WELLS + ASSOCIATES

MEMORANDUM

TO: Jeff Kaufman, Edens
Rahul Sood, Edens

FROM: Jami Milanovich, P.E.

RE: Gateway Market
Preliminary Traffic Assessment

DATE: April 12, 2013

Edens (the Applicant) is submitting a Planned Unit Development (PUD) modification to develop the property located at 340 Florida Avenue in northeast Washington, D.C. The subject site is located on the northwest corner of the Florida Avenue/4th Street intersection in Square 3587. The current development program includes approximately 180 residential apartment units, 12,200 square feet (SF) of general retail space on the ground floor, and a 17,040 SF grocery store on the ground floor. Approximately 226 parking spaces (86 spaces for retail use and 140 spaces for residential use) located in three levels of below-grade parking also are proposed.

As part of this PUD request, the Applicant is requesting the use of an existing Florida Avenue curb-cut to provide full-access to the proposed development. Currently there are seven curb cuts providing access to the undeveloped site (three on Florida Avenue, three on 4th Street, and one on Morse Street). The Applicant intends to close all of these curb cuts with the exception of the westernmost Florida Avenue curb cut which is situated approximately half way between the signalized intersections with 3rd Street and 4th Street. An additional curb cut is proposed on Morse Street to provide access for loading operations. The full access curb cut on Florida Avenue has been the subject of a number of discussions with the District Department of Transportation (DDOT). It is expected that these discussions will continue as the project progresses.

The purpose of this memorandum is to summarize the traffic analyses and findings thus far regarding the proposed Florida Avenue full-access point as well as indicate the direction in which the project will be focused to progress towards a successful development.

Following the submission of this PUD application, Wells + Associates will be undertaking a full traffic impact study (TIS) for the Gateway Market development. The TIS will be scoped with DDOT to ensure agreement on the study area and methodologies. The TIS will identify any traffic impacts related to the proposed development and will make recommendations to offset these impacts.

1420 Spring Hill Road, Suite 600 • McLean, Virginia 22102 • 703 / 917-6620 • Fax: 703 / 917-0739

CURB CUT EVALUATION

In May of 2012, Wells + Associates submitted a curb cut evaluation memorandum to DDOT describing the necessity of Florida Avenue access for the viability of the proposed development and evaluating the feasibility of the proposed curb cut. Below is a brief summary of the results from this analysis. The memorandum in its entirety has been included as Attachment A.

Memorandum Summary

DDOT's Design and Engineering Manual (DEM) indicates that "A new curb cut or driveway shall not be permitted from any property with alley access or with potential access through an alley widened onto private property or with potential access to an expanded alley network on private property unless the applicant provides documentation that demonstrates that alley access is not possible due to topography or that alley access would be in conflict with existing land uses and not supported by guidelines in the Comprehensive Plan."

The proposed development is bordered by two other streets, Morse Street and 4th Street; however, access from either of these streets has been evaluated and has been deemed infeasible for the following reasons:

1. The elevation of the site along Morse Street is roughly 17 feet higher than the elevation of the site along Florida Avenue. Therefore, providing access from Morse Street would require a significant slope to access below grade levels.
2. In order for the retail to be viable, it is important to have convenient retail parking on the same level, adjacent to the retail entrance. As proposed, the majority of the retail would be located at the ground level along Florida Avenue to provide visibility and activate the street experience on Florida Avenue. In turn, the retail parking would be provided on the same level, on the Morse Street side, as shown on Sheet A03 of the plans. If access was forced to be provided via Morse Street (in addition to the loading access) or 4th Street, the available space for retail parking would be greatly reduced on this level.
3. Access to/from Florida Avenue is imperative to the success of the small, organic grocer that is proposed to occupy over half of the retail space. Since this grocer will be the first of its kind in the area and there currently is no established residential neighborhood to the north, a significant portion of the grocer's customer base will be vehicular traffic (both destination traffic and pass-by traffic). As such, convenient, readily recognizable access is crucial to the success and viability of the grocery store.

- Traffic counts and field observations were conducted at the Florida Avenue/4th Street intersection to determine the existing conditions near the proposed development. The traffic counts indicated that Florida Avenue, classified by DDOT as a principle arterial, currently has excess capacity (0.62 capacity ratio). Additionally, the pedestrian activity at the signalized crosswalks of the Florida Avenue/4th Street intersection would be considered low compared to other areas of the District. Field observations revealed that eastbound queues from the 4th Street intersection as well as westbound queues from the New York Avenue intersection occasionally extend beyond the location of the proposed driveway. However, these

occurrences are confined to a short period of time during the peak traffic hours. Additionally, the traffic signals at the 4th Street and 3rd Street intersections (on either side of the proposed development) create significant gaps in Florida Avenue traffic. These gaps would help facilitate left-turns into and out of the proposed Florida Avenue access point. Furthermore, the signal phasing at the Florida Avenue/4th Street intersection would facilitate left turns into the proposed development since westbound, Florida Avenue traffic is stopped at a red signal at 4th Street when eastbound, Florida Avenue traffic receives a green signal.

