



Ruthanne Fuller  
Mayor

City of Newton, Massachusetts  
Department of Planning and Development  
1000 Commonwealth Avenue Newton, Massachusetts 02459

**#25-20**  
Telephone  
(617) 796-1120  
Telefax  
(617) 796-1142  
TDD/TTY  
(617) 796-1089  
www.newtonma.gov

**Barney Heath**  
Director

---

## PUBLIC HEARING/WORKING SESSION MEMORANDUM

**DATE:** June 12, 2020  
**MEETING DATE:** June 16, 2020  
**TO:** Land Use Committee of the City Council  
**FROM:** Barney Heath, Director of Planning and Development  
Neil Cronin, Chief Planner for Current Planning  
Michael Gleba, Senior Planner  
**CC:** Petitioner

In response to questions raised at the City Council public hearing, the Planning Department is providing the following information for the upcoming public hearing/working session. This information is supplemental to staff analysis previously provided at the Land Use Committee public hearing.

---

### **PETITION #25-20**

**1158 Beacon Street**

---

#### **Petition #25-20** (modified notice; additions in **bold**)

SPECIAL PERMIT/SITE PLAN APPROVAL to allow a retail marijuana establishment, to waive the minimum driveway width for two-way traffic, **to waive minimum driveway width by use of an easement**, to waive perimeter screening requirements, **to waive perimeter screening requirements by use of an easement, to allow parking in the side setback**, and to waive lighting requirements at 1158 Beacon Street, Ward 6, Newton Highlands, on land known as Section 54 Block 22 Lot 49A, containing approximately 20,443 sq. ft. of space in a district zoned BUSINESS USE 2. Ref: Sec. 7.3.3, 7.4, 6.10.3.D, 4.4.1, 5.1.10, 5.1.8.A.1, 5.1.6.A, 5.1.6.B, 5.1.13, 5.1.8.D.1, 5.1.9.A of the City of Newton Rev Zoning Ord, 2017.

---

The Land Use Committee (the "Committee") held a public hearing on February 4, 2020 on this petition. This memo reflects additional information addressed to the Planning Department as of June 11, 2020.

---

## **Background**

The petitioner is seeking a special permit from the City Council to operate a marijuana retail establishment pursuant to Section 6.10.3 of the Newton Zoning Ordinance in a space previously occupied by a dry cleaner (an existing take-out restaurant on the property is expected to continue operations). As originally designed the proposed marijuana retailer required certain additional zoning relief, including exceptions to requirements that:

- two-way entrance and exit driveways be a minimum of 20 feet wide;
- outdoor parking facilities with more than five stalls be adequately screened from abutting streets and properties; and
- parking facilities used at night have security lighting with a minimum intensity of one-foot candle on their entire surfaces.

## **Petition Update**

Subsequent to the Land Use Committee's initial February 4, 2020 hearing, in response to issues raised at that hearing and comments from the public and the Planning Department, the petitioner has made some changes to the proposed project and amended its petition to modify its proposed site plan and seek additional zoning relief (as detailed in the attached Zoning Review Memorandum (**Attachment A**)).

## ***Additional Relief and Modified Plans***

The additional relief includes (as noted by the Planning Department noted in its initial memorandum) allowing one parking stall in the rear left of the property within a section of the side setback that abuts a residential property in a Multi Residence 1 (MR1) zoning district. Please note that neither the amount nor the location of parking stalls have been modified.

To address the requirement that two-way entrance and exit driveways be a minimum of 20 feet wide, the petitioner has indicated (and as reflected in the modified site plans) that it has secured an agreement with the owner of 1172 Beacon Street, the abutting property to the west (right) side of the subject property. The agreement would grant the petitioner an "easement in perpetuity" on a portion of that abutting property that would allow the widening of the petitioner's driveway from 19 feet to 20 feet, the minimum required width for such two-way drive aisles (§5.1.8.D.1B).

This proposed arrangement would place a portion of the required accessory parking facility on another lot. While §5.1.6.A of the NZO requires that accessory parking facilities be provided on the same lot as the principal use, the petitioner is seeking relief under §5.1.6.B which provides that the City Council may:

"subject to ... (an) ... easement ... grant a special permit to allow the required parking facility to be located on another lot which is within a district in which the use to be served by the parking facility would be permitted and which is within 500 feet of the lot on which the principal use served is located".

The Planning Department notes that the abutting property is within 500 feet and, like the subject property, located within a Business 2 (BU2) zoning district.

Similarly, the petitioner is also now seeking relief under §5.1.6.B to provide additional perimeter screening required by §5.1.9.A along the western edge of the widened driveway within the above-referenced easement.

Please note that there is a small area along the driveway near the back of the building that, because it is a part of the required buffer for the parking area on the abutting property to be burdened by the easement, cannot satisfy the perimeter screening requirement for the subject property. For this reason, the petitioner is retaining its request for a waiver of the perimeter screening requirements in this location per §5.1.13.

### ***Landscaping***

The modified landscaping plan submitted by the petitioner indicates significant new perimeter and other landscaping beyond that located along the western boundary as discussed above. This includes several new trees in a previously existing 'gap' toward the rear of the left property line (aligned with the maneuvering aisle of the rear parking area). It also includes additional trees proposed for the southern edge of the paved area of that parking area and along the rear property line.

### ***Proposed Operational Modifications***

The petitioner has indicated that to attempt to address parking and other concerns related to access and circulation noted in public comments, it is reducing the number of "points of sale" from nine to six, two of which would be what it calls "express checkout stations." The petitioner has also stated that it will operate on a 'by appointment only' basis, "consistent with that of other approved operators." Further, the petitioner has also indicated that rather than operating 9:00am – 9:00pm every day of the week, it would close no later than 6:00pm on Sundays.

To secure these changes the petitioner is asking that they be made conditions of any special permit that might be granted pursuant to this petition.

### ***Cold Spring Park concerns***

In response to concerns that customers will use products purchased at the proposed marijuana retailer in nearby Cold Spring Park, the petitioner has stated its intent to institute "a good-neighbor policy for all our customers that requires them to agree to not publicly consume cannabis" and that if the petitioner is to "discover that a customer violates this agreement, they will no longer have access to (the) facility."

