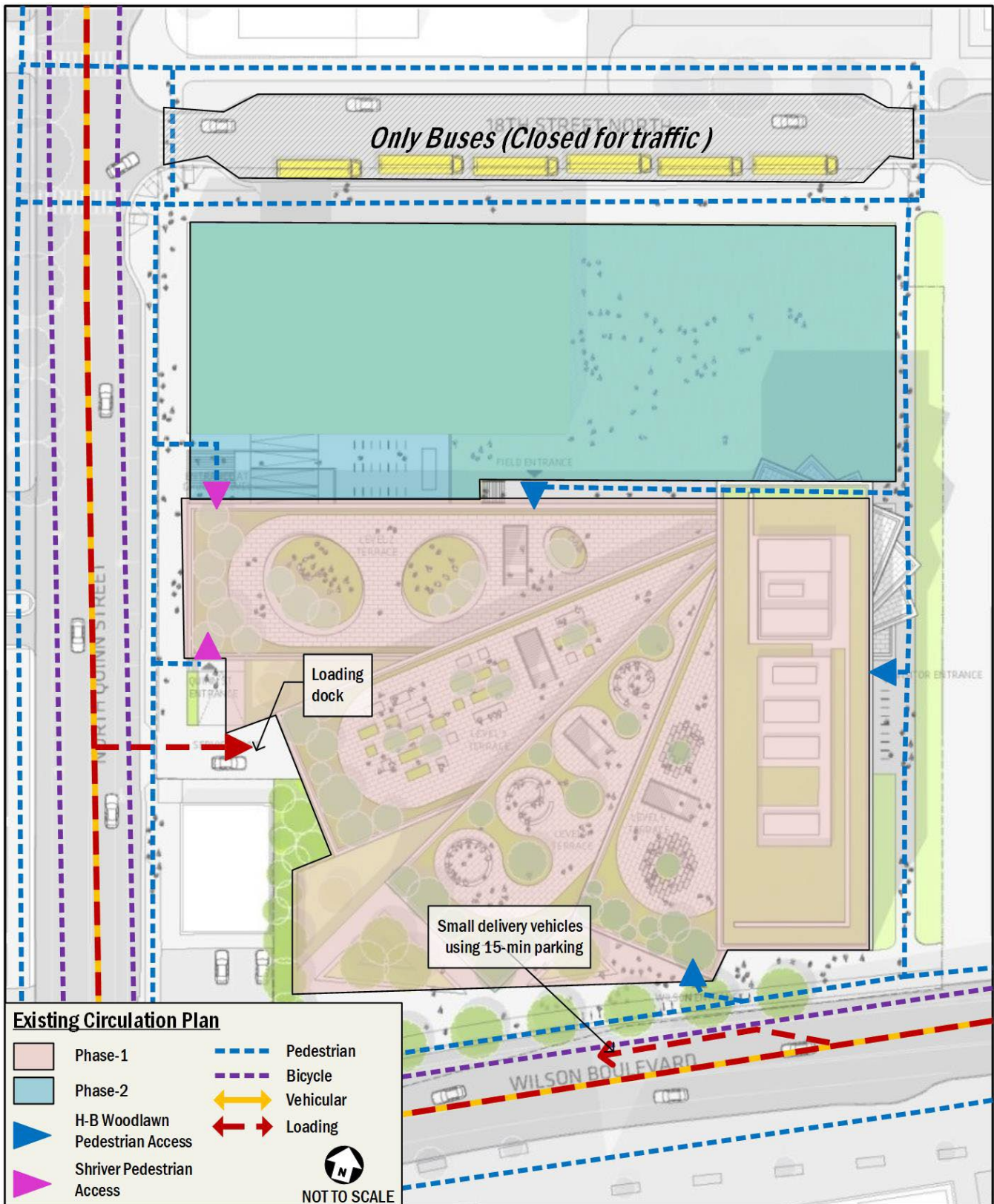


Figure 19: Existing Circulation Plan

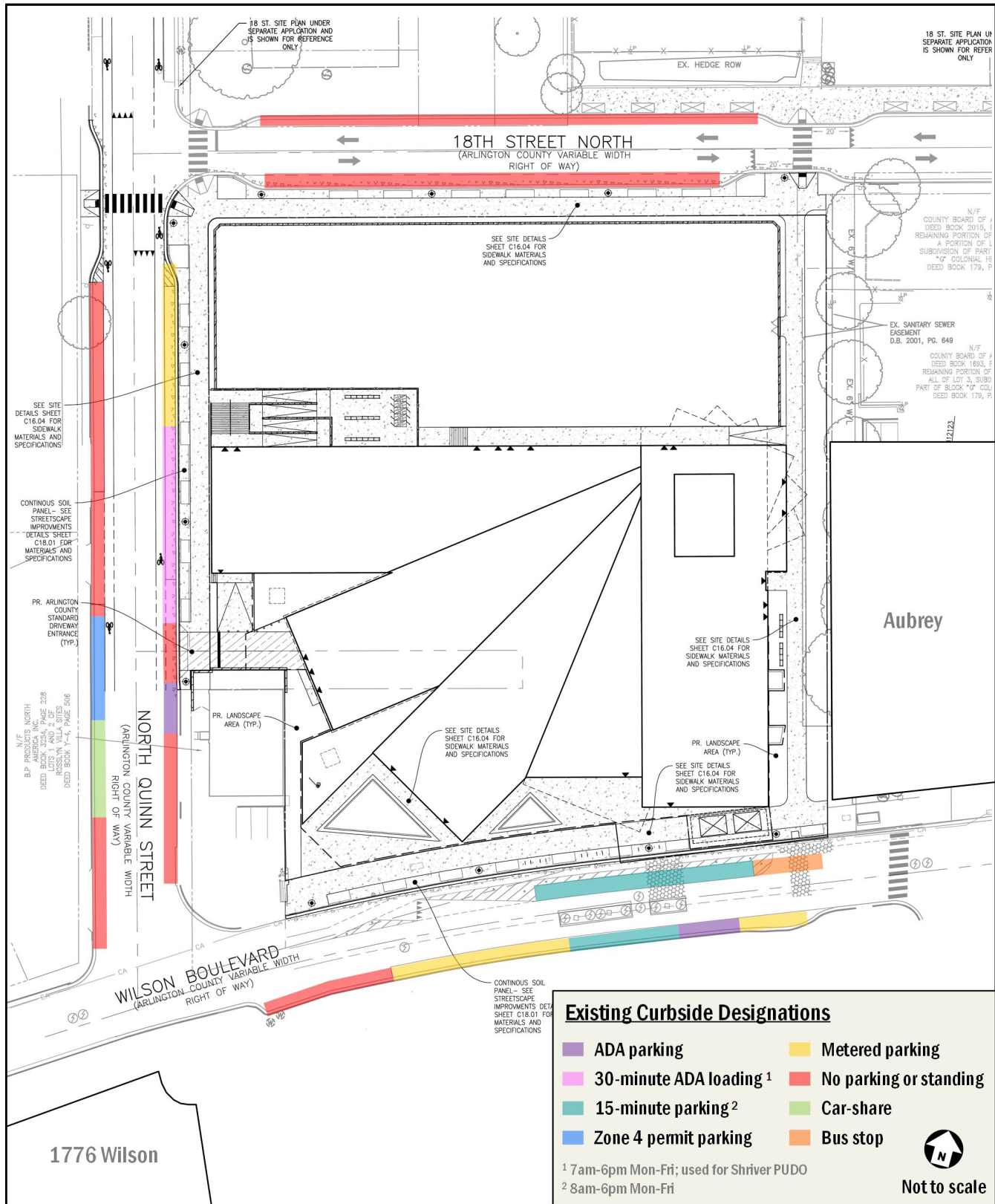


Figure 20: Existing Curbside Management

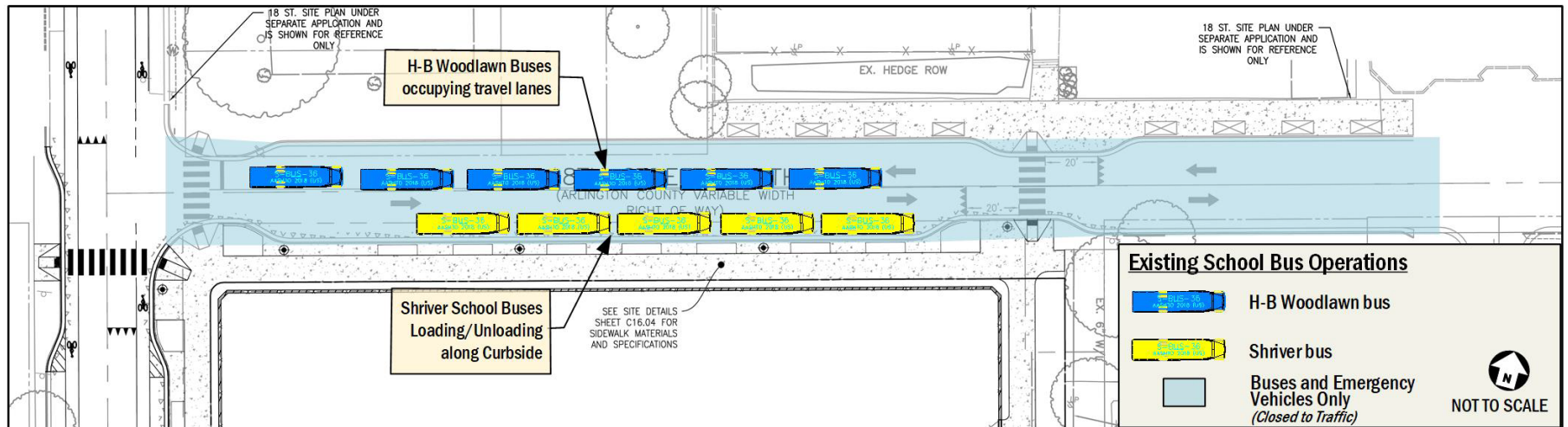


Figure 21: Existing School Bus Operations

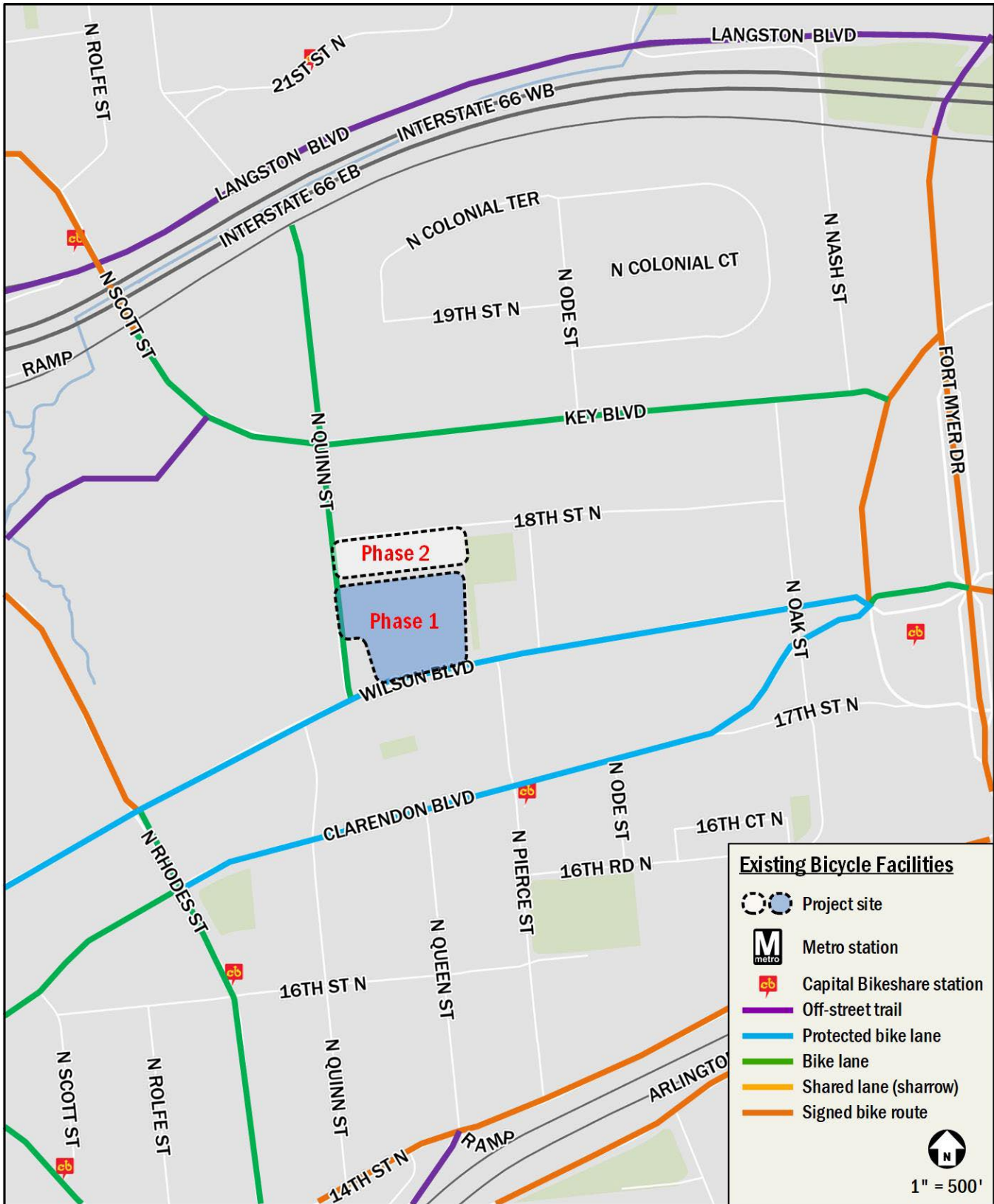


Figure 22: Existing Bicycle Facilities

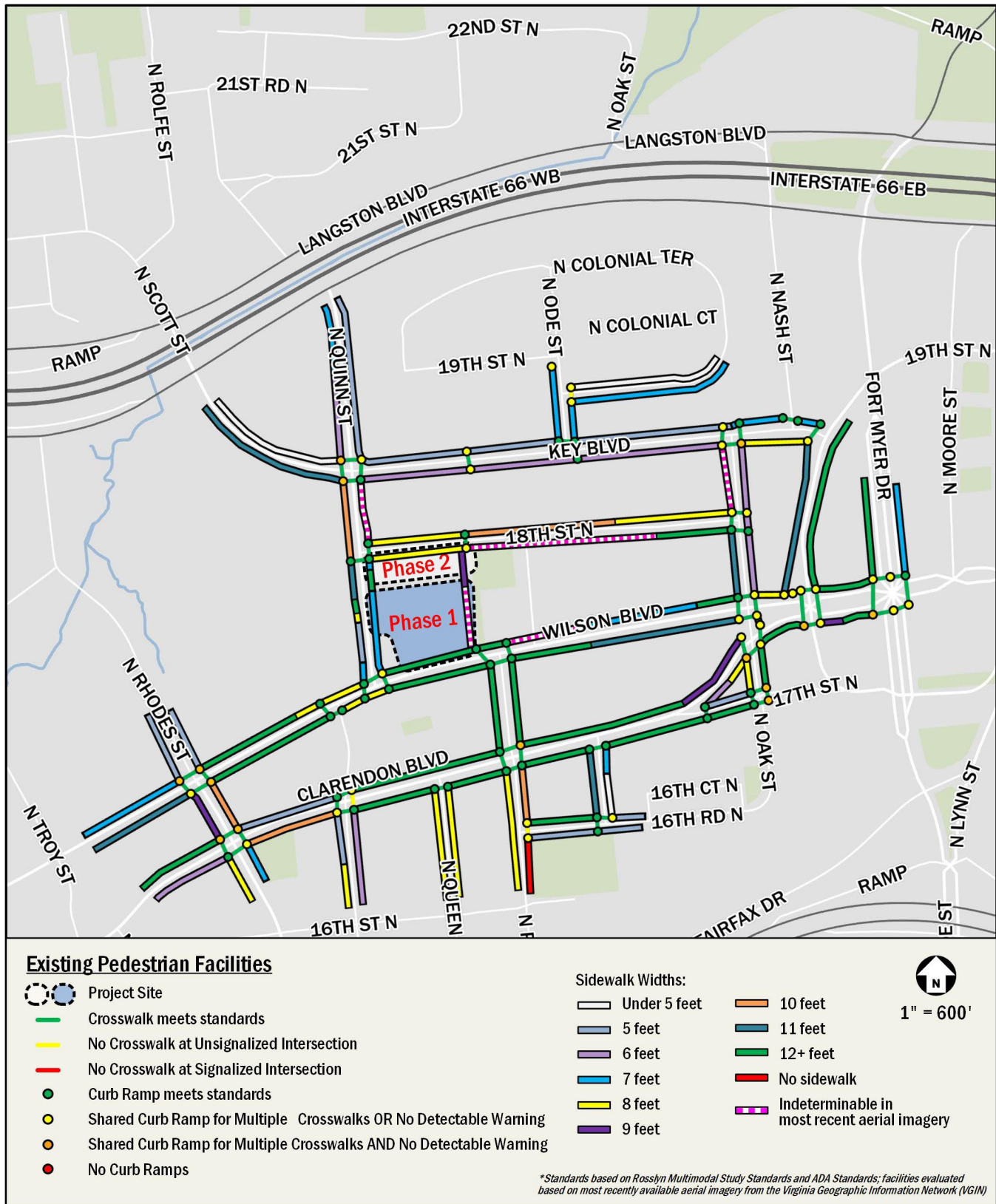


Figure 23: Existing Pedestrian Facilities

Summary of Findings – Phase 1

A summary of the transportation needs and challenges identified in this chapter under existing (Phase 1) conditions is presented in the table below.

Table 7: Summary of Findings – Phase 1

Transportation Component	Needs/Demands <i>(Based on data collected in December 2021)</i>	Phase 1	
		Current Location	Issues/Details
School Buses			
H-B Woodlawn	<ul style="list-style-type: none"> Max of 12 buses at a time Each bus stays 3 to 4 minutes on average during morning arrival, occupying space 9:00 to 9:25am Each bus stays 6 to 7 minutes on average during afternoon dismissal, occupying space 3:50 to 4:30pm 	18 th St adjacent to The Heights (currently closed to traffic)	<p><i>Generally works well, with the following notes:</i></p> <ul style="list-style-type: none"> Conflicts with vehicles that ignore bus/emergency-vehicle-only restrictions Some conflicts between the two programs using the same space Narrow sidewalk limits space for student-bus matching (at dismissal)
Shriver	<ul style="list-style-type: none"> Max of 6 buses at a time Each bus stays 7 to 8 minutes on average during morning arrival, occupying space 8:45 to 9:20am Each bus stays 14 to 15 minutes on average during afternoon dismissal, occupying space 3:40 to 4:15pm Shriver buses need to board/alight students at the curb, to accommodate wheelchair access 	18 th St adjacent to The Heights (currently closed to traffic)	<p><i>Generally works well, with the following notes:</i></p> <ul style="list-style-type: none"> No covered path from buses to main entrance Some conflicts between the two programs using the same space – Shriver buses need to time arrivals early to allow them to use curbside space Limited curbside space for loading Conflicts with vehicles that ignore bus/emergency-vehicle-only restrictions
Off-Peak Buses	<p><i>Mid-day bus needs</i></p> <ul style="list-style-type: none"> Day of data collection counted 1 Shriver bus approximately an hour before afternoon dismissal 	18 th St adjacent to The Heights (currently closed to traffic)	<p><i>Works well</i></p> <ul style="list-style-type: none"> Accommodates off-peak needs with minimal issues observed/reported
Pick-Up/Drop-Off			
Shriver	<ul style="list-style-type: none"> 3 marked spaces with an observed functional capacity closer to 4 vehicles along Shriver frontage on N Quinn St Restricted to 30-minute ADA parking from 7:00 AM to 6:00 PM, Monday through Friday, and unrestricted ADA parking at all other times Observations showed up to 2 non-ADA vehicles occupying spaces, sometimes during arrival/dismissal, and insufficient space for ADA vehicles at times (vehicles queuing or loading/unloading in street) 	Quinn St	<p><i>Works poorly</i></p> <ul style="list-style-type: none"> Does not provide a covered pick-up/drop-off similar to prior Shriver program home Sometimes occupied by non-ADA vehicles like maintenance vans Sometimes does not accommodate all ADA pick-up/drop-off demand at arrival/dismissal
H-B Woodlawn	<ul style="list-style-type: none"> Space for up to 5 vehicles along H-B Woodlawn frontage, shared with other uses Restricted to 15-minute parking from 8:00 AM to 6:00 PM, Monday through Friday, and unrestricted parking at all other times Processed 148 total vehicles during morning arrival with no spillover into travel lanes 	Wilson Blvd	<p><i>Accommodates most needs, with some exceptions</i></p> <ul style="list-style-type: none"> Not currently designated for exclusive school use Accommodates student pick-up/drop-off, short-term retail parking, food trucks, mail/parcel vehicles, and maintenance vehicles Functions well except when conflicts with parked vehicles Potential conflicts with new floating bus stop