Although the final design for the proposed development access-point has not been completed, the Applicant will design in compliance with the guidelines outlined in the DDOT DEM for general driveways as well as commercial driveways.

CRASH DATA EVALUATION

In order to assess the safety implications of a full-access driveway on Florida Avenue in the study area, crash data for the existing driveways on Florida Avenue in the site vicinity were evaluated. Crash data from the most recent three years available (2009 through 2011) were obtained for Florida Avenue between the intersections of 2nd Street and 6th Street. From there, the crashes occurring at mid-block or at driveways were isolated (i.e. intersection related crashes removed from the analysis) to determine the number of crashes occurring on that stretch of Florida Avenue due to mid-block access points. The crash data indicated that a total of four crashes occurred at the eight, existing driveways over these three years. Two of the crashes occurred at the eastern-most Burger King driveway, just west of the subject site, and one crash occurred at each of the two middle driveways to the Hess gas station, located on the northwest corner of the Florida Avenue/5th Street intersection. The crash data and locations of the crashes are shown on Figure B-1.

Wells + Associates then conducted traffic counts at four full-access driveways on Florida Avenue within the crash specific limits, as follows:

- The easternmost (unsignalized) driveway to the Burger King and
- The three driveways to the Hess gas station. Note that for purposes of calculating the crash rate, the volumes at the three Hess driveways were summed. The second driveway is actually the summation of the three driveways accessing the Hess gas station.

The driveway intersection ADTs were then determined in order to calculate the crash rates experienced at these driveways. An intersection crash rate is reported in crashes per year per million entering vehicles (MEV) and takes into account the number of crashes, number of study years, and the intersection ADT.

Using the calculated driveway ADT's and DDOT's 2010 ADT of Florida Avenue, crash rates for the Burger King driveway and the Hess gas station driveway were calculated to be 0.08 and 0.06 crashes per year per MEV, respectively.

DDOT's *Traffic Safety Report Statistics 2007-2009* indicates the 100 intersections in the District with the highest crash rates ranged from 1.23 to 4.27 crashes per year per MEV. Therefore, the studied driveway intersections are well outside of what has been identified as a high crash rate intersection. The data and calculations involved with determining the crash rates has been included as Attachment B.

CONCLUSIONS

In conclusion, based on the evaluations conducted to-date by Wells + Associates, the proposed driveway is expected to function safely and efficiently for the following reasons:

- The pedestrian volumes on the north side of Florida Avenue are minimal and are low compared to other areas of the City. Even considering some increase in pedestrian volumes associated with potential redevelopment north of Florida Avenue, the number of pedestrians would continue to be low as M Street would be the route of choice for pedestrians walking to/from the Metro. As such, the number of pedestrian/vehicle conflicts is not expected to be significant at this location.
- Traffic signals on either side of the proposed access point create gaps in the traffic stream that would facilitate left turns into and out of the proposed development,
- The signal phasing at the Florida Avenue/4th Street intersection is split phased and therefore westbound traffic is stopped while eastbound traffic receives a green signal, and
- Full-access driveways operating within a couple blocks of the proposed development currently operate with very low crash rates.

We hope that this memorandum provides you with sufficient information regarding the proposed Gateway Market development. Please do not hesitate to contact me at (202) 556-1113 or jlmilanovich@mjwells.com with any questions you may have regarding this memorandum.

Gateway Market
340 Florida Avenue, NE
Washington, D.C.

Attachment A
Curb Cut Evaluation
Memorandum

WELLS + ASSOCIATES

WELLS + ASSOCIATES

MEMORANDUM

TO: Sam Zimbabwe, DDOT
Jeff Jennings, DDOT
Jamie Henson, DDOT

FROM: Jami Milanovich, P.E.