### ***Traffic and Transportation***

As noted in the Planning Department's previous memorandum, the petitioner submitted a Traffic Review Letter examining the proposal's projected trips generation. The analysis indicated the project would be expected to generate approximately 24 new vehicle trips (13 entering / 11 exiting) during the weekday morning peak hour and approximately 50 new vehicle trips (25 entering / 25 exiting) during the weekday afternoon peak hour. No projections were submitted for any other periods, i.e., the Saturday peak hour. Similarly, no information was provided regarding pedestrian and bicycle traffic travel. The Letter also indicates the 55% of the new trips would access the site from Beacon Street east of the site and 45% from the west.

The Planning Department's on-call transportation consultant, the BSC Group (BSC), conducted a peer-review of the petitioner's Traffic Letter and other transportation/traffic issues (**Attachment B**).

The peer review recommended further study of the surrounding transportation network, including providing Saturday traffic counts and trip generation estimates, and that the petitioner submit a response letter for review.

On June 10, 2020, the petitioner submitted a response to the peer review as well as additional traffic analysis and a transportation demand management (TDM) plan (**Attachment C**). The Planning Department notes that in its TDM plan the petitioner proposes to:

- give CharlieCards and/or Commuter Rail passes to employees
- display/provide public transit information
- provide on-site covered bicycle storage area for employees and customers.
- subsidize employees use of dockless bike shares, walking (one pair of shoes per year) and carpooling
- and, "If necessary," provide a shuttle or vouchers for transportation network companies for "last mile" connections to transit.

This new traffic and transportation material have been forwarded to BSC for review. The Planning Department anticipates receiving its reply in advance of the upcoming, or a subsequent, public hearing.

### ***Engineering Review***

The petitioner submitted an updated stormwater report on June 10, 2020. At the time of the writing of this memorandum the proposed project is under review by the Engineering Division. The Planning Department anticipates receiving a memorandum from the Engineering Division in advance of the upcoming, or a subsequent, public hearing.

### **Next Steps**

The petitioner should continue to work with City departments and their peer reviewers as they review materials submitted and respond to any issues that have or will be raised related to this petition.

### **ATTACHMENTS**

<b>Attachment A</b>	Revised Zoning Review Memorandum dated May 11, 2020
<b>Attachment B</b>	Peer reviewer (BSC Group) memorandum entitled "Transportation Peer Review – Cannabis Dispensary, 1158 Beacon Street Newton, Massachusetts," dated March 2, 2020
<b>Attachment C</b>	Petitioner (Fuss & O'Neill) response to peer reviewer's (BSC Group) March 2, 2020 memorandum, dated June 10, 2020 (technical information omitted)



Ruthanne Fuller  
Mayor

# ATTACHMENT A

City of Newton, Massachusetts  
Department of Planning and Development  
1000 Commonwealth Avenue Newton, Massachusetts 02459

Telephone  
(617) 796-1120  
Telefax  
(617) 796-1142  
TDD/TTY  
(617) 796-1089  
www.newtonma.gov

Barney S. Heath  
Director

## ZONING REVIEW MEMORANDUM

Date: May 11, 2020

To: John Lojek, Commissioner of Inspectional Services

From: Jane Santosuosso, Chief Zoning Code Official  
Neil Cronin, Chief Planner for Current Planning

Cc: Scott M. Baratz (POA), applicant  
Union Twist, Inc.  
Michael P. Ross, Attorney  
Barney S. Heath, Director of Planning and Development  
Jonah Temple, Assistant City Solicitor

RE: Request to allow a marijuana retail establishment and associated dimensional waivers for the parking facility

Petitioner: Union Twist, Inc.	
Site: 1158 Beacon Street	SBL: 54022 0049A
Zoning: BU2	Lot Area: 20,443 square feet
Current use: Dry cleaner	Proposed use: Marijuana retail establishment

### BACKGROUND:

The property at 1158 Beacon Street consists of a 20,443 square foot lot improved with a one-story commercial building constructed in 1964 currently occupied by a dry cleaner and small take-out restaurant. The petitioner seeks to operate a marijuana retail establishment pursuant to section 6.10.3 in the space occupied by the dry cleaner. The petitioner intends to remove approximately 400 square feet from the rear of the building, and to reconfigure the existing parking areas to increase from 12 to 18 parking stalls.

The following review is based on plans and materials submitted to date as noted below.

- Zoning Review Application, prepared by Michael P. Ross, attorney, dated 10/25/2019
- Existing Conditions Plan, signed and stamped by Gerry L. Holbright, surveyor, dated 4/1/2019
- Site Plan, prepared by Fuss & O’Neill, dated 10/23/2019
- Floor Plans, signed and stamped by Keith Bettencourt, architect, dated 9/9/2019
- Traffic Impact Statement, prepared by Hayes Engineering, Inc, dated 1/7/2019

## **ADMINISTRATIVE DETERMINATIONS:**

---

1. The petitioner is proposing to operate a marijuana retail establishment. This use requires a special permit from the City Council per Section 6.10.3.D of the Newton Zoning Ordinance.
2. Section 6.10.3.E.5 states that a marijuana retailer is subject to the parking requirements of 5.1.4.A, which requires one stall for every 300 square feet of gross floor area, and one stall for every three employees at the highest shift for the retail use. The petitioners are proposing to occupy 2,290 square feet for the operation and is contemplated to have 10 employees at the busiest shift. The proposed establishment requires 12 parking stalls.

A take-out only restaurant occupies the second tenant space within the existing commercial building. Per section 5.1.4.A, a restaurant requires one parking stall per every three seats, plus one stall for every three employees at the busiest shift. The existing restaurant requires two parking stalls.

The petitioner is proposing to reconfigure the existing parking area with 18 parking stalls, which satisfies the requirements of section 5.1.4.A.