Transportation Component	Needs/Demands (Based on data collected in December 2021)	Phase 1	
		Current Location	Issues/Details
	<ul style="list-style-type: none"> Processed 181 total vehicles during afternoon dismissal with 1-3 vehicles spilling over into travel lanes at times 		<ul style="list-style-type: none"> H-B Woodlawn students that require ADA access have difficulties using space
Loading			
Mail/Parcel Deliveries	<ul style="list-style-type: none"> Up to 10 daily deliveries based on information provided by schools 	Wilson Blvd Quinn St	<ul style="list-style-type: none"> No existing coordination between deliveries Most smaller parcel delivery vehicles use 15-minute parking on Wilson Blvd or park illegally in ADA loading area on Quinn St
Trash & Cafeteria Deliveries	<i>In addition to the above:</i> <ul style="list-style-type: none"> 5/7 vehicles entered loading dock for uses other than trash removal or cafeteria deliveries 	Loading Dock	<ul style="list-style-type: none"> Loading dock often blocked because it is frequently used for short-term parking rather than deliveries
Bicycle Parking			
Class II/III (Bike Racks)	<ul style="list-style-type: none"> 10 bike racks (20 spaces) by main office entrance to H-B Woodlawn 21 bike racks (42 spaces) by ramps down to Shriver entrance 9 bike racks (18 spaces) along frontage on Wilson Blvd 	H-B Entrance Shriver Entrance Wilson Blvd	<i>Does not work well:</i> <ul style="list-style-type: none"> No covered bike racks Bike racks at H-B Woodlawn entrance over capacity Bike racks by Shriver largely unused, possibly due to their distance from the main H-B Woodlawn entrance or the lack of protection from the elements H-B Woodlawn discourages use of bike racks along Wilson Blvd due to frequent theft; also, conflict with pick-up/drop-off
Class I (Secure Storage)	<ul style="list-style-type: none"> 3 bike lockers (6 spaces) by ramps down to Shriver entrance 	Shriver Entrance	<ul style="list-style-type: none"> Largely unused, possibly due to their distance from the main H-B Woodlawn entrance or the lack of protection from the elements
Parking			
Staff Parking	<ul style="list-style-type: none"> Access to 100 spaces in the Aubrey parking garage, 90 reserved for staff, 10 for visitors Hourly max of 84/100 school spaces occupied at the Aubrey (11:00 AM) Additional 30 spaces leased in parking garage at 1776 Wilson 	The Aubrey 1776 Wilson	<ul style="list-style-type: none"> Accommodates full-time staff as well as up to 15 temporary staff and 10 long-term visitors (based on information provided by schools) Aubrey has 1 ADA van space and 3 ADA vehicle spaces adjacent to shuttle elevator Visitors directed to the Aubrey during school hours and to 1776 Wilson after school hours
Visitor Parking	<ul style="list-style-type: none"> 10 Space in Aubrey parking garage reserved for visitors Space for up to 9 vehicles along Wilson Blvd and 6 vehicles along Quinn St 	The Aubrey 1776 Wilson On-Street	<ul style="list-style-type: none"> Visitors directed to the Aubrey during school hours and to 1776 Wilson after school hours. School validates parking for both garages
ADA Visitor Parking	<ul style="list-style-type: none"> Aubrey has 1 ADA van space and 3 ADA vehicle spaces One space on Wilson Blvd along 1550 Wilson frontage One space on Quinn St along 7-Eleven frontage 	The Aubrey Wilson Blvd Quinn St	<ul style="list-style-type: none"> ADA parking not always available Long walk to Shriver program for people with mobility needs
Maintenance Vehicle Parking	<ul style="list-style-type: none"> No dedicated space 	None	<ul style="list-style-type: none"> Maintenance vehicles park in non-designated areas
Staff Short-term Parking	<ul style="list-style-type: none"> Relies on on-street parking Space for up to 9 vehicles along Wilson Blvd and 6 vehicles along Quinn St 	Wilson Blvd Quinn St	<ul style="list-style-type: none"> Staff that need to load/unload supplies to the school have difficulty finding space near the school