RE: Gateway Market

DATE: May 14, 2012

As a follow-up to our meeting on May 10th, the purpose of this memo is to summarize our preliminary evaluations regarding the curb cut for Eden's proposed development on Florida Avenue, NE. The subject site is located on the northwest quadrant of the Florida Avenue/4th Street intersection in northeast Washington, DC. The proposed development will consist of approximately 180 residential units, a 17,040 SF grocery store (including 3,350 SF of mezzanine space), 10,000 SF of additional retail uses, and 2,200 SF of community space. Consistent with the Florida Avenue Market Study (DC Office of Planning, June 2009), no new curb cuts are proposed on Florida Avenue. There currently are three curb cuts for the site on Florida Avenue and three curb cuts for the site on 4th Street. The Developer would eliminate two of the three curb cuts on Florida Avenue and all three of the curb cuts on 4th Street. The driveway for the proposed development would be located in approximately the same location as the existing, western-most curb cut on Florida Avenue and would provide full-access movements into and out of the site.

DDOT Policy

According to the District Department of Transportation's (DDOT's) Design and Engineering Manual, "A new curb cut or driveway shall not be permitted from any property with alley access or with potential access through an alley widened onto private property or with potential access to an expanded alley network on private property unless the applicant provides documentation that demonstrates that alley access is not possible due to topography or that alley access would be in conflict with existing land uses and not supported by guidelines in the Comprehensive Plan." The site does not have a public alley adjacent to it; however, it is bordered by two other streets, namely 4th Street and Morse Street. The project team has evaluated the potential of providing access via 4th Street or Morse Street and determined that neither of those options are feasible for the following reasons:

1. The elevation of the site along Morse Street is roughly 17 feet higher than the elevation of the site along Florida Avenue. Therefore, providing access from Morse Street would require a significant slope to access below grade levels.

2. In order for the retail to be viable, it is important to have convenient retail parking on the same level, adjacent to the retail entrance. As proposed, the majority of the retail would be located at the ground level along Florida Avenue to provide visibility and activate the street experience on Florida Avenue. In turn, the retail parking would be provided on the same level, on the Morse Street side, as shown on Sheet A03 of the plans. If access was forced to be provided via Morse Street (in addition to the loading access) or 4th Street, the available space for retail parking would be greatly reduced on this level.
3. Access to/from Florida Avenue is imperative to the success of the small, organic grocer that is proposed to occupy over half of the retail space. Since this grocer will be the first of its kind in the area and there currently is no established residential neighborhood to the north, a significant portion of the grocer's customer base will be vehicular traffic (both destination traffic and pass-by traffic). As such, convenient, readily recognizable access is crucial to the success and viability of the grocery store.

Florida Avenue Characteristics

DDOT designates Florida Avenue as a principal arterial in the vicinity of the site. Florida Avenue is a two-way, undivided, six-lane roadway in the vicinity of the site. Traffic signals are present at its intersection with 4th Street, east of the site, and at its intersection with 3rd Street, west of the site.

Vehicular Volume

Turning movement counts (including vehicle, pedestrian, and bicycle counts) were conducted at the Florida Avenue/4th Street intersection from 7:00 AM to 10:00 AM and from 4:00 PM to 7:00 PM on Tuesday, March 6, 2012. The peak hours were determined to occur from 7:45 AM to 8:45 AM and from 4:30 PM to 5:30 PM.

Today, Florida Avenue, adjacent to the site, has a volume of 502 vehicles per hour during the AM peak hour and 934 vehicles per hour during the PM peak hour. On a daily basis, Florida Avenue carries 28,000 vehicles per day, based on 2009 data obtained from DDOT.

According to DDOT's Design and Engineering Manual, the capacity of a six-lane major (or principal) arterial is 55,000 vehicles per day (or 7,500 vehicles per day per lane). Therefore, Florida Avenue currently has excess capacity. In fact, based on the daily volume on Florida Avenue, the volume-to-capacity ratio is 0.62.

Pedestrian Volume

According to the turning movement counts, the pedestrian volumes in the site vicinity would be considered low compared to other areas of the District. At the Florida Avenue/4th Street intersection, 16 pedestrians cross Florida Avenue on the west leg and 41 pedestrians cross the east leg of the intersection during the AM peak hour. During the PM peak hour, 17 pedestrians cross Florida Avenue on the west leg and 12 pedestrians cross the east leg of the intersection. During the AM peak hour, 21 pedestrians cross 4th Street on the north leg of its intersection with Florida Avenue and 79 pedestrians cross the south leg of the intersection. During the PM peak hour, 12 pedestrians cross 4th Street on the north leg of the intersection and 58 pedestrians cross 4th Street on the south leg of the intersection.

Driveway Volumes

The total number of trips generated by the proposed redevelopment would be comprised of vehicular trips to/from the site and non-auto trips to/from the site. The total number of trips anticipated to be generated by the proposed development was estimated based on ITE's Trip Generation.