3. Section 5.1.8.A.1 requires that no parking locate within any required front or side setback. While the majority of the lot abuts other lots also zoned Business 2, the rear abuts properties zoned either Multi-Residence 1 or 2, which requires that the setback be the greater of half the building height or 15 feet. As such, the one-story building creates a 15-foot side setback requirement. The proposed parking facility has one stall in the rear that is abutting the MR1 zoning district within the side setback, requiring a special permit per sections 5.1.8.A.1 and 5.1.13.
4. Section 5.1.8.D.1 requires that two-way entrance and exit drives must be a minimum of 20 feet wide. The driveway to the rear parking area narrows to less than 19 feet wide on the property, however the petitioner has secured an easement with the abutter at 1172 Beacon Street allowing for a 20 foot wide access driveway. Per section 5.1.6.A required off-street parking facilities must be provided on the same lot as the principal use. When a property cannot meet the requirements for off-street parking facilities on the same lot as the principal use served, a special permit may be granted to allow those requirements to be met on a lot within 500 feet per section 5.1.6.B. The petitioners seek a special permit per sections 5.1.6.A, 5.1.6.B and 5.1.8.D.1 to allow the driveway width requirement to be provided in part on the abutting property via an easement.
5. Per section 5.1.9.A, outdoor parking facilities with more than five stalls must be screened from abutting streets and properties with a strip of at least five feet in width of dense shrubs or trees and/or a wall, fence etc. of at least six feet in height. The petitioners propose shrubs along the eastern border, some fencing and shrubs along the rear half of the western border and three trees at the rear. The landscaping along the southern (rear) property lines does not meet the perimeter screening requirements of section 5.1.9.A, requiring a special permit per section 5.1.13.

The petitioners also intend to provide perimeter screening in a landscape easement with the abutting property at 1172 Beacon Street. Per section 5.1.6.B, a special permit is required to provide the perimeter screening off site.

6. Section 5.1.10.A requires that parking facilities which are used at night have security lighting with a minimum intensity of one-foot candle on the entire surface of the parking facility. To the extent that any proposed lighting in the parking facility does not meet the requirements of section 5.1.10.A, a special permit is required.

7. See “Zoning Relief Summary” below:

<b>Zoning Relief Required</b>		
<i>Ordinance</i>	<i>Required Relief</i>	<i>Action Required</i>
§6.10.3.D §4.4.1	To allow a marijuana retailer	S.P. per §7.3.3
§5.1.8.A.1 §5.1.13	To allow parking in the side setback	S.P. per §7.3.3
§5.1.8.D.1 §5.1.6.A §5.1.6.B	To allow the minimum driveway width for two-way traffic to be provided off-site	S.P. per §7.3.3
§5.1.9.A §5.1.13	To waive perimeter screening requirements	S.P. per §7.3.3
§5.1.9.A §5.1.6.A §5.1.6.B	To allow perimeter screening to be provided off-site	S.P. per §7.3.3
§5.1.10 §5.1.13	To waive the lighting requirements	S.P. per §7.3.3



<b>To:</b>	Mr. Michael Gleba Senior Planner City of Newton, Massachusetts	<b>Date:</b>	March 2, 2020
<b>From:</b>	Michael A. Santos, PE, PTOE	<b>Proj. No.</b>	28402.03
<b>Re:</b>	Transportation Peer Review – Cannabis Dispensary 1158 Beacon Street Newton, Massachusetts		

As requested, BSC Group, Inc. (BSC) conducted a peer review of the Traffic Review Letter prepared by Fuss & O’Neill and dated April 2, 2019 for the proposed cannabis dispensary at 1158 Beacon Street in Newton, Massachusetts.

The purpose of this review is to ensure that the traffic analysis conforms to industry standards, to confirm that the traffic study methods are appropriate for the setting, and to ensure that the recommendations and proposed mitigation adequately address potential project impacts and are consistent with the City of Newton’s recommended guidelines for transportation improvements.

The Project site is located at 1158 Beacon Street, approximately 280 feet west of Beaconwood Road and 825 feet west of the signalized intersection of Beacon Street at Walnut Street. The Project will remodel a portion of the existing building to be used as a cannabis dispensary. The Project will also remove a small portion of the rear of the building, reconstruct the parking lot, and provide additional landscaping elements. The previous uses of the space included a dry-cleaning business. The other use in the building is a take-out style restaurant. A total of 18 parking spaces will be provided on the site to accommodate the Project and the existing restaurant. Access to the site is currently provided by two curb cuts, which will remain in place. The western curb cut will operate as an entrance-only and the eastern curb cut will operate as exit-only.

The key findings of our review of the Traffic Review Letter are presented in the following sections. **BSC’s comments and recommendations are presented in bold.**

## Scope of Review

The following topics were reviewed in the Traffic Review Letter as part of the peer review:

- Study methodology
- Existing traffic volumes
- Crash Analysis
- Trip distribution and trip generation
- Parking Analysis, Sight Distance, and Site Plan

## Study Methodology

The traffic analysis provided in the Traffic Review Letter presented a limited evaluation of the impacts of the Project. The evaluation included traffic counts along Beacon Street, a trip generation, distribution, and assignment analysis, a review of motor vehicle crash data, a parking analysis, and sight distance



measurements. The evaluation did not include peak-hour turning movement volumes or a traffic operations analysis at any intersections and did not provide information related to pedestrian and bicycle travel to/from the site. The evaluation also did not present specific mitigation or transportation demand management measures to be implemented by the Applicant as part of the Project.

- 1. Based on the location of the Project and the expected trip generation, the methodology used in the study is adequate and consistent with industry standards.**
- 2. The Applicant should develop a transportation demand management (TDM) plan to reduce the number of single-occupancy vehicles that travel to the site.**
- 3. The Applicant should include a description and qualitative evaluation of the pedestrian and bicycle facilities that serve the Project site. Due to the site's location in Newton, we expect that some of the trips to and from the site will be made by non-motorized modes of travel.**
- 4. The Applicant should provide a description of the anticipated operations of the site. It is unclear if customers will be required to make an appointment to patronize the site. The Applicant should also provide anticipated hours and days of operation.**

## Existing Traffic Volumes

The Applicant collected automatic traffic recorder (ATR) counts and speed measurements along Beacon Street, east of Beaconwood Road, on Thursday March 28, 2019. Beacon Street currently carries approximately 11,539 vehicles on a typical weekday in March. The 85<sup>th</sup> percentile speeds along Beacon Street were measured to be 33 miles per hour (mph) in the westbound direction and 29 mph in the eastbound direction.

- 5. The traffic volumes on Beacon Street were conducted on a typical weekday in March 2019. The Project is also expected to have impacts on Saturdays, especially during the afternoon peak period. BSC recommends that the City request the Applicant to provide traffic volumes on a Saturday based on new counts or an acceptable adjustment factor. The Project may have a different level of impact during the Saturday midday than it will during the weekday peak hours.**

## Crash Analysis

The Applicant provided crash data obtained from the MassDOT Crash Portal for Beacon Street in the vicinity of the site driveways. A total of 12 crashes were reported over the most recent three-year period for which data is available (2014-2016), with the majority occurring east of the site driveways between Beaconwood Road and Walnut Street.