Transportation Component	Needs/Demands <i>(Based on data collected in December 2021)</i>	Phase 1	
		Current Location	Issues/Details
Event Parking	<ul style="list-style-type: none"> Nearby on-street parking and structured parking 	Various	<ul style="list-style-type: none"> School currently validates parking from garages

Project Design – Phase 2

This chapter reviews the transportation components of the proposed Phase 2 of The Heights. This includes an overview of the project's transportation components and how the proposed design will address and improve existing Phase 1 transportation issues identified in the previous chapter.

Project Summary

As part of Phase 2 of the project, the existing natural grass recreational space and former Arlington County Temporary Fire Station Number 10 will be redeveloped and include:

- ADA-compliant pick-up/drop-off areas;
- A covered entrance for the Shriver program;
- An above-grade athletic field;
- Covered and secure bicycle parking; and
- Permanent on-site, off-street parking in a below-grade structure underneath the athletic field with 61 parking spaces to be designated as follows:
 - Seven (7) standard ADA-compliant spaces;
 - Two (2) van ADA-compliant spaces;
 - Six (6) maintenance van and small parcel delivery spaces;
 - Two (2) staff loading/unloading spaces;
 - 30 long-term staff parking spaces; and
 - 14 visitor parking spaces.

As part of preliminary construction associated with Phase 2, the decommission and demolition of the former temporary fire station was completed in November 2021, and the associated curb cut along N Quinn Street was removed. A single new curb cut will be added along 18th Street N as part of Phase 2.

Overall Transportation Strategy

One of the goals of this project is to ensure equity in comfortable mobility across the site with the special needs of Shriver students at the forefront of the Phase 2 design. The addition of on-site, off-street parking presents an opportunity to both achieve equity and to optimize transportation operations. This will primarily be accomplished by:

- Providing below-grade, ADA-compliant parking spaces that can be used for Shriver student pick-up/drop-off (PUDO) directly adjacent to the program's main entrance;
- Increasing access to covered, secure bicycle parking facilities for staff and students; and
- Mitigating the impact of PUDO on transit operations and the flow of traffic along Wilson Boulevard by freeing up additional curbside space along N Quinn Street that can be designated for school use and used primarily for H-B Woodlawn PUDO.

Other transportation components detailed in this chapter include improving bus loading and unloading along 18th Street with the completion of Phase 2 and the adjacent Rosslyn Highlands Park as well as ameliorating vehicle conflicts between PUDO vehicles, maintenance vehicles, and short-term parking vehicles. The recommendations included in this MMTA, and detailed in the following sections, are all rooted in the primary goals of achieving equity in mobility and optimizing existing transportation operations of the completed Phase 1.

Site Access and Circulation

Pedestrian Access

As part of Phase 2, the primary pedestrian access for Shriver students will be reconstructed to eliminate the existing stairs and weaving ramps to provide a single, ADA-compliant ramp down from 18th Street without any switchbacks. All other pedestrian access will remain unchanged from Phase 1 circulation as shown in Figure 19. The anticipated circulation plan is shown in Figure 24

Bicycle Access

New long-term and short-term bicycle parking is proposed as part of Phase 2. From 18th Street, students and staff will access covered, short-term bicycle parking spaces and the secure, long-term bicycle storage room, respectively, using the new single ramp down to the main Shriver entrance. These bicycle parking spaces will constitute a notable improvement compared to existing conditions with overhead coverage to protect from the elements and secure storage for staff commuting by bicycle. A revised circulation plan showing expected bicycle routes is shown in Figure 24.

Vehicular Access

A new curb cut to the proposed below-grade structure on 18th Street will provide vehicular access to the ADA-compliant spaces designated for Shriver student PUDO during arrival and dismissal as well as the other off-street parking spaces. When Phase 2 is completed, 18th Street will remain closed to traffic in both directions during school arrival and dismissal hours. A revised circulation plan showing expected vehicle routes to the below-grade structure is shown in Figure 24. The proposed 18th Street operations are detailed in the School Bus Loading/Unloading section and presented in Figure 26.

Loading

The loading area on Quinn Street will remain unchanged from Phase 1; however, signage will be added to discourage maintenance vehicles and mail/parcel delivery vehicles from using the space. This area will be reserved for trash removal services and cafeteria deliveries. Six (6) spaces in the proposed below-grade structure will be designated for exclusive use by County maintenance vehicles and mail/parcel delivery vehicles as shown in Figure 25.

Truck Routes and Access

Truck routing to and from the building will remain unchanged from Phase 1 and will primarily occur via Quinn Street to the existing loading area as shown in Figure 19.

Parking

Based on the approved and amended school use permit ([U-3468-16-1](#)), on-site vehicular parking requirements were not included in Phase 1 and will remain the same for Phase 2. Per the approved and amended permit, however, consideration of on-site parking spaces was to be deferred to Phase 2 after the removal of the temporary fire station. As this occurred in November 2021, this section details plans for the proposed below-grade structure that will accommodate PUDO, loading, and various use-specific parking spaces.

Phase 2 plans that will address and improve existing Phase 1 parking and loading challenges identified in the previous chapter include:

- A new below-grade structure will be constructed underneath the proposed athletic field that will provide a total of 61 parking spaces as shown in Table 8.

- County vans and parents and guardians of Shriver students currently utilizing ADA-compliant spaces along Quinn Street for PUDO will be redirected to the seven (7) standard and two (2) van ADA-compliant spaces adjacent to the main Shriver entrance in the below-grade structure.
- ADA loading and metered parking along Quinn Street between the loading area and 18th Street will be removed and restricted to school-use-only from 7:00 AM to 6:00 PM on school days and unrestricted parking at all other times to help accommodate H-B Woodlawn PUDO and other needs. Proposed curbside uses are shown in Figure 28.
- Existing 15-minute parking restrictions along H-B Woodlawn's Wilson Boulevard frontage will be maintained to accommodate both PUDO and short-term parking for adjacent non-school uses.
- The 100 spaces permanently reserved inside the Aubrey will remain; however, the 10 spaces reserved for visitors (and the need to validate parking) will be eliminated.
 - Visitors will be redirected to designated spaces in the on-site, below-grade structure.
 - Parents and guardians of H-B Woodlawn students with special mobility needs (e.g., wheelchair users, students with crutches, etc.) will be directed to the ADA-compliant spaces in the Aubrey for morning arrival and afternoon dismissal.
- The 30 parking spaces leased in the 1776 Wilson Boulevard garage will be eliminated.
 - Staff currently directed to park in this location will be redirected to the Aubrey or designated spaces in the on-site, below-grade structure. Visitors will be redirected to the below-grade structure.
- No parking spaces are reserved for students.

The proposed below-grade structure is shown in Figure 25.

Table 8: Preliminary Parking Breakdown by Type

Type	Level B1
Standard	52
Maintenance/Parcel	6
Staff Loading/Unloading	2
Long-Term Staff Parking	30
Visitor Parking	14
Compact	0
Parallel	0
ADA Accessible	7
ADA Accessible (Van)	2
Total	61

Student Pick-up/Drop-Off

The construction of the below-grade structure underneath the athletic field will significantly improve both Shriver and H-B Woodlawn PUDO operations. Details regarding each program’s anticipated PUDO scheme and how Phase 2 will address existing transportation issues identified in the previous chapter are detailed below.

Shriver PUDO

Shriver student PUDO will take place inside the below-grade structure within the seven (7) standard and two (2) van ADA-compliant spaces and adjacent loading zones next to the main Shriver entrance. Compared to the existing ADA loading along Quinn Street that can accommodate no more than two (2) vans or up to four (4) vehicles at a time, the below-grade structure will permit concurrent loading/unloading of both vehicles and vans without impacting public space. These spaces will be able to accommodate peak PUDO demand as shown in Figure 17, while designated maintenance vehicle/delivery spaces will minimize conflict with non-ADA vehicles.

H-B Woodlawn PUDO

H-B Woodlawn student PUDO will continue to take place in the 15-minute parking spaces along Wilson Boulevard and be expanded to utilize curbside spaces along Quinn Street as shown in Figure 28. Moving Shriver student PUDO into the below-grade structure will allow for ADA loading spaces alongside adjacent metered parking spaces to be eliminated and restricted to school-use-only from 7:00 AM to 6:00 PM on school days. These spaces would be unrestricted at all other times. Curbside designations along Wilson Boulevard will remain unchanged to continue to accommodate both PUDO and short-

term parking for adjacent non-school uses. By distributing PUDO between Wilson Boulevard and Quinn Street, peak PUDO demand (based on December 2021 data) as shown in Figure 15 should be accommodated, mitigating negative impacts on adjacent travel lanes on Wilson Boulevard under existing conditions.

School Bus Loading/Unloading (Proposed 18th Street Operations)

As part of the proposed Phase 2 operations shown in Figure 26, 18th Street between Quinn Street and Pierce Street will remain closed to non-school traffic during arrival and dismissal periods to allow buses to use the area as a loading/unloading zone. Up to 18 buses will be able to fit along 18th Street between the below-grade structure driveway and Pierce Street, although it is unlikely there will be this many buses present at one time based on field observations and the data detailed in the Review of Existing Conditions – Phase 1 chapter. Buses will enter 18th Street from the west, use both travel lanes to load and unload, and exit via Pierce Street or 18th Street to the east. The street closure will be implemented with vehicle barriers at Quinn Street and N Pierce Street, each blocking inbound traffic to 18th Street, with school staff directing traffic at one or both barriers as needed. Modeled bus turns on to 18th Street and example barriers are shown in Figure 27.

H-B Woodlawn buses will load and unload along the northern curb with students walking along the travel lane of 18th Street and in the mid-block crosswalk leading to the site’s internal sidewalk network. Shriver buses will load and unload along the southern curb to allow easier ADA access along the southern sidewalk of 18th Street and within the below-grade structure. It should be noted that a portion of the Shriver pedestrian path will cross the below-grade structure driveway, presenting a conflict point with vehicles. However, to minimize conflicts, school staff and other visitors who park in the below-grade structure will be directed not to arrive or depart during arrival or dismissal, meaning the only vehicles entering or exiting during arrival or dismissal should be ADA pick-up/drop-off drivers accessing the ADA pick-up/drop-off location in the below-grade structure.