The trip generation for the proposed redevelopment is summarized in Table 1 and, as shown, the proposed development would generate 298 AM peak hour trips and 461 PM peak hour based on standard ITE rates/equations.

The data included in Trip Generation are based largely on suburban, stand-alone sites. By its nature and mix of uses, the proposed development would experience a naturally occurring synergy. That is, a portion of the site-generated trips would be captured internally within the mixed-retail/residential development. For example, the residents of the site may shop at the retail uses instead of shopping at retail uses off site. As a result of this naturally occurring synergy, the volume of external trips generated by the site would be reduced.

In order to estimate the number of trips that would occur internally within the site, the internal capture rates outlined in the ITE Trip Generation Handbook were used. Since internal capture rates are not provided for the AM peak hour, the AM internal capture rates were assumed to be half of the PM rates. Based on this methodology, 32 AM peak hour trips and 90 PM peak hour trips are projected to occur internally.

A portion of the trips generated by the proposed development would be made via non-auto modes of transportation. The percentage of site-generated trips that would use public transportation is dependent on the proximity of the site to transit stops, the walkability of the surrounding area, and the degree to which the use of public transit is encouraged, such as by implementation of a transportation demand management (TDM) program.

Based on the site's proximity to the Florida Avenue/Gallaudet University Metro Station, the non-auto mode split for the residential component was estimated to be 50 percent. The non-auto mode split for the retail component was estimated to be 30 percent. Therefore, 95 AM peak hour trips and 128 PM peak hour trips are projected to be made by non-auto modes of transportation.

Taking into account the internally captured trips and the non-auto mode share, the proposed development would generate an estimated 171 AM peak hour external vehicular trips and 243 PM peak hour external vehicular trips.

Table 1
Trip Generation Summary

Land Use	ITE Code	Size	Units	AM Peak Hour IN	AM Peak Hour OUT	AM Peak Hour TOTAL	PM Peak Hour IN	PM Peak Hour OUT	PM Peak Hour TOTAL	Weekday ADT
PROPOSED USES:										
Apartment	220	180	DU							
Total Trips				18	74	92	76	41	117	1,214
Internal Capture				4	6	10	20	15	35	307
External Trips (Total - Internal)				14	68	82	56	26	82	907
TDM Reduction		50%		7	34	41	28	13	41	454
Vehicle Trips (External - TDM Reduction)				7	34	41	28	13	41	453
Pass-by Reduction		0%		-	-	-	-	-	-	-
New External Vehicle Trips (External - Pass-by)				**7**	**34**	**41**	**28**	**13**	**41**	**453**
Retail	814	12,200	SF							
Total Trips[2]				70	75	145	22	29	51	541
Internal Capture				6	7	13	6	9	15	211
External Trips (Total - Internal)				64	68	132	16	20	36	330
TDM Reduction		30%		19	20	39	5	6	11	99
Vehicle Trips (External - TDM Reduction)				45	48	93	11	14	25	231
Pass-by Reduction		30%		14	14	28	3	4	8	69
New External Vehicle Trips (External - Pass-by)				**32**	**34**	**65**	**8**	**10**	**18**	**162**
Supermarket	850	17,040	SF							
Total Trips				37	24	61	149	144	293	2,532
Internal Capture				6	3	9	19	21	40	410
External Trips (Total - Internal)				31	21	52	130	123	253	2,122
TDM Reduction		30%		9	6	15	39	37	76	637
Vehicle Trips (External - TDM Reduction)				22	15	37	91	86	177	1,485
Pass-by Reduction		30%		7	5	11	27	26	53	446
New External Vehicle Trips (External - Pass-by)				**15**	**11**	**26**	**64**	**60**	**124**	**1,040**
Total Development										
Total Trips				125	173	298	247	214	461	4,287
Internal Capture				16	16	32	45	45	90	928
External Trips (Total - Internal)				109	157	266	202	169	371	3,359
TDM Reduction				35	60	95	72	56	128	1,190
Vehicle Trips (External - TDM Reduction)				74	97	171	130	113	243	2,169
Pass-by Reduction				20	19	39	31	30	61	515
New External Vehicle Trips (External - Pass-by)				**54**	**78**	**132**	**99**	**83**	**182**	**1,654**

Notes:

[1] Trips generated using Institute of Transportation Engineers (ITE) Trip Generation, Eighth Edition.