- 6. The Applicant should define the limits of the segment analyzed in the crash analysis. It is unclear if crash data was provided for the intersection of Beacon Street at Walnut Street.**

## Trip Distribution and Trip Generation

The Traffic Review Letter estimates the trips generated by the Project based on the *Institute of Transportation Engineers (ITE)'s Trip Generation, 10<sup>th</sup> Edition*, using Land Use Code (LUC) 882 – Marijuana Dispensary. The trips related to the former dry-cleaning business or the existing restaurant on the site were not estimated. Based on the evaluation provided in the Traffic Review Letter, the dispensary is expected to generate 24 trips during the weekday morning peak hour and 50 trips during the weekday evening peak hour. Trip generation

was not estimated for the Saturday midday peak hour.

7. **The ITE LUCs that were used are appropriate for the previous and proposed land uses. Trip generation estimates were not provided for the existing restaurant uses on the site, which will use both site driveways. In order to develop accurate traffic volumes entering and exiting the site, the restaurant uses should be included. We recommend that the City request the Applicant to estimate the additional Saturday midday peak hour trips generated by the Project. The Project is expected to generate more trips during Saturday midday peak hour than either of the weekday peak hours.**
8. **Trip generation estimates for cannabis dispensaries are based on a few data points that are highly variable. Actual trip generation will be dependent upon market factors such as proximity to other dispensaries. The site may experience heavy vehicular activity upon opening. As such, the City should request that the Applicant commit to providing a police detail on the site to direct traffic during the peak periods to account for activity that exceeds the trip generation estimates presented in the traffic analysis.**
9. **It is expected that some trips will occur by non-vehicular modes such as walking and bicycling. It is also expected that some trips may occur in the form of pass-by trips, which represent vehicles already traveling along Beacon Street that stop at the site as they travel to their final destination. The Applicant did not apply mode-shares or account for pass-by trips, resulting in higher trip generation estimates. No additional analysis is necessary to account for mode-share or pass-by trips.**

## **Parking Analysis, Sight Distance, and Site Plan**

The Applicant provided a parking analysis based on requirements of the City of Newton Zoning Ordinance. Based on the ordinance, a total of 12 spaces are required for the dispensary (1 space per 300 sf and an additional space per 3 employees) and 2 spaces are required for the existing restaurant (1 space per 3 seats and an additional space per 3 employees). A total of 18 parking spaces will be provided on the site, including one accessible space. The parking supply meets the zoning requirements.

10. **The parking supply shown on the site plan complies with the zoning regulations for the uses on the site. However, the project may experience increased activity upon opening. The City should request that the Applicant provide a plan for potential overflow parking on the site in the event that site activity exceeds the projected estimates. On-street parking is not permitted along Beacon Street or anywhere in the vicinity of the site to accommodate overflow parking.**
11. **The four parking spaces in the front of the building appear to conflict with movements entering the site. The City should request that the Applicant provide vehicle maneuver diagrams using AutoTURN or a similar CAD-based software for passenger vehicles entering and exiting the site, showing vehicles entering and exiting the parking space closest to the enter-only driveway to accurately visualize any potential conflicts.**

Access to the site will be provided by two driveways along Beacon Street. An entrance-only driveway will be located on the western edge of the site and an exit-only driveway will be located on the eastern edge of the site. The exit-only driveway will be placed under stop control.

12. **An evaluation of loading, deliveries, and trash pick-up was not provided in the Traffic Review Letter. The Applicant should provide a description of anticipated loading, deliveries, and trash servicing and should ensure that the design will allow all loading, deliveries, and trash service to**

occur on the site to minimize impacts to the public right-of-way and surrounding transportation network.

13. **An evaluation of existing pedestrian and bicycle infrastructure was not provided in the Traffic Review Letter. The Applicant has indicated that there will be a new bicycle rack in the front of the building, which meets the requirements of the City of Newton Zoning Code (Chapter 30: Zoning Ordinance, Section 5.1.11).**
14. **The proposed driveway is shown to be 19-feet in width on the site plan. The City of Newton Zoning Code (Chapter 30: Zoning Ordinance, Section 5.1.8.D) requires that drive aisles be a minimum of 20-feet for two-way travel on commercial sites. We recommend that the City require the Applicant to show movement diagrams for two passenger vehicles traveling in the 19-foot wide segment of the driveway. We also recommend that the City require the Applicant to provide vehicle movement diagrams for an emergency vehicle and for the largest delivery truck that is expected to access the site (typically an SU-36, or a single-unit box truck approximately 40-feet in length).**

The Applicant provided a sight distance analysis at the proposed exit-only driveway along Beacon Street. Based on the measured 85<sup>th</sup> percentile speeds of 33 mph in the westbound direction and 29 mph in the eastbound direction, a total of 370 feet is recommended for intersection sight distance (ISD), which is the distance needed for a vehicle to exit a side street or driveway and make a left-turning maneuver onto the intersecting roadway. Based on the evaluation, adequate sight distance is provided at the exit-only driveway.

15. **BSC conducted a site visit and verified that there are adequate lines of sight along Beacon Street at the site driveway locations. We recommend that the City of Newton require the Applicant to commit to maintaining proposed vegetation along the site frontage to continue to provide adequate sight distance.**

## Conclusions

BSC reviewed the Traffic Review Letter submitted for the proposed cannabis dispensary located at 1158 Beacon Street. Based on the trip generation estimates presented in the letter, we recommend further study of the surrounding transportation network, including providing Saturday traffic counts and trip generation estimates for the Project. We also recommend that the City of Newton require the Applicant to respond to and address all BSC's numbered comments in this letter and submit a response letter for our review.

# ATTACHMENT C



FUSS & O'NEILL

June 10, 2020

Mr. Michael Gleba  
Senior Planner  
City of Newton  
1000 Commonwealth Avenue  
Newton Centre, Massachusetts 02459

Re: Transportation Peer Review  
Cannabis Dispensary  
1158 Beacon Street, Newton, MA  
Fuss & O'Neill Reference No. 20190241.A30

Dear Mr. Gleba:

This letter will serve as a response to the Transportation Peer Review comments submitted to BSC Group, Inc. (BSC) on March 23, 2020 for the cannabis dispensary proposed at 1158 Beacon Street in Newton, Massachusetts. The comments are reprinted in *italics* with our responses below. Additionally, a technical memorandum, AutoTURN movement diagrams, and a transportation demand management plan have been prepared to address several of the comments and are attached to this letter. The memorandum will be referenced as appropriate throughout this letter.

