

EAJ

### TECHNICAL MEMORANDUM

To:	Jonathan Rogers	DDOT – PSD
CC:	Eddie Meder Jeff Utz	Gables Residential Goulston & Storrs
From:	Vinay Varadarajan, E.I.T Daniel Solomon, AICP Daniel B. VanPelt, P.E., PTOE	
Date:	October 11, 2019	
Subject:	ZC Case No. 14-12E: 1329 5 <sup>th</sup> Street NE Second-Stage P 1309 5 <sup>th</sup> Street, LLC (collectively, the "Applicant") – Cor	

### Introduction

This memorandum presents the findings of a Comprehensive Transportation Review ("CTR") update conducted in support of a Second-Stage Planned Unit Development ("PUD") application for the new building (the "North Building") to be constructed on the northern portion (the "North Parcel") of the of the property at 1309-1329 5<sup>th</sup> Street NE. The North Building was approved as a First-Stage PUD on March 30, 2015 as part of ZC Case Number 14-12 with a development program including 290,000 square feet of either residential (approximately 368 dwelling units) or office space, approximately 35,000 square feet of retail, and 300 to 475 parking spaces. Under the same application, the building and related improvements (the "Future South Building") to be constructed above the existing "Market" building (the "Existing South Building") on the southern portion of the site was approved as a Consolidated PUD. Within the approved, hybrid First-Stage and Consolidated application, the North Building and the Future South Building (or the Existing South Building until the Future South Building is constructed) will be separated by an urban plaza ("Plaza") to provide connectivity and pedestrian amenities to the surrounding area. This memorandum pertains only to the pending Second-Stage PUD application for the North Building.

The North Building is located within the Union Market District in the Northeast quadrant of DC, as shown in Figure 1, and is generally bounded by the Plaza and the Existing South Building to the south, a vacant lot where the original Union Market Terminal sheds are currently located and which is now used for maintenance storage to the north, 6<sup>th</sup> Street NE to the east, and 5<sup>th</sup> Street NE to the west.

The Second-Stage PUD plans for the North Building consist of a single mixed-use building containing approximately 300 dwelling units, up to 23,053 square feet containing a mix of retail, service, restaurant, and/or PDR/maker uses, and approximately 310 below-grade parking spaces meant to serve both the North Building and the Existing South Building (and ultimately the Future South Building, once constructed). Vehicular access to the below-grade parking garage and internal loading facilities will be from 6<sup>th</sup> Street, NE via a single curb cut. Included in the North Building construction will be the buildout of the Plaza.

**Transportation Planners and Engineers** 

www.goroveslade.com ZONING COMMISSION District of Columbia CASE NO.14-12E EXHIBIT NO.18A This CTR serves as an update to the information regarding the North Building that was provided in the First-Stage Transportation Impact Study (TIS) and to review the transportation-related site design elements, particularly those that were not available at the time of the First-Stage TIS.

As such, this statement includes the following four sections:

- <u>Project Update</u>: This section provides a comparison of the First-Stage and Second-Stage development programs and subsequent trip generations.
- <u>Design Review</u>: This section reviews the transportation components of the North Building, including the proposed site plan. It includes descriptions of the site's vehicular access, loading, parking, pedestrian, and bicycle accommodations, including a discussion of public space improvements along 5<sup>th</sup> Street, NE and 6<sup>th</sup> Street, NE along with details of the Plaza.
- <u>Transportation Demand Management</u>: This section outlines the proposed TDM plan for the North Building based on specific needs of the site.
- <u>Review of First-Stage PUD Conditions</u>: This section reviews the PUD conditions outlined in the Zoning Commission Order as part of the First-Stage PUD and outlines the compliance of these conditions as part of the Second-Stage PUD.

Of note, no supplementary capacity analysis is included as part of this memorandum as the projected trip generation of the North Building will yield fewer trips than what was projected in the First-Stage analysis. However, unless superseded by the analysis contained herein, the prior findings, data, and analysis contained in the First-Stage TIS, available at Exhibits 18, 18A, and 30 in the record of Z.C. Case No. 14-12, are incorporated by reference here.

This CTR concludes that:

- The Applicant has complied with all applicable conditions of the First-Stage PUD, and the overall development plan is in accordance with and less impactful than the First-Stage PUD, resulting in fewer projected peak hour trips.
- The vehicular parking supply proposed in the Second-Stage application is within the range of vehicular parking that the Zoning Commission approved as part of the First-Stage PUD.
- The proposed loading facilities and proposed Loading Management Plan will sufficiently meet the loading demands of the North Building, and the previously-approved flexibility from the loading requirements of the applicable Zoning Regulations will have no material adverse impact on District services or nearby properties.
- The amount of proposed long-term bicycle parking exceeds the current requirements of the Zoning Regulations for the proposed uses of the North Building and the theater and retail uses of the South Building. Additionally, the North Building includes short-term bicycle parking along the 5<sup>th</sup> Street and 6<sup>th</sup> Street, NE frontages of the site.
- The pedestrian environment will be greatly improved as a result of the North Building and associated development in public space, which will include wide sidewalks, pedestrian amenities, and improved porosity through the Union Market Area. The design of streetscape improvements will be based on the Union Market Streetscape Guidelines.
- The proposed Transportation Demand Management (TDM) Plan adequately promotes non-auto modes of travel that
  are consistent with the specific needs of the site and mitigates transportation-related impacts of the North Building.

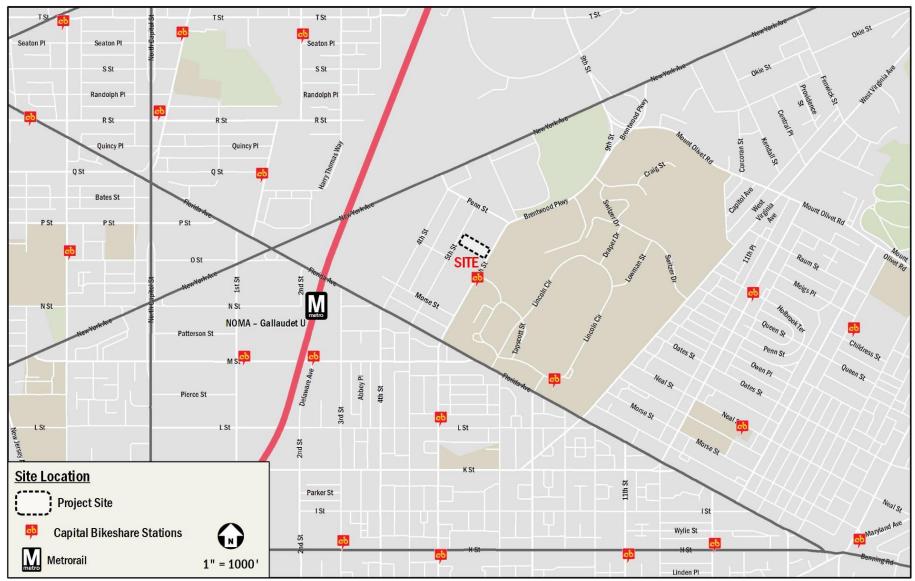


Figure 1: Site Location

## Project Update

This section outlines updates to the development program and trip generation for the North Building as part of its Second-Stage PUD Application.

## Development Program Update

The overall development plan for the North Building has been refined from the approved First-Stage PUD, as shown in Table 1. As approved under ZC Case Number 14-12, the North Building was proposed to include approximately 290,000 square feet or either residential space or office space, approximately 35,000 square feet of retail use, and 300-475 parking spaces.

Under plans filed for ZC Case Number 14-12E, the development program for the North Building has been refined, following the guidelines set forth by the ZC Case Number 14-12. As shown in Table 1, the Second-Stage plans comply with and narrow the ranges approved during the First-Stage PUD process.

## Table 1: Summary of North Building Development Program

Plan Component	North Building per First-Stage PUD (ZC Case 14-12)	North Building per Second-Stage PUD Application (ZC Case 14-12E)
Residential Space	290,000 square feet of residential space (approximately 368 dwelling units) or 290,000 square feet of office space.	300 dwelling units (± 10%)
Retail Space <sup>1</sup>	35,000 square feet	23,053 square feet (± 10%)
Vehicular Parking	300 to 475 parking spaces in a garage under the North Building, which includes parking for all uses of the South Building.	310 parking spaces (± 10%) in a garage under the North Building, which includes parking for all uses of the South Building.
Bicycle Parking	Approximately 111-119 long-term spaces within the North Building and 17-27 outdoor spaces adjacent to the North Building. The long-term supply includes eight (8) spaces for the retail and theater uses of the South Building.	Approximately 111-119 long-term spaces within the North Building and 20 short-term spaces adjacent to the North Building. The long-term supply includes eight (8) spaces for the retail and theater uses of the South Building.
Loading Facilities	The loading facilities for the North Building would be approved as part of its Second- Stage PUD Approval.	Two (2) 30' loading berths (loading relief from ZR58 requested, however facilities comply with current ZR16 requirements).

<sup>&</sup>lt;sup>1</sup> All references to "Retail" space in this memorandum should be understood to refer to the area of the Project that will include retail, service, eating and drinking establishment, and PDR/maker uses per DDOT guidelines and standards.

# Trip Generation Update

The original trip generation assumed for the North Building as part of the First-Stage PUD was derived using Institute of Transportation Engineers' (ITE) Trip Generation, 9<sup>th</sup> Edition rates. This includes Land Uses 710 (General Office) and 820 (Shopping Center). Although the North Building was approved with the flexibility to be built as either an office building or a residential building (both with ground floor retail and related uses), the First-Stage TIS analyzed the office scenario as it resulted in a more conservative analysis (i.e., the office scenario resulted in a greater expected trip generation than the residential option expected trip generation). This ITE analysis was supplemented to account for the urban nature of the site by splitting trips into four (4) modes: transit (consisting of both Metrorail and Metrobus), walking, biking, and driving. The mode split estimates were developed using survey information contained within several sources, including WMATA's 2005 *Development-Related Ridership Survey*, assumptions from the nearby mixed-use Gateway Market PUD, and U.S. Census Data (including Census Transportation Planning Products). Although the maximum number of parking spaces proposed for the North Building has decreased from the First-Stage PUD, the same mode split, shown in Table 2, was used for comparison purposes (which is another conservative assumption). The trip generation for the North Building as analyzed in the First-Stage TIS is presented in Table 3.

## Table 2: Mode Split Assumptions

Land Use	Mode					
	Drive	Transit	Bike	Walk		
Residential/Office	50%	39%	3%	8%		
Retail	70%	17%	3%	10%		

## Table 3: North Building Trip Generation Summary (As Analyzed as part of ZC 14-12)

		North Bui	lding – First-Sta	ige PUD Develop	ment Program		
Mode	Land Use –		AM Peak Hou		PM Peak Hour		
woue		In	Out	Total	In	Out	Total
Auto	Office	196	29	225	35	167	202
Auto (veh/hr)	Retail	15	9	24	43	48	91
(ven/m)	Total	211	38	249	78	215	293
Turnerit	Office	174	23	197	30	147	177
Transit (ppl/hr)	Retail	6	4	10	19	20	39
(pp)/m)	Total	180	27	207	49	167	216
Dile	Office	13	2	15	2	12	14
Bike (ppl/hr)	Retail	1	1	2	3	4	7
(pp)/m)	Total	14	3	17	5	16	21
	Office	36	4	40	6	30	36
Walk (ppl/hr)	Retail	4	2	6	11	12	13
(pp)(11)	Total	40	6	46	17	42	59

In order to make a more direct comparison between the First-Stage and Second-Stage development programs for the North Building, both are presented below utilizing ITE Trip Generation, 10<sup>th</sup> Edition rates. For the First-Stage program, the same Land Use codes were used between 9<sup>th</sup> Edition and 10<sup>th</sup> Edition. For the Second-Stage program, residential trip generation

was calculated based on ITE Land Use 221 (Mid-Rise Apartment). All retail (and related non-residential ground floor use) trip generation was calculated using ITE Land Use 820 (Shopping Center).

As part of the First-Stage approvals, the Applicant was granted flexibility to provide the number of residential units, size of the retail space, and number of parking spaces within 10 percent from the number depicted in the plans, as shown in Table 4. As such, the trip generation analysis shown below in Table 5 reflects a scenario where a 10 percent increase in the development program were realized, again to use a conservative set of assumptions.

### Table 4: Comparison of Development Program with Design Flexibility

Plan Component	Development Program as shown in PUD Plans (dated 08.30.2019)	Development Program with 10% Flexibility Added
Residential Space	300 dwelling units	330 dwelling units
Retail Space	23,053 square feet	25,358 square feet

Based on the above methodology and the development programs from the original First-Stage PUD and the proposed Second-Stage PUD, the following changes to the North Building trip generation were determined:

- AM peak hour trip generation decrease of 115 vehicular trips (from 192 to 77 trips)
- PM peak hour trip generation decrease of 120 vehicular trips (from 261 to 141 trips)

Table 5 summarizes the North Building trip generation for the approved First-Stage PUD, the current Second-Stage PUD application, and the difference between the two trip generation projections. As shown in the comparison, the proposed Second-Stage plan is expected to generate significantly fewer vehicular trips than was analyzed during the First-Stage TIS. Accordingly, and with the concurrence of District Department of Transportation ("DDOT"), a vehicular capacity analysis is not needed for the Second-Stage PUD due to the significant reduction in vehicular peak hour trips relative to what the Commission reviewed and approved as part of the First-Stage PUD. That is, the Commission has already relatively recently reviewed and approved a program for the North Building that results in much greater transportation-related impacts than the development program proposed as part of the instant Second-Stage application. Detailed trip generation calculations are included in the Technical Attachments.

Mode		AM Peak Hou	r		PM Peak Hour	
Mode	In	Out	Total	In	Out	Total
		Approved Fir	st-Stage PUD plai	ns		
		Office (290	,000 Square Feet)			
Auto (veh/hr)	145	24	169	27	141	168
Transit (ppl/hr)	133	22	155	25	129	154
Bike (ppl/hr)	11	1	12	2	10	12
Walk (ppl/hr)	28	4	32	6	26	32
		Retail (35,	000 Square Feet)			
Auto (veh/hr)	14	9	23	45	48	93
Transit (ppl/hr)	6	4	10	20	21	41
Bike (ppl/hr)	1	1	2	3	4	7
Walk (ppl/hr)	4	2	6	12	13	25
		Proposed Seco	ond-Stage PUD pla	ans		
		Resident	ial (330 Units)*			
Auto (veh/hr)	16	44	60	44	29	73
Transit (ppl/hr)	15	40	55	41	26	67
Bike (ppl/hr)	2	3	5	4	2	6
Walk (ppl/hr)	3	9	12	9	5	14
		Retail (25,3	58 Square Feet)*	:		
Auto (veh/hr)	11	6	17	33	35	68
Transit (ppl/hr)	5	3	8	15	15	30
Bike (ppl/hr)	1	0	1	3	3	6
Walk (ppl/hr)	3	2	5	9	9	18
		Difference (Pro	oposed vs Approv	ved)		
Auto Trips	-132 veh/hr	17 veh/hr	-115 veh/hr	5 veh/hr	-125 veh/hr	-120 veh
Non-Auto Trips	-154 ppl/hr	23 ppl/hr	-131 ppl/hr	13 ppl/hr	-143 ppl/hr	-130 ppl

## Table 5: Summary of Trip Generation Comparison (using ITE 10<sup>th</sup> Edition rates)

\* trip generation includes 10% flexibility from development program, representing the most impactful trip generation possible for the Second-Stage PUD, another conservative assumption made in order to consider the potential impact of the PUD

# Design Review

This section provides an overview of the on-site transportation features for the North Building. This section reviews updates to the proposed site facilities discussed during the First-Stage PUD and provides detailed site design information that was not yet determined during the First-Stage PUD. The Second-Stage plans for the North Building consist of single mixed-use building containing approximately 300 dwelling units, approximately 23,053 square feet of retail, and approximately 310 below-grade parking spaces serving both the North Building and the Existing South Building (and ultimately the Future South Building, once constructed). A detailed ground-floor site plan is shown on Figure 15.