[2] To determine the number of trips during the AM Peak Hour of Adjacent Street, the PM Peak Hour of the Adjacent Street was used & then adjusted based on the ration of the AM Peak Hour of the Generator to the PM Peak Hour of the Generator

Traffic Operations

Based on field observations during the AM and PM peak periods, eastbound queues on Florida Avenue, stemming the traffic signal at 4th Street, do occasionally extend past the location of the proposed driveway; however, these occurrences appear to be confined to a short period of time. Westbound queues from New York Avenue extend through 3rd Street and also occasionally extend beyond the location of the proposed driveway. Again, these occurrences are confined to a short period of time. As observed in the field, the traffic signals located at 4th Street and 3rd Street (on either side of the proposed development) create significant gaps in the traffic stream on Florida Avenue. These gaps would help facilitate left turns into and out of the proposed site after the queues clear.

Field observations also revealed that the existing signal phasing at the Florida Avenue/4th Street intersection actually would help facilitate left turns from Florida Avenue into the proposed site. The signal at the Florida Avenue/4th Street intersection operates with split phasing on Florida Avenue. As such, westbound Florida Avenue traffic is stopped when eastbound Florida Avenue has a green signal. As a result, motorists wanting to turn left into the subject site will either arrive when eastbound Florida Avenue is already stopped at a red signal at 4th Street (thus not unduly delaying Florida Avenue traffic), or they would arrive when eastbound Florida Avenue has a green signal. Since westbound Florida Avenue is stopped at this time, vehicles waiting to turn into the site would not have opposing traffic to deal with (with the exception of the occasional right turn on red from 4th Street).

Design Criteria

The proposed curb cut on Florida Avenue would need to be compliant with the guidelines outlined in section 31.2.3.1 of DDOT's Design and Engineering Manual. The manual has the following requirements for general driveways:

- *Driveway entrances should be constructed perpendicular to the curb line of the street through the entire public space area to the property line.*

  Based on our review of the proposed conceptual plans, the driveway is proposed to be perpendicular to Florida Avenue.

- *All driveways must be flush with the grade of the sidewalk when crossing the entire sidewalk area. The sidewalk area may start a minimum of three feet from the roadway curb line. No step-down curbs or ramps are allowed.*

  The driveway will be constructed such that it is flush with the grade of the sidewalk. As such, no step-down curbs or ramps will be required.

- *The grade of any driveway within the public space shall not exceed 12 percent.*

  As currently proposed, the grade of the driveway will be a maximum of five percent in public space and approximately 10 percent on-site. The grade within public space will not exceed 12 percent.

- *A curb cut and/or respective portion of the driveway, including the flare or radius at the curb cut, shall be located within the public space abutting the same lot with the building or structure it is intended to serve.*

  The entire driveway, including the radius, will be located entirely within the public space in front of the subject property and will not encroach into the public space in front of the adjacent property to the west.

- *Sight-distance when exiting a driveway or parking garage requires a minimum 15 feet distance from the edge line of the driveway on a 45-degree angle from the property line or garage exit, as applicable, to the back edge line of the sidewalk. Within this area, no over-height fencing and/or shrubbery over 4 feet tall are allowed, excluding city trees.*

  As plans are advanced, the driveway and streetscape will be designed to ensure that adequate sight distance is provided.

- *No driveway entrance or exit on any roadway shall be closer than 60 feet to a roadway intersection as measured from the driveway edge line to the intersection of the roadway curb lines extended.*

  As shown on the conceptual drawings, the proposed driveway would be located approximately 200 feet from the nearest intersections in either direction (as measured from edge line of driveway to edge line of nearest intersecting street).

- *All driveway entrances shall be constructed of poured concrete in accordance with the DDOT Standard Specifications for Highways and Structures.*

  Noted.

- *Driveway paving materials shall continue the paving color and texture of the adjoining sidewalk across the driveway as an indication to drivers that they are crossing a pedestrian pathway.*

  The paving color and texture of the adjoining sidewalk will be continued across the driveway to indicate that drivers are crossing a pedestrian pathway.

- *A driveway or parking pad shall be constructed in such a manner so that the parking of a motor vehicle thereon shall not cause any portion of the vehicle to intrude in part or whole over any portion of the public space.*

  The proposed driveway would provide access to the on-site parking. The proposed parking would occur on private property and would not occur in the public space.

- *When changes occur at a property due to redevelopment and when the proposed principal use for the property will be different from that prior to the redevelopment, all existing driveways shall be restored with new curb and gutter, tree space and sidewalk to current DDOT*

standards. Any existing attached curb cut proposed for the new use shall be applied for as a new curb cut and driveway at the DDOT public space permit office.

Two of the three existing driveways on Florida Avenue and the three existing driveways on 4th Street will be restored with new curb and gutter, tree space, and sidewalk according to DDOT standards. The third (western-most) driveway on Florida Avenue will be moved several feet to the west. A new public space permit for the proposed driveway would be sought from DDOT.

