

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION



d. Policy, Planning and Sustainability Administration

MEMORANDUM

TO: Sara Bardin
Director, Office of Zoning

FROM: Samuel Zimbabwe 
Associate Director

DATE: October 5, 2015

SUBJECT: **ZC Case No. 15-10** – Deanwood Hills – 5201 Hayes Street, NE

PROJECT SUMMARY

Deanwood Hills, LLC (the “Applicant”) requests approval of a consolidated planned unit development (PUD) and related zoning map amendment from C-M-1 to R-5-B. The Applicant requests relief from the loading requirement of one 55 foot loading dock, one 200 square foot loading platform, and one 20 foot service space and proposes one 30 foot loading dock, one 100 foot service space, and one 20 foot service space. The Applicant requests relief from the compact parking space requirement of a maximum of 40% and proposes 56% instead. The site is located at 5201 Hayes St. NE (Square 5197, Lot 809) and bounded by Hayes Street to the north, 51st Street and the Deanwood Rehabilitation and Wellness Center to the west, and a surface parking lot to the east; Division Avenue is to the east of the site and Nannie Helen Burroughs Avenue is to the south of the site. The Applicant proposes to build out the unimproved public alley adjacent to their site in order to connect Hayes Street with an existing public alley that runs north-south from Nannie Helen Burroughs Avenue. The project consists of:

- 150 affordable dwelling units;
- 75 vehicular parking spaces; and
- 50 long-term bicycle parking spaces.

SUMMARY OF DDOT REVIEW

DDOT is committed to achieve an exceptional quality of life in the nation’s capital by encouraging sustainable travel practices, safer streets, and outstanding access to goods and services. As one means to achieve this vision, DDOT works through the zoning process to ensure that impacts from new developments are manageable within and take advantage of the District’s multimodal transportation network.

The purpose of DDOT's review is to assess the potential safety and capacity impacts of the proposed action on the District's transportation network and, as necessary, propose mitigations that are commensurate with the action. DDOT finds:

Site Design

- The missing sidewalk immediately adjacent to the site on the south-side of Hayes Street will be completed;
- An unimproved public alley running north-south adjacent to site will be completed and connect Hayes Street with Nannie Helen Burroughs Avenue;
- Loading relief is consistent with other loading-related relief requests throughout the District; and
- Loading and parking access is proposed to occur from the alley, which meets DDOT's approach to site access.

Travel Assumptions

- The parking ratio and number of compact spaces are appropriate; and
- The action is expected to generate a moderate number of new vehicle and transit trips.

Analysis

- The Applicant utilized sound methodology to perform the analysis;
- Existing transit service may have capacity to accommodate future demand. Due to recently rerouted bus lines, it is too early to assess if overcrowding exists;
- The pedestrian facilities are deficient. The sidewalk on the south-side of Hayes Street beyond the Applicant's site is missing both to the east and the west of the site, preventing a safe passageway to transit facilities, which is necessary in order to meet the Applicant's mode split;
- No intersections are adversely impacted by the proposed development; and
- The Transportation Demand Management (TDM) measures are not sufficiently robust to support the proposed mode split.

Mitigations

DDOT has no objection to the requested approval with the following conditions:

- Construct a sidewalk along the south-side of Hayes Street to extend beyond the Applicant's property to the east to Division Street;
- Construct a safe pedestrian connection, to be approved by DDOT, to the north-side of Hayes Street at either 51st Street or near 50th Place;
- Construct a new curb ramp and receiving ramp at southwest and southeast corners of Hayes Street and Division Street;
- Amend the TDM plan to include the following:
 - Provide each new resident a one-time, one-year bikeshare or carshare membership until the total aggregate benefit value reaches \$12,000 and provide proactive marketing strategy to ensure residents are aware of this benefit;
 - Provide an additional 28 long-term bicycle spaces above the District of Columbia Municipal Regulations (DCMR) requirement of 50 spaces, for a total of 78 long-term spaces;
 - Provide a secure bicycle repair station within the long-term bicycle storage room; and
 - Install a minimum of eight short-term bicycle parking spaces (four racks) near the building entrances.