## Vehicular Access and Circulation

Consistent with First-Stage PUD plans, vehicular access to/from the site's below-grade garage and loading facilities will be located off of 6<sup>th</sup> Street, NE, via a single curb cut. Two (2) curb cuts along the west and east ends of the Plaza will remain, with limited vehicular access anticipated for servicing events on the Plaza and access to the loading facilities for the Existing South Building. Two (2) existing curb cuts along 5<sup>th</sup> Street, NE— both of which previously serviced the existing building located in the footprint of the North Building— will be removed.

Per DDOT's request, the Applicant has explored incorporating into the North Building a design strategy that could accommodate shared vehicle access with the proposed enclosed garage serving the neighboring property immediately to the north of the North Parcel (i.e., so-called "Parcel 4" of the 6<sup>th</sup> Street Development, which is subject to a First-Stage PUD approved in Z.C. Case No. 15-24 and which is under control of an owner and developer that is unaffiliated with the Applicant. Parcel 4 has its primary vehicular access from 5<sup>th</sup> Street, NE as approved by a First Stage PUD on such site). The potential future shared access would allow for 5<sup>th</sup> Street, NE to occasionally be closed to vehicular traffic for special events while still allowing vehicular access to the garage for Parcel 4. In order to allow for this scenario, the Applicant will design and construct the North Building's garage with a "knock-out" panel that could be removed to allow access between 6<sup>th</sup> Street, NE and the Parcel 4 garage via the North Building's garage, as shown in Figure 2.

The current set of drawings for the North Building contain a wide area of knock-out panels where the neighbor could elect to place a vehicle entrance subject to reaching an agreement with the Applicant in the future governing the conditions of such access.

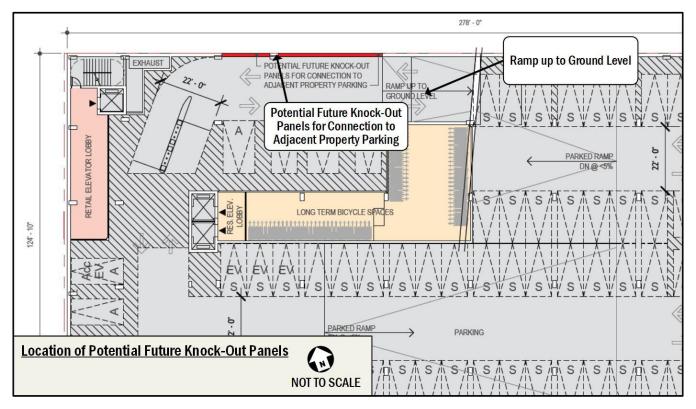


Figure 2: Location of Potential Future Knock-Out Panels

## Parking

Under the proposed development plan, parking for all uses of the North Building and the Existing South Building (as well as the Future South Building, once constructed) will be located in the garage underneath the North Building pursuant to the pending Second-Stage PUD. All vehicular access to the North Building garage will be from 6<sup>th</sup> Street, NE.

The amount of parking proposed for the North Building has been refined as part of the Second-Stage PUD. As part of the First-Stage PUD, the approved parking supply was a range from 300 to 475 parking spaces. At the time of the First-Stage PUD approval, it was assumed that the South Building would be completed before the North Building and therefore require interim parking facilities prior to the construction of the North Building. As part of its Consolidated PUD approval under Z.C. Case No. 14-12, parking for the South Building would temporarily use nearby street parking and 225 spaces on the lot to the south of the property until completion of the North Building. In light of the North Building being constructed first and providing parking for both the North Building and South Building, interim parking is no longer necessary.

Parking for the North and South Buildings will consist of three and a half (3.5) levels of underground parking that will consist of approximately 310 spaces. Approximately 139 spaces are reserved for the North Building uses (92 spaces for the residential use, 47 spaces for the retail use) and approximately 171 spaces are reserved for the South Building uses (10 spaces for the retail use, 125 spaces for the theater use, and 36 spaces for residential use). Of these spaces, between six (6) to eight (8) spaces will be reserved for electric vehicle (EV) charging. The number of parking spaces proposed is within the range of parking spaces (300-475) that the Zoning Commission approved as part of the First-Stage PUD, and is within and at the low end of that range reflecting DDOT's priorities for making the development multi-modal friendly.

At the time of First-Stage approval, the layout for the below grade parking was to be defined during the Second-Stage application. Residential parking will be access-controlled and placed on the lowest parking level, with the remaining uses for the North and South Buildings to utilize the upper levels of the below-grade garage.

## Loading

## **Loading Facilities**

Under the proposed development plan, the North Building will provide two (2) 30-foot loading berths and one (1) 20-foot service/delivery space on the ground floor. The loading berths will utilize the same curb cut as the parking garage entry from 6<sup>th</sup> Street. The 1958 Zoning Regulations (ZR58) that govern the Second-Stage PUD require that a residential building the size of the proposed North Building must contain one 55-foot loading berth and one 20-foot service space for the residential use and one 30-foot berth for the retail uses. The Commission as part of the First-Stage and Consolidated PUD approved flexibility with respect to the requirement to provide the 55-foot berth. The proposed loading facilities for the North Building meet current 2016 Zoning Regulations (ZR16) even though the Second-Stage PUD technically requires zoning flexibility with respect to the applicable ZR58. The Future South Building was approved to provide one 30-foot berth for the residential/office use and one 30-foot berth for the retail use, and the Future South Building berths will be accessible from the Plaza via a curb cut along 6<sup>th</sup> Street, NE.

The amount of loading expected at the North Building is estimated as follows:

- As a baseline, it is expected that there will be three (3) daily truck deliveries (covering trash, general delivery, and mail).
- Residential loading activity is estimated assuming an expected rental turnover of 18 months, with two (2) trucks per move – one move-in and one move-out. (1 daily truck delivery).

Although the exact nature of the retail space is unknown at this time, it is expected that in general each retail user will generate approximately 1 to 2 deliveries per day in addition to the baseline deliveries. For the purposes of this memorandum, this analysis assumes that there will be eight (8) individual retail spaces on the ground floor of the North Building. Therefore, this analysis expects that the retail use will generate approximately 12 deliveries per day.

Using these estimates, the anticipated loading activity for the North Building is as follows:

The building (assuming 330 apartments and 25,358 square feet of retail space) is expected to generate a loading demand of 16 trucks per day (of which 10 are expected to be a single-unit trucks of 24 to 30 feet in length and five (5) are expected to be 20 foot service vehicles).

Figure 15 illustrates the layout of the loading area within the building. Based on the above projections, the proposed amount of loading facilities will be sufficient to accommodate the loading demand generated by the North Building. Trash operations for the North Building will occur in the loading area, utilizing a 20-foot trash compactor inside the loading area. No trash will be stored in public space. Please note that in the unlikely event that a 55-foot truck were to try to service the North Building, it could be accommodated in the Plaza.

### **Truck Routes**

Truck routing to and from these loading areas will be focused on nearby designated truck routes, such as Brentwood Parkway/6<sup>th</sup> Street, New York Avenue, and Florida Avenue, NE. Turning maneuvers into and out of the North Building are shown in Figure 3, Figure 4, Figure 5, and Figure 6. Turning maneuvers into and out of the Plaza (where the loading berths for the Future South Building are located) are shown in Figure 7, Figure 8, Figure 9, Figure 10, Figure 11, and Figure 12. Please note that street furniture located in the plaza is movable so it will not interfere with truck turning maneuvers.

#### Loading Management Plan

In conjunction with the request for loading relief, a loading management plan is proposed for the North Building in order to: (1) minimize and mitigate (as necessary) undesirable impacts to the adjacent neighborhood streets and building tenants; (2) reduce conflicts with truck traffic using the loading facilities; and (3) facilitate smooth operation of the loading facilities through appropriate levels of management and scheduled operations.

The components of the loading management plan are as follows:

- 1. A loading facility manager will be designated by the building management. The dock manager will coordinate with tenants/residents to schedule deliveries and will be on duty during delivery hours.
- 2. All loading activity will take place on private property and not in public right-of-way. Retail and residential tenants will be made aware of this requirement.
- 3. All tenants/residents will be provided with information regarding loading dock restrictions, rules, and suggested truck routes at lease singing. Tenants/residents will be encouraged to move using trucks 30 feet in length or shorter.
- 4. All residential move ins/move outs will be required to be scheduled in a manner that coordinates with the retail delivery schedule.
- 5. The dock manager will schedule deliveries such that the loading dock capacities are not exceeded. In the event that an unscheduled delivery vehicle arrives while the dock is full, that driver will be directed to return at a later time so as to not impede traffic flow.

- 6. Trucks using the loading dock will not be allowed to idle and must follow all District guidelines for heavy vehicle operation including but not limited to DCMR 20 Chapter 9, Section 900 (Engine Idling), the regulations set forth in DDOT's Freight Management and Commercial Vehicle Operations document, and the primary access routes listed in the DDOT Truck and Bus Route System.
- 7. The dock manager will be responsible for disseminating DDOT's Freight Management and Commercial Vehicle Operations document to drivers as needed to encourage compliance with District laws and DDOT's truck routes. The dock manager will also post these documents in a prominent location within the service area.

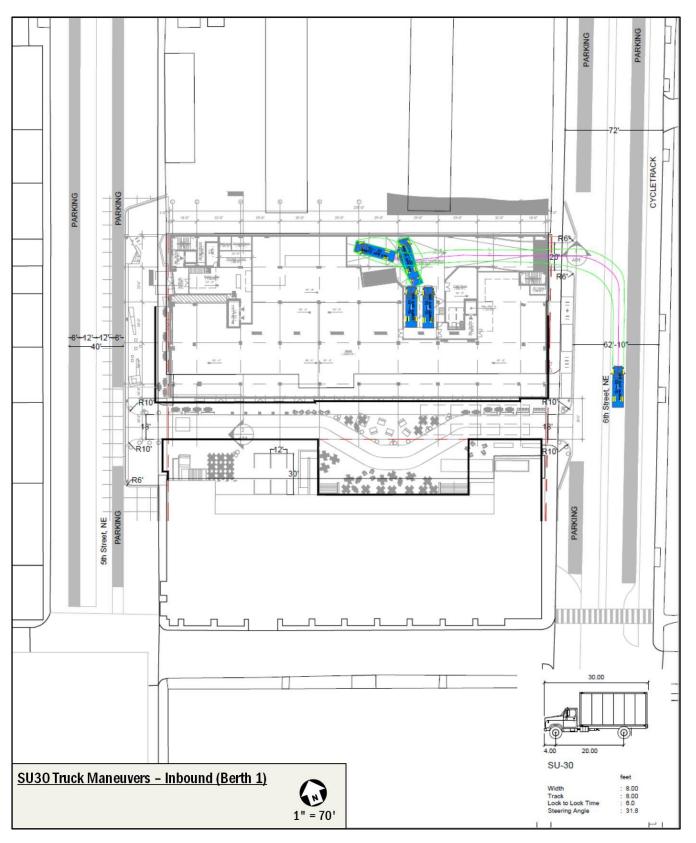
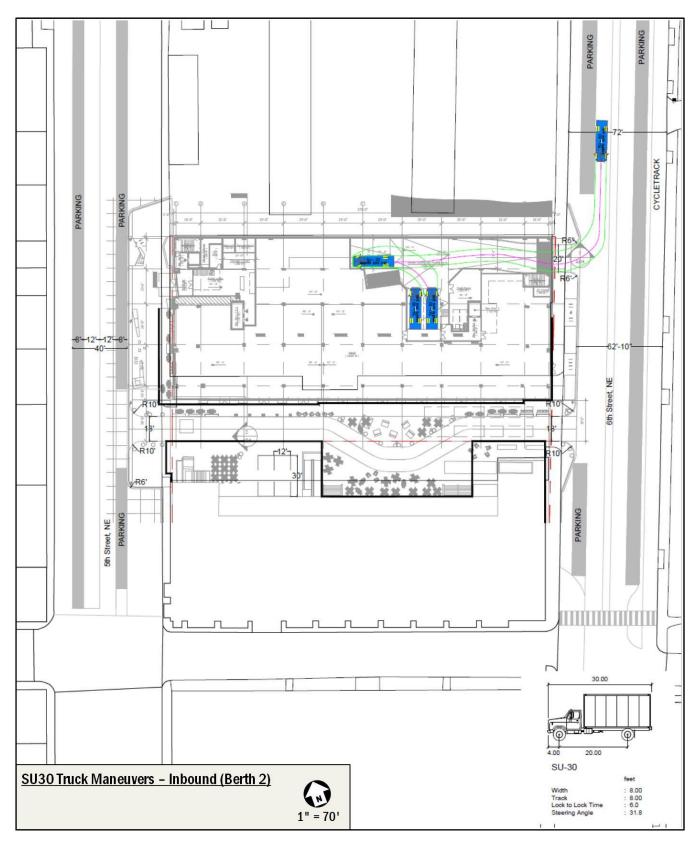


Figure 3: Inbound Turning Maneuvers (North Building – Berth 1)



