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August 10, 2020

**VIA EMAIL**

Jennifer Raitt, Director  
Department of Planning and Community  
Development  
Town of Arlington  
730 Massachusetts Avenue  
Arlington, MA 02476

Re: 1207-1211 Massachusetts Avenue, Arlington, MA (collectively  
referred to as the "Property") / Docket No. 3602

Dear Director Raitt:

Pursuant to the request of the Arlington Redevelopment Board (hereinafter referred to as the "Board"), I am providing the Board with the additional information requested:

- Floor Area Ratio Calculation for the Building, Bonus and Open Space Calculations and Issues Regarding Public Access Space<sup>1</sup>

Article 5, Section 5.3.6 references the exceptions to the maximum floor area ratio ("FAR") regulations or the "bonus" FAR, so-called. The determination that the proposed project is not a dwelling is relevant to the determination of the bonus FAR provisions contained in Article 5, Section 5.3.6. Article 5, Section 5.3.6C sets out the additional gross floor area or bonus FAR permitted.

The square footage of both lots is 14,030. The GFA would be 21,045 square feet (14,030 x 1.5 – see Article 5, Section 5.5.2. The bonus FAR would be 2,104 square feet (21,045 x .10). See Article 5, Section 5.3.6(D)(5).

Section 5.3.6A specifically authorizes the Board to grant a special permit subject to the standards contained in Section 3.3 or 3.4, as applicable, to allow a maximum gross floor area higher than is permitted in the district subject to the requirements set out at 5.3.6A(1)-(3).

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<sup>1</sup> The building inspector has determined that: (a) the floor area of the cellar of the proposed hotel and restaurant is excluded from the calculation of Gross Floor Area as more than one half of its height, measured from finished floor to finished ceiling is below the average finished grade of the ground adjoining the building. Article 2 and Article 5, Section 5.3.22(A)(6); and (b) bay windows that are more than two feet off the floor are likewise excluded from the calculation of Gross Floor Area.

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Accordingly, the total GFA permitted would be 23,149 square feet (21,045 +2,104). The petitioner's proposed GFA is 22,845 square feet.

The petitioner suggests that this proposal satisfies the requirements of Article 5, Section 5.3.6A(1) and (2).

The petitioner is proposing "public access" space, which will provide for a public art and presentation area located in the front right area of the Property. As such, the Property, two lots which are being aggregated with the B-4 use the larger use, is entitled to a 10% increase in FAR. The revised plans which are attached indicate that the petitioner is granting the Town 675 square feet of bonus FAR space, which is substantially more than is required by the Bylaw.

After considering the functionality of a 210 square foot area, the applicant felt this amount of space would not meet his vision for public use and has offered to provide 675 square feet (while still only getting a benefit based on the 210 square foot requirement). He has proposed the area run concurrent with the 40 year mixed-use restriction as well as a reasonable scheduling plan; as there are two business operations utilizing the site.

- Applicants Vision

From the outset of the RFP process, the applicant has been clear that his belief and desire is to leverage this development in two major ways; first, that this project would be a major catalyst in furthering the multi-decade attempt to tap into the tourism trade in Lexington; secondly, it would create much needed pedestrian traffic in the Heights, helping to stimulate economic activity.

A significant component of this is creating an open and welcoming venue for historical, cultural and artistic presentations (a great chance for exposing visitors and residents to the historical treasures in town). This generous proposal of 675 square feet is an attempt to provide truly a functional area, which will provide an outdoor, upscale, relaxing area to enjoy public events. He believes the proposal achieves this goal.

An open space which has no other amenities or onsite logistical support does not achieve the applicant's vision. Instead, this proposal creates a real opportunity to provide a true "public private" success. The goal is to work with the hotel operator to store, setup and support the technological and utilities needed to make the site a truly meaningful venue. In fact, the applicant believes that working with the hotel and restaurant could likely result in the potential for some in kind donations of menu samples and refreshments during these events. The applicant's vision is something "outside the box", a first for Arlington and sets the bar for similar future projects. No one should be interested in a small benign area with no usefulness and something destined to be underutilized.