Continued Coordination

Given the complexity and size of the action, the Applicant is expected to continue to work with DDOT outside of the Zoning Commission process on the following matters:

- Public space, including curb and gutter, street trees and landscaping, street lights, sidewalks, and other features within the public rights of way, are expected to be designed and built to DDOT standards;
- Careful attention should be paid to pedestrian connections along the site's perimeter and adjacent infrastructure in order to fill in gaps to transit facilities and upgrade ADA-accessible curb ramps. The final design of the sidewalk improvements would be determined during permitting;
- Required short-term bicycle parking spaces to be located at main building entrances; and
- The curb radius for the entrance to the Applicant's surface parking lot and loading facilities from the alley will be addressed during the public space permitting process.

TRANSPORTATION ANALYSIS

DDOT requires applicants requesting an action from the Zoning Commission complete a Comprehensive Transportation Review (CTR) in order to determine the action's impact on the overall transportation network. Accordingly, an applicant is expected to show the existing conditions for each transportation mode affected, the proposed impact on the respective network, and any proposed mitigations, along with the effects of the mitigations on other travel modes. A CTR should be performed according to DDOT direction. The Applicant and DDOT coordinated on an agreed-upon scope for the CTR that is consistent with the scale of the action.

The review of the analysis is divided into four categories: site design, travel assumptions, analysis, and mitigations. The following review provided by DDOT evaluates the Applicant's CTR to determine its accuracy and assess the action's consistency with the District's vision for a cohesive, sustainable transportation system that delivers safe and convenient ways to move people and goods, while protecting and enhancing the natural, environmental, and cultural resources of the District.

Site Design

Site design, which includes site access, loading, and public realm design, plays a critical role in determining a proposed action's impact on the District's infrastructure. While transportation impacts can change over time, the site design will remain constant throughout the lifespan of the proposed development, making site design a critical aspect of DDOT's development review process. Accordingly, new developments must provide a safe and welcoming pedestrian experience, enhance the public realm, and serve as positive additions to the community.

Site Access

The Applicant proposes all vehicular, including truck, access to the site through a north-south public alley to the east of the site. The Applicant proposes to build out the unimproved public alley adjacent to their site in order to connect Hayes Street with an existing public alley that runs north-south from Nannie Helen Burroughs Avenue. This alley extension will be widened five feet onto private property by an easement and will be 20 feet wide. The Applicant is expected to build the public alley to current

DDOT standards and apply for the appropriate public space permits.