## Figure 4: Inbound Turning Maneuvers (North Building – Berth 2)

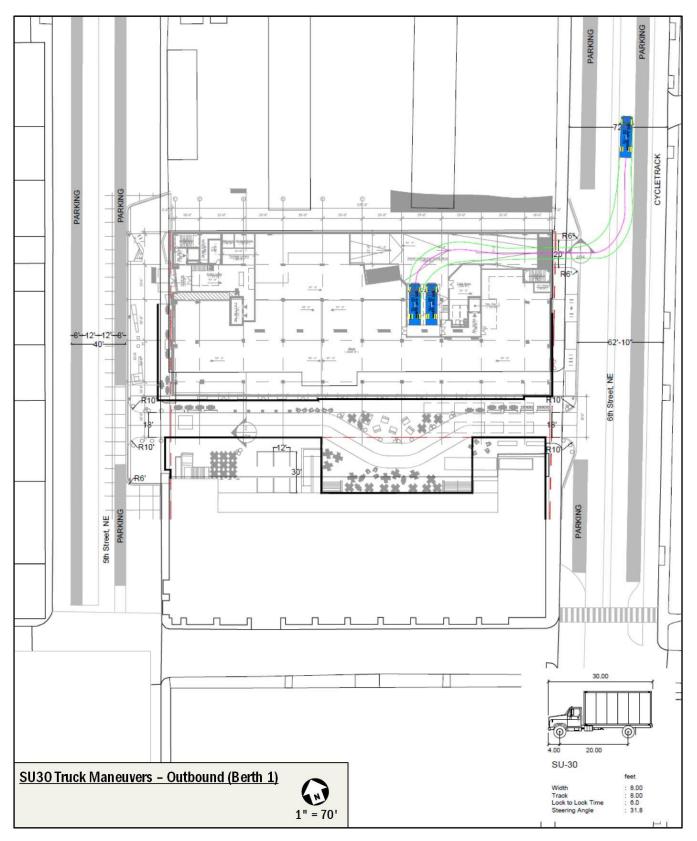
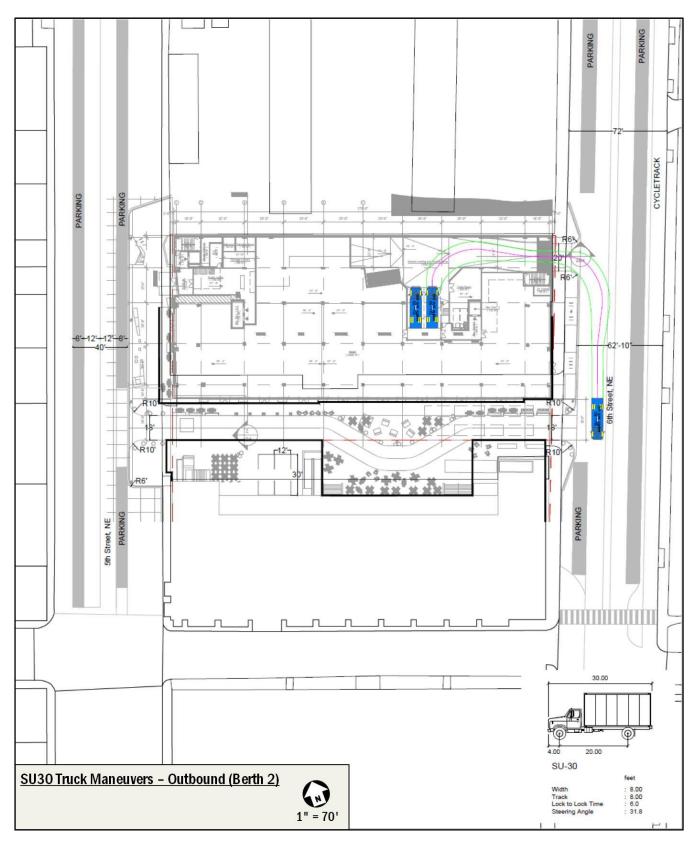
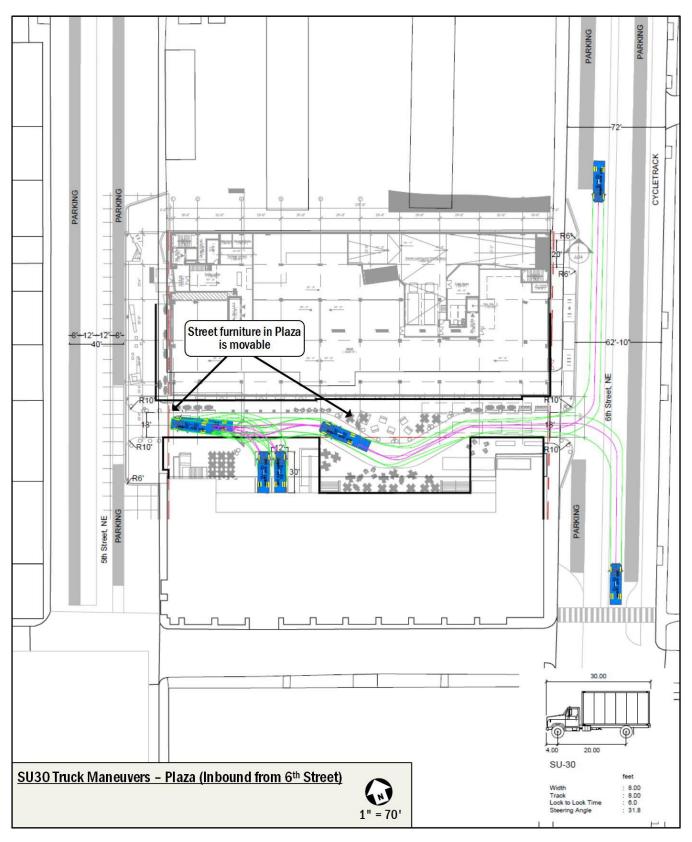


Figure 5: Outbound Turning Maneuvers (North Building – Berth 1)

Gorove/Slade



## Figure 6: Outbound Turning Maneuvers (North Building – Berth 2)



# Figure 7: Inbound Turning Maneuvers (Plaza – from 6<sup>th</sup> Street)

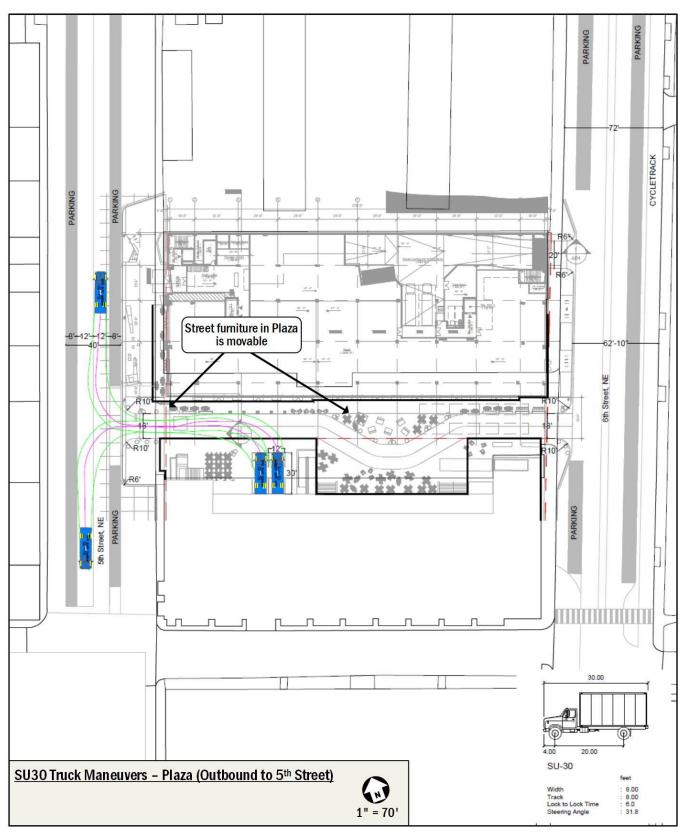
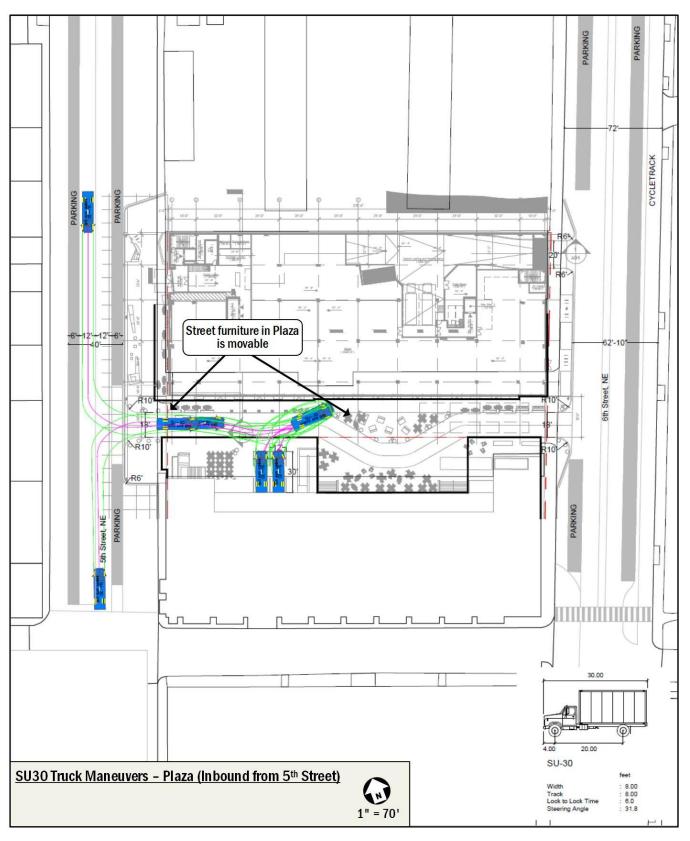
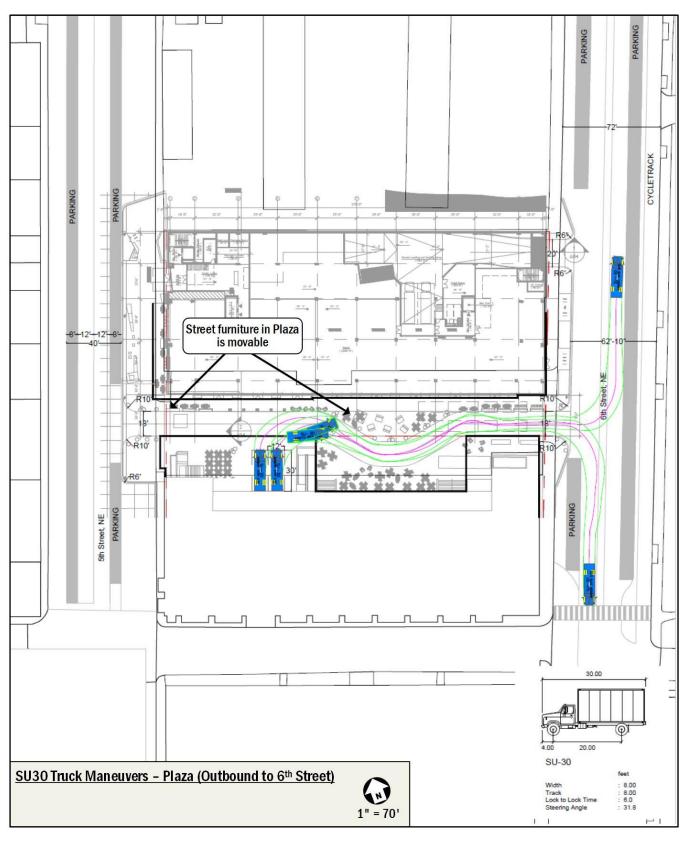


Figure 8: Outbound Turning Maneuvers (Plaza – to 5<sup>th</sup> Street)



# Figure 9: Inbound Turning Maneuvers (Plaza – from 5<sup>th</sup> Street)



# Figure 10: Outbound Turning Maneuvers (Plaza – to 6<sup>th</sup> Street)

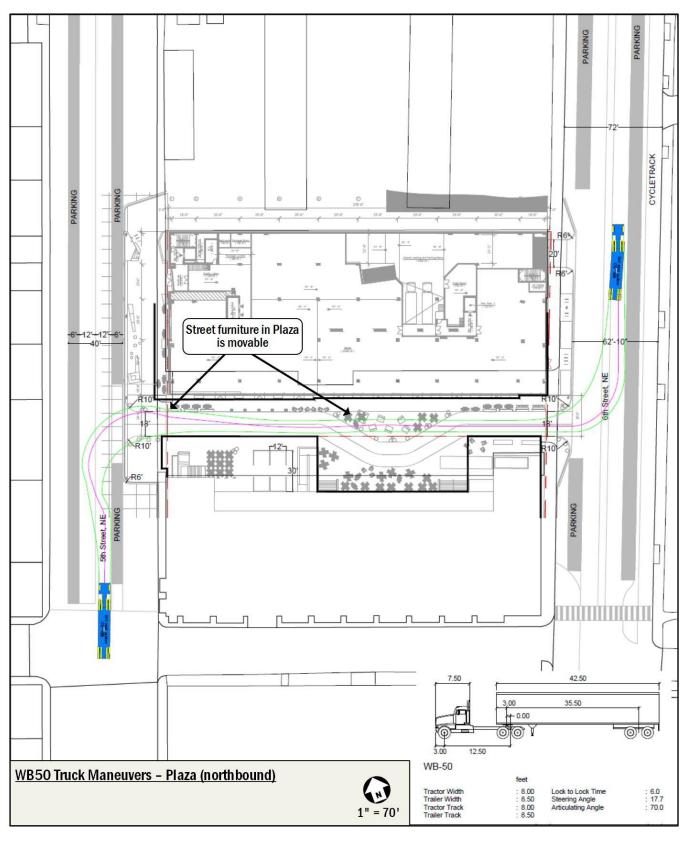


Figure 11: Turning Maneuvers (Plaza – WB50 Northbound)

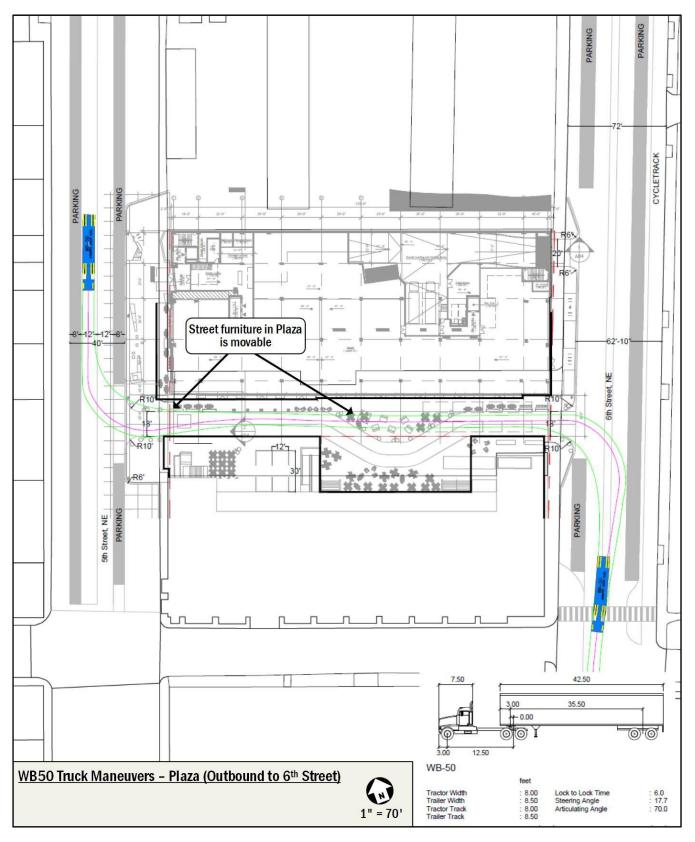


Figure 12: Turning Maneuvers (Plaza – WB50 Southbound)

## **Bicycle Facilities**

### **On-Site Bicycle Elements**

The North Building will include both short- and long-term bicycle parking. Meeting the required range outlined in the First-Stage approvals (8 spaces for retail and theater uses of the South Building and 111 to 119 spaces for the North Building uses), the North Building will supply approximately 119 to 127 secure long-term bicycle spaces in the first level of the below grade parking garage. The proposed bicycle parking supply was approved under ZR58 requirements. Although the development is not required to meet ZR16 requirements, the Applicant is providing an amount of long-term bicycle parking spaces that exceeds ZR16 requirements. Under ZR16, the residential portion of the North Building would be required to provide one (1) long-term space for every three (3) units and one (1) short-term space for every 20 units. After the first 50 bicycle spaces are provided for a use, additional spaces are required at half the rate (1 space for every 6 units). The retail portion of the North Building is required to provide one (1) long-term space for every 10,000 square feet and one (1) short-term space for every 3,500 square feet. This results in a requirement of 77 long-term spaces (75 residential, 2 retail) and 22 short-term spaces (15 residential, 7 retail). Of the 119 to 127 long-term bicycle spaces proposed, eight (8) will be reserved for the theater and retail uses of the Future South Building, per the approved Consolidated PUD.

Under the proposed site plans for the North Building, the location of the long-term bicycle parking will be on the first garage level. Access to the storage room is available from the 6<sup>th</sup> Street, NE garage entrance and elevators within the residential lobby on 5<sup>th</sup> Street, NE. Bicyclists accessing the long-term bicycle parking in the North Building from the South Building may walk across the Plaza.