Additionally, the southern curb of 18th Street adjacent to the school is proposed to be extended northward, replacing the existing curbside lane with an expanded sidewalk and bus boarding/alighting area. The advantage of this curb extension is

that it provides sufficient space for bus boarding/alighting and travel along the sidewalk while also preserving the planned tree boxes. Moreover, Shriver buses will be able to load/unload directly onto the sidewalk. Enforcing parking restrictions along 18th Street during arrival and dismissal periods will be essential to minimize bus maneuverability challenges that could arise with the presence of prohibited vehicles, and APS will coordinate with the County on enforcement issues if they occur.

Planned and Proposed Bicycle Facilities

Planned Bicycle Facilities

The Arlington Master Transportation Plan recommends existing bicycle facilities near the site be upgraded in the future, as shown in Figure 11, including the addition of bicycle lanes along Langston Boulevard, Fort Myer Drive and N Nash Street, on-street routes along N Nash Street, and bicycle trail improvements along N Lynn Street.

Proposed Bicycle Facilities

As mentioned in the previous chapter, the approved school use permit was amended by the County Board in March 2021 to incorporate updated and standardized TDM and bicycle parking requirements. Table 9 outlines previous and new bicycle parking requirements for Phase 2 of the project.

Class I (Long-Term, Secure Storage) Bicycle Parking

- Provide a minimum of one (1) bicycle space per 10 staff, at least half of which must be Class I and the balance Class II.
 - At least 30% of these spaces must be horizontal and at ground level.

Based on these requirements and the 130 total staff across both buildings as of February 2022, Phase 2 is required to provide at least 13 Class I spaces or at least 7 Class I spaces and six (6) Class II spaces.

Current below-grade structure plans shown in Figure 25 include 14 bicycle racks in a secure storage room constituting 28 Class I spaces for staff. As such, Phase 2 plans exceed bicycle parking requirements for staff.

Class II/III (Short-Term, Outdoors) Bicycle Parking

- Provide a minimum of one (1) bicycle space per 20 students in second through fifth grade for elementary

schools, and a minimum of one (1) bicycle space per 10 students for middle schools, high schools, and adult learning centers.

- These should conform to Class II or Class III Arlington County bicycle parking standards in effect on the date of use permit approval and be in highly visible locations within 50 feet of primary building entrances if possible.
- These are considered Class II if covered by a roof or overhang and Class III otherwise.

Based on these requirements and the design capacity of 775 students across both programs, Phase 2 is required to provide at least 78 Class II/III spaces for students.

Current below-grade structure plans shown in Figure 25 include 25 bicycle racks (50 spaces) along the covered walkway down to the main Shriver entrance. Along this covered walkway, approximately 18 spaces are within 50 feet of the entrance, and the rest are highly visible, covered, and not conflicting with pedestrian walkways. Additionally, the building will maintain 10 bicycle racks (20 spaces) by the H-B Woodlawn entrance and nine (9) bicycle racks (18 spaces) along Wilson Boulevard. As such, Phase 2 includes a total of 88 Class II/III spaces, exceeding bicycle parking requirements for students.

Showers and Lockers

- Provide a minimum of one (1) clothes storage locker for each required staff bicycle parking space, and a minimum of two (2) showers at the school to serve bicycle or walking commuters.
 - Lockers should be located adjacent to showers in a safe and secured area.
 - Lockers should measure at least 12 inches in width by 18 inches in depth by 36 inches in height and be available to bicycle commuters during normal building operating hours. They should, however, be available for storage 24/7.
 - Showers and lockers may be provided with gymnasium facilities and should be available to all school staff.

Based on these requirements, Phase 2 is required to provide two (2) showers and 13 lockers for bicycle and walking commuters. The number of showers and lockers available to commuters will

remain unchanged from Phase 1 conditions, and staff currently have access to two (2) showers and 16 lockers.

Table 9: Change in Bicycle Requirements

Type	Description	Requirements	
		Phase 1 (2016 Bike Parking Standards)	Phase 2 (March 2021 Use Permit Amendment)
Class I	Long-term, secure bike parking in a room/cage; at least 30% must be horizontal and at ground level; at least 50% must be Class I and rest can be Class II if necessary/desired	1 space per 10 employees	
Class II/III	Short-term, outdoor bike parking on racks; Class II if covered with roof or overhang; within 50 ft of entrance	1 space per 10 HS students 1 space per 15 MS students 1 space per 20 ES students	1 space per 20 students in grades 2-5 1 space per 10 students in MS/HS/adult learning centers
Showers	To support Class I spaces; must have 24/7/365 access; can be in the gym but must be available to commuters	1 shower per gender per 50k-sf (max of 3 per gender)	At least 2 showers to serve bicycle/walking commuters
Lockers	To support Class I spaces; must have 24/7/365 access; adjacent to spaces or showers and available to all commuters	1 locker per gender per Class I space	

Proposed Pedestrian Facilities

Phase 1 of this project included sidewalk improvements that facilitate quality pedestrian access to the site under existing conditions. Additionally, the recent completion of the Rosslyn Highland Park has further improved pedestrian access to the site. The only proposed changes to pedestrian facilities as part of Phase 2 includes the sidewalk extension along 18th Street between Quinn Street and the mid-block crosswalk to facilitate bus loading and unloading and to provide additional space for street trees. An updated review of pedestrian facilities with this proposed extension along 18th Street is shown in Figure 29.