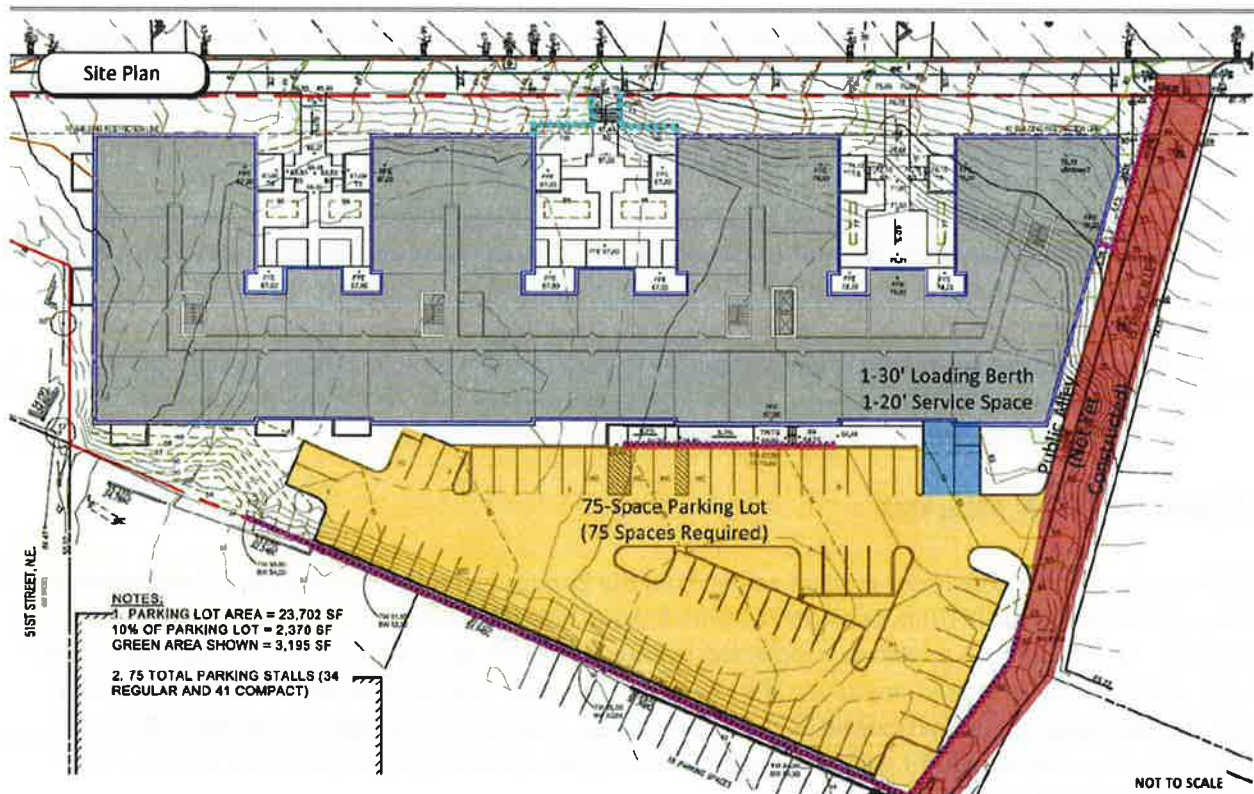


Figure 1: Site Design and Access (Source: Grove/Slade Associates)

Loading

DDOT's practice is to accommodate vehicle loading in a safe and efficient manner, while at the same time preserving safety across non-vehicle modes and limiting any hindrance to traffic operations. For new developments, DDOT requires that loading take place in private space and that no back-up maneuvers occur in the public realm. This often results in loading being accessed through an alley network.

The Applicant proposes one 30 foot loading dock, one 20 foot service space, and one 100 square foot platform in lieu of the zoning requirement for one 55 foot loading dock, one 20 foot service space, and one 200 square foot platform. The requested loading relief is consistent with other loading-related relief requests throughout the District. In the rare event that larger trucks must service the site, residents or the building management could apply for Emergency No Parking signs to reserve a loading area along the curbside. DDOT finds that the number and size of proposed loading facilities are sufficient to accommodate the typical loading demand generated by the number and unit composition of dwelling units included in this project.

Loading will be accessed through the proposed public alley extension. No back-up maneuvers will occur in the public realm. DDOT believes that it may be difficult for 40 foot garbage trucks to turn from the alley into the site. The Applicant has assured DDOT that 30 foot garbage trucks will be used. As truck turning diagrams for the 40 foot trucks have not been provided to DDOT, DDOT cannot assess impacts.

In the event that 40 foot garbage trucks need to utilize the site, the Applicant will need to adjust the curb radius into the surface parking from the alley. The curb radius will be addressed during the public space permitting process.

Streetscape and Public Realm

In line with District policy and practice, any substantial new building development or renovation is expected to rehabilitate streetscape infrastructure between the curb and the property lines. This includes curb and gutters, street trees and landscaping, street lights, sidewalks, and other appropriate features within the public rights of way bordering the site.

DDOT expects the Applicant to design and build the streetscape surrounding the property to current DDOT standards. The Applicant proposes to install a fence in the Building Restriction Line (BRL); fences in public space, including those within the BRL, are limited to 42 inches and must be open in nature. The Applicant proposes a sidewalk along the south-side of Hayes Street adjacent to the site. Due to the high share of transit users, residents will walk to the nearby bus stops and Metro stations, which means residents will traverse areas that do not have sidewalks and ADA-accessible curb ramps. DDOT expects the Applicant to build the sidewalk beyond their property along the south-side of Hayes Street to Division Street in order to connect to the nearest bus stop. Additionally, a pedestrian connection is necessary west of the site to connect the site to 49th Street; this could take the form of building a sidewalk along the south-side of Hayes Street west to 49th Street or, at a minimum, building a safe pedestrian connection to the north-side of Hayes Street at either 51st Street or near 50th Place. A new curb ramp at southwest corner of Hayes Street and Division Street is necessary to align with the existing crosswalk and bring the curb ramp up to current standards. These elements will require public space permits.

