

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION



d. Policy, Planning and Sustainability Administration

MEMORANDUM

TO: District of Columbia Board of Zoning Adjustment

FROM: Samuel Zimbabwe *Sam Zimbabwe*
Associate Director, PPSA
District Department of Transportation

DATE: September 28, 2012

SUBJECT: DDOT Report for BZA Case No. 18412

Dear BZA:

Please find the enclosed DDOT report dated September 28, 2012. The DDOT report regarding the referenced case has not been submitted within the seven-day window before the BZA hearing (October 2, 2012) due to the fact that the Applicant's traffic impact study (TIS) was submitted to DDOT on September 25, 2012. We expedited the review of the TIS and prepared the enclosed report to BZA reflecting DDOT's comments.

Based on the aforementioned circumstances, we respectfully request that you allow DDOT's comments and discussions to be included in the record.

Sincerely,

Sam Zimbabwe, PPSA

SEP 28

BOARD OF ZONING ADJUSTMENT
District of Columbia

CASE NO. 18412

EXHIBIT NO. 33

GOVERNMENT OF THE DISTRICT OF COLUMBIA

DEPARTMENT OF TRANSPORTATION



d. Policy, Planning and Sustainability Administration

MEMORANDUM

TO: District of Columbia Board of Zoning Adjustment

FROM: Samuel Zimbabwe 
Associate Director, PPSA
District Department of Transportation

DATE: September 28, 2012

SUBJECT: BZA Case #'s 18412 (Application of Be the Change, on behalf of the District of Columbia)
1005 North Capitol Street, NE

APPLICATION

Pursuant to 11 DCMR §§ 3103.2 and 3104.1, for a variance from the court width and area requirements under section 776, a variance from the off-street parking requirements under subsection 2101.1, variances from the loading berth depth and service/delivery space requirements under subsection 2201.1, a special exception from the rear yard requirements under subsection 774.2, a special exception from the roof structure setback requirements under subsections 411.11 and 770.6, to allow the construction of a new building with residential, retail and office uses in the C-3-C District at premises 1005 North Capitol Street, N.E. (Square 674, Lot 439).

BZA Case No. 18412 (Application of Be the Change, on behalf of the District of Columbia)

September 28, 2012

The proposed 14-story residential project is planned to include approximately 124 dwelling units. Approximately 60 of the 124 units are planned to be allocated as 'permanent supportive housing' and the remaining 64 units are planned to be developed as affordable housing (i.e., for income levels at less than or equal to 60-percent of the Area Median Income, or AMI). The building will also accommodate typical common space areas, 5,367 SF of office space for staff to manage the property and tenants, and 2,982 SF of ground floor retail. No on-site parking is proposed in conjunction with the project.

RECOMMENDATION IN BRIEF

Detailed study parameters such as required parking analyses, access and circulation, loading provisions and operations, transit service, etc., were discussed with the Applicant, and agreed in the Comprehensive Transportation Review (CTR) Scoping Agreement Form dated September 12, 2012. A transportation impact study (TIS) was submitted to the District Department of Transportation (DDOT) on September 25, 2012, and DDOT expeditiously reviewed the TIS in order to prepare this report to the BZA. Based on the review of the submitted documents, the following are DDOT's recommendations:

1. DDOT has no concern with the Applicant's request for relief from parking requirements. DDOT believes that not providing on-site parking is reasonable, because of the following reasons:
 - a) documented surplus of on-street parking in the vicinity
 - b) availability of off-street public parking in the area
 - c) demographic make-up of the potential residents supporting minimal automobile ownership
 - d) proximity of the proposed development to the transit facilities
 - e) availability/quality of the walking/bicycling facilities in the subject area
 - f) provision of adequate number of bicycle parking spaces
2. Although DDOT has no concern with the Applicant's proposed loading provisions under Option 1 and subsequent requests for relief from loading requirements, DDOT would like the Applicant to submit the following information and have the opportunity to review and comment on the following items prior to BZA's decision:
 - a) Geometric configuration of the curbside arrangement of bus zone, loading zone, and parking spaces, as well as the minimum required clearance of 40 feet from

September 28, 2012

the intersection of North Capitol Street, NE and K Street to the back of the first parking space on North Capitol Street, NE.

- b) Geometric details showing the concrete pad construction that involves the manhole (northern end of the bus zone) and the concrete pad that will be extending to the loading area (southern end of the bus zone).
- c) A detailed transportation demand management (TDM) plan that documents the efforts to maximize the use of transit, bicycle/pedestrian modes of travel, and reduce single occupancy vehicle trips during peak periods.