The manual also has the following requirements for commercial driveways:

- *Driveway entrances shall be constructed with 6 foot radius curb returns at the street in accordance with the Type A driveway entrance specified in the DDOT Standard Specifications for Highways and Structures.*

  Noted.

- *Driveways located off a street shall be a minimum of 12 feet wide from edge line to edge line for one-way circulation of motor vehicles, but shall not exceed 14 feet wide.*

  Not applicable. The driveway, as proposed, would provide for two-way circulation.

- *Driveways located off a street shall be a minimum of 20 feet wide from edge line to edge line for two-way circulation of motor vehicles, but shall not exceed 24 feet for two-way circulation when unusually heavy vehicular traffic is anticipated.*

  The driveway currently is proposed to be 25 feet in width. The driveway width will be reduced slightly to meet the requirements set forth above.

- *Driveways more than 24 feet wide shall have a minimum 6 foot wide pedestrian safety island provided between the two resulting driveways. This pedestrian island shall be paved as an 8 inch thick sidewalk that matches the material used for the existing and/or proposed adjacent sidewalk. The pedestrian island shall have minimum 3 foot radius curb returns at the street. From the back edge line of the sidewalk to the property line, this 6 foot wide island may be landscaped and shall be designed so as to prohibit vehicle crossing within the public space area.*

  The driveway will be modified to be a maximum of 24 feet in width.

- *The edge lines of any driveway shall be located a minimum of 32 feet from the edge line of any adjacent driveway or alley, so as to provide room for at least 1 curb tree.*

  The proposed location of the driveway would not meet the 32 foot separation from the existing Burger King driveway to the west; however, we anticipate that the same number of street trees would be provided along the Florida Avenue frontage. All of the trees would be located on the east side of the driveway.

- *The edge line of any driveway shall not be located closer than 16 feet to the centerline of an existing healthy curb tree.*

  There currently are no existing street trees located within 16 feet of the proposed driveway.

- *Any entry gate, card reader, or security check point shall be located on private property a minimum of 20 feet inside the back edge of the public sidewalk to ensure that a vehicle awaiting entry will not block in part or whole, any portion of the sidewalk.*

  Although the access control for the garage has not been designed yet, any gate would be located a minimum of 20 feet inside the back edge of the public sidewalk.

- *Driveways for loading docks with entrances on the roadway shall be a minimum of 12 feet wide from edge line to edge line, but shall not exceed 24 feet wide, regardless of the number of loading bays.*

  Access to the loading docks is proposed on Morse Street. As plans are developed further, we will evaluate the required width of the curb cut to determine the appropriate width based on accessibility for the size of trucks anticipated to make deliveries to the site. It is imperative to maintain accessibility to ensure that trucks can use the loading docks in lieu of loading/unloading from the street.

- *All motor vehicles accessing a loading dock driveway from a roadway shall both enter and exit a driveway entrance in a forward direction so as to avoid vehicle backing in the public space.*

  As proposed, trucks would back into the loading dock from Morse Street and then exit front first onto Morse Street. Given the small size of the site and constraints associated with the significant grade change on site, it is not feasible to provide both front-first access and front-first egress. The curb cut for the loading dock is proposed on Morse Street, which has the lowest functional classification of all of the streets bordering the site (it is classified as a local street). Additionally, Morse Street deadends west of the site; therefore, no through traffic is present on Morse Street.

- *All turning and backing movements associated with accessing a loading dock from a driveway entrance on a street shall take place on private property.*

  See comment above.

- *All parking and standing associated with the use of a loading dock shall be on private property and at no time shall any portion of a standing or parked motor vehicle intrude in part or whole over any portion of the public space.*

  Trucks parking or standing while using the loading dock will be located entirely on private property and will not protrude onto public space.

- *Driveways within the Downtown Streetscape area and other areas designated by Chapter 11 DCMR, Chapter 11, Hotel-Residential Incentive Overlay District shall be constructed at a right angle (90 degrees) to the curb line of the roadway through the entire public space area to the property line; and shall have a 6 foot radius curb returns at the roadway. A driveway edge line must be located a minimum of 8 feet from any interior property line.*

  Not applicable.

- *The use of shared curb cuts and driveways for more than one property or building to access parking facilities and loading docks is encouraged.*

  Not applicable.

CONCLUSIONS

As discussed at our May 10th meeting, today's economic environment necessitates modifications to the previously approved PUD. In order for the residential development to be successful, the viability of the proposed retail component is critical. Efficient access to the site is a key element in the viability of the retail uses. This, coupled with the site constraints (e.g. the small size of the site and the significant drop in elevation), makes access from Morse Street and 4th Street infeasible.