The North Building will also include 20 short-term bicycle parking spaces in public areas along the 5<sup>th</sup> Street, NE and 6<sup>th</sup> Street, NE frontages. The short-term spaces will include inverted U-racks, or similar racks, placed in high-visibility areas. The Applicant will work with DDOT to finalize the exact location of bicycle racks in public space.

#### **Existing and Planned Bicycle Facilities**

It is expected that the majority of people cycling to and from the proposed development will access it from the existing 6<sup>th</sup> Street, NE cycle track, which is immediately adjacent to the project site. Improved bicycle infrastructure is planned along Florida Avenue, located south of the project site. As part of recommendations made from the *Florida Avenue Multimodal Transportation Study* published by DDOT in 2015, Florida Avenue is being transformed to cater more towards bicyclists and pedestrians. The start of the Florida Avenue project is scheduled in 2021, and interim improvements have been and are being installed along Florida Avenue between 2<sup>nd</sup> Street, NE and 14<sup>th</sup> Street, NE in 2019. The interim improvements address safety concerns along the Florida Avenue corridor for bicyclists, pedestrians, and motorists. With the removal of existing travel lanes along Florida Avenue, a two-way protected cycle track is being added along the south side of Florida Avenue, giving cyclists a safe route to the Union Market area and the project site location. A cross-section of interim improvements along Florida Avenue is shown in Figure 13. A circulation plan showing expected bicycle routes is shown in Figure 16.

## **Pedestrian Facilities**

As part of the North Building development, certain pedestrian facilities surrounding the site will be improved over existing conditions. As stated in the First-Stage TIS, within the Union Market district, existing pedestrian facilities reflect the industrial nature of the site. With the opening of the North Building, significant pedestrian and streetscape improvements are proposed by the Applicant that will be consistent with current streetscape design guidelines for the Union Market area (the Union Market Streetscape Guidelines).

Surrounding the North Parcel, streetscape facilities along 5<sup>th</sup> Street, NE will include sidewalk and landscaping space amounting to approximately 30' in width, with additional amenity space including built-in outdoor furniture and short-term bicycle parking. Streetscape facilities along 6<sup>th</sup> Street, NE will include sidewalk and landscaping space amounting to 14'6" and additional amenity space. Landscaping space will include street trees that will be planted along the 5<sup>th</sup> Street, NE and 6<sup>th</sup> Street, NE frontages. The Plaza has been designed with a minimum unobstructed width of 18', expanding to 70'6" near the center of the buildings. The expanse of the Plaza will allow for unimpeded pedestrian travel and better integration of the community and ground-floor based retail, such as flexibility of outdoor café seating. An overview of the Plaza is presented in Figure 14.

Transportation-related improvements related to the approved Consolidated PUD for the Future South Building will be completed as part of the Future South Building's construction. This includes upgrades made to the southern Neal Place, NE sidewalks between 4<sup>th</sup> Street. NE and 5<sup>th</sup> Street, NE and the western sidewalk along 5<sup>th</sup> Street, NE between Neal Place, NE and Penn Street, NE. Interim improvements made along Florida Avenue referred to in the previous section will benefit pedestrians, with improved pedestrian crossing times at the 5<sup>th</sup> Street, NE and 6<sup>th</sup> Street, NE intersections as a result of fewer travel lanes. A circulation plan showing expected pedestrian routes is shown in Figure 16.

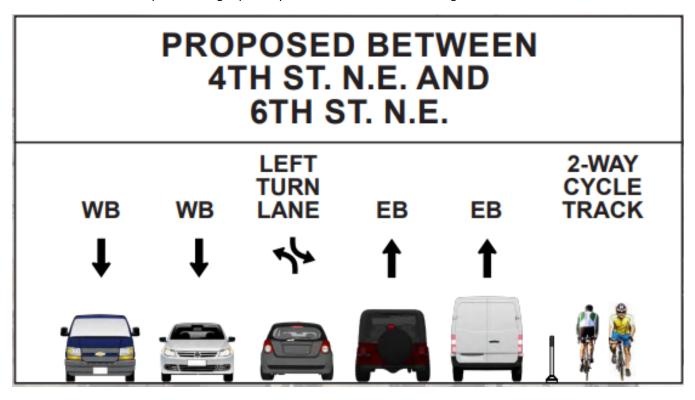
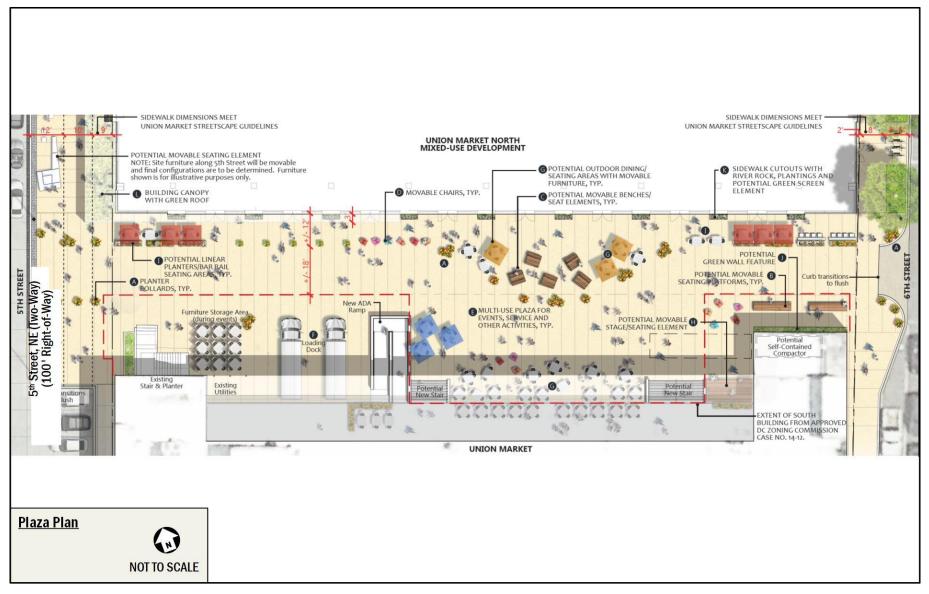
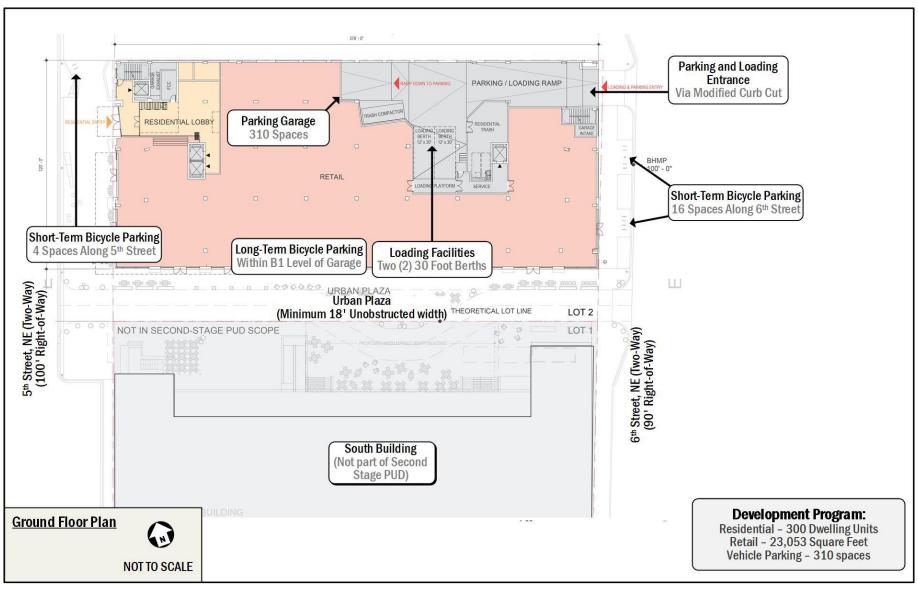


Figure 13: Cross-Section of Florida Avenue in vicinity of site as part of 2019 Interim Improvements (DDOT)



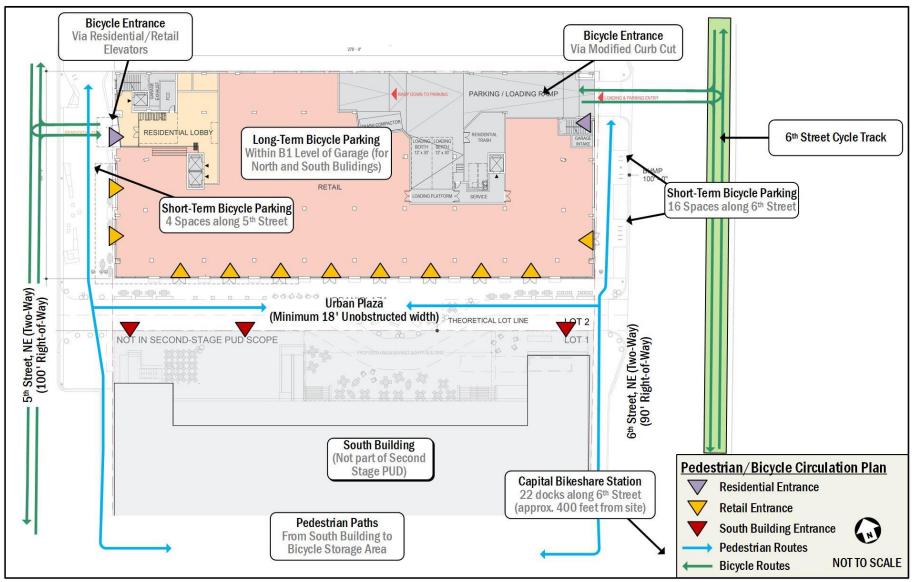
### Figure 14: Proposed Pedestrian Plaza

Gorove/Slade



## Figure 15: Ground Floor Plan

Gorove/Slade



### Figure 16: Bicycle and Pedestrian Circulation

## Transportation Demand Management (TDM)

TDM is the application of policies and strategies used to reduce travel demand or to redistribute demand to other times or spaces. TDM typically focuses on reducing the demand of single-occupancy, private vehicles during peak period travel times or on shifting single-occupancy vehicular demand to off-peak periods.

As outlined in the conditions of Z.C. Order No. 14-12, the North Building must include the following TDM measures:

- The Applicant shall designate for the North Building a TDM coordinator, who is responsible for organizing and marketing the TDM plan and who will act as a point of contact with DDOT.
- All parking on in the North Building's garage will be priced at no less than at market rates, defined as the average cost for parking in a 0.25-mile radius from the site. All residential parking will be unbundled from the costs of leasing apartments or purchasing condos.
- The Applicant shall reserve at least two (2) parking spaces for a car-sharing service in the North Building's underground parking garage, subject only to offering such spaces for lease to a carsharing service at market rates.
- The Applicant shall provide within the North Building residential lobby a transportation information screen containing information related to local transportation alternatives.

In addition, the Applicant proposes to include the following TDM measures:

- The Applicant will work with DDOT and goDCgo (DDOT's TDM program) to implement TDM measures at the North Building.
- The Applicant will share with DDOT and goDCgo (info@godcgo.com) the full contact information of the TDM coordinator for the North Building.
- The Applicant will post all TDM commitments online for easy reference.
- The Applicant will provide TDM materials to new residents in the Residential Welcome Package materials.
- The Applicant will supply long-term and short-term bicycle parking in accordance with the approved final plans for the North Building.

## **Review of First-Stage PUD Conditions**

As part of ZC Case Number 14-12, the South Building of the overall 1309-1329 5<sup>th</sup> Street, NE development was approved as a Consolidated PUD and the North Building was approved as a First-Stage PUD, and both PUDs were accompanied by a related Zoning Map amendment. During the approval process, DDOT submitted an initial report on January 5, 2015 noting no objections to the two-building project, with open items to be addressed. Further coordination with the Applicant resulted in DDOT submitting a supplemental report in support of the application on February 9, 2015. A public hearing was held on February 11, 2015, and the Zoning Commission took final action to approve the application on March 30, 2015.

The transportation-related conditions outlined in Z.C. Order No. 14-12 applicable to the First-Stage PUD approval of the North Building are outlined in Table 6 along with the status of each condition as part of the North Building Second-Stage PUD application.

First-Stage PUD Condition (ZC 14-12)	Status of Condition in Second-Stage Application (ZC 14- 12E)
The North Building shall include a mixed-use building containing approximately 35,000 square feet of retail use, approximately 290,000 square feet of residential (368 dwelling units) or office space, and a parking garage containing approximately 300 to 475 parking spaces for all	This CTR addresses the updated range of residential units and parking supply. The Second-Stage application proposes to include 300 residential units in lieu of the office option, 23,058 square feet of retail space, and 310 parking spaces, which is within with the range of the approved First-Stage
uses of the north and south buildings. The North Building shall provide eight (8) permanent bicycle spaces for the theater/retail uses of the South Building on the first floor or the first subgrade level of the building's parking garage. Bicycle storage for the North Building's residential and retail uses will be located in the North Building. Short-term spaces will be located outside the North Building.	parking space requirement. This CTR addresses the proposed number of long-term bicycle parking spaces. Approximately 119 to 127 long- term spaces will be located within the North Building including eight (8) spaces for the theater/retail uses of the Future South Building and 20 short-term spaces adjacent to the North Building.
<ul> <li>For the life of the North Building, the Applicant shall provide the following transportation demand management ("TDM") measures:</li> <li>Designate a TDM coordinator responsible for organizing and marketing the TDM plan;</li> <li>All parking on site will be priced at market rates at minimum, defined as the average cost of parking in 0.25-mile radius from the site;</li> <li>The Applicant shall reserve at least two parking spaces for a car-sharing service in the North Building's underground parking garage, provided that space is desire by a car-sharing service; and</li> </ul>	The proposed TDM plan will include all of the TDM measures approved as part of the First-Stage PUD. In addition, the Applicant has proposed additional TDM elements over and above those approved in the First-Stage PUD.

## Table 6: Summary of Transportation Related First-Stage PUD Conditions and Second-Stage Status

Provide a transportation information screen within	
the North Building residential lobby.	
The Applicant shall provide at its cost, the "Union Market	As part of the Second-Stage PUD, the Plaza will be located
Plaza". The plaza shall be comprised of approximately	between the North and South Building and will be
12,500 square feet of land area. The Applicant will	constructed concurrently with the North Building. The
maintain the Union Market Plaza for the life of the Project	Plaza will provide a minimum 18-foot wide unobstructed
and may actively program them with events. The Applicant	clear path, exceeding the 10 feet required, and will be
will provide a 10-foot wide unobstructed clear path for the	much wider for large parts of the Plaza.
east/west dimension of the Union Market Park for the	
duration of the project.	
In DDOT's initial and supplemental report for the First-	
Stage PUD, items identified for continued coordination	
with the Applicant include the following:	
<ul> <li>Based on suggestions made in the First-Stage TIS</li> </ul>	The Applicant agrees to convert the intersection at $4^{\mbox{\scriptsize th}}$
to mitigate traffic impacts in the area, the	Street, NE and Morse Street, NE from two-way stop
Applicant proposes to convert the intersection of	controlled to all-way stop controlled.
4 <sup>th</sup> Street & Morse Street from a two-way stop	
control to an all-way stop control.	
The installation of electric car charging stations as	The Applicant agrees to install vehicle charging stations to
part of the Second-Stage PUD. DDOT recommends	service between 6 to 8 electric vehicles, based on DDOT's 1
at least 2 electric vehicle charging stations be	per 50 parking space recommendation.
provided.	
<ul> <li>The location of utility vaults are expected to be</li> </ul>	The Applicant concurs.
accommodated on private property.	
The Applicant will be expected to provide showers	The amount of retail proposed in the North Building does
and changing facilities to encourage bicycle use.	not meet the minimum space requirement to provide
An appropriate number of showers and lockers	facilities, as such none are proposed.
will be determined during the North Building	
review.	