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However, whether the applicant proceeds with the project based on the increased GFA is directly connected to the need to have restrictions placed on the use of the bonus area, including the number of days per week and the amount of time it is utilized. The applicant cannot and will not agree to unfettered use of the space for seven days a week from dawn until dusk. This is neither in the interest of the hotel and restaurant operators nor neighborhood.

- **Issues to be Considered**

The Bylaw (Section 5.3.6, D(5)) refers to “deeded or easement” space. As noted, the applicant is willing to have the space restricted for the forty year mixed-use term. However, when you read further, the bylaw notes that this public area shall not be included in open space or in calculating the GFA. The result of this language is that when calculating the maximum GFA, the applicant loses 315 square feet of GFA.

If the applicant does not utilize the bonus GFA section of the Bylaw, he suggests that the following will occur in reducing the size of the development.

1. 4 to 6 hotel rooms would be removed from the fourth floor with a conservative estimate of \$1,500,000 to \$2,000,000 in lost hotel taxes to the Town over 40 years (this number is based on current room and tax rates, which will likely increase).
2. A substantial reduction in property taxes. Due to the reduction in the room count, the applicant estimates that the property tax lost to be between approximately \$326,000 to \$490,000 over 40 years (this number is based on current assessments and tax rates). Please keep in mind that if the Town does go to a split tax rate in the future, this entire project would be taxed at the higher commercial rate.
3. The opportunity to set a new benchmark for creating open public space throughout our business districts will likely be lost.

- **Corner Lots, Setbacks and Upper Story Stepback**

Article 5, Section 5.3.8(A) provides that a “corner lot shall have minimum street yard depths which shall be the same as the required front yard depths for the adjoining lot”. The lot adjoining the property at issue on Clarke Street located in an R-2 zone has a front yard depth of 7.9 feet.

The Bylaw requires no front or side yard setback for a Mixed-Use Development, Article 5, Section 5.5.2(B).

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The approved correct version of Article 5, Section 5.3.17 provides for an additional 7.5 foot stepback beginning at the fourth story "along all building elevations with street frontage . . ."<sup>2</sup> This is no longer an issue as the fourth floor has a 7.5 stepback from Massachusetts Avenue and Clark Street sides.

The Board, as confirmed by Town Counsel in his memorandum dated May 13, 2020, has the authority to grant an adjustment to the required setbacks as set forth elsewhere in the Bylaw to account for specific conditions unique to the proposal. Thus, if it is the Board's position that Section 5.3.8(A) applies, the Board has the authority to adjust the setback. Indeed, the Board has done so on a number of projects most recently for 882-892 Massachusetts Avenue.

Further, I have discussed Section 5.3.8(A) with the building department. The interpretation of the language "which shall be the same as the required front yard depths for the adjoining lot" references the present required front yard depth of the adjoining lot, which is 7.9 feet. If the homeowner were required to rebuild, the required front yard depth would be the existing front yard.

The proposed project at the Massachusetts Avenue/Clark Street corner is 10.7 feet from the lot line and at the rear of the building is 5.7 feet from the lot line. If the required front lot line of the adjoining lot is 7.9 feet, the relief requested by the applicant relates to essentially the rear portion of the Clark Street lot line and is frankly de minimus particularly given the relief granted to 882-892 Massachusetts Avenue. Moreover, even if the required front yard depth were 20 feet, this Board is clearly compelled by the facts to grant the relief requested.

The applicant can make and has made as set forth below a clear and compelling case for the Board to find that there are conditions unique to this proposal enabling the Board to grant the setback relief requested.