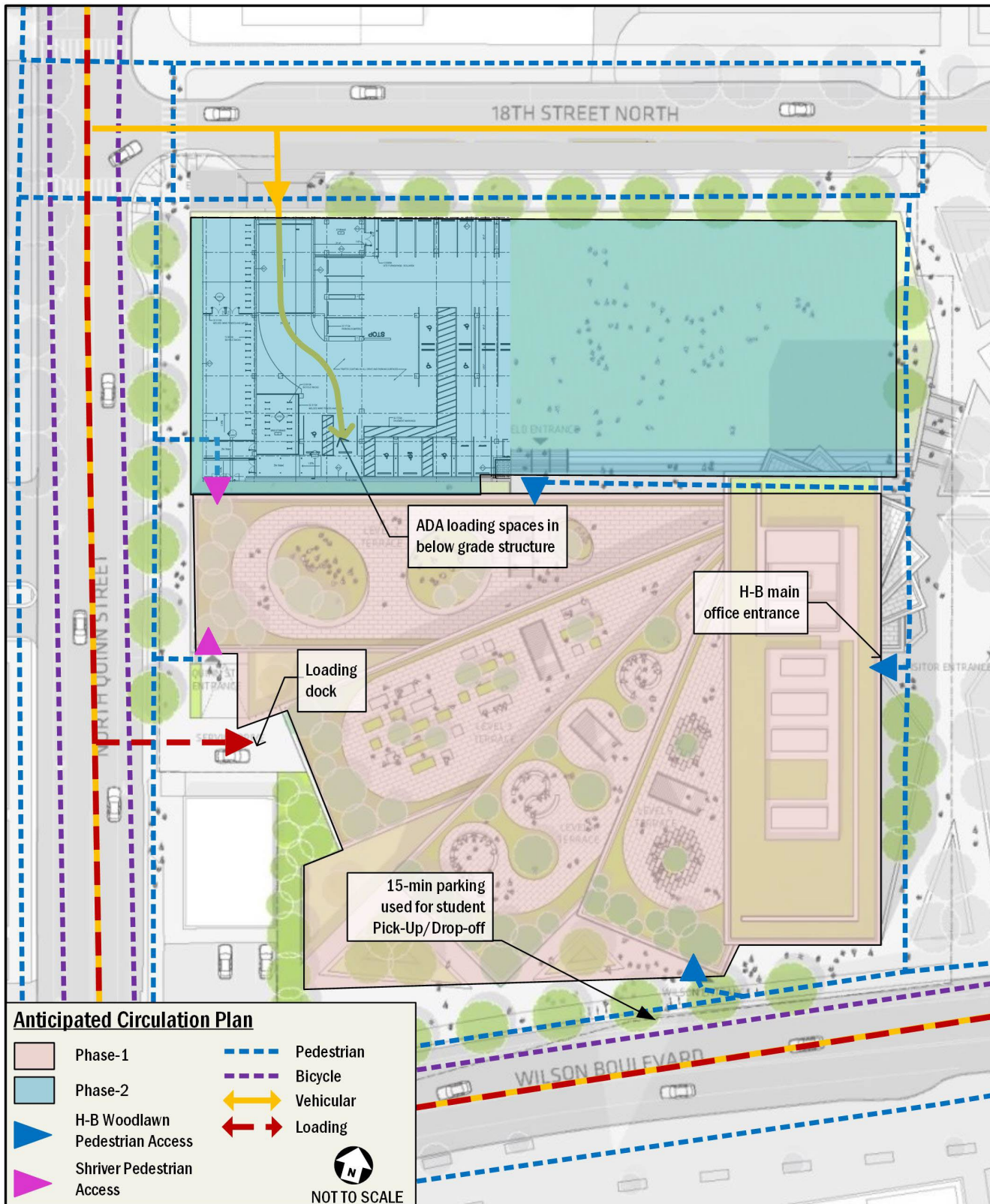


Figure 24: Anticipated Circulation Plan

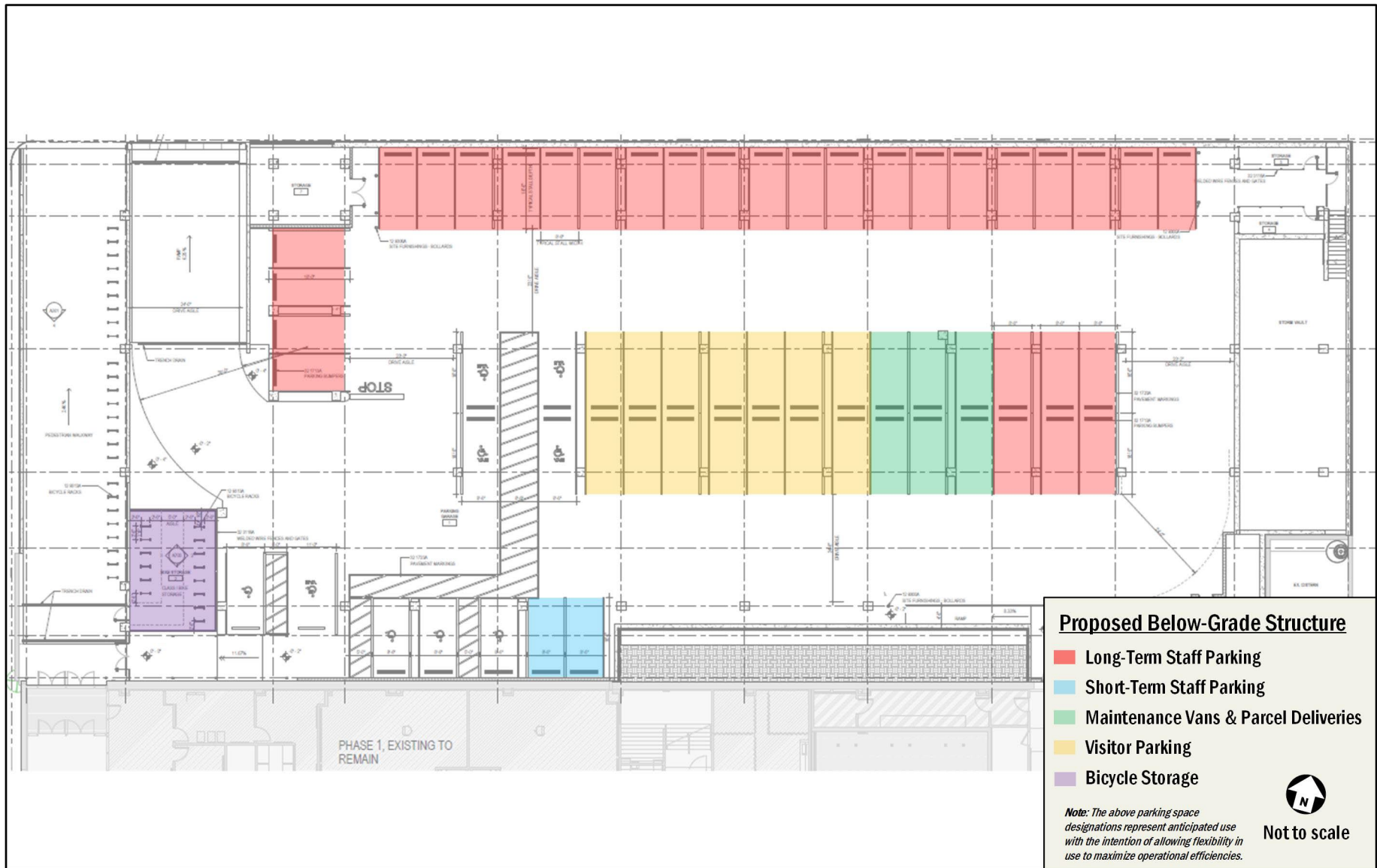
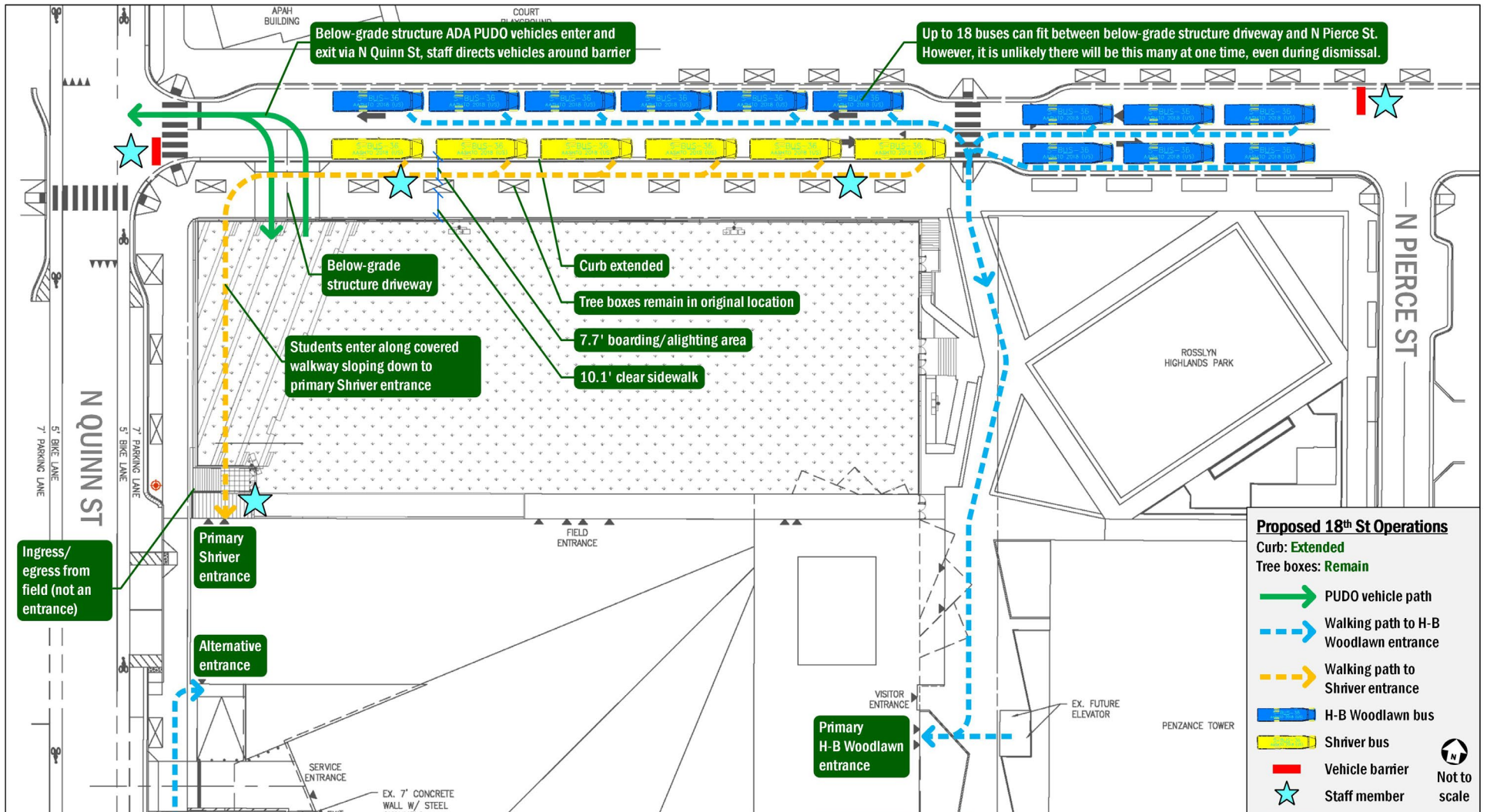