The Applicant must work closely with DDOT and the Office of Planning to ensure that the design of the public realm meets current standards and will substantially upgrade the appearance and functionality of the streetscape for public users needing to access the property or circulate around it. In conjunction with the District of Columbia Municipal Regulations, DDOT's *Design and Engineering Manual* will serve as the main public realm references for the Applicant. DDOT staff will be available to provide additional guidance during the public space permitting process.

Final design of the public space will be determined during DDOT's public space permitting process. DDOT notes the importance of maximizing the width of sidewalks along the perimeter of the site to accommodate pedestrian and bicycle activity.

Travel Assumptions

The purpose of the CTR is to inform DDOT's review of a proposed action's impacts on the District's transportation network. To that end, selecting reasonable and defensible travel assumptions is critical to developing a realistic analysis.

Background Developments and Regional Growth

As part of the analysis of future conditions, DDOT requires applicants account for future growth in traffic on the network or what is referred to as background growth. There are not any entitled projects with an

origin or destination within the study area; therefore, no background development was included in the analysis.

DDOT also requires applicants account for regional growth. This can be done by assuming a general growth rate, by evaluating growth patterns forecast in MWCOC's regional travel demand model, or by comparing existing and past average annual weekday traffic volume obtained from DDOT and applying an average growth rate. The Applicant's analysis used DDOT traffic volumes and applied a 0.25% annualized growth rate throughout the study area. DDOT agrees with the proposed growth rate.

Off-Street Vehicle Parking

The overall parking demand created by the development is primarily a function of land use, development square footage, and price and supply of parking spaces. However, in urban areas, other factors contribute to the demand for parking, such as the availability of high quality transit, frequency of transit service, and proximity to transit.

The proposed site includes 75 off-street surface parking spaces, 56% of which would be compact spaces. Zoning requires a total of 75 spaces and limits compact spaces to 40%. DDOT finds this parking ratio of 0.5 cars to dwelling units and number of compact spaces are appropriate for a development this size and at this location.

Trip Generation

The Applicant provided trip generation estimates utilizing the Institute of Traffic Engineers (ITE) Trip Generation Manual. The Applicant utilized Residential: Apartment (Code 220) ITE land use in their trip generation estimation.

Each trip a person makes is made by a certain means of travel, such as vehicle, bicycle, walking, etc. The means of travel is referred to as a 'mode' of transportation. A variety of elements impact the mode of travel, including density of development, diversity of land use, design of the public realm, availability and cost of parking, among many others.

The Applicant developed the following mode split assumptions informed by the U.S. Census data and WMATA's 2005 *Development-Related Ridership Survey*.

	Drive	Transit	Bike	Walk
Residential	55%	40%	2%	3%

Figure 2: Mode Split (Source: Grove/Slade Associates)

Based on the trip generation and mode split assumptions discussed above, the Applicant predicted the following level of weekday peak hour trip generation as shown in Figure 3:

Trip Generation by Land Use & Mode		AM Peak Hour			PM Peak Hour			Weekday Trips
		In	Out	Total	In	Out	Total	
Residential								
Transit Person-Trips	40%	7	28	35	28	15	43	454
Walking Person-Trips	3%	1	2	3	3	1	4	34
Bicycling Person-Trips	2%	1	1	2	2	1	3	23
Vehicular Person-Trips	55%	10	38	48	38	20	58	625
<i>Vehicle-Trips</i>		9	34	42	34	18	51	568
Total Person-Trips		19	69	88	71	37	108	1,136
Total Vehicle-Trips		9	34	42	34	18	51	568

Figure 3: Weekday Peak Hour Vehicle Trip Generation (Source: Grove/Slade Associates)

The proposed residential building is expected to generate a combined 42 AM and 51 PM peak hour vehicle trips, 35 AM and 43 PM peak hour transit trips, and minimal pedestrian-only and bike-only trips. The total vehicle trips generated by this project are not expected to result in significant delay or congestion.