The applicant respectfully suggests that the facts and circumstances unique to the proposed project that compel the Board to exercise its discretion to adjust the required setback on the Clark Street side are as follows:

1. The proposed development is truly a mixed-use project as contemplated by the Bylaw.
2. The conversion of a vehicular-oriented business district lot from a vehicular-oriented use to an aesthetically pleasing mixed-use development is prioritized in the Bylaw. The Bylaw, Article 5, Section 5.5.1(E), in fact, encourages the

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<sup>2</sup> Town Counsel's Memorandum dated May 13, 2020, addresses the correct version of Section 5.3.17 to be applied by the Board.

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conversion of B-4 uses “to other retail, service, office, or residential use, particularly as part of a mixed-use development.” (emphasis supplied.)

3. The applicant is incorporating into the project a significantly undersized and generally nonconforming lot owned by the Town into a viable development. The lot on which the Disabled American Veterans building is located, 1207 Massachusetts Avenue, is only 4,645 square feet. The only use that could be made of this lot under the Bylaw is for a mixed- use project. The size of the lot and the constraints of the Bylaw virtually make this lot impractical and undesirable for development.
4. The price and conditions imposed by the Town in its request for proposal resulted in only one bid for 1207 Massachusetts Avenue, which was the proposal made by the applicant. Absent the development of the Town-owned lot as proposed by the applicant, the Town will likely be unable to procure an interested party that would be prepared to pay the price demanded by the Town and incur the costs to develop a relatively small building.
5. This proposed projects sits at the “Foot of the Rocks”, which is the site of the former home of Benjamin Locke, who served as a captain for Menotomy’s Minute Men during the Lexington Alarm. After Paul Revere and William Dawes rode past Locke’s house at the Foot of the Rocks, present day Appleton Street, Locke roused the troops in the early morning of April 19, 1775, and headed to Lexington. This area is the start of the Arlington Heights neighborhood and business district and is the gateway to the Heights. Arlington became a charter member of the Battle Road Scenic By-Way Committee in 2013, which promotes and enhances tourism along the length of the Battle Road area. Master Plan, p. 100. This proposed hotel is at the “Foot of the Rocks”, one of the twenty-one (21) places in Arlington along the scenic byway with a significant potential to attract tourism and overnight guests.

There are no hotels in this area of Town. This is an opportunity for the Town to capture a significant portion of the tourism business from the three large hotels in Lexington, the Quality Inn, Aloft and Element. Consideration should be given to the small businesses, including the small restaurants in Arlington that are clearly suffering from the effects of the pandemic that would benefit from the revenue from out-of-town guests staying at the hotel and frequenting their businesses.

6. As noted in the Master Plan commissioned by this Board, Arlington’s various theatres attract out-of-town visitors who spend significant funds in nearby shops, restaurants and service businesses. Master Plan, p. 99. With attractive and

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available lodging, out-of-town visitors traveling a distance could extend their stays and provide additional business for the local businesses.

7. This project will provide residents and visitors with a sit-down restaurant, lodging and additional customers for the businesses located in the Heights. This is significant given the likely business closures that have resulted and may result due to the pandemic. In the Master Plan adopted by the Board on February 4, 2015, a key finding of the committee was and is that Massachusetts Avenue has the capacity for growth. One of the Master Plan goals for economic development is to "maximize the buildout potential of commercial and industrial properties." Master Plan, p. 95. One of the long-term goals of the Town in Arlington Heights is to "redevelop key commercial sites with high-value retail and mixed-use structures." Master Plan, p. 100. This proposed project comports with the findings and goals of the Master Plan.
8. The hotel is indeed unique in that it generates a hotel tax of 5% on the nightly room rate paid directly to the Town. Moreover, the proposed project will be an overall addition to the tax base without any offset for the use of Town services. The applicant suggests that this project encourages "an orderly expansion of the tax base by utilization, development, and redevelopment of land." Article 1, Section 1.2.

With respect to site lines and visibility, the revised plans show the flattening of the entrance and visibility to Clark Street such that pedestrians will have safe access.