### Study Methodology

1. Based on the location of the Project and the expected trip generation, the methodology used in the study is adequate and consistent with industry standards.

*Acknowledged.*

2. The Applicant should develop a transportation demand management (TDM) plan to reduce the number of single-occupancy vehicles that travel to the site.

A transportation demand management (TDM) plan is attached to this letter.

3. The Applicant should include a description and qualitative evaluation of the pedestrian and bicycle facilities that serve the Project site. Due to the site's location in Newton, we expect that some of the trips to and from the site will be made by non-motorized modes of travel.

A description and qualitative evaluation of pedestrian and bicycle facilities on Beacon Street as well as Walnut Street have been provided in the attached technical memorandum.

108 Myrtle Street  
Suite 502  
Quincy, MA  
02171  
t 617.282.4675  
800.286.2469  
f 617.481.5885  
www.fandoo.com

California  
Connecticut  
Maine  
Massachusetts  
New Hampshire  
Rhode Island  
Vermont

Mr. Michael Gleba

June 10, 2020

Page 2

4. The Applicant should provide a description of the anticipated operations of the site. It is unclear if customers will be required to make an appointment to patronize the site. The Applicant should also provide anticipated hours and days of operation.

It is expected that the dispensary will operate on an appointment only basis, at least at the outset of its opening. Hours of operation will be determined through the Special Permit application process, however it is expected that they will be in the 9:00 a.m. – 10:00 p.m. range. As such it is not expected that the dispensary will generate any significant number of trips during the morning peak hours of adjacent street traffic.

#### Existing Traffic Volumes

5. The traffic volumes on Beacon Street were conducted on a typical weekday in March 2019. The Project is also expected to have impacts on Saturdays, especially during the afternoon peak period. BSC recommends that the City request the Applicant to provide traffic volumes on a Saturday based on new counts or an acceptable adjustment factor. The Project may have a different level of impact during the Saturday midday than it will during the weekday peak hours.

Saturday counts have been conducted at the intersection of Beacon Street and Walnut Street. The data is included in the attached technical memorandum.

#### Crash Analysis

6. The Applicant should define the limits of the segment analyzed in the crash analysis. It is unclear if crash data was provided for the intersection of Beacon Street at Walnut Street.

The crash analysis has been updated to include the most recent information from the MassDOT Interactive Mapping Portal and Crash Tracking (IMPACT) system. Crash data was gathered within 1,000 feet east and west of the site, including at the study intersection and is detailed in the attached technical memorandum.

#### Trip Distribution and Trip Generation

7. The ITE LUCs that were used are appropriate for the previous and proposed land uses. Trip generation estimates were not provided for the existing restaurant uses on the site, which will use both site driveways. In order to develop accurate traffic volumes entering and exiting the site, the restaurant uses should be included. We recommend that the City request the Applicant to estimate the additional Saturday midday peak hour trips generated by the Project. The Project is expected to generate more trips during Saturday midday peak hour than either of the weekday peak hours.

The restaurant use has been generated and applied to the site driveway intersection for the weekday afternoon, and Saturday midday peak hours.

Mr. Michael Gleba

June 10, 2020

Page 3

8. Trip generation estimates for cannabis dispensaries are based on a few data points that are highly variable. Actual trip generation will be dependent upon market factors such as proximity to other dispensaries. The site may experience heavy vehicular activity upon opening. As such, the City should request that the Applicant commit to providing a police detail on the site to direct traffic during the peak periods to account for activity that exceeds the trip generation estimates presented in the traffic analysis.

The applicant expects to employ a police detail during the opening weekend of operations, and for as long as the City requests it remain.

9. It is expected that some trips will occur by non-vehicular modes such as walking and bicycling. It is also expected that some trips may occur in the form of pass-by trips, which represent vehicles already traveling along Beacon Street that stop at the site as they travel to their final destination. The Applicant did not apply mode-shares or account for pass-by trips, resulting in higher trip generation estimates. No additional analysis is necessary to account for mode-share or pass-by trips.

It is expected that some trips will occur by non-vehicular modes such as walking and bicycling, and not all vehicles visiting the dispensary will be new to the roadway network. These would typically be considered "pass-by" trips. Businesses that rely on pass-by trips typically generate a portion of their traffic volumes by appealing to the existing traffic already using the roadway network. The proposed traffic which enters and exits the proposed site not as a primary origin or destination, but as an intermediate stop in a trip made for some other purpose is defined as a pass-by trip. The Institute of Transportation Engineers (ITE) provides guidance on pass-by percentages for various land uses including drive through coffee shops and gas stations, but does not yet include marijuana dispensaries, so a reduction in the trip generation calculation has not been applied.

#### Parking Analysis, Sight Distance, and Site Plan

10. The parking supply shown on the site plan complies with the zoning regulations for the uses on the site. However, the project may experience increased activity upon opening. The City should request that the Applicant provide a plan for potential overflow parking on the site in the event that site activity exceeds the projected estimates. On-street parking is not permitted along Beacon Street or anywhere in the vicinity of the site to accommodate overflow parking.

While this effect has been experienced at other dispensaries opening across the Commonwealth, more recently the opening weekends for dispensaries come and go without any significant disturbance to area traffic operations. In addition, even on opening weekend, the dispensary will operate by appointment only, and will use that system as its method for controlling parking occupancy. Should any issues of overcrowding arise, the police detail and parking lot attendants will be able to direct customers to return at a time closer to their designated appointment.

Mr. Michael Gleba

June 10, 2020

Page 4

11. The four parking spaces in the front of the building appear to conflict with movements entering the site. The City should request that the Applicant provide vehicle maneuver diagrams using AutoTURN or a similar CAD-based software for passenger vehicles entering and exiting the site, showing vehicles entering and exiting the parking space closest to the enter-only driveway to accurately visualize any potential conflicts.

*The AutoTURN diagrams have been provided as an attachment to this letter, and no potential conflicts have been identified.*

12. An evaluation of loading, deliveries, and trash pick-up was not provided in the Traffic Review Letter. The Applicant should provide a description of anticipated loading, deliveries, and trash servicing and should ensure that the design will allow all loading, deliveries, and trash service to occur on the site to minimize impacts to the public right-of-way and surrounding transportation network.