Figure 25: Proposed Below-Grade Structure



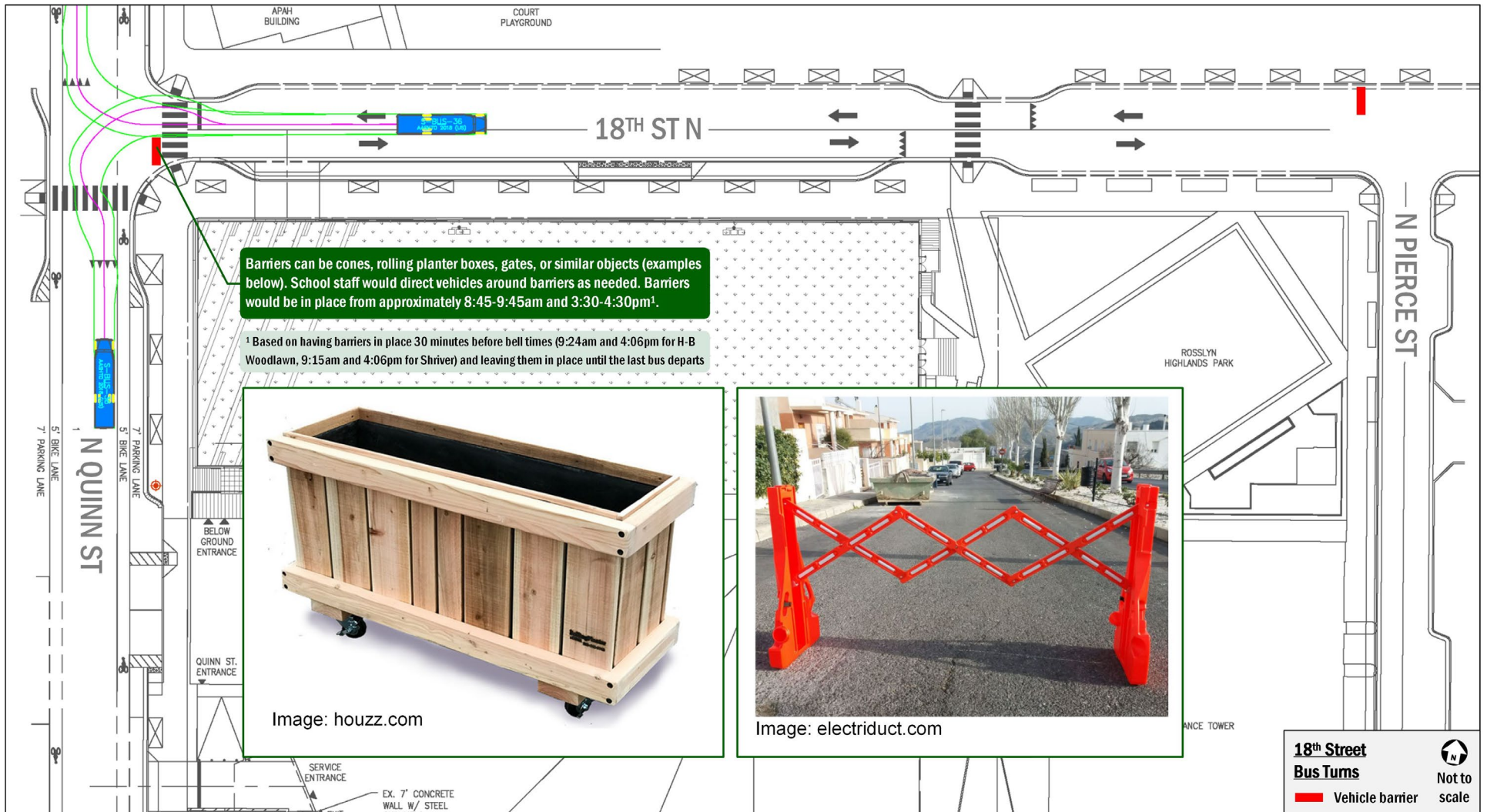


Figure 27: 18th Street Bus Turns

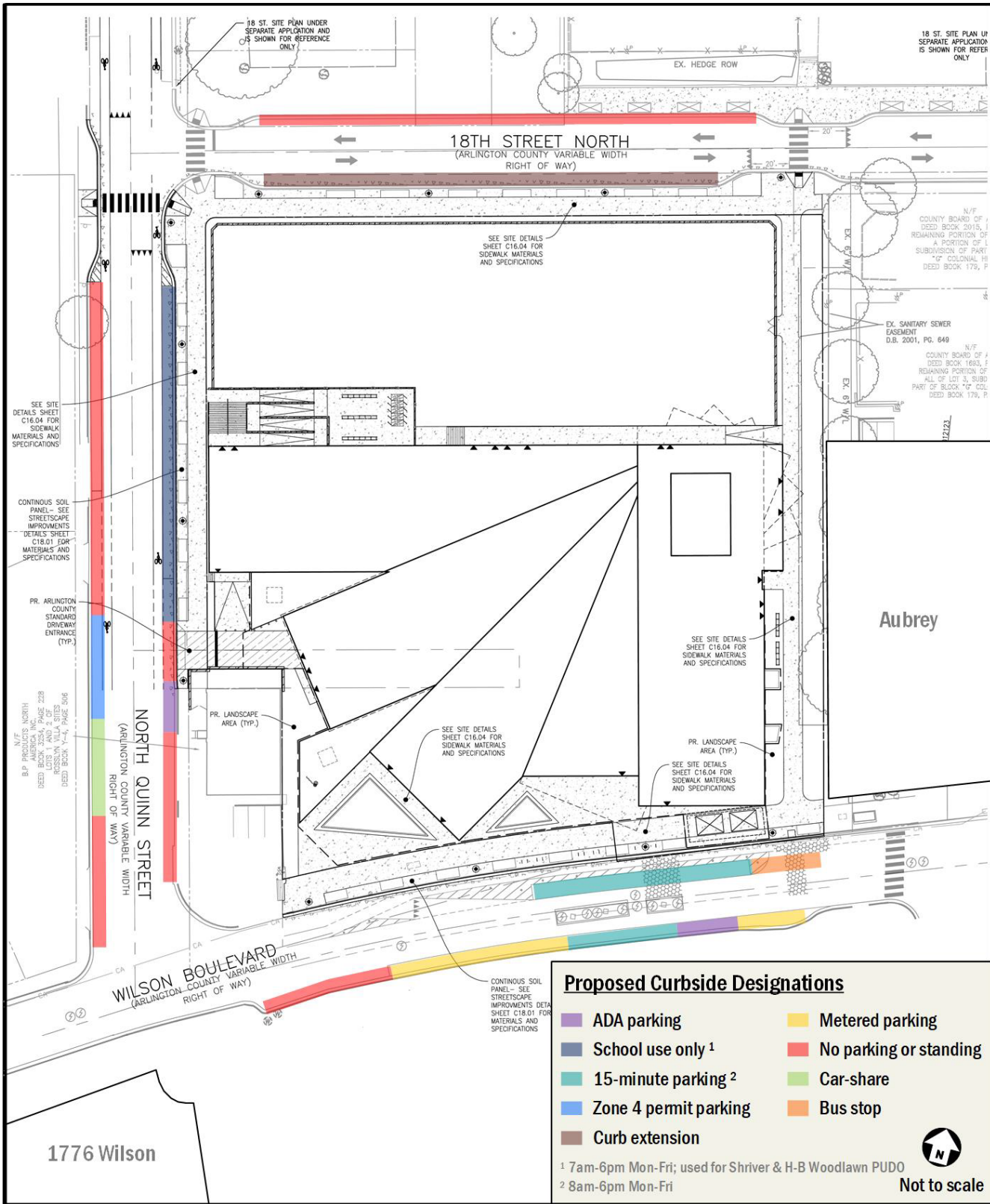


Figure 28: Proposed Curbside Management

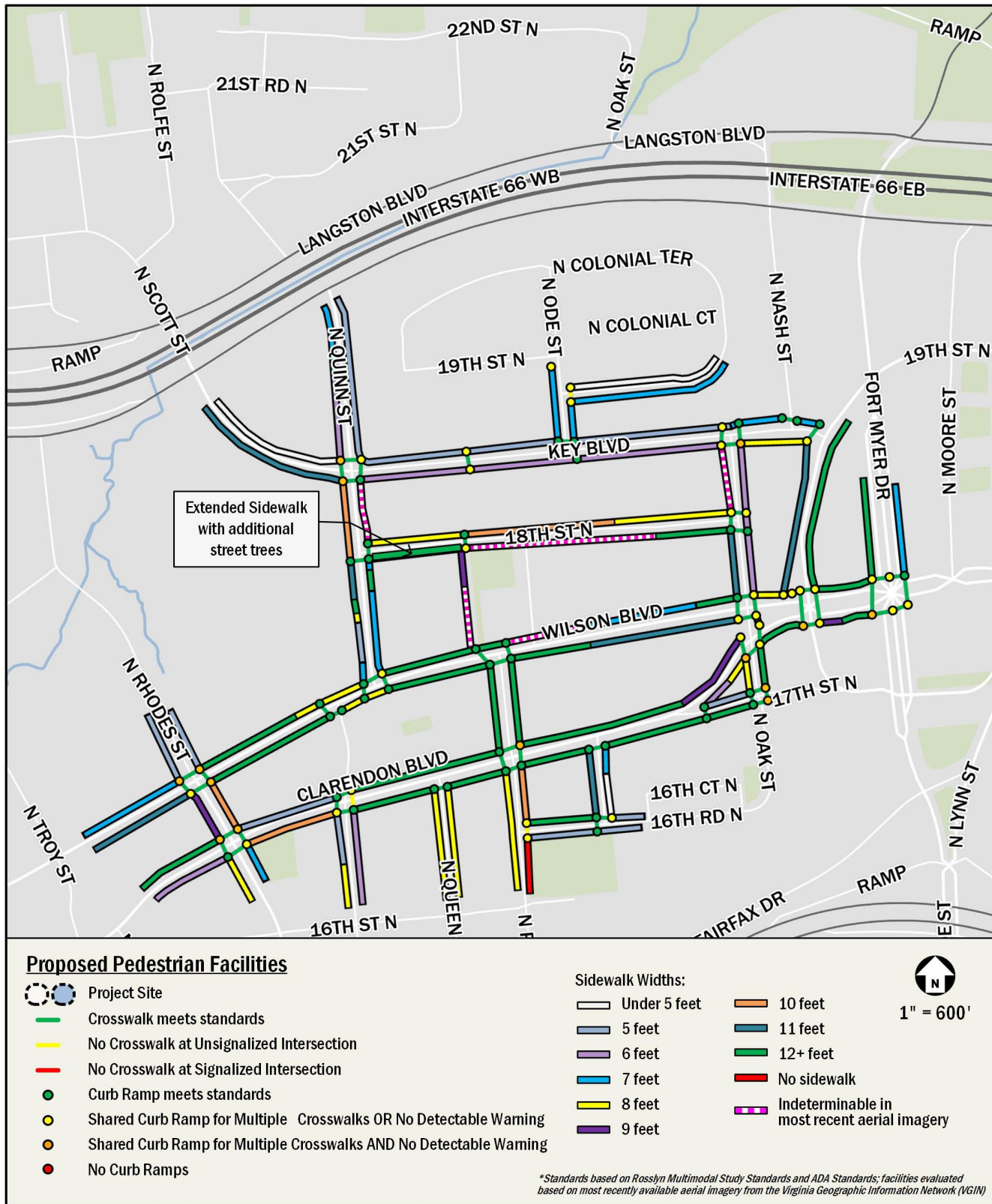


Figure 29: Proposed Pedestrian Facilities

Summary of Findings – Phase 2

A summary of the transportation components of Phase 2 detailed in this chapter as well as how they address and significantly improve the transportation needs and challenges identified in the previous chapter under existing (Phase 1) conditions is presented in the table below.

Table 10: Summary of Findings – Phase 2

Transportation Component	Needs/Demands (Based on data collected in December 2021)	Phase 2		
		Location	Proposed Location/Operations	Strengths/Details
School Buses				
H-B Woodlawn	<ul style="list-style-type: none"> Max of 12 buses at a time Each bus stays 3 to 4 minutes on average during morning arrival, occupying space 9:00 to 9:25am Each bus stays 6 to 7 minutes on average during afternoon dismissal, occupying space 3:50 to 4:30pm 	18 th St adjacent to The Heights (closed to traffic during arrival and dismissal)	<ul style="list-style-type: none"> Permanently restrict 18th St to buses and emergency vehicles only between N Quinn St and N Pierce St during arrival and dismissal Extend southern curb to travel lane along 18th St between Quinn St and mid-block crosswalk Allow buses to stage in front of Rosslyn Highlands Park between N Pierce St and mid-block crosswalk 	<ul style="list-style-type: none"> Discourages curbside vehicles along south side of 18th St by removing curbside parking lane Provides additional space for student-bus matching Allows room for street tree plantings Provides sufficient staging space for all buses for both programs during arrival and dismissal
Shriver	<ul style="list-style-type: none"> Max of 6 buses at a time Each bus stays 7 to 8 minutes on average during morning arrival, occupying space 8:45 to 9:20am Each bus stays 14 to 15 minutes on average during afternoon dismissal, occupying space 3:40 to 4:15pm Shriver buses need to board/alight students at the curb, to accommodate wheelchair access 	18 th St adjacent to The Heights (closed to traffic during arrival and dismissal)	<p><i>In addition to the above:</i></p> <ul style="list-style-type: none"> Maintain policy of restricting curbside to ADA loading during arrival and dismissal until Shriver boarding and alighting complete 	<p><i>In addition to the above:</i></p> <ul style="list-style-type: none"> Provides additional space for ADA loading and unloading Positions Shriver students closest to covered ramp to main entrance at the southeast corner of Quinn St and 18th St
Off-Peak Buses	<p><i>Mid-day bus needs</i></p> <ul style="list-style-type: none"> Day of data collection counted 1 Shriver bus approximately an hour before afternoon dismissal 	Quinn St	<ul style="list-style-type: none"> Stage off-peak buses in former ADA loading/parking along Shriver frontage Board/Alight students on 18th Street in front of covered walkway (additional details in Pick-Up/Drop-Off section) 	<ul style="list-style-type: none"> Limits conflicts with vehicles along 18th St outside of arrival and dismissal
Pick-Up/Drop-Off				
Shriver	<ul style="list-style-type: none"> 3 marked spaces with an observed functional capacity closer to 4 vehicles along Shriver frontage on N Quinn St Restricted to 30-minute ADA parking from 7:00 AM to 6:00 PM, Monday through Friday, and 	Below Field	<ul style="list-style-type: none"> Phase 2 provides 9 ADA parking spaces, two of which are van-sized, in the below-field structure Provide and adjacent loading areas for ADA loading and unloading in the below-field structure 	<ul style="list-style-type: none"> Provides covered area for Shriver student pick-up/drop-off adjacent to main entrance Additional capacity compared to Phase 1 should accommodate all pick-up/drop-off demands

Transportation Component	Needs/Demands (Based on data collected in December 2021)	Phase 2		
		Location	Proposed Location/Operations	Strengths/Details
	<p>unrestricted ADA parking at all other times</p> <ul style="list-style-type: none"> Observations showed up to 2 non-ADA vehicles occupying spaces, sometimes during arrival/dismissal, and insufficient space for ADA vehicles at times (vehicles queuing or loading/unloading in street) 			
H-B Woodlawn	<ul style="list-style-type: none"> Space for up to 5 vehicles along H-B Woodlawn frontage, shared with other uses Restricted to 15-minute parking from 8:00 AM to 6:00 PM, Monday through Friday, and unrestricted parking at all other times Processed 148 total vehicles during morning arrival with no spillover into travel lanes Processed 181 total vehicles during afternoon dismissal with 1-3 vehicles spilling over into travel lanes at times 	<p>Wilson Blvd</p> <p>Quinn St</p>	<ul style="list-style-type: none"> Remove ADA loading along Quinn St and restrict to school-use-only from 7:00 AM to 6:00 PM, school days, and for unrestricted parking at all other times, to help accommodate H-B Woodlawn pick-up/drop-off and other needs Maintain existing 15-minute parking restrictions along Wilson Blvd Allow H-B Woodlawn students with mobility needs to use the space under the field or gain access to Aubrey garage 	<ul style="list-style-type: none"> Provides school-designated curbside space that does not exist in Phase 1 Additional processing capacity compared to Phase 1 Reduces spillover into travel lanes on Wilson Blvd and potential conflicts with new floating bus stop Maintains short-term parking for non-school uses on Wilson Blvd
Loading				
Mail/Parcel Deliveries	<ul style="list-style-type: none"> Up to 10 daily deliveries based on information provided by schools 	<p>Wilson Blvd</p> <p>Quinn St</p>	<p><i>See H-B Woodlawn Pick-Up/Drop-Off</i></p>	<ul style="list-style-type: none"> Maintaining short-term parking along Wilson Blvd provides space for short-term deliveries
Trash & Cafeteria Deliveries	<p><i>In addition to the above:</i></p> <ul style="list-style-type: none"> 5/7 vehicles entered loading dock for uses other than trash removal or cafeteria deliveries 	<p>Loading Dock</p>	<p><i>See H-B Woodlawn Pick-Up/Drop-Off</i></p>	<ul style="list-style-type: none"> Additional school-designated curbside space along Quinn St provides space for short-term deliveries and discourages inappropriate use of the loading dock
Bicycle Parking				
Class II/III (Bike Racks)	<ul style="list-style-type: none"> 10 bike racks (20 spaces) by main office entrance to H-B Woodlawn 21 bike racks (42 spaces) by ramps down to Shriver entrance 9 bike racks (18 spaces) along frontage on Wilson Blvd 	<p>Below Field</p> <p>H-B Entrance</p> <p>Wilson Blvd</p>	<ul style="list-style-type: none"> Phase 2 includes 25 bike racks (50 spaces) along covered walkway down to main Shriver entrance in the below-field structure Maintain 10 bike racks (20 spaces) by H-B Woodlawn entrance and 9 bike racks (18 spaces) along Wilson Blvd 	<ul style="list-style-type: none"> Exceeds the Class II/III spaces (outdoor bicycle facilities) required by most recent requirements (March 2021 amended use permit) Maintaining existing bike racks by H-B Woodlawn entrance and along Wilson Blvd helps make progress toward meeting MTP