Accordingly, the applicant suggests that the setback and the extensive buffer and plantings proposed provide a more than adequate setback and buffer for this project. This Board most recently in Docket No. 3625 for the project at 882-892 Massachusetts Avenue exercised its discretion under the Bylaw and approved the grant of a special permit for a mixed-used development with a side yard setback less than that required by Section 5.3.8(A) along Lockeland Avenue without any articulation of "conditions unique" to the proposed project. The proposed setback for this project is de minimus and there are substantial and compelling conditions unique to this project to warrant relief.

The applicant cannot provide for a greater setback on the Clark Street side of the property and proceed with this project. Accordingly, the Board must balance the overall benefits of this project as detailed hereinabove and the uniqueness of the project in determining whether the revitalization of this area supports the exercise of its discretion as to the Clark Street setback. The applicant suggests that clearly the Board can reach a conclusion that there are specific conditions "unique to the proposal" and that the numerous Project benefits warrant the exercise of its discretion to reduce the Clark Street setback. If the Board does not do so, the applicant is unable to proceed with the project. Frankly, I would suggest that if the Board does not do so, the failure

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to do so will be viewed as “arbitrary and capricious” in light of other projects where such relief was granted.

Finally, this proposed project is in clearly in keeping with the key findings in the Master Plan authored at the direction of this Board, including without limitation, the fact that: (a) Massachusetts Avenue “can support mixed-use development commensurate with its function as Arlington’s primary commercial corridor”; (b) “increased density through greater building heights and massing would benefit the corridor from an urban design perspective and benefit the Town from a fiscal perspective”; and (c) “Arlington’s growth management priorities must be Massachusetts Avenue . . .” This Board authorized the development of this plan and should implement it.

The applicant suggests that this project comports with the purposes of the Bylaw to, inter alia, “achieve optimum environmental quality through review and cooperation by the use of incentives, bonuses and design review; and to preserve and increase its amenities and to encourage an orderly expansion of the tax base by utilization, development and redevelopment of land.” The proposed project also comports with the Master Plan commissioned by the Town.

- Driveway

Pursuant to the Board’s request, Plan C-2 – the site layout plan, provides additional detail as to the driveway, including the slope and driveway clearance. As previously noted, the driveway slope is well below Department of Transportation requirements.

A site plan is attached which indicates the size of the service truck the site can accommodate and the turning radius.

- Existing Trees, Proposed Plantings and Trees and Retaining Wall

There are three (3) trees which make up the existing canopy. They are identified on plan C-1 – Existing Conditions Plan. The largest tree is located on a property abutting the proposed hotel site. The overhang may be trimmed but the tree will not be removed.

The tree in the center of the plan is in the middle of the proposed driveway. It will be removed. The intention is to retain the tree near the right property line. Provided, however, this will depend ultimately on construction considerations and the health of the tree. All of these trees are Norway Maples.

The applicant is substantially increasing the landscaped areas, specifically by 40%. Numerous trees will be placed along the rear property line, including Blue Pines, which will provide more screening particularly during the winter months.

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The landscape plan attached as L1.2 identifies the proposed trees and plantings and the sizes.

The building inspector has reviewed the retaining wall on the plans and advised it is in compliance with the Bylaws.

- Landscaping and Open Space Calculations

Plan C-2 contains, inter alia, the open space and landscaped area calculations. The proposal provides for 19.4% open space or 4,492 square feet of open space, which consists of 1,933 square feet of landscaped space, 2,315 square feet of patio space and 244 square feet of sidewalk.

- Elevations

Renderings for various street views are enclosed as well as building elevations. See plans A.4.1 and A.4.2.

- Delivery Protocols

As detailed hereinabove, the updated submittals provide information as to the size truck that can safely travel into the rear of the site.

In addition to rubbish disposal trucks, which will access the site, there will be vehicles delivering food to the restaurant, as well as vans delivering linens and cleaning supplies. The vehicles, with the exception of the rubbish truck, will be substantially smaller in size and will have the ability to utilize the front or rear driveways for loading and unloading.