## Conditions tied to South Building

At the time of the First-Stage PUD for the North Building, it was thought the South Building would be delivered first. As the North Building is now expected to be delivered before the South Building, DDOT has requested that a number of conditions originally tied to the South Building be realized with the delivery of the North Building. Table 7 outlines the transportation-related conditions from Z.C. Order No. 14-12 applicable to the Consolidated PUD approval of the Future South Building along with the status of each condition as part of the North Building Second-Stage PUD application.

## South Building Consolidated PUD Condition (ZC 14-12) Status of Condition in Second-Stage Application (ZC 14-12E) Neal Place and 5th Street Sidewalk These improvements will be completed as part of the Future South Building's construction. Prior to the issuance of a certificate of occupancy ("C of O") for the new component(s) of the [Future] South Building, the Applicant will upgrade the southern Neal Place sidewalks between 4<sup>th</sup> and 5<sup>th</sup> Streets, N.E. and the western 5th Street sidewalk between Neal Place and Penn Street, N.E. to DDOT-compliant standards, as necessary, subject to DDOT approval and the issuance of public space permits and further subject to limited deviations from DDOT standards as required by the current location of infrastructure adjacent to such sidewalks. The final plans for the sidewalk on the south side of Neal Place between 4<sup>th</sup> and 5<sup>th</sup> Streets will include: A six-foot-wide clear path to meet ADA and DDOT standards with the exception of pinch points due to existing infrastructure that may remain; Replacement of curb ramps to meet ADA and DDOT standards; Moving light pole(s), if necessary; and Striping in parallel parking; Prior to the issuance of the first C of O for the new This condition has been satisfied since the issuance of Z.C. component(s) of the South Building, the Applicant will Order No. 14-12 as the parking management program has design and install an interim parking management program been completed. for 5<sup>th</sup> Street, N.E., including the design and installation of striping and signage, subject to DDOT approves during the public space permitting process. The Applicant shall have flexibility to revise the design of the public space surrounding the property as needed, based upon the continued coordination with DDOT.

## Table 7: Summary of Transportation Related First-Stage PUD Conditions tied to South Building and Second-Stage Status

Prior to the issuance of a C of O for new component(s) of	This condition has been satisfied since the issuance of Z.C.
the South Building, the Applicant will commission and	Order No. 14-12 as these guidelines have been approved
receive the streetscape design guidelines for the Union	by DDOT.
Market district, subject to DDOT approval. The Applicant	
may design and construct the public space adjacent to the	
project in accordance with the recommendations of the	
streetscape design guidelines subject to DDOT approvals	
during the public space permitting process.	
Prior to the issuance of a C of O for the South Building, the	Although not applicable to the application for the North
Applicant will install way-finding signage to access the	Building, the property manager for the retail uses of the
Union Market district from New York Avenue, NE, utilizing	North Building and Existing South Building has begun to
Brentwood Avenue, NE subject to DDOT (and if necessary,	provide this way-finding benefit.
Federal) approvals during the public space permitting	
process.	
Prior to the issuance of the C and O of the North Building,	As part of this Second-Stage PUD, the Applicant will comply
the Applicant shall provide the following financial incentives	and provide these incentives as applicable.
to its tenants or residents in the South Building, as	
applicable:	
<ul> <li>Office: each office worker will be provided with</li> </ul>	
access to a corporate bikeshare membership to	
the maximum value of \$15,000 cumulatively for	
this Project; and	
<ul> <li>Residential: all new tenants will be provided with</li> </ul>	
a carshare or bikeshare membership up to the	
maximum value of \$14,000 cumulative for the	
Project.	
hojett.	

# Summary and Conclusions

The findings of this Comprehensive Transportation Review (CTR) conclude that:

- The Applicant has complied with all applicable conditions of the First-Stage PUD, and the overall development plan is in accordance with and less impactful than the First-Stage PUD, resulting in fewer projected peak hour trips.
- The vehicular parking supply proposed in the Second-Stage application is within the range of vehicular parking that the Zoning Commission approved as part of the First-Stage PUD.
- The proposed loading facilities and proposed Loading Management Plan will sufficiently meet the loading demands of the North Building, and the previously-approved flexibility from the loading requirements of the applicable Zoning Regulations will have no material adverse impact on District services or nearby properties.

- The amount of proposed long-term bicycle parking exceeds the current requirements of the Zoning Regulations for the proposed uses of the North Building and the theater and retail uses of the South Building. Additionally, the North Building includes short-term bicycle parking along the 5<sup>th</sup> Street and 6<sup>th</sup> Street, NE frontages of the site.
- The pedestrian environment will be greatly improved as a result of the North Building development, which will
  include wide sidewalks, pedestrian amenities, and improved porosity through the Union Market Area. Improvements
  constructed as part of the proposed development will comply with the Union Market Streetscape Guidelines, in
  compliance with Z.C. Case No. 14-12.
- The proposed TDM plan adequately promotes non-auto modes of travel that are consistent with the specific needs of the site and mitigates any transportation-related impacts of the North Building.

**TECHNICAL ATTACHMENTS** 

### Mode Split Assumptions

#### **Residential Component**

## Pertinent Mode Split data from other sources:

	Mode						
Information Source	SOV	Carpool	Transit	Bike	Walk	Telecommute	Other
CTPP - TAZ Residents	5.5%	7.3%	3.6%	0.0%	56.4%	27.3%	0.0%
Gateway Market PUD Assumptions	50%		39%	8%	3%		
State of the Commute (of District residents)	41% 7%		41%	11%			
WMATA Ridership Survey (average for <i>Suburban-Inside the Beltway</i> )	39%		49%	14%			

#### Mode Split assumed in TIS:

	Mode						
Information Source	Drive	Transit	Bike	Walk	Telecommute/Other		
Residential Mode Split	50%	39%	3%	8%			

Notes: -Study uses Gateway Market PUD assumptions, per scoping with DDOT -Other data sources provided as background information

-CTPP data is limited by small sample size (few residents in Florida Ave Market TAZ)

### **Retail Component**

#### Pertinent Mode Split data from other sources:

	Mode						
Information Source	SOV	Carpool	Transit	Bike	Walk	Telecommute	Other
CTPP - TAZ Employees	43.1%	10.6%	23.6%	1.0%	19.1%	2.5%	0.0%
Gateway Market PUD Assumptions	70	)%	17%	10%	3%		
WMATA Ridership Survey (U Street Main Street Retail)	19%		57%	25%			
WMATA Ridership Survey (Crystal City - Crystal Plaza Shops)	24%		41%	35%			
WMATA Ridership Survey (Crystal City - The Underground)	27%		37%	36%			

#### Mode Split assumed in TIS:

	Mode							
Information Source	Drive	Transit	Bike	Walk	Telecommute/Other			
Ground-Floor Retail	70%	17%	3%	10%				

Notes: -Study uses Gateway Market PUD assumptions, per scoping with DDOT

-Other data sources provided as background information

-TAZ employees listed as guideline for retail employee mode split

-Mode Splits only used for non-auto trips (auto trip gen is based on parking spaces)

# North Building Trip Generation - Office (First Stage)

290,000 Square Feet

## Step 1: Base trip generation using ITEs' Trip Generation 10th Edition

Land Use Land Use Code	Quantity		AM Peak Hou	ur	PM Peak Hour			
		Quantity	In	Out	Total	In	Out	Total
General Office	710	290,000 sf	289 veh/hr	47 veh/hr	336 veh/hr	53 veh/hr	281 veh/hr	334 veh/hr

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

Land Use People/Car			AM Peak Ho	ır	PM Peak Hour		
Land Use (from 2017 NHTS, Tabl	(from 2017 NHTS, Table 16)	In	Out	Total	In	Out	Total
General Office	1.18 ppl/veh	341 ppl/hr	55 ppl/hr	396 ppl/hr	63 ppl/hr	332 ppl/hr	394 ppl/hr

### Step 3: Split between modes, per assumed Mode Splits

Land Use N	Mode	Mode Split		AM Peak Hour			PM Peak Hour			
Lanu Ose	Widde	Split	In	Out	Total	In	Out	Total		
General Office	Auto	50%	171 ppl/hr	28 ppl/hr	199 ppl/hr	32 ppl/hr	166 ppl/hr	198 ppl/hr		
General Office	Transit	39%	133 ppl/hr	22 ppl/hr	155 ppl/hr	25 ppl/hr	129 ppl/hr	154 ppl/hr		
General Office	Bike	3%	11 ppl/hr	1 ppl/hr	12 ppl/hr	2 ppl/hr	10 ppl/hr	12 ppl/hr		
General Office	Walk	8%	28 ppl/hr	4 ppl/hr	32 ppl/hr	6 ppl/hr	26 ppl/hr	32 ppl/hr		

### Step 4: Convert auto trips back to vehicles/hour

Land Lico	People/Car		AM Peak Hou	ur	PM Peak Hour		
Land Use	(from 2017 NHTS, Table 16)	In	Out	Total	In	Out	Total
General Office	1.18 ppl/veh	145 veh/hr	24 veh/hr	169 veh/hr	27 veh/hr	141 veh/hr	168 veh/hr

## **Trip Gen Summary for Residential**

Mode	AM Peak Hour			PM Peak Hour			
Wode	In	Out	Total	In	Out	Total	
Auto	145 veh/hr	24 veh/hr	169 veh/hr	27 veh/hr	141 veh/hr	168 veh/hr	
Transit	133 ppl/hr	22 ppl/hr	155 ppl/hr	25 ppl/hr	129 ppl/hr	154 ppl/hr	
Bike	11 ppl/hr	1 ppl/hr	12 ppl/hr	2 ppl/hr	10 ppl/hr	12 ppl/hr	
Walk	28 ppl/hr	4 ppl/hr	32 ppl/hr	6 ppl/hr	26 ppl/hr	32 ppl/hr	

## North Building Trip Generation - Retail (First Stage)

35,000 SF Retail

### Step 1: Base trip generation using ITEs' Trip Generation 10th Edition

Land Use Land Use Code	Quantity		AM Peak Ho	ur	PM Peak Hour			
		Quantity	In	Out	Total	In	Out	Total
Retail	820	35,000 sf	20 veh/hr	13 veh/hr	33 veh/hr	64 veh/hr	69 veh/hr	133 veh/hr

Note: Rates used for neighborhood retail instead of equation, because size is much lower than average data point

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

Land Use	People/Car		AM Peak Ho	ur	PM Peak Hour		
Land Use	(from 2017 NHTS, Table 16)	In	Out	Total	In	Out	Total
Retail	1.82 ppl/veh	36 ppl/hr	24 ppl/hr	60 ppl/hr	116 ppl/hr	126 ppl/hr	242 ppl/hr

### Step 3: Split between modes, per assumed Mode Splits

Land Use	Modo	Mode Split -		AM Peak Hour			PM Peak Hour		
Lanu Ose	widde		In	Out	Total	In	Out	Total	
Retail	Auto	70%	25 ppl/hr	17 ppl/hr	42 ppl/hr	82 ppl/hr	88 ppl/hr	169 ppl/hr	
Retail	Transit	17%	6 ppl/hr	4 ppl/hr	10 ppl/hr	20 ppl/hr	21 ppl/hr	41 ppl/hr	
Retail	Bike	3%	1 ppl/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr	4 ppl/hr	7 ppl/hr	
Retail	Walk	10%	4 ppl/hr	2 ppl/hr	6 ppl/hr	12 ppl/hr	13 ppl/hr	24 ppl/hr	

### Step 4: Convert auto trips back to vehicles/hour

Land Lico	People/Car	AM Peak Hour			PM Peak Hour			
Land Use (from 2	(from 2017 NHTS, Table 16)	In	Out	Total	In	Out	Total	
Retail	1.82 ppl/veh	14 veh/hr	9 veh/hr	23 veh/hr	45 veh/hr	48 veh/hr	93 veh/hr	

#### **Trip Gen Summary for Retail**

Mode	AM Peak Hour			PM Peak Hour			
Mode	In	Out	Total	In	Out	Total	
Auto	14 veh/hr	9 veh/hr	23 veh/hr	45 veh/hr	48 veh/hr	93 veh/hr	
Transit	6 ppl/hr	4 ppl/hr	10 ppl/hr	20 ppl/hr	21 ppl/hr	41 ppl/hr	
Bike	1 ppl/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr	4 ppl/hr	7 ppl/hr	
Walk	4 ppl/hr	2 ppl/hr	6 ppl/hr	12 ppl/hr	13 ppl/hr	24 ppl/hr	

## North Building Trip Generation - Residential (2nd Stage)

330 residential units

#### Step 1: Base trip generation using ITEs' Trip Generation 10th Edition

Land Use	Use Land Use Code Quantity			AM Peak Hour			PM Peak Hour		
Land Use Land Use Code Quantity		In	Out	Total	In	Out	Total		
Apartments	221	330 du	31 veh/hr	88 veh/hr	119 veh/hr	88 veh/hr	57 veh/hr	145 veh/hr	

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

Land Use People/Car (from 2017 NHTS, Table 16)		AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Apartments	1.18 ppl/veh	37 ppl/hr	104 ppl/hr	140 ppl/hr	104 ppl/hr	67 ppl/hr	171 ppl/hr

#### Step 3: Split between modes, per assumed Mode Splits

Land Use Mode	Modo	Split		AM Peak Hour			PM Peak Hour			
	Split	In	Out	Total	In	Out	Total			
Apartments	Auto	50%	19 ppl/hr	52 ppl/hr	71 ppl/hr	52 ppl/hr	34 ppl/hr	86 ppl/hr		
Apartments	Transit	39%	15 ppl/hr	40 ppl/hr	55 ppl/hr	41 ppl/hr	26 ppl/hr	67 ppl/hr		
Apartments	Bike	3%	2 ppl/hr	3 ppl/hr	5 ppl/hr	4 ppl/hr	2 ppl/hr	6 ppl/hr		
Apartments	Walk	8%	3 ppl/hr	9 ppl/hr	12 ppl/hr	9 ppl/hr	5 ppl/hr	14 ppl/hr		

#### Step 4: Convert auto trips back to vehicles/hour

Land Use People/Car (from 2017 NHTS, Table 16)		AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Apartments	1.18 ppl/veh	16 veh/hr	44 veh/hr	60 veh/hr	44 veh/hr	29 veh/hr	73 veh/hr

#### **Trip Gen Summary for Residential**

Mode	AM Peak Hour			PM Peak Hour			
	In	Out	Total	In	Out	Total	
Auto	16 veh/hr	44 veh/hr	60 veh/hr	44 veh/hr	29 veh/hr	74 veh/hr	
Transit	15 ppl/hr	40 ppl/hr	55 ppl/hr	41 ppl/hr	26 ppl/hr	67 ppl/hr	
Bike	2 ppl/hr	3 ppl/hr	5 ppl/hr	4 ppl/hr	2 ppl/hr	6 ppl/hr	
Walk	3 ppl/hr	9 ppl/hr	12 ppl/hr	9 ppl/hr	5 ppl/hr	14 ppl/hr	