Transportation Component	Needs/Demands (Based on data collected in December 2021)	Phase 2		
		Location	Proposed Location/Operations	Strengths/Details
				goal of 15% student mode split
Class I (Secure Storage)	<ul style="list-style-type: none"> 3 bike lockers (6 spaces) by ramps down to Shriver entrance 	Below Field	<ul style="list-style-type: none"> Phase 2 includes 14 bike racks (28 spaces) in a secure storage room below-field Maintain access to existing showers and lockers for bicycling/walking commuters 	<ul style="list-style-type: none"> Provides nearly double the Class I spaces required by most recent requirements (March 2021 amended use permit) Encourages bicycle commuting by providing safe storage protected from the elements
Parking				
Staff Parking	<ul style="list-style-type: none"> Access to 100 spaces in the Aubrey parking garage, 90 reserved for staff, 10 for visitors Hourly max of 84/100 school spaces occupied at the Aubrey (11:00 AM) Additional 30 spaces leased in parking garage at 1776 Wilson 	The Aubrey Below Field	<ul style="list-style-type: none"> Maintain 100 spaces in the Aubrey, and use all for staff (eliminate 10 reserved for visitors) Eliminate 30 leased spaces in 1776 Wilson Blvd, replace with parking spaces in the below-field structure 	<ul style="list-style-type: none"> Provides permanent space for all staff parking needs on-site or directly adjacent between the below-field structure and the Aubrey
Visitor Parking	<ul style="list-style-type: none"> 10 Space in Aubrey parking garage reserved for visitors Space for up to 9 vehicles along Wilson Blvd and 6 vehicles along Quinn St 	Below Field	<ul style="list-style-type: none"> Designate visitor parking spaces in the below field structure 	<ul style="list-style-type: none"> Accommodates visitor parking in a simpler way for non-regular visitors, eliminates need for validating parking
ADA Visitor Parking	<ul style="list-style-type: none"> Aubrey has 1 ADA van space and 3 ADA vehicle spaces One space on Wilson Blvd along 1550 Wilson frontage One space on Quinn St along 7-Eleven frontage 	Below Field	<ul style="list-style-type: none"> Accommodate ADA Visitor parking in the below field structure 	<ul style="list-style-type: none"> Covered parking in close proximity to Shriver program entrance
Maintenance Vehicle Parking	<ul style="list-style-type: none"> No dedicated space 	Below Field	<ul style="list-style-type: none"> Designate some parking spaces in the below-field structure for Maintenance vehicles 	<ul style="list-style-type: none"> Eliminates conflicts with maintenance vehicles parking in non-designated areas
Staff Short-term Parking	<ul style="list-style-type: none"> Relies on on-street parking Space for up to 9 vehicles along Wilson Blvd and 6 vehicles along Quinn St 	Below Field	<ul style="list-style-type: none"> Designate some parking in the below-field structure to accommodate short-term staff parking 	<ul style="list-style-type: none"> Provides better access for teachers to load/unload supplies
Event Parking	<ul style="list-style-type: none"> Nearby on-street parking and structured parking 	The Aubrey Below Field Nearby garages as needed	<ul style="list-style-type: none"> Use below-field structure to accommodate event parking, expand to Aubrey garage for large events 	<ul style="list-style-type: none"> Reduces need to rely on off-site garages and validation Can accommodate parking needs for small/moderate sized events in the below-field structure

Summary and Conclusions

This report concludes that Phase 2 of the Heights will not have a detrimental impact on the surrounding multimodal transportation network and will significantly improve observed transportation challenges under existing Phase 1 conditions, assuming that all planned site design elements are implemented.

The Heights building is well served by transit and is surrounded by a well-connected pedestrian and bicycle network. The site is located near several arterials such as Wilson Boulevard, N Quinn Street, and Clarendon Boulevard. These arterials create connections to the greater Washington region via I-66, US-29 (Langston Boulevard), US-50 (Arlington Boulevard), and VA-110 (Richmond Highway).

The Heights building has five (5) above-grade and two (2) below-grade stories and houses the H-B Woodlawn Secondary Program and the Eunice Kennedy Shiver Program. The latter of these programs serves APS students who have special needs. The programs occupy a 180,000-square-foot site that includes the Heights building, natural grass recreational space, and formerly the Arlington County Temporary Fire Station Number 10. This fire station was decommissioned and demolished in November 2021, and the associated curb cut along N Quinn Street was removed. The site does not include any on-site parking and has no covered pick-up/drop-off areas or accessible parking for students served by the Shiver program.

Although some transportation components are operating at acceptable conditions, field observations and collected data show that both the H-B Woodlawn and Shriver programs have difficulties accommodating competing multimodal needs.

- Full-time staff parking demands are generally met, as the building has access to 100 permanent spaces in the adjacent parking garage at the Aubrey residential development. These spaces are supplemented by 30 spaces leased at the 1776 Wilson Boulevard parking garage, approximately a 3-minute walk from the main office entrance to the H-B Woodlawn program.
- School bus boarding and alighting along 18th Street N generally works during arrival and dismissal; however, significant coordination is required between the two programs. Additionally, vehicles often ignore the existing restrictions prohibiting vehicles other than emergency

vehicles and buses along 18th Street between N Quinn Street and N Pierce Street.

- The Shriver program faces significant challenges accommodating ADA-compliant loading and unloading for its students as well as ADA-compliant, short-term visitor parking. ADA-compliant curbside spaces recently constructed along the east side of Quinn Street have alleviated some of these challenges, but they often cannot accommodate all demands and/or are blocked by vehicles that do not require ADA-compliant spaces.
- Short-term parking needs are not well served under existing conditions. Teachers loading and unloading supplies have difficulty finding a short-term space near their program's front door. Additionally, there are no dedicated spaces for maintenance vehicles which often utilize the ADA-compliant spaces on Quinn Street or the 15-minute parking spaces along Wilson Boulevard meant to accommodate H-B Woodlawn pick-up/drop-off (PUDO).
- Bicycle parking is a challenge at the schools, with no covered bicycle racks or storage boxes provided. Where bicycle parking is provided along Wilson Boulevard, school staff discourages it due to frequent theft and conflicts with student PUDO.

As part of Phase 2 of the project, the existing natural grass recreational space and former fire station will be redeveloped to address and significantly improve the existing transportation challenges. This includes:

- ADA-compliant pick-up/drop-off areas;
- A covered entrance for the Shriver program;
- An above-grade athletic field;
- Covered and secure bicycle parking; and
- Permanent on-site, off-street parking in a below-grade structure underneath the athletic field with 61 parking spaces to be designated as follows:
 - Seven (7) standard ADA-compliant spaces;
 - Two (2) van ADA-compliant spaces;
 - Six (6) maintenance van and small parcel delivery spaces;
 - Two (2) staff loading/unloading spaces;
 - 30 long-term staff parking spaces; and
 - 14 visitor parking spaces.

A single new curb cut will be added along 18th Street to accommodate access to the below-grade structure. The parking lane on the south side of 18th Street between Quinn Street and the mid-block crosswalk will be removed and the sidewalk will be extended to the travel lane to reduce vehicle bus conflicts, to provide additional space for student staging and bus matching, and to allow for additional street trees along the roadway.

Several planned transportation improvements in the vicinity of the project are expected to enhance the quality of transportation surrounding the school. The full list of improvements is detailed in the report, but projects include:

- Core of Rosslyn Transportation Study
- Clarendon Boulevard Resurfacing Project for Complete Streets
- Courthouse-Rosslyn Multimodal Connectivity Improvements

Phase 2 has many positive elements contained within its design that minimize existing transportation challenges observed in Phase 1, including:

- Dedicated ADA-compliant loading/unloading and short-term parking spaces provided in the below-field structure which will provide covered parking within close proximity to the Shriver program's main entrance at the northwest side of the building.
- Dedicated parking spaces for short-term faculty and staff use provided in the below-field structure as well as dedicated spaces for maintenance vehicles. This will alleviate conflicts between maintenance vehicles and other curbside demands such as student PUDO and short-term retail parking for nearby businesses.
- Increased bicycle parking for the building in the below-grade structure. The inclusion of a secure bicycle storage room for commuters and covered bicycle racks for students will help the programs meet their Class I and Class II/III bicycle parking requirements. Additional bicycle parking will also help the programs make progress toward goals set in Arlington County's Master Transportation Plan.
- School bus operations will be improved through the addition of a covered walkway between 18th Street and the building. Phase 2 also includes proposed changes to the 18th Street streetscape by extending the southern curb

between Quinn Street and the mid-block crosswalk at Rosslyn Highlands Park. APS is open to modifying the final design as long as the implemented streetscape improvements will provide the following functionality:

- Sufficient space for students to queue during arrival and dismissal;
 - Ability for Shriver school buses to load and unload wheelchairs directly on the sidewalk;
 - Adequate sidewalk widths to allow typical pedestrian activity to take place concurrently with arrival and dismissal; and
 - The ability to meet the project's goals for tree planting, with the secondary benefit of providing shade for students boarding and alighting school buses.
- The below-field structure will allow The Heights to stop leasing parking spaces from the 1776 Wilson Boulevard parking garage, will accommodate visitor parking, and could be used for event parking on nights and weekends.
 - Other operational improvements are also recommended, including ways to increase the efficiency and capacity of PUDO for both programs with slight changes to curbside management that will not decrease space used for non-school uses such as short-term retail parking and food trucks.

A comprehensive comparison of transportation accommodations reviewed in this report for both Phase 1 and Phase 2 is shown in Table 11. As noted above, this report concludes that Phase 2 of the Heights will not have a detrimental impact on the surrounding multimodal transportation network and will significantly improve observed transportation challenges under existing Phase 1 conditions.