*Trash collection services will all occur outside of normal business hours. The dumpster will be located in the southwest corner of the site, adjacent to the parking lot. Delivery services are also planned to occur only outside of normal business hours, and will occur at the rear warehouse area through the side door of the dispensary.*

13. An evaluation of existing pedestrian and bicycle infrastructure was not provided in the Traffic Review Letter. The Applicant has indicated that there will be a new bicycle rack in the front of the building, which meets the requirements of the City of Newton Zoning Code (Chapter 30: Zoning Ordinance, Section 5.1.11).

*A description and qualitative evaluation of pedestrian and bicycle facilities on Beacon Street as well as Walnut Street have been provided in the attached technical memorandum.*

14. The proposed driveway is shown to be 19-feet in width on the site plan. The City of Newton Zoning Code (Chapter 30: Zoning Ordinance, Section 5.1.8.D) requires that drive aisles be a minimum of 20-feet for two-way travel on commercial sites. We recommend that the City require the Applicant to show movement diagrams for two passenger vehicles traveling in the 19-foot wide segment of the driveway. We also recommend that the City require the Applicant to provide vehicle movement diagrams for an emergency vehicle and for the largest delivery truck that is expected to access the site (typically an SU-36, or a single-unit box truck approximately 40-feet in length).

*The driveway has been widened to meet the minimum 20 feet in width standard required by the City of Newton Zoning Code. However, the requested AutoTURN movement diagrams have been included as an attachment to this letter.*



Mr. Michael Gleba

June 10, 2020

Page 5

15. BSC conducted a site visit and verified that there are adequate lines of sight along Beacon Street at the site driveway locations. We recommend that the City of Newton require the Applicant to commit to maintaining proposed vegetation along the site frontage to continue to provide adequate sight distance.

The proposed vegetation along the site frontage will be maintained to provide adequate sight distance along Beacon Street.

We have enclosed the Traffic Review Memorandum as well as turning movement figures for your review. We trust that this information will be sufficient; however, if you should require additional information or have any questions, please contact me.

Sincerely,

Katherine Patch, EIT  
Transportation Engineer

Matthew Skelly, PE, PTOE  
Project Manager

Enclosures: Transportation Demand Management Plan, dated June 6, 2020  
Technical Memorandum, dated June 6, 2020  
AutoTURN Figures

cc: Michael A. Santos, PE, PTOE, BSC Group (w/ enclosures)



## MEMORANDUM

TO: Ms. Marie St. Fleur  
Union Twist, Inc.

FROM: Matthew W. Skelly, PE, PTOE  
Katherine Patch, EIT

DATE: June 6, 2020

RE: 1158 Beacon Street Cannabis Dispensary  
Transportation Demand Management Plan

---

In order to reduce the number of single occupancy vehicle (SOV) trips to and from the proposed cannabis dispensary located at 1158 Beacon Street in Newton, Massachusetts, Union Twist, Inc. has developed the following Transportation Demand Management (TDM) Plan. This plan is intended to function in part with the Massachusetts Bay Transportation Authority (MBTA), specifically route 59 which connects to the Newton Highlands Green Line stop.

This plan assumes that COVID-19 related concerns about the use of public transit will, in the long run, subside, and patrons of the dispensary will regain a level of comfort with using public transit.

The following actions will be taken by Grassroots Companies in order to promote the use of the above referenced bus lines, as well as other modes of transportation:

- Provide a pre-paid CharlieCard and/or Commuter Rail pass to any employee who is able to utilize the MBTA system to commute to the dispensary. Union Twist, Inc. intends to enroll in the MBTA Perq program, or similar replacement, in order to facilitate this process.
- Prominently display all public transit schedules in a visible location at the dispensary.
- Provide MBTA maps depicting station locations to both employees and customers in order to supply transit users with the information required to utilize the system.
- Install a secure, covered bicycle storage area on site, with longer term storage for employees and shorter term storage for customers.
- Enroll employees in a dockless bike share that will help employees (or customers) connect to the Commuter Rail, when available.
- Reimburse employees who regularly walk to work the cost of a new pair of walking shoes each calendar year.
- Incentivize employees to carpool with small bonuses or other programs as appropriate.
- If necessary, Union Twist, Inc. may also provide a shuttle, or vouchers for transportation network companies (e.g. Uber or Lyft) in order to make last mile connections to transit.

## TECHNICAL MEMORANDUM

TO: Ms. Marie St. Fleur  
Union Twist, LLC

FROM: Matthew W. Skelly, PE, PTOE  
Katherine Patch, EIT

DATE: June 6, 2020

RE: Additional Traffic Analysis  
1158 Beacon Street Cannabis Dispensary  
Newton, Massachusetts

---

This memorandum will serve as an addendum to the preliminary traffic review letter dated April 2, 2019 discussing the impact of the proposed marijuana dispensary building at 1158 Beacon Street in Newton, Massachusetts. The intention of the previously submitted letter was to provide a high level review of the traffic, transit, pedestrian and bicycle infrastructure and conditions in the vicinity of the site. This memorandum will provide a more detailed analysis of those parameters, specifically focused on the traffic conditions.

### Adjacent Roadway Network

The adjacent roadway network consists of the following roadways:

- Beacon Street
- Walnut Avenue

Beacon Street is an east/west roadway that runs approximately four and a half miles through Newton between Route 16 (Washington Street) in the west to its eastern terminus at Hammond Pond Parking at the Newton/Chestnut Hill municipal line. The roadway carries two lanes of travel, one in each direction, and is classified by the Commonwealth and the City as a minor arterial roadway. No on-street parking or dedicated bicycle facilities are provided however sidewalks are provided on both sides of the street at five feet in width.

Walnut Avenue is a north/south roadway that runs approximately three and a half miles between Crafts Street in the north and Dedham Street in the south. In the vicinity of the proposed site, the roadway carries two lanes of travel, one in each direction, with a posted speed limit of 25 miles per hour. It is classified by the Commonwealth and City as a minor arterial roadway. No on-street parking or dedicated bicycle facilities are provided however sidewalks are provided on both sides of the street at five feet in width.