### North Building Trip Generation - Retail (2nd Stage)

25,358 SF Retail

#### Step 1: Base trip generation using ITEs' Trip Generation 10th Edition

Land Use	Land Lise Code	and Use Code Quantity		AM Peak Ho	ur	PM Peak Hour		
Edito OSC			In	Out	Total	In	Out	Total
Retail	820	25,358 sf	15 veh/hr	9 veh/hr	24 veh/hr	47 veh/hr	50 veh/hr	97 veh/hr

Note: Rates used for neighborhood retail instead of equation, because size is much lower than average data point

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

Land Use People/Car		AM Peak Hour			PM Peak Hour		
Land Use	(from 2017 NHTS, Table 16)	In	Out	Total	In	Out	Total
Retail	1.82 ppl/veh	27 ppl/hr	16 ppl/hr	44 ppl/hr	86 ppl/hr	91 ppl/hr	177 ppl/hr

#### Step 3: Split between modes, per assumed Mode Splits

Land Use Mode	Modo	Split		AM Peak Ho	ur	PM Peak Hour			
	Spilt	In	Out	Total	In	Out	Total		
Retail	Auto	70%	19 ppl/hr	11 ppl/hr	31 ppl/hr	60 ppl/hr	64 ppl/hr	124 ppl/hr	
Retail	Transit	17%	5 ppl/hr	3 ppl/hr	7 ppl/hr	15 ppl/hr	15 ppl/hr	30 ppl/hr	
Retail	Bike	3%	1 ppl/hr	0 ppl/hr	1 ppl/hr	3 ppl/hr	3 ppl/hr	5 ppl/hr	
Retail	Walk	10%	3 ppl/hr	2 ppl/hr	4 ppl/hr	9 ppl/hr	9 ppl/hr	18 ppl/hr	

#### Step 4: Convert auto trips back to vehicles/hour

Land Use People/Car (from 2017 NHTS, Table 16)			AM Peak Ho	ur	PM Peak Hour		
		In	Out	Total	In	Out	Total
Retail	1.82 ppl/veh	11 veh/hr	6 veh/hr	17 veh/hr	33 veh/hr	35 veh/hr	68 veh/hr

#### **Trip Gen Summary for Retail**

Mode	AM Peak Hour			PM Peak Hour			
	In	Out	Total	In	Out	Total	
Auto	11 veh/hr	6 veh/hr	17 veh/hr	33 veh/hr	35 veh/hr	68 veh/hr	
Transit	5 ppl/hr	3 ppl/hr	7 ppl/hr	15 ppl/hr	15 ppl/hr	30 ppl/hr	
Bike	1 ppl/hr	0 ppl/hr	1 ppl/hr	3 ppl/hr	3 ppl/hr	5 ppl/hr	
Walk	3 ppl/hr	2 ppl/hr	4 ppl/hr	9 ppl/hr	9 ppl/hr	18 ppl/hr	

Mada	1	AM Peak Hou	ır		PM Peak Hou	r
Mode	In	Out	Total	In	Out	Total
	Nor	th BuildingA	Approved Stage	e 1 PUD plans		
		Office (2	90,000 Square	Feet)		
Auto	145 veh/hr	24 veh/hr	169 veh/hr	27 veh/hr	141 veh/hr	168 veh/hr
Transit	133 ppl/hr	22 ppl/hr	155 ppl/hr	25 ppl/hr	129 ppl/hr	154 ppl/hr
Bike	11 ppl/hr	1 ppl/hr	12 ppl/hr	2 ppl/hr	10 ppl/hr	12 ppl/hr
Walk	28 ppl/hr	4 ppl/hr	32 ppl/hr	6 ppl/hr	26 ppl/hr	32 ppl/hr
		Ret	ail (35,000 SF)			
Auto	14 veh/hr	9 veh/hr	23 veh/hr	45 veh/hr	48 veh/hr	93 veh/hr
Transit	6 ppl/hr	4 ppl/hr	10 ppl/hr	20 ppl/hr	21 ppl/hr	41 ppl/hr
Bike	1 ppl/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr	4 ppl/hr	7 ppl/hr
Walk	4 ppl/hr	2 ppl/hr	6 ppl/hr	12 ppl/hr	13 ppl/hr	25 ppl/hr
	Nor	th BuildingF	Proposed Stage	2 PUD plans		
		Reside	ential (330 Unit	ts)		
Auto	16 veh/hr	44 veh/hr	60 veh/hr	44 veh/hr	29 veh/hr	73 veh/hr
Transit	15 ppl/hr	40 ppl/hr	55 ppl/hr	41 ppl/hr	26 ppl/hr	67 ppl/hr
Bike	2 ppl/hr	3 ppl/hr	5 ppl/hr	4 ppl/hr	2 ppl/hr	6 ppl/hr
Walk	3 ppl/hr	9 ppl/hr	12 ppl/hr	9 ppl/hr	5 ppl/hr	14 ppl/hr
		Ret	ail (25,358 SF)			
Auto	11 veh/hr	6 veh/hr	17 veh/hr	33 veh/hr	35 veh/hr	68 veh/hr
Transit	5 ppl/hr	3 ppl/hr	8 ppl/hr	15 ppl/hr	15 ppl/hr	30 ppl/hr
Bike	1 ppl/hr	0 ppl/hr	1 ppl/hr	3 ppl/hr	3 ppl/hr	6 ppl/hr
Walk	3 ppl/hr	2 ppl/hr	5 ppl/hr	9 ppl/hr	9 ppl/hr	18 ppl/hr
			Difference			
Auto Trips	-132 veh/hr	17 veh/hr	-115 veh/hr	5 veh/hr	-125 veh/hr	-120 veh/hr
Non-Auto Trips	-154 ppl/hr	23 ppl/hr	-131 ppl/hr	13 ppl/hr	-143 ppl/hr	-130 ppl/hr

# District Department of Transportation (DDOT) Comprehensive Transportation Review (CTR) Scoping Form



The purpose of the Comprehensive Transportation Review (CTR) study is to evaluate potential impacts to the transportation network that can be expected to result from an approved action of the Zoning Commission (ZC), Board of Zoning Adjustment (BZA), Public Space Committee (PSC), a Federal action, or DDOT project. The Scoping Form accompanies the *Guidance for Comprehensive Transportation Review* and provides the Applicant an opportunity to propose a scope of work to evaluate the potential transportation impacts of the project.

**Directions:** The CTR Scoping Form contains study elements that an Applicant is expected to complete in order to determine the scope of the analysis. An Applicant should fill out this Form with a proposed scope of analysis commensurate with the requested action and submit to DDOT for review and concurrence. Accordingly, not all elements and figures identified in the Scoping Form are required for every action, and there may be situations where additional analyses and figures may be necessary. Once a completed Scoping Form is returned, DDOT will provide feedback on the initial parameters of an appropriate analysis scope. After the Scoping Form has been finalized and agreed to by DDOT, the Applicant is required to expand upon the elements outlined in this Form within the CTR study.

Scoping Information
Pate(s) Scoping Form Submitted to DDOT: May 30, 2019
DOT Case Manager: Jonathan Rogers
Pate(s) Scoping Form Comments Submitted to Applicant: August 07, 2019
Date Scoping Form Finalized:

Project Overview	Proposed Development Program
Project Name: Gables Union Market North	Use(s) Residential, Retail
Street Address: 1329 5 <sup>th</sup> Street, NE	Residential (dwelling units): 300 units
Square & Block / ANC: Square 3591/Lot 5/ANC 5D	Retail (square feet): 23,053 sf
Applicant Name: Eddie Meder, Gables Residential, 703-918-2506,	Office (square feet): NA
emeder@gables.com	
Transportation Consultant:	Hotel (rooms): NA
Gorove/Slade Associates, Inc.,	
1140 Connecticut Avenue NW, Suite 600, Washington, DC 20036	
Dan VanPelt, 202-540-1924, dbv@goroveslade.com	
Daniel Solomon, 202-540-1928, ds@goroveslade.com	
Land Use Counsel: Jeff Utz, Goulston & Storrs, 202-721-1132,	Other: NA
jutz@goulstonstorrs.com	
Case Type & No. (ZC, BZA, PSC, etc.): Stage 2 PUD Application, ZC 14-12E	# of Vehicle Parking Spaces:

	310 spaces proposed (±10%).
	It should be noted that the parking spaces within the North Building
	will also serve the South Building as no parking is being provided in
	the South Building. This was a condition of approval as part of the
	Stage 1 PUD.
Prior Related Action(s) (ZC, BZA, PSC, etc.): ZC 14-12 (First Stage PUD Approval), ZC	# of Carshare spaces: 2 (per Zoning Order)
14-12A (Two-year time extension)	
Current Zoning and/or Overlay District: C-3-C (Approved as part of First Stage PUD)	# of Electric Vehicle Stations: 6 to 8 (1 per every 50 spaces
	proposed)
Estimated Date of Hearing: Fall 2019	# of Bicycle Parking Spaces (long- and short-term)
Projected Build-Out Year: 2022	Long-term: 119-127 provided (87 required)
Small Area Plan (if applicable): Florida Avenue Market Study Small Area Plan	Short-term: 20 provided (none required by ZR58)
Livability Study (if applicable): N/A	Loading Berths/Spaces: Two (2) 30' berths

**Existing Site and Description of Action:** Describe the type(s) of regulatory approval(s) being requested and any background information on the project relevant to the requested action such as the existing uses, amount of vehicle parking, and other notable proposed changes on-site.

The project, referred to as Union Market North or the North Building, includes an application for Stage 2 PUD approval of a mixed-use building located at 1329 5th Street NE. The Stage 1 PUD was approved by the Zoning Commission on March 30, 2015 by Zoning Commission Order No. 14-12. The Stage 1 development program included 290,000 square feet of residential use (approximately 301 residential dwelling units) or an option for office space, and 35,000 square feet of retail space. Of note, this zoning case also included a consolidated PUD encompassing the southern portion of the site, referred to as Union Market South or the South Building.

The proposed Stage 2 development program for the North Building includes 300 residential dwelling units and 23,053 square feet of retail space. Thus, the proposed development program is within the envelope set during the Stage 1 PUD approval.

Access is proposed along 6<sup>th</sup> Street via an existing curb cut. The curb cut will provide access to a below-grade parking garage and loading facilities. The development is proposing to supply approximately 310 parking spaces, which is meant to serve both the North Building and the South Building, as no parking is proposed in the South Building. This is consistent with what was proposed during the previous Stage 1 PUD and consolidated PUD process (ZC Case No. 14-12).

Previous Conditions and Commitments: List all relevant conditions and proffers still in effect from a previous approval (Campus Master Plan, First Stage PUD, etc.) and status of completion

The following transportation-related conditions were included in the Stage 1 zoning order as it relates to the North Building:

The project shall provide no parking in the South Building. The project shall include a minimum of 300-475 vehicle parking spaces in the below-grade garage beneath the North Building. The project shall provide one 30-foot berth and one 100 square foot loading platform in the South Building, as shown on the Plans. Loading for the North Building will be approved as part of its Stage 2 approval.

The following conditions were outlined in the DDOT report during the Stage 1 PUD process for the North Building, as it relates to the Stage 2 PUD:

- For the subsequent Stage 2 PUD submission for the North Building, DDOT expects consistency with the Stage 1 analysis and an updated CTR might be necessary;
- Additional mitigation measures might be necessary as part of the North Building Stage 2 PUD. In particular, the Applicant will be expected to provide showers and changing facilities to encourage bicycle use. An appropriate number of showers and lockers will be determined during the North Building review; and
- Bicycle parking locations for the North Building are not specified and will need to be determined during the Stage PUD.

The Stage 2 CTR will provide more details on the site design elements, including bicycle accommodations. As the revised development program is within the envelope set during the Stage 1 PUD approval, we are not proposing to include an updated vehicular capacity analysis in the Stage 2 CTR.

## **Section 1: SITE DESIGN**

DDOT reviews the site plan to evaluate consistency with DDOT's standards, policies, and approach to access as documented in the most recent Design and Engineering Manual (DEM). If the proposal for use of public space is found to be inconsistent with the agency approach, DDOT will note this regardless of its relevance to the action. It is DDOT's position that issues regarding public space should be addressed at the earliest possible opportunity to minimize concerns that may result from proposed access design.

CATEGORY & GUIDELINES	CONSULTANT PROPOSAL	DDOT COMMENTS
Site Access Show site access points for vehicles, pedestrians and bicyclists, including proposed curb cut locations, curb cuts to be closed, access controls (e.g., right-in/out, signalized), sight distance analysis from access points, driveway widths and spacing, on- and off-site parking garage locations, inter-parcel connections, and public/private status of driveways, alleys, and streets. DDOT requires access be located off an alley if available, otherwise it should be located	All parking and loading access for the development will be provided via the existing curb cut along 6th Street. This curb cut location is consistent with the Stage 1 PUD site plan. The curb cut will be full-access, will facilitate trash pickup, and will accommodate head-in/head-out maneuvering. All site access will be unsignalized. Pedestrian entry to the site will be located along the western, southern, and eastern frontages. Separate entrances will be provided for residential and retail access.	Per the 7/30 meeting, DDOT requires the Applicant to explore shared vehicle access opportunities with the property to the north. This is important in order to facilitate the vision for 5 <sup>th</sup> Street as a special street that could be intermittently shut down to vehicle traffic subject to future and separate public space permitting. Providing an option for the subject property and the neighboring property to have vehicle access from 6 <sup>th</sup> Street is
off the lower volume street. Note any proposed deviations from DDOT standards with justification and if conceptual approval by the Public Space Committee (PSC) has/is being sought. DDOT will not support curb cut design relief unless there is a physical impossibility	Bicycle parking will be accessible from the 6 <sup>th</sup> Street curb cut. Approximately 119-127 long-term spaces are proposed for the development, meeting or exceeding zoning requirements. These spaces will be located on the B1 level of the parking garage.	needed to achieve this vision. A shared alley, knock-out panel within the garage, etc should be the options explored. A support letter from the neighboring property will be needed in the Zoning record.

3

preventing an Applicant from meeting all standards. Additionally, all proposed private streets must be built to DDOT standards and have a public access easement.

□ Scoping/CTR Figure – Project Location Map □ Scoping/CTR Figure – Site Circulation Plan Please note that while the curb cuts for the site are existing, new curb cut permits will be needed for all 3 (2 for the for private alley and 1 for the auto access) due to the change in character of the land use and the fact that the curb will be bumped out on 5<sup>th</sup> and 6<sup>th</sup> Streets.

DDOT's DEM requires a 6' offset of all curb cuts from the property line. The site plan shows the curb cut located directly on the property line, which does not meet the standard.

Per the State 1 PUD, the South Building's longterm bike parking will be provided in the North Building. Show connections between the North Building's long-term bicycle parking and the South Building.

GS Response: Noted. The Applicant has explored shared vehicle access opportunities to the neighboring property (Parcel 4 of the 6<sup>th</sup> Street Development). Options explored with the neighboring property included but are not limited to a shared alley or knock-out panel within garage to allow access to/from the neighboring property along 6<sup>th</sup> Street.

The current set of drawings contains a wide area of knock-out panels where the neighbor could elect to place a vehicle entrance subject to reaching an agreement with the applicant in the future governing the conditions of such access.