The applicant will use his best efforts to schedule deliveries midday between 8:30 a.m. and 2:00 p.m. However, deliveries and rubbish removal will not occur before 7:00 a.m. or after 7:00 p.m. Monday-Saturday.

- Shadow Study

The petitioner has previously provided the Board with a shadow study. Subsequently, a resident, Don Seltzer, who is not an abutter to this proposed development, submitted an "Extended Shadow Study for Hotel Lexington Project," so-called. He has apparently updated his conclusions. I reiterate that Mr. Seltzer is not an expert in the field and his submission is not competent evidence upon which the Board may rely. The Board is required to consider reports and studies prepared by experts in the respective fields. As the attorneys on the Board well know, the Board plays the role of "gatekeeper" with the responsibility as a matter of law to ensure the expert testimony is

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both reliable and relevant. Clearly, Mr. Seltzer's testimony is not reliable as he is neither an expert in the field nor impartial. Using his theory, the applicant would be able to perform its own traffic study if the applicant believed he/she was competent enough to prepare traffic counts, collect data, analyze the data and opine. This is not how it is done for obvious reasons.

The enclosed shadow study was updated based on the site topography and not a flat plane. The study was prepared by Lincoln Architects, a qualified expert in the field.

- Traffic Impact Report

Michael Santos, a professional engineer and a certified professional traffic operations engineer associated with BSC Group, Inc., has previously submitted a traffic information summary dated January 16, 2020.

In his January 16, 2020 summary, he concluded that: (a) the proposed project is expected to have a minimal impact on the surrounding roadway network through most of the day; (b) the periods that would experience the most impact will occur during off-peak commuter hours, i.e. hotel check-in and check-out; (c) the proposed restaurant will have the highest impact after the weekday evening commuter peak hours when traffic volumes are typically lower; (d) there will be no right turns from the parking area onto Clarke Street northbound; and (e) all deliveries and trash removal service will occur onsite.

The applicant previously provided to Director Raitt and Chairman Muse of the Traffic Advisory Committee, the letter prepared by Mr. Santos dated July 22, 2020, which responds to two questions raised at the July 6, 2020 hearing. The two questions raised were : (a) traffic volumes at the intersection of Massachusetts Avenue/Lowell Street; and (b) pedestrian and bicycle counts conducted in February, 2020.

In his July 22, 2020 letter, Mr. Santos concludes that traffic operations at the intersection of Massachusetts Avenue at Lowell Street would continue to operate well below capacity and would experience slightly increased delays.

Mr. Santos concludes that pedestrian and bicycle activity will not materially change the results of the operations analysis or the conclusions presented.

The construction plan set to be submitted to the Board shall also include wayfaring signage, which will include no right turn onto Clark Street and appropriate enter and do not enter signs for the Massachusetts Avenue entrance.

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- Plan Revisions

The architectural plans have been revised to reflect various comments from the Board members and residents. Some of the revisions include the reduction in height of the front bay windows, the widening of the band around the front of the building, change in style of the rear fourth floor windows, relocation of the equipment screening on the roof, additional shrubbery and landscaping at the front and side of the property, a change in materials for the railing and the balcony level of the fourth floor, and the removal of the sign facing Clarke Street.

- Submittals

Enclosed are the following additional submittals and/or information as requested by the Board:

- Updated plan set, which includes a key for the proposed exterior construction materials. There also was a request to change the materials for the railing at the balcony level at the fourth floor. The railing has been changed to tempered glass.
- Building elevations.
- July 22, 2020 letter from BSC Group, which was previously provided to Director Raitt and Chairman Muse.

It is now time to render a decision on this project. On behalf of the applicant, I thank the Board and Ms. Raitt for the significant amount of time and input they have provided on this project.