TRANSPORTATION ANALYSIS

DDOT is committed to achieving an exceptional quality of life in the Nation's Capital by encouraging sustainable transportation practices, constructing safer streets, and providing outstanding access to goods and services. As one means to achieve this vision, DDOT works through the zoning process to ensure alternative modes of transportation are adequate to accommodate new travel demand while discouraging single occupancy vehicle trips. The following analysis evaluates the Applicant's TIS to determine its accuracy and consistency with the District's vision and goals for its transportation network.

Roadway Network, Capacity & Operations

Based on the trip generation estimates provided in the Comprehensive Transportation Review (CTR) Scoping Agreement Form, DDOT determined that the number of trips that are expected to be generated by the subject development do not meet the minimum thresholds for the Applicant to provide operational and/or capacity analyses at the intersections that are in the vicinity of the subject site. In order to present the insignificance of vehicular impact of the proposed development, the following sections discuss the trip generation assumptions in detail.

Trip generation estimates are discussed in the TIS in detail, along with assumptions and documented justifications for each proposed land use. A combination of sources for the computations and trip reduction measures were documented in the TIS. The initial trip generation calculations were based on the guidelines as outlined in the Institute of Transportation Engineers (ITE) Trip Generation (8th Edition), and the Applicant adjusted the base trip generation estimates based on several factors, as follows:

BZA Case No. 18412 (Application of Be the Change, on behalf of the District of Columbia)

September 28, 2012

- 60 of the 124 units will be allocated for permanent supportive housing units, where the residents are not expected to own an automobile; therefore generate negligible number of automobile trips (i.e., drop-offs, etc.).
- Trip generation for the remaining number of units (i.e., 64), is based on the US Census data (2010), where 71-percent of the households in rental units within the subject census tract are documented not to own an automobile.
- Trip generation for the staff of 15, who will occupy the 5,367 SF of office in various shifts, is based on the information provided by the Applicant, where 70-percent of the staff is expected to arrive by automobile. DDOT finds this assumption reasonable.
- The small retail portion of the proposed development is expected to serve the immediate neighborhood (i.e., pedestrian and bicycle trips); therefore no automobile trips are expected from the retail portion of the proposed development.

Based on the above assumptions, the following table summarizes the trip generation information for the proposed development:

Land Use Trip Type	AM Peak Hour			PM Peak Hour			Sunday Peak Hour			Daily Weekday
	In	Out	Total	In	Out	Total	In	Out	Total	
Apartment (ITE LUC 220) 124 Dwelling Units										
Total Trips ¹	13	51	64	56	30	86	32	31	63	875
Non-Auto Mode Split for Permanent Supportive Housing Units ²	(6)	(25)	(31)	(27)	(15)	(42)	(15)	(15)	(30)	(423)
Vehicle Trips after Permanent Supportive Housing Non-Auto Trips Removed	7	26	33	29	15	44	17	16	33	452
Non-Auto Mode Split for Affordable Housing Units ³	(5)	(18)	(23)	(21)	(11)	(32)	(12)	(11)	(23)	(321)
Vehicle Trips after Affordable Housing Non-Auto Trips Removed	2	8	10	8	4	12	5	5	10	131
Staff Vehicle Trips (including non-auto mode split) ⁴	5	2	7	-	5	5	2	2	4	21
Vehicle Trips	7	10	17	8	9	17	7	7	14	152

September 28, 2012

Bicycle and Pedestrian Facilities

As discussed in the trip generation section, automobile ownership is expected to be minimal, and transit, walking, and bicycling are expected to be the predominant modes of transportation at this site. The Applicant provided a qualitative evaluation of the bicycle and pedestrian facilities and their connection to the transit facilities. Based on the Applicant's field observations, minor items were identified along the pathways of pedestrians with disabilities. Further coordination in the public space permitting process will be necessary to ensure that the pedestrian facilities within public space surrounding the site are designed to meet DDOT standards.

Transit Services

DDOT and Washington Metropolitan Transportation Authority (WMATA) have partnered to provide extensive public transit service in the District. DDOT's vision is to leverage this investment to increase the share of non-automotive travel modes so that economic development opportunities increase with minimal infrastructure investment.

The Applicant evaluated the proximity of the subject site to the two Metro Stations and the adequacy of the bus service along the routes that serve the subject area. The proposed development will be situated within approximately ½ mile of two Metro Stations: NoMA/Gallaudet University (to the north) and Union Station (to the south).

The site will be served by numerous bus routes (D3, D4, P6, D8, X1, X2, X9, 903, 922, and 950) that have stops within a three-block radius of the proposed development, as well as a bus shelter in front of the subject site, which is served directly by bus routes 80 and 96. During the public space permitting process, DDOT will evaluate the capacity of the bus shelter in front of the subject site, as well as the geometry of the sidewalks leading to and around the bus shelter in order to ensure that pedestrian access and circulation is provided in a safe and efficient manner.