Study Area and Data Collection

The Applicant identified nine intersections where detailed vehicle, bicycle, and pedestrian counts would be conducted and a level of service analysis would be performed. These intersections are immediately adjacent to the site and include intersections radially outward from the site that have the greatest potential to see moderate to significant increases in vehicle delay. DDOT acknowledges that not all affected intersections are included in the study area and there will be intersections outside of the study area that realize new trips. However, DDOT expects minimal to no increase in delay outside the study area as a result of the proposed action.

Counts were conducted on Thursday, April 30, 2015 from 6:30 AM to 9:30 AM and from 4:00 PM to 7:00 PM, while Congress, DC Public Schools, and Prince George's County Public Schools were in session. DDOT agrees with the time frame and collection date.

Analysis

To determine the action's impacts on the transportation network, a CTR includes an extensive multi-modal analysis of the existing baseline conditions, future conditions without the proposed action, and future conditions with the proposed development. The Applicant completed their analysis based on the assumptions described above.

Roadway Capacity and Operations

DDOT aims to provide a safe and efficient roadway network that provides for the timely movement of people, goods and services. As part of the evaluation of travel demand generated by the site, DDOT requests analysis of traffic conditions for the agreed upon study intersections for the current year and after the facility opens both with and without the site development or any transportation changes.

All intersections in the study area are expected to operate at an acceptable level of service with the added trips from the proposed project. The proposed project will have a minimal impact to the intersections in the study area.

Transit Service

The District and the Washington Metropolitan Area Transit Authority (WMATA) have partnered to provide extensive public transit service in the District of Columbia. DDOT's vision is to leverage this investment to increase the share of non-automotive travel modes so that economic development opportunities increase with minimal infrastructure investment. Transit is expected to be an important mode of transportation for this development.

The proposed project is approximately one mile from the Deanwood Metro Station entrance and 1.25 miles from the Minnesota Avenue Metro Station entrance. The closest bus stop is approximately 300 feet away at the intersection of Hayes Street and Division Street. The proposed project is well-served by four bus lines (i.e., V2, V4, X9, and W4). These bus lines operate with headways in the range of approximately 10 to 30 minutes.

The Applicant's review of WMATA studies shows that sufficient capacity exist to absorb the expected increase of transit trips by this development. However, the analysis did not account for a June 2015 rerouting of the V2 and V4 bus lines, now serving the site, and instead accounted for the U8 line, which no longer serves the site. The restructured routes no longer serve the same termini, and it is too early to assess if overcrowding exists on the restructured routes.

Pedestrian Facilities

The District is committed to enhance pedestrian accessibility by ensuring consistent investment in pedestrian infrastructure on the part of both the public and private sectors. DDOT expects new developments to serve the needs of all trips they generate, including pedestrian trips.

The Applicant performed an inventory of the pedestrian infrastructure surrounding the site (see Figure 4). A continuous sidewalk from Division Street along Hayes Street to the site and then to 49th Street does not currently exist. The Applicant proposes to improve the pedestrian infrastructure and streetscape in front of their site only. Hayes Street is a key pedestrian path to the two nearby Metro stations and bus stops. Due to the high share of transit users, residents will walk to the nearby bus stops and Metro stations, which means residents will traverse areas that do not have sidewalks and ADA-accessible curb ramps. DDOT expects the Applicant to build the sidewalk beyond their property along the south-side of Hayes Street to Division Street in order to connect to the nearest bus stop. Additionally, a pedestrian connection is necessary west of the site to connect the site to 49th Street; this could take the form of building a sidewalk along the south-side of Hayes Street west to 49th Street or, at a minimum, building a safe pedestrian connection to the north-side of Hayes Street at either 51st Street or near 50th Place. A new curb ramp at southwest corner of Hayes Street and Division Street is necessary to align with the existing crosswalk and bring the curb ramp up to current standards. The Applicant will be required to install a streetscape plan per DDOT standards.



Figure 4: Pedestrian Infrastructure (Source: Grove/Slade Associates)

Bicycle Facilities

The District of Columbia is committed to enhance bicycle access by ensuring consistent investment in bicycle infrastructure on the part of both the public and private sectors. DDOT expects new developments to serve the needs of all trips they generate, including bicycling trips.