Very truly yours,

  
Mary Winstanley O'Connor

MWO/ccg  
Enclosures  
6214

cc: James F. Doherty

July 22, 2020

Town of Arlington Redevelopment Board  
730 Massachusetts Avenue Annex  
Arlington, MA 02476

RE: 1207-1211 Massachusetts Avenue  
Traffic Study Response

Dear Arlington Redevelopment Board:

This letter is in response to comments that were brought to BSC's attention related to the traffic study we prepared for the proposed hotel development at 1207-1211 Massachusetts Avenue (the "Project"). The two issues that were raised include the following:

- Traffic volumes at the intersection of Massachusetts Avenue/Lowell Street
- Pedestrian and bicycle counts conducted in February 2020

Traffic Volumes at Massachusetts Avenue/Lowell Street

Due to the ongoing COVID-19 pandemic, reliable traffic data could not be conducted at the intersection of Massachusetts Avenue at Lowell Street for the Traffic Impact and Access Study (TIAS) prepared for the Project. In lieu of traffic data collection efforts, historical traffic data was obtained from the most recent available traffic study that provided traffic counts along Lowell Street.

The traffic counts used in the operations analysis for the intersection of Massachusetts Avenue at Lowell Street were obtained from a traffic impact study prepared in 2016 for a residential development located at 19R Park Avenue. The traffic volumes used in that study were based on counts conducted in October 2016. That traffic study included weekday morning and evening peak hour turning movement volumes for the intersection of Park Avenue/Lowell Street/Westminster Avenue/Bow Street. The traffic volumes along the Lowell Street leg of that intersection were adjusted upwards by 2 percent per year and used in the analysis prepared for the proposed hotel development. The through movements along Massachusetts Avenue at the intersection with Lowell Street were balanced from the traffic counts conducted at the intersection of Massachusetts Avenue/Appleton Street/Appleton Place conducted in 2020.

To provide an updated and more conservative analysis, BSC increased the 2025 Build Condition turning movements at the intersection of Massachusetts Avenue at Lowell Street by 30 percent. The following table presents the updated traffic operations analysis with the 30 percent increase in turning volumes at the intersection:

Engineers  
Environmental  
Scientists  
Custom Software  
Developers  
Landscape  
Architects  
Planners  
Surveyors



**Traffic Operations Analysis Summary  
Massachusetts Avenue at Lowell Street**

	2025 Build Conditions from TIAS				2025 Build Conditions with Volume Adjustments			
	Delay	LOS	v/c	95th queue	Delay	LOS	v/c	95th queue
<b>WEEKDAY MORNING PEAK HOUR</b>								
<b>Massachusetts Avenue/Lowell Street</b>								
Massachusetts Avenue EB L/T	0.3	A	0.01	1	0.3	A	0.01	1
Massachusetts Avenue WB T/R	0.0	A	0.37	0	0.0	A	0.39	0
Lowell Street SB L/R	21.6	C	0.42	51	26.5	D	0.55	80
<b>WEEKDAY EVENING PEAK HOUR</b>								
<b>Massachusetts Avenue/Lowell Street</b>								
Massachusetts Avenue EB L/T	0.2	A	0.01	1	0.2	A	0.01	1
Massachusetts Avenue WB T/R	0.0	A	0.29	0	0.0	A	0.33	0
Lowell Street SB L/R	19.1	C	0.36	40	22.8	C	0.48	63

As shown in the table above, traffic operations at the intersection of Massachusetts Avenue at Lowell Street would still operate well below capacity and would experience slightly increased delays when compared to the results that were presented in the original TIAS prepared for the Project (a 4.9 second increase during the weekday morning peak hour and a 3.7 second increase during the weekday evening peak hour along the Lowell Street southbound approach). Based on this conservative analysis, vehicular operations at the intersection are expected to be acceptable, with maximum queues of around 3 vehicles during the peak hours. The applicable operations analysis worksheets are provided as an attachment to this letter.

Pedestrian and Bicycle Counts

Pedestrian and bicycle counts were conducted concurrently with the February 2020 TMCs. There was a comment made that pedestrian and bicycle activity may have been low when the counts were conducted due to the prevailing weather conditions and temperatures.