		1
		The Applicant will revise the location of the existing curb cut located directly along the property line to satisfy DEM requirements. An exhibit detailing the pathways between the south building and north building long- term bicycle parking area will be shown in the CTR.
Loading         Discuss and show the quantity and sizes of loading berths/delivery spaces, trash storage locations, on- and off-site loading locations, turnaround design, nearby commercial loading zones, and anticipated demand, operations, and routing of delivery and trash vehicles. Identify the sizes of trucks anticipated to serve the site and design vehicles to be used in truck turning diagrams.         DDOT requires head-in and head-out vehicle movements through public space (DEM 31.5) and that direct internal connections be provided between retail bays and loading facilities. Note any proposed deviations or requested relief from ZR16 or DDOT standards with justification and whether a loading management plan will be included. A template loading management plan can be provided upon request.            Scoping/CTR Figure – Loading Area Design         CTR Figure(s) – Truck Turning Diagrams (on the site and to/from designated truck routes and alleys)	The loading facilities will consist of two (2) 30' berths, which will be located off of the driveway leading to the underground garage. The project's Stage 1 PUD was approved under ZR58 regulations, which requires one (1) 55' berth for the residential portion. The applicant is seeking relief for the 55' berth as the proposed facilities meet current ZR16 requirements. All loading vehicles will enter the driveway through the 6 <sup>th</sup> Street curb cut and will utilize head-in, head-out turning maneuvers.	<ul> <li>Provide AutoTurn for the South Building's current and proposed loading facilities given the revised building footprint for the North Building.</li> <li>Provide AutoTurn for the North Building's loading facilities. Show how the loading berths are connected to all residential and retail uses via a loading corridor.</li> <li>A Loading Management Plan will be needed to identify mitigation strategies for the loading relief.</li> <li>GS Response: Noted; AutoTURN will be provided for the North Building and South Building. A loading management plan will be included in the study.</li> </ul>

A conceptual public space plan will be included in the CTR and/or other elements of the PUD application.	The Applicant will be required to comply with the Union Market Streetcape Guidelines. A conceptual public space plan should show where the curbline change along 5th and 6th Street occurs between the North and South buildings.
	See DDOT-UFD's comments regarding trees (attached).
	DDOT expects all building projections to be compliant with the Building Code. Provide exhibits showing all bay windows, oriel
	windows, stairs, ramps, etc proposed.
	<ul> <li>GS Response: Noted; The Applicant will comply with the Union Market Streetscape Guidelines.</li> <li>Per UFD's comments, street trees will be planted along the 5<sup>th</sup> and 6<sup>th</sup> Street frontages,</li> </ul>
	with trees along 6 <sup>th</sup> Street to be maintained by
	UFD, all as shown on plans that the applicant will submit to the Zoning Commission.
A curbside management plan will be proposed for the proposed	
development if changes are proposed from existing conditions.	
	A curbside management plan will be proposed for the proposed

Note that the preliminary curbside management plan will not be approved by DDOT during the zoning process. Applicant must submit a more detailed signage and marking plan via TOPS for formal review and approval by DDOT-PGTD during public space permitting. DDOT expects the Applicant to fund the installation of multi-space meters on blocks where meters are required.		
CTR Figure – Existing Curbside		
Designations 		
CTR Figure – Preliminary Proposed		
Curbside Management Plan		
CTR Figure – Preliminary Proposed		
Signage and Marking Plan		
MotorcoachesPropose methodology for data collectionand analysis. Describe and show the parkinglocations, anticipated demand, existingareas on- and off-site for loading andunloading (and desired loading timesrestrictions, if any), and potential routes toand from designated truck routes. This istypically required for uses that generatesignificant tourist activity (hotels, museums,cruises, etc.).CTR Figure – Motor Coach Loading AreasCTR Figure – Motor Coach Routing	No motorcoach activity is anticipated to occur at the proposed development.	
Sustainable Transportation Elements Identify all sustainable transportation elements, such as electric vehicle charging stations proposed to be included in the project.	Sustainable transportation elements for this development will be identified as part of the CTR and/or other elements of the PUD submission.	
DDOT recommends 1 per 50 vehicle spaces be served by an EV station.		

Heritage Trees	We are not aware of any Heritage Trees that exist in the vicinity of the	See DDOT-UFD's comments (attached).
Heritage Trees are defined as having a circumference of 100 inches or more and are typically located on private property. They are protected by District law and must be preserved if non-hazardous. Special Trees are between 44 inches and 99 inches in circumference and may be removed with a permit.	project.	GS Response: Noted; Per UFD's comments, street trees will be planted along the 5 <sup>th</sup> and 6 <sup>th</sup> Street frontages, as shown on plans that the applicant will submit to the Zoning Commission with trees along 6 <sup>th</sup> Street to be
Note whether there are existing Heritage Trees located on-site or in the adjacent public space. The presence of Heritage Trees will impact site design since they may not be removed.		maintained by UFD.

# Section 2: TRAVEL ASSUMPTIONS

CATEGORY & GUIDELINES	CONSULTANT PROPOSAL DDOT COMMENTS			
<b>Strategic Planning Elements</b> Identify relevant planning efforts and demonstrate how the proposed action is consistent with District-wide planning documents, as well as localized studies.	<ul> <li>The CTR will consider the suggested studies included in the column to the left, in addition to the following:</li> <li>Florida Avenue Market Study Small Area Plan</li> </ul>			
The evaluation should consider at least the following high level/District-wide documents:				
<ul> <li>MoveDC and its relevant modal elements</li> </ul>				
<ul> <li>DDOT Livability Study (relevant to the project)</li> </ul>				
<ul> <li>OP Small Area Plans (relevant to the project)</li> </ul>				
<ul> <li>District of Columbia Comprehensive Plan</li> </ul>				
<ul> <li>State Transportation Improvement Plan (STIP)</li> </ul>				
Vision Zero Action Plan				
Capital Bikeshare Development Plan				
<ul> <li>Washington Metropolitan Area Transit Authority's (WMATA) Metrorail and Metrobus Plans</li> </ul>				

<ul> <li>DDOT Corridor studies (e.g., Transit Development Plan, Streetscape Design Plans and Guidelines)</li> </ul>		
Transportation Network	As a vehicular analysis is not being proposed, transportation network	Please identify DDOT's Florida Avenue Safety
Improvements List and map all roadway, transit, bicycle, and pedestrian projects funded by DDOT or WMATA, or proffered by developers, in the vicinity of the study area and expected to open for public use prior to the proposal's anticipated build-out year.	improvements are not included.	and Streetscape Capital Project as well as the near-term improvements being installed Summer 2019. GS Response: Noted; The study will identify the capital project and near-term improvements along Florida Avenue currently being installed.
network improvements Local Traffic Growth	No vehicular capacity analysis is proposed as the revised Stage 2	
List and map developments to be analyzed as local background growth. This should include anticipated matter-of-right and zoning-approved developments within ¼ mile of site and ones more than ¼ mile from site if traffic distributed through study intersections. Include portions of developments anticipated to open by the projected build-out year.	development plans are within the envelope approved during the Stage 1 PUD process.	
Scoping/CTR Figure – Map showing background development projects near study area		

<ul> <li>Scoping/CTR Figure – Table showing completion amounts of background developments</li> <li>CTR Figure – Table showing trip</li> </ul>		
generation assumptions for background developments		
CTR Figure(s) – Assignment of		
Background Traffic (for each development)		
Regional Traffic Growth	No vehicular capacity analysis is proposed as the revised Stage 2	
Propose a methodology to account for growth in regional travel demand passing through the study area. An appropriate methodology could include reviewing MWCOG model growth rates, historic DDOT AADT traffic counts, or data from other planning studies. These sources should only be used as a guide. Map proposed growth rates by facility, direction, and time of day.	development plans are within the envelope approved during the Stage 1 PUD process.	
Generally, maximum annually compounding growth rates of 0.5% in peak direction and 2.0% in non-peak direction are acceptable. Growth rates based on historical data should look at 10+ years of data. Adjustments to the rates may be necessary depending on the amount of traffic assumed from local background developments or if there were recent changes to the roadway network.		
Scoping/CTR Figure(s) – Table and map showing projected regional growth assumptions (dependent on methodology)		
Vehicle Parking Identify parking locations and justify the amount of on-site vehicle parking, including a comparison to the number of spaces required by ZR16 and any previous approvals. Use the <i>DDOT Park Right DC</i> tool to assess vehicle parking demand for residential over retail projects.	The study will include details on the proposed parking supply. 310 (±10%) parking spaces are currently proposed in a 4-level below-grade garage. The North Building parking garage will also serve the parking needs of the South Building, as the South Building does not include any parking.	
Provide parking calculations and parking ratios by land use, including any eligible ZR16 vehicle parking reductions (e.g., within ¼ mile of Priority Bus Route, within ½ mile of Metrorail Station, providing carshare spaces, located within a D zone, etc.).		

Confirm that the proposed vehicle parking provision is in line with the vehicle trip generation estimates. If vehicle parking ratios are not in line with the context of the neighborhood where the site is located, then adjustments to the trip generation calculations and additional TDM commitments will be required.Confirm whether ZR16 TDM Mitigations will be required, per Subtitle C § 707.3, for providing more than double the amount of required vehicle parking. Coordinate with the Zoning Administrator as early in the process as possible for an official determination.For BZA parking relief cases, per Subtitle C § 703.4, a TDM Plan is required when providing fewer than the ZR16 required number of spaces. Also, if relief is being requested from 5 or more spaces, then a Parking Occupancy Study is required (see Impact Assessment section).DScoping/CTR Figure – ZR16 Vehicle		
Parking Calculations and Proposed Parking Ratios by Land Use		
<b>Bicycle Parking</b> Identify the locations of proposed bicycle parking and justify the amount of long- and short-term spaces proposed. Provide a calculation of the number of spaces required by ZR16. Long-term bicycle parking spaces should be easily accessible from building lobby or located in the parking garage level closest to the ground floor. Lockers and showers must be included with non-residential long-term bicycle storage rooms, per Subtitle C § 706.	Long-term bicycle parking will be accommodated within the building. Under the current development plan, approximately 119-127 long-term spaces are proposed in the designated long-term bicycle storage area located in the B1 level of the underground garage. This will include eight (8) spaces reserved for the South Building's retail and theater uses, per the approved Consolidated PUD order. 20 short-term bicycle spaces are proposed, as agreed to in the Stage 1 approvals. The spaces will be placed curbside along 5 <sup>th</sup> Street and 6 <sup>th</sup> Streets, with the final location to be determined in consultation with DDOT.	As noted above, Stage 1 review identified that the South Building's long-term bicycle parking spaces were to be provided in the North Building. Please identify the number of spaces provided to meet both building's requirements. As noted above, show how the bike parking would be connected to the South Building. GS Response: Noted; The North Building will
Provide calculations for required lockers and showers. Short-term bicycle parking should be accommodated by installing inverted U-racks along the perimeter of the site in private or public space, near the site entrance(s).		provide 119-127 long-term spaces, meeting minimum requirements for the North Building (79) and South Building (8 for retail and theater uses) per the South Building's Approved Consolidated PUD order. As noted earlier, an exhibit showing pathways from the

<ul> <li>Scoping/CTR Figure – ZR16 calculations for bicycle parking and shower/locker Facilities</li> <li>Scoping/CTR Figure – Locations of internal bicycle parking spaces, routing to these spaces, and related support facilities including locker rooms, showers, storage areas, and service repair room</li> </ul>							South Building to the bicycle parking area in the North Building will be shown in the CTR.
Mode Split         Provide mode split assumptions with sources and justification. Sources of data could include the most recent Census Transportation Planning Products (CTPP) or the 2005 WMATA Development-Related Ridership Survey. Note that the walking mode share will account for internal trip synergies for mixed use developments.         The agreed upon mode split assumptions should not be revised between scoping and CTR submission without DDOT concurrence.         Scoping/CTR Figure – Mode Split Assumptions	We do not propose including a supplementary capacity analysis in conjunction with the Stage 2 application as the trip generation is expected to decrease in conjunction with the election of the project to pursue residential use on the floors above the first floor, when compared to the analysis included in the Stage 1 CTR (which assumed an office use). In order to appropriately compare the projected trip generation of the two applications, the mode split assumptions used in the Stage 1 PUD Review were assumed. The modal splits are presented below. A detailed breakdown of these assumptions is included in the scoping form attachments.						
· · · · · · · · · · · · · · · · · · ·							
	Land Use	Drive	Transit	Bike	Walk	Telecommute/ Other	
	Residential/Office Mode Split	50%	39%	3%	8%		
	Retail Mode Split	70%	17%	3%	10%		

### **Trip Generation**

Provide site-generated trip generation estimates, utilizing the most recent version of ITE <u>Trip Generation Manual</u> or another agreed upon methodology such as manual doorway or driveway counts at similar facilities. Estimates must be provided by mode, type of trip, land use, and development phase. Modes include transit (rail and bus), bicycle, walk, and automobile. Existing site trips should be based on visual counts and not estimated based on trip generation calculations.

A vehicle capacity analysis is required when a development generates 25 or more peak hour vehicle trips in the peak direction (higher of either inbound or outbound vehicles in highest peak hour). Existing site traffic, pass-by, TDM, and internal capture reductions should not be applied when calculating whether a CTR is required. They may be used in the multi-modal trip generation summary and assignment of trips within the CTR, as appropriate.

DDOT TripsDC tool should be used to determine trip generation estimates for residential over retail projects.

Adjustments to trip generation may be made, as appropriate, if the number of vehicle parking spaces proposed is significantly lower or higher than expected for the context of the neighborhood.

Pass-by rates in the District are minimal and should only apply to major retail-dominant destinations, grocery stores, and gas stations. An adjusted pass-by/diverted trips methodology should be developed if proposed uses are not located on a road classified as arterial or higher.

The agreed upon trip generation estimates should not be revised between scoping and CTR submission without DDOT concurrence.

□ Scoping Figure – Vehicle Trip Generation Calcs for CTR Threshold

We propose a multi-modal trip generation methodology using ITE 10<sup>th</sup> Generation rates and the mode split assumptions from the previous section.

The original trip generation assumed for the North Building as part of the First Stage PUD process was derived using 9<sup>th</sup> Edition rates. This includes Land Uses 710 (General Office) and 820 (Shopping Center). Although there was flexibility during the Stage 1 for the North Building to be developed as either office or residential over retail, the CTR analyzed the office scenario as it resulted in a more conservative analysis. The Stage 1 trip generation is presented below.

North Building - Stage 1 PLID Development Progra

North Building – Stage I POD Development Program								
Mode	Land Use	A	M Peak H	lour	P	PM Peak Hour		
		In	Out	Total	In	Out	Total	
Auto	Office	196	29	225	35	167	202	
(veh/hr)	Retail	15	9	24	43	48	91	
(ven/m)	Total	211	38	249	78	215	293	
Trensit	Office	174	23	197	30	147	177	
Transit (ppl/hr)	Retail	6	4	10	19	20	39	
(ppi/iii)	Total	180	27	207	49	167	216	
Bike	Office	13	2	15	2	12	14	
(ppl/hr)	Retail	1	1	2	3	4	7	
(ppi/iii)	Total	14	3	17	5	16	21	
Malk	Office	36	4	40	6	30	36	
Walk (ppl/hr)	Retail	4	2	6	11	12	13	
(pp)m)	Total	40	6	46	17	42	59	

In order to make a direct comparison between the Stage 1 and Stage 2 Development programs, both are presented below utilizing 10<sup>th</sup> Edition Rates.

🗌 Scoping/CTR Figure – Multi-Modal Trip
Generation

For Stage 1, the same Land Use codes were used between 9<sup>th</sup> Edition and 10<sup>th</sup> Edition. For the Stage 2 Development program, trip generation utilized "Mid-Rise Apartment" (LU Code 221) and "Shopping Center" (LU Code 820). To reflect a conservative analysis and flexibility in the development program, trip generation for the Stage 2 plans assumed a 10% increase in the development program, resulting in 330 residential units and 25,358 square feet of retail.