Based on the fact that there will be no on-site parking provided and automobile ownership is expected to be minimal, DDOT believes that the proposed development will be served adequately with the existing bus routes, as well as the two Metro Stations that are within a short walking distance. However, the Applicant did not provide ridership estimates, capacity analyses, or information on the headway frequency for the existing bus routes that will serve the proposed development. DDOT believes that it would be beneficial that the Applicant coordinates with Progressive Transportation Services Administration (PTSA) and WMATA to ensure that capacity exists along Bus Routes 80 and 96, and the headways are adequate to serve the needs of the residents of the proposed development.

September 28, 2012

Site Access and Loading

Pedestrian access will be provided at three access points along North Capitol Street, NE, separately for the residential and retail portions of the development. The Applicant provides two options for loading access:

- Option 1 is designed for on-street loading (no driveway and a 12' X 30' loading zone on North Capitol Street, NE along the frontage of the proposed building). Under Option 1, the Applicant would require relief from the DCMR loading requirements for the 55-ft loading berth, the 200 SF loading platform and the 20-ft service/delivery space.
- Option 2 is for on-site loading (a 12-ft driveway will be located on the southern portion of the proposed building). Under Option 2, the Applicant would require relief from the DCMR loading requirements for the 55-ft berth and the 20-ft service/delivery space.

The original site plans for the proposed development were presented to DDOT at a Preliminary Design Review Meeting (PDRM) on June 14, 2012. Based on the review of site plans, DDOT identified potential safety and operational deficiencies that could arise from provision of the 12-foot driveway at the southern portion of the site along North Capitol Street, NE (Option 2). DDOT emphasized that reverse truck maneuvers (i.e., backing onto the driveway) would create unsafe conditions for pedestrians/bicyclists and vehicular traffic along North Capitol Street. North Capitol Street is classified as a Principal Arterial in DC Functional Classification Map, and carries an Average Annual Daily Traffic (AADT) of approximately 27,000 vehicles (2009 data). It is DDOT's opinion that backing onto a driveway at this location would unnecessarily create unsafe conditions for pedestrian, bicycle, and vehicular traffic.

DDOT recommended a safer alternative, which was the provision of a 30-ft marked commercial loading zone along the frontage of the proposed building on the eastern curbside of North Capitol Street, NE (Option 1) as a feasible solution to prevent the potential safety deficiencies. However, configuration of the curbside along North Capitol Street at this location requires integration of several elements such as maintaining the number of parking spaces, maintaining the location of the bus stop/shelter, and designing the loading zone to fit within the existing geometry and by following DDOT design standards.

DDOT and the Applicant met several times to discuss the geometric issues and it was agreed that addition of a seven or eleven feet concrete to the existing bus pad on the northern side of the bus zone could allow the Applicant to fit the proposed loading zone with minimal geometric and financial disruption. Before making a recommendation to the BZA, DDOT would like the

BZA Case No. 18412 (Application of Be the Change, on behalf of the District of Columbia)

September 28, 2012

opportunity to review the details of the concrete pad construction that involves the manhole (northern end of the bus zone) and the concrete pad that will be extending to the loading area (southern end of the bus zone).

Under Option 1, DDOT also discussed hours of operation for the loading zone with the Applicant. Currently, the area that may be designated for a loading zone has parking restrictions from Monday to Friday between the hours of 7:00 AM and 9:30 AM in the morning and 4:00 PM and 6:30 PM in the afternoon to allow for a vehicle travel lane adjacent to the curb. In order to not infringe on the operation of the street, DDOT will require loading operations occur outside of these hours. Under no circumstance will any loading be permitted in the peak period travel lanes. In addition, under Option 1, the access plan would allow certain utility/maintenance services to be performed from the on-street loading area. Further activity in the loading zone, including emergency building maintenance activity, will not be permitted in the peak period travel lanes.

The Applicant also provided a detailed loading management plan (LMP), where restrictions and conditions of use of the loading areas under both Options 1 and 2 are outlined in detail. DDOT requests that the Applicant develops a plan showing safe access and circulation of pedestrians and bicycles during such service periods.

Although DDOT opposes the on-site loading that would require a curb cut along North Capitol Street, NE, as presented under Option 2, DDOT is in general agreement with the Applicant's proposal to provide a 30-ft marked commercial loading zone along the eastern curbside of North Capitol Street under Option 1. However, it should be noted that a final approval for curb usage is granted during the public space permitting process.

Parking

DCMR §2101.1 requires that developments within a C-3-C district provide one parking space for four dwelling units, one parking space for every 1,800 SF of office space in excess of 2,000 SF, and one space for every 750 SF of retail space in excess of 3,000 SF. Based on the regulations, the following are the required number of parking spaces for the proposed development:

- 124 dwelling units – 31 parking spaces
- 5,367 SF office – 3 parking spaces
- 2,982 SF retail – no parking space is required

Based on the previous discussions regarding trip generation estimates, if the same assumptions are applied to parking demand calculations, the expected demand for parking by the residential portion of the development computes to 19 spaces.