Pedestrian activity along Massachusetts Avenue during the peak hours is related to people walking to/from bus stops, local businesses, and for leisure purposes. Bicycle activity is mostly related to commuting patterns and recreational activity. The seasonality of pedestrians during the peak hours is less likely to fluctuate due to many people needing to use public transportation for commuting purposes and to access local businesses throughout the year. Bicycling is affected by seasonality due to people being less likely to ride in inclement weather. People are more likely to use public transportation and personal vehicles for commuting purposes. Bicycling for recreational purposes will also decrease during the colder months.

Adjustments to pedestrian and bicycle activity will not materially change the results of the operations analysis or the conclusions presented in the TIAS. A qualitative evaluation of the pedestrian and bicycle infrastructure is better suited to addressing existing geometric and safety deficiencies, which do not require a technical analysis based on count data



collected over the course of a few hours during the peak periods on a specific day.

Please do not hesitate to contact our office with any inquiries you may have.

Very truly yours,

BSC Group, Inc.

Michael A. Santos, PE, PTOE  
Project Manager

cc: James F. Doherty  
Mary Winstanley O'Connor

Attachments:  
Intersection Operations Analysis Worksheets

	EBL	EBT	WBT	WBR	SBL	SBR
Movement						
Lane Configurations		←	→		←	→
Traffic Volume (veh/h)	6	347	446	114	178	6
Future Volume (Veh/h)	6	347	446	114	178	6
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.75	0.75	0.84	0.84	0.92	0.92
Hourly flow rate (vph)	8	463	531	136	193	7
Pedestrians		30	30		30	
Lane Width (ft)		12.0	12.0		12.0	
Walking Speed (ft/s)		3.5	3.5		3.5	
Percent Blockage		3	3		3	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	697				1138	659
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	697				1138	659
tC, single (s)	4.1				*5.0	*5.0
tC, 2 stage (s)						
tF (s)	2.2				*3.0	*3.0
pD queue free %	99				46	99
cM capacity (veh/h)	883				358	589
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	471	667	200			
Volume Left	8	0	193			
Volume Right	0	136	7			
cSH	883	1700	363			
Volume to Capacity	0.01	0.39	0.55			
Queue Length 95th (ft)	1	0	80			
Control Delay (s)	0.3	0.0	26.5			
Lane LOS	A		D			
Approach Delay (s)	0.3	0.0	26.5			
Approach LOS			D			
Intersection Summary						
Average Delay		4.1				
Intersection Capacity Utilization		49.8%		ICU Level of Service	A	
Analysis Period (min)		15				

\* User Entered Value

	EBL	EBT	WBT	WBR	SBL	SBR
Movement						
Lane Configurations		↰	↰		↰	↰
Traffic Volume (veh/h)	6	441	260	217	163	6
Future Volume (Veh/h)	6	441	250	217	163	6
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.75	0.75	0.84	0.84	0.92	0.92
Hourly flow rate (vph)	8	588	296	258	177	7
Pedestrians		30	30		30	
Lane Width (ft)		12.0	12.0		12.0	
Walking Speed (ft/s)		3.5	3.5		3.5	
Percent Blockage		3	3		3	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	586				1091	487
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	586				1091	487
IC, single (s)	4.1				*5.0	*5.0
IC, 2 stage (s)						
IF (s)	2.2				*3.0	*3.0
p0 queue free %	99				53	99
cM capacity (veh/h)	970				376	700
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	596	556	184			
Volume Left	8	0	177			
Volume Right	0	258	7			
cSH	970	1700	382			
Volume to Capacity	0.01	0.33	0.48			
Queue Length 95th (ft)	1	0	63			
Control Delay (s)	0.2	0.0	22.8			
Lane LOS	A		C			
Approach Delay (s)	0.2	0.0	22.8			
Approach LOS			C			
Intersection Summary						
Average Delay		3.2				
Intersection Capacity Utilization		46.6%		ICU Level of Service	A	
Analysis Period (min)		15				

\* User Entered Value