#### Trip Gen Comparison for Proposed Second Stage Development (ITE 10<sup>th</sup> Edition)

Mode	AN	1 Peak Ho	our	PM Peak Hour		
wode	In	Out	Total	In	Out	Total
North	BuildingA	Approved	l Stage 1 F	PUD plar	าร	
	Office (2	90,000 So	quare Fee	t)		
Auto (veh/hr)	145	24	169	27	141	168
Transit (ppl/hr)	133	22	155	25	129	154
Bike (ppl/hr)	11	1	12	2	10	12
Walk (ppl/hr)	28	4	32	6	26	32
	Ret	ail (35,00	00 SF)			
Auto (veh/hr)	14	9	23	45	48	93
Transit (ppl/hr)	6	4	10	20	21	41
Bike (ppl/hr)	1	1	2	3	4	7
Walk (ppl/hr)	4	2	6	12	13	25
North	Building	Proposed	Stage 2 P	UD plar	ns	
	Reside	ntial (33	0 Units)*			
Auto (veh/hr)	16	44	60	44	29	73
Transit (ppl/hr)	15	40	55	41	26	67
Bike (ppl/hr)	2	3	5	4	2	6
Walk (ppl/hr)	3	9	12	9	5	14
Retail (25,358 SF)*						
Auto (veh/hr)	11	6	17	33	35	68
Transit (ppl/hr)	5	3	8	15	15	30
Bike (ppl/hr)	1	0	1	3	3	6
Walk (ppl/hr)	3	2	5	9	9	18
		Differen	ce			

	Auto Trips (veh/hr)	-132	17	-115	5	-125	-120
	Non-Auto Trips (ppl/hr)	-154	23	-131	13	-143	-130
		*proposed trip generation includes 10% flexibility from development program, representing the most conservative trip generation					
	As seen from the trip ger expected to generate sig during the Stage 1 CTR. T vehicular capacity analys A detailed trip generatio	nificantl Therefore	y fewer e, we do the Sta	vehicular not prop ge 2 CTR.	trips t bose ind	han was cluding a	analyzed revised
Trip Distribution Provide sources and justification for proposed percentage distribution of site- generated trips. Additionally, document proposed pass-by distributions and the re- routing of existing or future vehicles based on any changes to the transportation network. Percentage distributions should be shown turning at interactions throughout the	No vehicular capacity and development plans are w PUD process.					0	Stage 1
turning at intersections throughout the transportation network and at site driveways and garage entrances.							
The agreed upon percentage distribution of trips should not be revised between scoping and CTR submission without DDOT concurrence.							
☐ Scoping/CTR Figure – Percentage Distribution Map(s) by Land Use, Direction, and Time of Day							
CTR Figure – Assignment of Site- Generated Trips							
□ CTR Figure – Assignment of Pass-By or							

**CATEGORY & CONSULTANT PROPOSAL DDOT COMMENTS GUIDELINES** 

Version 1.0 – August 2018

Traffic Impact Analysis (TIA)	No vehicular capacity analysis is proposed as the revised Stage 2	DDOT has no objection to exclusion of a TIA
Study Area and Data	development plans are within the envelope approved during the Stage 1	component because 1) a less intense land use
Collection	PUD process.	(residential) is proposed and 2) the parking
Identify study intersections commensurate with the impact of the proposed project and the travel demand it will generate. Study area should include all major signalized and unsignalized intersections, intersections expected to realize large numbers of new traffic, and intersections that may experience changing traffic patterns. <i>Turning Movement Counts (TMC) should be</i> <i>collected during the weekday morning (6:30</i> <i>AM to 9:30 AM) and evening (4:00 PM to</i> <i>7:00 PM) peak periods while schools and</i> <i>Congress are in session, unless otherwise</i> <i>agreed upon. The Saturday mid-day peak</i> <i>period should be studied if development</i> <i>program is retail-heavy. TMCs should include</i> <i>vehicles, pedestrians, bicyclists, and % truck</i> <i>traffic. Previously collected TMCs may be</i> <i>used if they are less than 2 years old, unless</i> <i>a significant change to the transportation</i> <i>network has occurred.</i>		<ul> <li>supply is at the lower end of the range approved at Stage 1 with the following condition: <ul> <li>The Applicant will continue to provide the transportation mitigations identified during the Stage 1 review. Any request to not provide required mitigations must be justified through a TIA scoped with DDOT.</li> </ul> </li> <li>GS Response: Noted; The Applicant will continue to provide the transportation mitigations mitigations identified during the Stage 1 Review.</li> </ul>
Provide hard copies of TMCs in CTR appendix and electronic copies in DDOT-preferred format at time of submission.		
Scoping/CTR Figure – Study Intersections		
<b>TIA Study Scenarios</b> Propose an appropriate set of scenarios to analyze. Note the anticipated build-out year and project phasing. Analysis scenarios should consider:	No vehicular capacity analysis is proposed as the revised Stage 2 development plans are within the envelope approved during the Stage 1 PUD process.	
• Existing Conditions		
<ul> <li>Background Conditions (No-Build)</li> </ul>		
<ul> <li>Total Future Conditions (With Development)</li> </ul>		
<ul> <li>Total Future Conditions (With Mitigation)</li> </ul>		
<ul> <li>Total Future Conditions (+5 Years), as necessary</li> </ul>		
<ul> <li>Additional Scenarios For Each Phase, as necessary</li> </ul>		

Note that the Background (No-Build) scenarios for multi-phase projects should <u>not</u> include site-generated traffic from earlier phases of development.		
Propose an appropriate methodology for the	No vehicular capacity analysis is proposed as the revised Stage 2 development plans are within the envelope approved during the Stage 1 PUD process.	

Pedestrian Network	The study will review all proposed pedestrian facilities on-site and along site	The Phase 1 analysis identified several
<ul> <li>Propose methodology for evaluating the condition of the existing pedestrian network and determining the project's impact.</li> <li>Evaluate, at a minimum, sidewalk widths, network completeness, whether facilities meet DDOT and ADA standards, whether pedestrian signal timings are adequate, and identifying critical walking routes.</li> <li>Study area should include, at a minimum, all roadway segments and multi-use trails within a ¼ mile radius from the site, including routes to Metrorail, transit stops, schools, and major activity centers.</li> <li>Scoping/CTR Figure – Pedestrian Study Area and Walking Routes to Transit, Schools, Activity Centers</li> <li>CTR Figure – Pedestrian Network Existing Conditions</li> <li>CTR Figure – Pedestrian Network Future Conditions (if improvements are</li> </ul>	frontage. No additional review of existing off-site pedestrian facilities is being proposed as this has been included in the Stage 1 submission process.	substandard pedestrian conditions in the vicinity, and committed to improving these facilities as part of the South Building construction. Some of these commitments were tied to offsite parking lots and some were standalone commitments intended to improve the pedestrian network in the vicinity (Neal Place). Provide an update on the proposed off-site improvements. DDOT's expectation is that these off-site deficiencies would be improved as part of the North Building construction. The pedestrian network must be re-evaluated if any of the off-site pedestrian improvements are not proposed as part of the North Building. GS Response: Noted.
programmed/proffered by others or proposed by the Applicant)		
<b>Bicycle Network</b> Propose methodology for evaluating the condition of the existing bicycle network and determining the project's impact, including impacts to Capital Bikeshare. Evaluate, at a minimum, network completeness and adequacy of Capital Bikeshare locations and availability.	The study will review all proposed bicycle facilities on-site and along site frontage. No additional review of off-site existing bicycle facilities is being proposed as this has been included in the Stage 1 submission process.	
Study area should include, at a minimum, all roadway segments and multi-use trails within a ½ mile radius from the site, including routes to Metrorail, transit stops, schools, and major activity centers.		
Note where bike lanes conflict with access to the site or on-street loading movements associated with the project.		
If a Capital Bikeshare station is located along the site frontage, the Applicant must assume the station will stay in place after the development has been constructed and must be designed into the public space plans. If it		

is not physically possible to stay in place,		
then DDOT expects the Applicant to		
demonstrate this hardship, propose a viable		
alternative location, and fund the station		
relocation. The minimum size of a new		
Capital Bikeshare station is 19 docks.		
,		
Scoping/CTR Figure – Bicycle Study Area		
and Bicycling Routes to Transit, Schools,		
Activity Centers		
CTR Figure – Bicycle Network Existing		
Conditions		
CTR Figure – Bicycle Network Future		
Conditions (if improvements are		
programmed/proffered by others or		
proposed by the Applicant)		
Transit Network	A review of transit facilities is not being proposed as this was included in	
Propose methodology and metrics for	the Stage 1 submission process.	
evaluating and determining the transit		
impacts of the project. Evaluate, at a		
minimum, existing transit stop locations,		
adjacent bus routes and Metro headways,		
planned transit improvements, and an		
assessment of existing transit stop		
conditions (e.g., ADA compliance, bus		
shelters, benches, etc.). For rail stations,		
refer to the 2008 WMATA Station Site and		
Access Planning Manual, as well as various		
station capacity studies.		
All existing bus stops must be		
accommodated during construction.		
accontracted during construction.		
Scoping/CTR Figure – Map of Adjacent		
Transit Routes and Stations		

Safaty Analysis	No vehicular capacity analysis is proposed.	
Safety Analysis	No venicular capacity analysis is proposed.	
Propose methodology to identify crash		
patterns at study intersections and mitigate potential safety concerns. Identify		
intersections with a crash rate of 1.0 MEVs		
or higher over the most recent 3-year		
period, document the types of crashes, and		
evaluate crash trends at these intersections.		
A safety analysis is only required if a capacity		
analysis is required.		
Perform a review of DDOT Vision Zero Map		
for the project study area and connect crash		
trends and recommendations to DDOT's		
Vision Zero strategy. Note whether any study intersections have been identified by DDOT		
as high crash locations and if any safety		
studies have been previously conducted.		
Crash data may be obtained by submitting a		
data request form to the Transportation Operations and Safety Division (TOSD). This		
form can be provided upon request.		
Internal Circulation and	The site does not contain more than 500 vehicle parking spaces. The	
Transportation Facilities	Internal and Transportation Facilities section will not be included in the	
If site contains 500 or more vehicle parking	CTR.	
spaces, evaluate on-site vehicle parking		
demand and provide analysis demonstrating		
parking entrance and ramps can properly		
process vehicles without queuing onto public streets. Provide proposed parking		
supply, queuing analysis, and physical		
controls to parking area, if applicable.		
CTR Figure – Parking ramps and		
processing facilities along with processing		
speed		

<b>On-Street Parking Occupancy</b>	BZA relief is not being sought for this development.	
Study		
This analysis is required if BZA relief from 5		
or more on-site vehicle parking spaces is		
being requested. It may also be required as		
part of a ZC or permitting case, if DDOT has concerns about site-generated vehicles		
parking in adjacent residential		
neighborhoods.		
Vehicle parking occupancy counts should be		
collected hourly during periods of peak		
demand. These are typically the weekday		
evening period (6-9 PM) for residential uses, weekday morning period (7-9 AM) if within ¼		
mile of Metrorail, and weekend peak periods		
if there is a commercial component. Parking		
availability should be assessed a maximum		
of 2 blocks in each direction from the site,		
unless otherwise agreed upon.		
Scoping/CTR Figure – Study Area/Block		
Faces		
CTR Figure(s) – Block Face Parking		
Inventory and Restrictions		
CTR Figure(s) – Vehicle Parking Space		
Utilization by Study Period		

# **Section 4: MITIGATIONS**

The completed CTR should detail all proposed mitigations. The purpose of including the Mitigations section in the Scoping Form is to note DDOT's Significant Impact policy, DDOT's approach to mitigation, and to allow the Applicant to gain initial feedback on potential mitigations the Applicant may ultimately propose. Any mitigation strategies discussed and included in the Scoping Form are not considered binding until formally committed to in the CTR.

DDOT Significant Impact Policy: Per DEM 38.3.5, all site-generated vehicular impacts to the transportation network during study peak hours must be mitigated. Vehicular impacts are defined as 1) the degradation of an intersection approach to LOS E or F or intersection v/c ratio to 1.0 or greater under Total Future Conditions; 2) if an approach exceeds LOS E or F or intersection exceeds 1.0 v/c ratio under Background Conditions then an increase in delay or v/c ratio by 5% or more under Total Future Conditions; 3) vehicle queuing length exceeds available capacity of approach or turn lane under Total Future Conditions; 4) if the 95<sup>th</sup> percentile queue length of an approach or turn lane increases by 150 feet or more from Background to Total Future Conditions.

DDOT's approach to mitigate impacts to the network is to first establish optimal site design and operations to support efficient site circulation. When these efforts alone cannot properly mitigate an action's impact, reducing on-site vehicle parking, implementing TDM measures, and making upgrades to the pedestrian, bicycle, and transit networks to encourage use of non-automotive modes should be proposed. Only when these options are exhausted will DDOT consider capacity-increasing changes to the roadway network because such changes often have detrimental impacts on non-automotive travel and are often contrary to the District's multi-modal transportation goals.

The Applicant acknowledges DDOT's Significant Impact Policy and the Agency's approach to mitigation that prioritizes reducing vehicle parking, implementing TDM strategies, and making non-automotive network improvements.

CATEGORY & GUIDELINES	CONSULTANT PROPOSAL	DDOT COMMENTS
Transportation Demand Management (TDM) A TDM Plan is typically required to offset site-generated impacts to the transportation network or in situations where a site provides more parking than DDOT determines is practical for the use and surrounding context. TDM strategies are also an integral part of the District's transportation options. As such, a baseline TDM plan, regardless of impacts to the transportation network, should be proposed for all PUDs and Campus Plans.	The study will include a description of the recommended TDM plan. The TDM plan will be based on those agreed upon during the Stage 1 approval process, and adjusted as necessary.	Please provide a status update on all transportation related mitigations, benefits, and amenities. A partial list is included in the Applicant's Pre-Hearing Statement. GS Response: Noted.
Document all existing TDM strategies being implemented on-site and those being proposed and committed to by the Applicant. Elements of the TDM Plan must be broken down by land use.		
<b>Operational Changes</b> Describe all proposed operational changes in CTR and provide supporting analysis and warrants in the study appendix. All proposed changes in traffic control must be conducted following the procedures outlined in the Manual of Uniform Traffic Control Devices (MUTCD).	Noted.	
at this stage of scoping. <b>Geometric Changes</b> Describe all proposed geometric changes in CTR and provide supporting analysis and warrants in the study appendix. Note any preliminary ideas being considered at this stage of scoping.	Noted.	

22

Performance Monitoring	Noted.	
DDOT may require a performance monitoring plan in situations where anticipated vehicle trips are large in magnitude, unpredictable, or necessitate a vehicle trip cap. The monitoring plan will establish thresholds for new trips a project can generate, define post-completion evaluation criteria and methodology, determine the frequency of reporting, and establish potential remediating measures (e.g., adjust trip caps or implement additional TDM strategies). Document any existing performance monitoring Plans in effect and any proposed changes.		
Section 5: ADDITIONAL TO	PICS FOR DISCUSSION DURING SCOPING	
CATEGORY &	CONSULTANT PROPOSAL	DDOT COMMENTS
GUIDELINES		
These items include status of Community Benefits Agreement, ANC concerns, traffic calming proposals, Traffic Operations and Parking Plan (TOPP), additional analyses such as merge/weave analysis, etc.		