BZA Case No. 18412 (Application of Be the Change, on behalf of the District of Columbia)

September 28, 2012

In order to address the potential parking demand for the office staff and/or retail employees, and to document the on-street parking inventory/occupancy in the local area, the Applicant conducted a comprehensive parking survey. Based on their report, there are eleven (11) public parking garages within two-block radius of the subject site, and the following is a summary of the on-street parking inventory/occupancy within one block to the north and south and two blocks to the east and west during the peak demand periods (indicated in parenthesis):

- Weekday (5:00 PM): 323 of the 428 spaces were occupied (75-percent occupancy)
- Sunday (11:30 AM): 321 of the 622 spaces were occupied (52-percent occupancy)

Based on the above, DDOT believes that the Applicant's proposal of not providing any on-site parking is reasonable, because of the documented surplus on-street parking in the vicinity, availability of off-street public parking, demographic make-up of the potential residents and their likelihood of automobile ownership, proximity of the proposed development to the transit facilities, availability/quality of the walking/bicycling facilities in the subject area, and provision of adequate number of bicycle parking spaces.

In addition, the Applicant proposes to have indoor parking spaces for a number of bicycles ranging between 27 and 48. Based on the requirements outlined in the Bicycle Commuting and Parking Expansion Act of 2007 and its subsequent amendments, the minimum number of required bicycle parking spaces for the residential portion of the proposed development is calculated as 41 (i.e., one space per dwelling unit). DDOT recommends that the Applicant provides a minimum of 41 indoor and secured bicycle parking spaces, following DDOT's design guidelines and requirements for the type of bicycle racks and the location of such facility.

Transportation Demand Management (TDM)

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

The Applicant described the available alternative transportation modes within the proposed development (i.e., transit facilities, bike-sharing, and car-sharing, indoor bicycle parking facilities), along with maps showing the location/proximity of these facilities to the subject site. However, a detailed TDM plan was not provided in the Applicant's submission.

BZA Case No. 18412 (Application of Be the Change, on behalf of the District of Columbia)

September 28, 2012

Since the Applicant is seeking relief from the required parking provisions, which is directly related to reduction in trips and demand for parking, DDOT recommends that the Applicant provides a TDM plan within 30 days of the BZA Hearing. Once submitted, DDOT would also like to have the opportunity to review and comment on the proposed TDM plan prior making a final recommendation to the BZA.

Safety

DDOT's policy is to require that applicant's conduct safety analyses to demonstrate that specific land developments will not create or exacerbate new or existing safety issues for all modes of travel. Although an operational analysis was not requested by DDOT, the Applicant was asked to provide safety analyses at the following intersections:

- North Capitol Street and K Street, NE
- North Capitol Street and L Street, NE

Crash data for the intersections of North Capitol Street and K Street, NE and North Capitol Street and L Street, NE was requested from DDOT on September 21, 2012; however, the Applicant did not receive the crash data from DDOT to date, because DDOT requires a minimum of two weeks lead time to provide such data to the consultants. A detailed safety analysis is expected to be submitted by the Applicant within a 30-day period after the BZA hearing on October 2, 2012.

DDOT evaluated the most recent crash data (2010-2011) associated with bicyclists and pedestrians at the two study area intersections. Based on the characteristics of the crashes that occurred at the intersections of North Capitol Street and K Street, NE (four crashes in 2010-2011), and North Capitol Street and L Street, NE (one crash in 2011), there were no detectable patterns to suggest that the crashes are a result of a systematic deficiency.

In addition, the Applicant provided an evaluation of the physical conditions of the traffic control devices in the study area, along with an assessment for their conformance to the Manual on Uniform Traffic Control Devices (MUTCD). Based on the evaluations, it was determined that the traffic control devices are functional, current, and they comply with the MUTCD standards.

Streetscape and Public Realm

In accordance with District policy and practice, any substantial new building development or renovation is expected to rehabilitate streetscape infrastructure between the curb and the

BZA Case No. 18412 (Application of Be the Change, on behalf of the District of Columbia)

September 28, 2012

property lines. This includes curb & gutter, street trees and landscaping, street lights, sidewalks, and other appropriate features within the public rights of way bordering the site.

The Applicant is expected to work closely with DDOT to ensure that the design of the public realm meets current standards and will substantially upgrade the appearance and functionality of the streetscape for public users needing to access the property or circulate around it. DDOT expects that all utility vaults be located in private space and that the Applicant will schedule a PDRM to review their streetscape proposal.

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