As demonstrated herein, we believe that several factors would help facilitate the proposed, full-access curb cut on Florida Avenue. Specifically:

- The pedestrian volumes on the north side of Florida Avenue are minimal and are low compared to other areas of the City. Even considering some increase in pedestrian volumes associated with potential redevelopment north of Florida Avenue, the number of pedestrians would continue to be low as M Street would be the route of choice for pedestrians walking to/from the Metro. As such, the number of pedestrian/vehicle conflicts is not expected to be significant at this location.
- Traffic signals at 4th Street and 3rd Street create gaps in the traffic stream on Florida Avenue, which would facilitate left turns into and out of the proposed development, and
- The signal phasing at the Florida Avenue/4th Street intersection would facilitate left turns into the proposed development since westbound, Florida Avenue traffic is stopped at a red signal at 4th Street when eastbound, Florida Avenue traffic receives a green signal.

We hope that this memorandum provides you with sufficient information regarding the proposed curb cut. We look forward to receiving your feedback regarding this issue. Please do not hesitate to contact me at (724) 933-9010 or jlmilanovich@mjwells.com with any questions you may have regarding this memorandum. I look forward to your favorable review of this memo and support of the curb cut.

Gateway Market
340 Florida Avenue, NE
Washington, D.C.

ATTACHMENT B
CRASH DATA EVALUATION INFORMATION

WELLS + ASSOCIATES

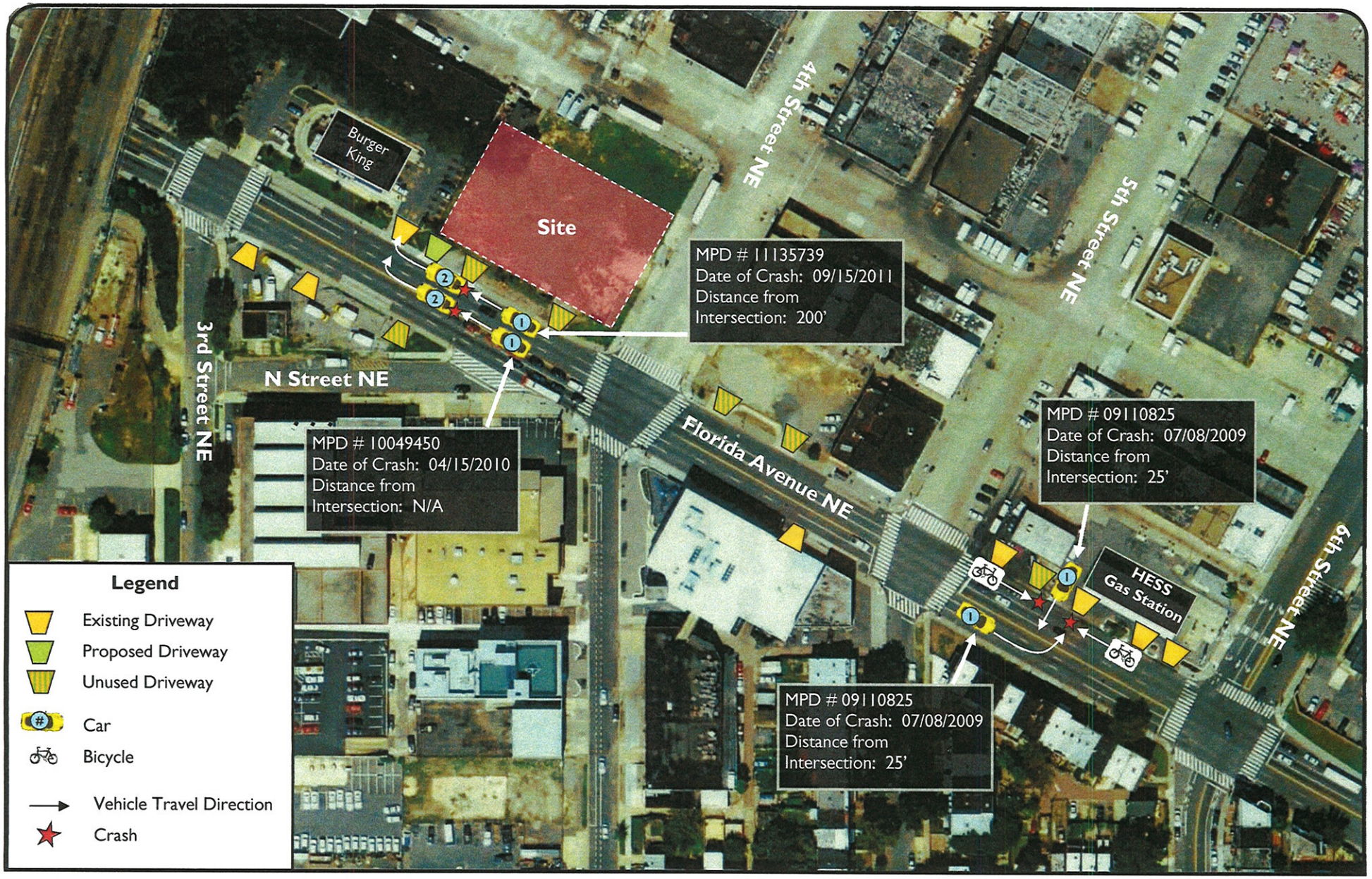

Figure B-1
Crash Data Diagram

North

Gateway Market
Washington, DC

WELLS + ASSOCIATES

Burger King Driveway	
Florida Avenue Volume Based on Balanced Counts	1,257
Florida Avenue ADT Based on Mechanical Counts	23,408
K Factor (Manual/Mechanical)	**0.05370**

Hess Gas Station Driveway	
Florida Avenue Volume Based on Balanced Counts	1,563
K Factor (Manual/Mechanical)	0.05370
Florida Avenue ADT	**29,106**