Ms. Marie St. Fleur  
June 6, 2020  
Page 2 of 7

### Study Area Intersection

The intersection of Beacon Street and Walnut Street was reviewed for this study. It is a signalized four-way intersection with Walnut Street providing the northbound and southbound approaches and Beacon Street providing the eastbound and westbound approaches. Each approach carries one exclusive left turn lane, one exclusive through lane, and one channelized right turn lane that is stop controlled. All of the channelized right turn lanes are separated by raised islands and crosswalks are provided throughout the intersection. No dedicated bicycle facilities are provided at this intersection.

### Traffic Volumes, Speeds, and Counts

As indicated in the aforementioned Traffic Review Letter, the greatest potential for traffic impact on the roadway network by the proposed dispensary will occur during the weekday morning and afternoon peak hours, the periods when commuter related trips are at their highest levels, and the midday on Saturday, when the dispensary is expected to generate the most trips. In order to determine the traffic impact of this proposed development on adjacent street traffic, representatives of Fuss & O'Neill conducted afternoon and Saturday peak hour turning movement counts (TMCs) on Thursday, November 21, 2019 and Saturday, November 23, 2019. The proposed development will not generate traffic during the morning peak hour of commuter related trips therefore counts were not needed during this time period. These two peak hours were subsequently analyzed for impacts.

According to Massachusetts Department of Transportation (MassDOT) standards, traffic volume data must be reviewed to account for seasonal fluctuation. MassDOT traffic count data indicates that the background traffic volumes during the month of October are approximately two percent higher than the yearly average, and as such the counts were not adjusted for any seasonal growth. The 2019 volumes are depicted in the attached Figure 1. The counts were grown to a design year of 2026, according to MassDOT Transportation Impact Assessment (TIA) standards, at a rate of 0.5 percent per year, through review of historic count data and consultation with Isaac Prizant, City of Newton Transportation Engineer. Those 2026 No-Build volumes are depicted in the attached Figure 2.

Fuss & O'Neill also contacted Jennifer Caira, City of Newton Chief Planner, in order to identify other permitted developments in the vicinity of the site expected to generate traffic in the study area. Two developments were identified. The first at 858 Beacon Street where a tutoring center is being converted into a veterinary hospital, and the second at 956 Walnut Street where a single family home is proposed to be razed and seven residential units to be built in its place. The traffic generated from these two developments is expected to be negligible and not affect the study intersection, and therefore was not included in the analysis for the proposed development at 1158 Beacon Street.

Ms. Marie St. Fleur

June 6, 2020

Page 3 of 7

## Proposed Conditions

As stated in the Traffic Review Letter, the development is expected to generate a total of 50 vehicle trips (25 entering, 25 exiting) during the weekday afternoon peak hour, and 84 vehicle trips (42 entering, 42 exiting) during the Saturday peak hour. Additionally, Land Use Code 933, "Fast Food Restaurant without Drive Through Window" was used to determine that the existing restaurant use in this building is assumed to generate 43 vehicle trips (21 entering, 22 exiting) during the afternoon peak hour, and 82 vehicle trips (40 entering, 42 exiting) during the Saturday peak hour.

This trip generation does not account for the offset in trips that were generated by the previous dry cleaners. ITE does not have a land use code specific to this use, however this use is commonly analyzed as part of a shopping center, which is provided as Land Use Code 820. Based on the data for this use, a dry cleaners occupying approximately 2,300 square feet could be expected to generate a total of 9 vehicle trips during the afternoon peak hour and 10 vehicle trips during the Saturday peak hour. This data was not included as part of the forthcoming analysis in order to uphold a conservative design.

For both periods of analysis, the site generated traffic for the proposed dispensary was distributed to the roadway system based on the arrival/departure distributions presented in the Traffic Review Letter. Those volumes were then added to the No-Build volumes to yield the 2026 Build volumes shown in the attached Figure 5.

## Intersection Capacity Analysis

Capacity analyses for the signalized intersections was conducted using Synchro Professional Software, version 10.0.

In discussing intersection capacity analyses results, two terms are used to describe the operating condition of the road or intersection. These two terms are volume to capacity ratio ( $v/c$ ) and level of service (LOS).

The  $v/c$  ratio is a ratio of the volume of traffic using an intersection to the total capacity of the intersection (the maximum number of vehicles that can utilize the intersection during an hour). The  $v/c$  ratio can be used to describe the percentage of capacity utilized by a single intersection movement, a combination of movements, an entire intersection approach, or the intersection as a whole.

LOS is a measure of the delay experienced by stopped vehicles at an intersection. LOS is rated on a scale from A to F, with A describing a condition of very low delay (less than 10 seconds per vehicle), and F describing a condition where delays will exceed 50 seconds per vehicle for unsignalized intersections and 80 seconds per vehicle for signalized intersections. Delay is described as a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Therefore, intersections with longer delay times are less acceptable to most drivers.

Ms. Marie St. Fleur

June 6, 2020

Page 4 of 7

LOS is generally used to describe the operation (based on delay time) of both signalized and unsignalized intersections, while v/c ratio is applied to signalized intersections only. The definition for LOS, as well as the methodology for conducting unsignalized intersection capacity analyses, are taken from the "Highway Capacity Manual 6<sup>th</sup> Edition" published by the Transportation Research Board.

In discussing two way stop controlled unsignalized intersection capacity analyses, LOS is used to provide a description of the delay and operational characteristics of the turns from the minor street (stop sign controlled) to the major street, and turns from the major street to the minor street. Through vehicles are not delayed by the minor street and do not experience delay, therefore they are not rated with a level of service.

Using the above referenced methodologies, weekday afternoon, and Saturday midday peak hour capacity analyses were conducted at the signalized intersection of Beacon Street and Walnut Street, as well as the unsignalized site driveway at its intersection with Beacon Street.

The signalized intersection of Beacon Street and Walnut Street operates at LOS E during the weekday afternoon peak hour and LOS D during the Saturday peak hour of the No-Build conditions. These calculations utilize timings that have been updated to reflect the volumes in these scenarios, and are maintained for the build scenario.

In the Build scenario, the intersection of Beacon and Walnut Street is expected to continue to operate at LOS E, with an added average delay of approximately one second per vehicle during the weekday afternoon peak hour. During the Saturday peak hour, the intersection is expected to operate at LOS E, with an additional delay of approximately five seconds on average per vehicle.