Table 11: Comparison of Transportation Accommodations

Transportation Component	Needs/Demands (Based on Data Collected in December 2021)	Phase 1		Phase 2		
		Current Location	Issues/Details	Location	Proposed Location/Operations	Strengths/Details
School Buses						
H-B Woodlawn	<ul style="list-style-type: none"> Max of 12 buses at a time Each bus stays 3 to 4 minutes on average during morning arrival, occupying space 9:00 to 9:25am Each bus stays 6 to 7 minutes on average during afternoon dismissal, occupying space 3:50 to 4:30pm 	18 th St adjacent to The Heights (currently closed to traffic)	<p><i>Generally works well, with the following notes:</i></p> <ul style="list-style-type: none"> Conflicts with vehicles that ignore bus/emergency-vehicle-only restrictions Some conflicts between the two programs using the same space Narrow sidewalk limits space for student-bus matching (at dismissal) 	18 th St adjacent to The Heights (closed to traffic during arrival and dismissal)	<ul style="list-style-type: none"> Permanently restrict 18th St to buses and emergency vehicles only between N Quinn St and N Pierce St during arrival and dismissal Extend southern curb to travel lane along 18th St between Quinn St and mid-block crosswalk Allow buses to stage in front of Rosslyn Highlands Park between N Pierce St and mid-block crosswalk 	<ul style="list-style-type: none"> Discourages curbside vehicles along south side of 18th St by removing curbside parking lane Provides additional space for student-bus matching Allows room for street tree plantings Provides sufficient staging space for all buses for both programs during arrival and dismissal
Shriver	<ul style="list-style-type: none"> Max of 6 buses at a time Each bus stays 7 to 8 minutes on average during morning arrival, occupying space 8:45 to 9:20am Each bus stays 14 to 15 minutes on average during afternoon dismissal, occupying space 3:40 to 4:15pm Shriver buses need to board/alight students at the curb, to accommodate wheelchair access 	18 th St adjacent to The Heights (currently closed to traffic)	<p><i>Generally works well, with the following notes:</i></p> <ul style="list-style-type: none"> No covered path from buses to main entrance Some conflicts between the two programs using the same space – Shriver buses need to time arrivals early to allow them to use curbside space Limited curbside space for loading Conflicts with vehicles that ignore bus/emergency-vehicle-only restrictions 	18 th St adjacent to The Heights (closed to traffic during arrival and dismissal)	<p><i>In addition to the above:</i></p> <ul style="list-style-type: none"> Maintain policy of restricting curbside to ADA loading during arrival and dismissal until Shriver boarding and alighting complete 	<p><i>In addition to the above:</i></p> <ul style="list-style-type: none"> Provides additional space for ADA loading and unloading Positions Shriver students closest to covered ramp to main entrance at the southeast corner of Quinn St and 18th St
Off-Peak Buses	<p><i>Mid-day bus needs</i></p> <ul style="list-style-type: none"> Day of data collection counted 1 Shriver bus approximately an hour before afternoon dismissal 	18 th St adjacent to The Heights (currently closed to traffic)	<p><i>Works well</i></p> <ul style="list-style-type: none"> Accommodates off-peak needs with minimal issues observed/reported 	Quinn St	<ul style="list-style-type: none"> Stage off-peak buses in former ADA loading/parking along Shriver frontage Board/Alight students on 18th Street in front of covered walkway (<i>additional details in Pick-Up/Drop-Off section</i>) 	<ul style="list-style-type: none"> Limits conflicts with vehicles along 18th St outside of arrival and dismissal
Pick-Up/Drop-Off						
Shriver	<ul style="list-style-type: none"> 3 marked spaces with an observed functional capacity closer to 4 vehicles along Shriver frontage on N Quinn St Restricted to 30-minute ADA parking from 7:00 AM to 6:00 PM, Monday through Friday, and unrestricted ADA parking at all other times Observations showed up to 2 non-ADA vehicles occupying spaces, sometimes during arrival/dismissal, and insufficient space for ADA vehicles at times (vehicles queuing or loading/unloading in street) 	Quinn St	<p><i>Works poorly</i></p> <ul style="list-style-type: none"> Does not provide a covered pick-up/drop-off similar to prior Shriver program home Sometimes occupied by non-ADA vehicles like maintenance vans Sometimes does not accommodate all ADA pick-up/drop-off demand at arrival/dismissal 	Below Field	<ul style="list-style-type: none"> Phase 2 provides 9 ADA parking spaces, two of which are van-sized, in the below-field structure Provide and adjacent loading areas for ADA loading and unloading in the below-field structure 	<ul style="list-style-type: none"> Provides covered area for Shriver student pick-up/drop-off adjacent to main entrance Additional capacity compared to Phase 1 should accommodate all pick-up/drop-off demands

Transportation Component	Needs/Demands <i>(Based on Data Collected in December 2021)</i>	Phase 1		Phase 2		
		Current Location	Issues/Details	Location	Proposed Location/Operations	Strengths/Details
H-B Woodlawn	<ul style="list-style-type: none"> Space for up to 5 vehicles along H-B Woodlawn frontage, shared with other uses Restricted to 15-minute parking from 8:00 AM to 6:00 PM, Monday through Friday, and unrestricted parking at all other times Processed 148 total vehicles during morning arrival with no spillover into travel lanes Processed 181 total vehicles during afternoon dismissal with 1-3 vehicles spilling over into travel lanes at times 	Wilson Blvd	<p><i>Accommodates most needs, with some exceptions</i></p> <ul style="list-style-type: none"> Not currently designated for exclusive school use Accommodates student pick-up/drop-off, short-term retail parking, food trucks, mail/parcel vehicles, and maintenance vehicles Functions well except when conflicts with parked vehicles Potential conflicts with new floating bus stop H-B Woodlawn students that require ADA access have difficulties using space 	Wilson Blvd Quinn St	<ul style="list-style-type: none"> Remove ADA loading along Quinn St and restrict to school-use-only from 7:00 AM to 6:00 PM, school days, and for unrestricted parking at all other times, to help accommodate H-B Woodlawn pick-up/drop-off and other needs Maintain existing 15-minute parking restrictions along Wilson Blvd Allow H-B Woodlawn students with mobility needs to use the space under the field or gain access to Aubrey garage 	<ul style="list-style-type: none"> Provides school-designated curbside space that does not exist in Phase 1 Additional processing capacity compared to Phase 1 Reduces spillover into travel lanes on Wilson Blvd and potential conflicts with new floating bus stop Maintains short-term parking for non-school uses on Wilson Blvd
Loading						
Mail/Parcel Deliveries	<ul style="list-style-type: none"> Up to 10 daily deliveries based on information provided by schools 	Wilson Blvd Quinn St	<ul style="list-style-type: none"> No existing coordination between deliveries Most smaller parcel delivery vehicles use 15-minute parking on Wilson Blvd or park illegally in ADA loading area on Quinn St 	Wilson Blvd Quinn St	<i>See H-B Woodlawn Pick-Up/Drop-Off</i>	<ul style="list-style-type: none"> Maintaining short-term parking along Wilson Blvd provides space for short-term deliveries
Trash & Cafeteria Deliveries	<p><i>In addition to the above:</i></p> <ul style="list-style-type: none"> 5/7 vehicles entered loading dock for uses other than trash removal or cafeteria deliveries 	Loading Dock	<ul style="list-style-type: none"> Loading dock often blocked because it is frequently used for short-term parking rather than deliveries 	Loading Dock	<i>See H-B Woodlawn Pick-Up/Drop-Off</i>	<ul style="list-style-type: none"> Additional school-designated curbside space along Quinn St provides space for short-term deliveries and discourages inappropriate use of the loading dock
Bicycle Parking						
Class II/III (Bike Racks)	<ul style="list-style-type: none"> 10 bike racks (20 spaces) by main office entrance to H-B Woodlawn 21 bike racks (42 spaces) by ramps down to Shriver entrance 9 bike racks (18 spaces) along frontage on Wilson Blvd 	H-B Entrance Shriver Entrance Wilson Blvd	<p><i>Does not work well:</i></p> <ul style="list-style-type: none"> No covered bike racks Bike racks at H-B Woodlawn entrance over capacity Bike racks by Shriver largely unused due to distance from H-B Woodlawn entrances H-B Woodlawn discourages use of bike racks along Wilson Blvd due to frequent theft; also, conflict with pick-up/drop-off 	Below Field H-B Entrance Wilson Blvd	<ul style="list-style-type: none"> Phase 2 includes 25 bike racks (50 spaces) along covered walkway down to main Shriver entrance in the below-field structure Maintain 10 bike racks (20 spaces) by H-B Woodlawn entrance and 9 bike racks (18 spaces) along Wilson Blvd 	<ul style="list-style-type: none"> Exceeds the Class II/III spaces (outdoor bicycle facilities) required by most recent requirements (March 2021 amended use permit) Maintaining existing bike racks by H-B Woodlawn entrance and along Wilson Blvd helps make progress toward meeting MTP goal of 15% student mode split
Class I (Secure Storage)	<ul style="list-style-type: none"> 3 bike lockers (6 spaces) by ramps down to Shriver entrance 	Shriver Entrance	<ul style="list-style-type: none"> Largely unused due to distance from H-B Woodlawn entrances and lack of protection from the elements 	Below Field	<ul style="list-style-type: none"> Phase 2 includes 14 bike racks (28 spaces) in a secure storage room below-field Maintain access to existing showers and lockers for bicycling/walking commuters 	<ul style="list-style-type: none"> Provides nearly double the Class I spaces required by most recent requirements (March 2021 amended use permit) Encourages bicycle commuting by providing safe storage protected from the elements

Transportation Component	Needs/Demands <i>(Based on Data Collected in December 2021)</i>	Phase 1		Phase 2		
		Current Location	Issues/Details	Location	Proposed Location/Operations	Strengths/Details
Parking						
Staff Parking	<ul style="list-style-type: none"> Access to 100 spaces in the Aubrey parking garage, 90 reserved for staff, 10 for visitors Hourly max of 84/100 school spaces occupied at the Aubrey (11:00 AM) Additional 30 spaces leased in parking garage at 1776 Wilson 	The Aubrey 1776 Wilson	<ul style="list-style-type: none"> Accommodates full-time staff as well as up to 15 temporary staff and 10 long-term visitors (based on information provided by schools) Aubrey has 1 ADA van space and 3 ADA vehicle spaces adjacent to shuttle elevator Visitors directed to the Aubrey during school hours and to 1776 Wilson after school hours 	The Aubrey Below Field	<ul style="list-style-type: none"> Maintain 100 spaces in the Aubrey, and use all for staff (eliminate 10 reserved for visitors) Eliminate 30 leased spaces in 1776 Wilson Blvd, replace with parking spaces in the below-field structure 	<ul style="list-style-type: none"> Provides permanent space for all staff parking needs on-site or directly adjacent between the below-field structure and the Aubrey
Visitor Parking	<ul style="list-style-type: none"> 10 Space in Aubrey parking garage reserved for visitors Space for up to 9 vehicles along Wilson Blvd and 6 vehicles along Quinn St 	The Aubrey 1776 Wilson On-Street	<ul style="list-style-type: none"> Visitors directed to the Aubrey during school hours and to 1776 Wilson after school hours. School validates parking for both garages 	Below Field	<ul style="list-style-type: none"> Designate visitor parking spaces in the below field structure 	<ul style="list-style-type: none"> Accommodates visitor parking in a simpler way for non-regular visitors, eliminates need for validating parking
ADA Visitor Parking	<ul style="list-style-type: none"> Aubrey has 1 ADA van space and 3 ADA vehicle spaces One space on Wilson Blvd along 1550 Wilson frontage One space on Quinn St along 7-Eleven frontage 	The Aubrey Wilson Blvd Quinn St	<ul style="list-style-type: none"> ADA parking not always available Long walk to Shriver program for people with mobility needs 	Below Field	<ul style="list-style-type: none"> Accommodate ADA Visitor parking in the below field structure 	<ul style="list-style-type: none"> Covered parking in close proximity to Shriver program entrance
Maintenance Vehicle Parking	<ul style="list-style-type: none"> No dedicated space 	None	<ul style="list-style-type: none"> Maintenance vehicles park in non-designated areas 	Below Field	<ul style="list-style-type: none"> Designate some parking spaces in the below-field structure for Maintenance vehicles 	<ul style="list-style-type: none"> Eliminates conflicts with maintenance vehicles parking in non-designated areas
Staff Short-term Parking	<ul style="list-style-type: none"> Relies on on-street parking Space for up to 9 vehicles along Wilson Blvd and 6 vehicles along Quinn St 	Wilson Blvd Quinn St	<ul style="list-style-type: none"> Staff that need to load/unload supplies to the school have difficulty finding space near the school 	Below Field	<ul style="list-style-type: none"> Designate some parking in the below-field structure to accommodate short-term staff parking 	<ul style="list-style-type: none"> Provides better access for teachers to load/unload supplies
Event Parking	<ul style="list-style-type: none"> Nearby on-street parking and structured parking 	Various	<ul style="list-style-type: none"> School currently validates parking from garages 	The Aubrey Below Field Nearby garages as needed	<ul style="list-style-type: none"> Use below-field structure to accommodate event parking, expand to Aubrey garage for large events 	<ul style="list-style-type: none"> Reduces need to rely on off-site garages and validation Can accommodate parking needs for small/moderate sized events in the below-field structure