ITE LUC 934: Fast-Food w/Drive Through (Ind. Var. = SF)	
ITE Weekday Rate:	**496.12**
ITE PM (Adj) Rate:	**32.65**
K Factor (PM (Adj)/Weekday):	**0.0658**
Ratio Based ADT (vpd):	**441**
ITE Based ADT (vpd)*:	**555**

*ITE ADT uses the hourly data provided in the ITE Trip Generation Manual, 9th Edition

ITE LUC 944: Gas Station (Ind. Var. = Fuel Positions)	
ITE Weekday Rate:	**168.56**
ITE PM (Adj) Rate:	**13.87**
K Factor (PM (Adj)/Weekday):	**0.0823**
Ratio Based ADT (vpd):	**632**
ITE Based ADT (vpd):	**632**

*ITE ADT uses the ratio between the weekday and PM (adj) since hourly data is not provided

Burger King ADT Based on ITE Hourly Data							
Peak Time	Vol. In	Vol. Out	% 24HR In	%24 HR Out	24 HR In	24HR Out	ADT
4:30 - 5:30	21	8	5.2%	5.3%	404	151	555

Crash Rate using ITE generated driveway ADT's				
Intersection	Number of Crashes (n)	Period of Study (T)	ADT (V)	**Crash Rate (MEV)**
Burger King Driveway	2	3	23,963	**0.08**
Gas Station Driveway	2	3	29,738	**0.06**

Crash Rate using Weekday/PM Ratio generated driveway ADT's				
Intersection	Number of Crashes (n)	Period of Study (T)	ADT (V)	**Crash Rate (MEV)**
Burger King Driveway	2	3	23,849	**0.08**
Gas Station Driveway	2	3	29,738	**0.06**

$$Crash\ Rate = \frac{n \times 1{,}000{,}000}{365 \times T \times V}$$

Time	Burger King Entrance		Sidewalk				Ped Crossings	
	Cars In	Cars Out	Peds EB	Peds WB	Bikes EB	Bikes WB	Peds NB	Peds SB
4:00 PM	9	4	1	6	0	1	1	2
4:15 PM	3	2	0	5	0	0	0	0
4:30 PM	8	4	3	4	1	1	0	0
4:45 PM	6	2	5	1	1	0	0	0
5:00 PM	4	1	5	3	0	0	1	0
5:15 PM	3	1	3	5	0	0	0	2
5:30 PM	8	4	3	5	0	1	1	0
5:45 PM	5	1	5	2	1	1	0	0

*Peak hour of the study intersections was utilized

Time	Gas Station Entrance		Sidewalk				Ped Crossings	
	Cars In	Cars Out	Peds EB	Peds WB	Bikes EB	Bikes WB	Peds NB	Peds SB
4:00 PM	7	5	4	2	0	1	1	0
4:15 PM	5	3	6	1	0	3	1	0
4:30 PM	4	8	5	3	1	0	0	0
4:45 PM	4	2	0	1	1	3	0	0
5:00 PM	12	11	3	0	0	0	0	0
5:15 PM	7	4	1	0	1	0	0	0
5:30 PM	8	10	1	5	0	3	0	0
5:45 PM	16	5	2	6	2	0	0	1

*Peak hour of the study intersections was utilized