At the site driveway intersections, the vehicles exiting the site are expected to experience approximately 20 seconds of delay per vehicle during both the weekday afternoon and Saturday peak hours in the Build condition. Vehicles entering the site are expected to experience less than ten seconds of delay when entering in both peak hours.

The recommended timing adjustments are provided in the Synchro analysis worksheets attached to this memo, and the delay per vehicle is shown below in Table 1 for the No-Build and Build conditions.

Table 1 – Critical Movement LOS/Average Delay per Vehicle

Critical Movements	Afternoon Peak Hour		Saturday Peak Hour	
	No-Build	Build	No-Build	Build
Beacon Street at Walnut Street	LOS E	LOS E	LOS D	LOS E
Eastbound Approach	72.3 sec	73.5 sec	54.1 sec	63.2 sec
Westbound Approach	71.6 sec	71.9 sec	46.8 sec	49.7 sec
Northbound Approach	61.6 sec	64.0 sec	50.4 sec	58.3 sec
Southbound Approach	69.5 sec	69.1 sec	51.1 sec	50.6 sec
Beacon Street at Site Driveway				
Westbound Through/Left Turn	N/A	9.0 sec	N/A	8.4 sec
Northbound Approach	N/A	21.8 sec	N/A	17.2 sec

### Queue Analysis

No-Build and Build condition 95<sup>th</sup> percentile (design) queue lengths were also reviewed at the study intersection. The 95<sup>th</sup> percentile vehicle queue lengths represent the maximum queue lengths that can be expected at each of the critical approach lanes of the study intersection. The queue lengths are provided in the attached Synchro capacity analysis worksheets.

None of the 95<sup>th</sup> percentile queue lengths studied are expected to increase by more than one vehicle length between the No-Build and Build scenarios.

It should be noted that queues experienced during the morning and afternoon weekday peak hours have been observed to extend longer than reported in the capacity analysis for this study. The primary reasons for this are twofold: one is the overflow of left turning vehicles beyond their storage space; the other is the driveway "friction" experienced as vehicles approach the intersection. Between the proposed site and Walnut Street, a high density of curb cuts add to delay beyond what is calculated as a result of the signal operations.

The City of Newton Transportation Division has been contacted regarding the potential to alleviate congestion at this intersection by allotting more time to left turning vehicles. A summary of the peak hour queue lengths at each intersection is provided in Table 2 on the next page.

Ms. Marie St. Fleur

June 6, 2020

Page 6 of 7

Table 2 –Peak Hour Queue Length Summary

Critical Movements	2019 Afternoon Peak Hour		2019 Saturday Peak Hour	
	No-Build	Opt. Build	No-Build	Opt. Build
Beacon Street at Walnut Street				
Eastbound Left Turn	165 ft	180 ft	150 ft	180 ft
Eastbound Through	455 ft	455 ft	245 ft	250 ft
Westbound Left Turn	205 ft	205 ft	85 ft	80 ft
Westbound Through	425 ft	425 ft	235 ft	240 ft
Northbound Left Turn	195 ft	205 ft	165 ft	190 ft
Northbound Through	385 ft	385 ft	330 ft	340 ft
Southbound Left Turn	170 ft	170 ft	165 ft	165 ft
Southbound Through	495 ft	495 ft	380 ft	385 ft
Beacon Street at Site Driveway				
Westbound Approach	N/A	5 ft	N/A	5 ft
Northbound Approach	N/A	20 ft	N/A	20 ft

\* values listed are rounded to the nearest five feet

### Crash Analysis

As stated in the Traffic Review Letter, crash data was gathered from MassDOT Crash Portal along Beacon Street in vicinity of the site driveway. Since the date of that letter, MassDOT has implemented their Interactive Mapping Portal and Crash Tracking (IMPACT) system and the data has been updated to include crashes from 2017. Therefore, for the purpose of this analysis, crash records were analyzed between 2015 and 2017 using the IMPACT system.

A total of 39 crashes were reported over this time period within 1,000 feet east and west of the site, including at the study intersection. Eleven crashes occurred in 2015, twelve in 2016, and sixteen in 2017, for an average of approximately thirteen crashes per year. The majority (fourteen) of the crashes were angle collisions, ten were rear-end collisions, ten were a sideswipe, three were a single vehicle crash, and two crashes did not report a manner of collision. Of these crashes, nine were associated with a possible personal injury, and all occurred at the study intersection or at the intersection of Beacon Street and Beaconwood Road. Crash locations are depicted in the attached figure.

Five of the collisions during the study period involved a collision with a cyclist. Three of these crashes were angle collisions, one was a single vehicle crash, and one was a sideswipe with vehicles traveling in the same direction. All five collisions resulted in non-fatal injuries and all occurred at the study intersection or at the intersection of Beacon Street and Beaconwood Road.

Ms. Marie St. Fleur

June 6, 2020

Page 7 of 7

MassDOT has four other vehicle/pedestrian crash on record within the vicinity of the site, two in 2014, one in 2007 and one in 2005. One at the entrance to Old State Park, east of the site, and three that occurred west of the site at the intersection of Beacon Street and Beaconwood Street. All four crashes resulted in non-fatal injuries to the non-motorist.

#### Conclusion

The purpose of this memorandum is to provide a more detailed analysis of the traffic infrastructure and condition initially discussed in the preliminary Traffic Review Letter dated April 2, 2019 regarding the proposed marijuana dispensary at 1158 Beacon Street in Newton.

Peak hour turning movement counts were conducted at the intersection of Beacon Street and Walnut Street in Newton during November, 2019. The data collected was grown to an analysis year of 2026 according to MassDOT Transportation Impact Assessment (TIA) standards to develop a No-Build condition. The previously determined trips expected to be generated by the proposed dispensary were added to the No-Build volumes in order to create a Build condition. Both conditions were analyzed for the weekday afternoon and Saturday peak hours.

Capacity and queue analysis indicates that on average, motorists can be expected to experience no more than two additional queueing vehicle during any peak hour with the incorporation of proposed signal timing improvements as a result of the trips associated with the site. The study intersection of Beacon Street and Walnut Street is expected to operate at LOS E during the afternoon and Saturday peak hours, of the Build condition, with added delay per vehicle of approximately five seconds or less.

It is the opinion of Fuss & O'Neill at the proposed development will have no significant impact on traffic delays or queues at the intersection of Beacon Street and Walnut Street.