No bicycle facilities exist adjacent to the site on Hayes Street; however, a combination of a shared-lane and cycle track exists to the south of the site along Nannie Helen Burroughs Avenue. In addition, the Marvin Gaye Trail is located south of the subject site.

The closest Capital Bikeshare station is located 0.4 miles from the site at the southwest corner of the intersection of Nannie Helen Burroughs Avenue and 49th Street with 11 bicycle docks. In the *Capital Bikeshare Development Plan*, DDOT has identified a quarter-mile radius that the subject site is located within, noted in the plan as Deanwood, as a location of a new station due to demand and limited access to bikeshare.

The Applicant proposes 50 long-term bicycle parking spaces on the lower level of the building. These spaces are accessible from the surface parking lot or via an elevator from the first floor. The Applicant noted as a part of their Transportation Demand Management (TDM) plan an unspecified number of short-term bicycle racks external to the building. During the Public Space permitting process, DDOT will require a minimum of eight short-term bicycle parking spaces (four racks) near the building entrances.

Mitigations

As part of all major development review cases, DDOT requires the Applicant to mitigate the impacts of the development in order to positively contribute to the District's transportation network. The mitigations must sufficiently diminish the action's vehicle impact and promote non-auto travel modes. This can be done through Transportation Demand Management (TDM), physical improvements, operations, and performance monitoring.

DDOT preference is to mitigate vehicle traffic impacts first through establishing an optimal site design and operations to support efficient site circulation. When these efforts alone cannot properly mitigate an action's impact, TDM measures may be necessary to manage travel behavior to minimize impact. Only when these other options are exhausted will DDOT consider capacity-increasing changes to the transportation network because such changes often have detrimental impacts on non-auto travel and are often contrary to the District's multi-modal transportation goals.

In addition to the TDM measures outlined below, DDOT proposes the following mitigations as conditions of approval in order to improve the pedestrian facilities and connect residents to transit:

- Construct a new sidewalk along the south-side of Hayes Street to extend from the Applicant's property to Division Street;
- Construct a safe pedestrian connection, to be approved by DDOT, to the north-side of Hayes Street at either 51st Street or near 50th Place; and
- Construct a new curb ramp and receiving ramp at southwest and southeast corners of Hayes Street and Division Street.

Transportation Demand Management

TDM is a set of strategies, programs, services, and physical elements that influence travel behavior by mode, frequency, time, route, or trip length in order to help achieve highly efficient and sustainable use of transportation facilities. In the District, this typically means implementing infrastructure or programs to maximize the use of mass transit, bicycle and pedestrian facilities, and reduce single occupancy vehicle trips during peak periods. The Applicant's proposed TDM measures play a role in achieving the desired and expected mode split.

The specific elements within the TDM plan vary depending on the land uses, site context, proximity to transit, scale of the development, and other factors. The TDM plan must help achieve the assumed trip generation rates to ensure that an action's impacts will be properly mitigated. Failure to provide a robust TDM plan could lead to unanticipated additional vehicle trips that could negatively impact the District's transportation network.

The Applicant proposed the following TDM strategies:

- Provide 50 long-term bicycle parking spaces and an unspecified number of short-term spaces. These 50 spaces, however, are required by the DCMR for a building this size; therefore, DDOT does not consider this a TDM strategy. The provision of additional long-term bicycle parking spaces is considered a TDM strategy; and
- Appoint a TDM Leader (for planning, construction, and operations) who will work with residents to distribute and market various transportation alternatives and options.

DDOT does not find the above TDM measures sufficiently robust to support the expected mode split. DDOT recommends the following additional TDM measures in order to support the project:

- Provide each new resident a one-time, one-year bikeshare or carshare membership until the total aggregate benefit value reaches \$12,000 and provide proactive marketing strategy to ensure residents are aware of this benefit;
- Provide an additional 28 long-term bicycle spaces above the District of Columbia Municipal Regulations (DCMR) requirement of 50 spaces, for a total of 78 long-term spaces;
- Provide a secure bicycle repair station within the long-term bicycle storage room; and
- Install a minimum of eight short-term bicycle parking spaces (four racks) near the building entrances.

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