260 West Exchange Street, Suite 300
Providence, Rhode Island 02903
tel: 401 751-5360

February 24, 2021

Mr. Jamie Ponte
Commissioner
Department of Public Infrastructure
1105 Shawmut Avenue
New Bedford, Massachusetts 02746

Subject: Draft Peer Review of Traffic Analysis; Southcoast Apothecary – New Bedford, MA

Dear Mr. Ponte:

In accordance with your request, we have undertaken a Peer Review of the traffic analysis materials prepared for the proposed re-development of (formerly known as) 115 Coggeshall St, New Bedford, MA 02746. The current proposal includes the reconstruction of an existing 5,300 square-foot building to a 5,000 square-foot Adult Use Cannabis Retail Facility. Access will be provided via existing 'Riverside Landing' plaza driveways. The existing driveway at the site will be used for deliveries only.

We have received a copy of the following documents from your office pertaining to our Peer Review:

- Technical Memorandum (hereafter referred to as the Study) – Traffic Analysis, Southcoast Apothecary – New Bedford, MA, Fuss & O'Neill Reference No. 20191061.T10 prepared by Fuss & O'Neill, Inc. dated January 11, 2021
- Special Permit Submission Plan Set – ASCEND CANNABIS DISPENSARY, 115 COGGESHALL STREET, NEW BEDFORD, MASSACHUSETTS prepared by Fuss & O'Neill, Inc. dated January 8, 2021
- Letter to the New Bedford Planning Board – RE: Site Plan and Special Permit Application for 115 Coggeshall Street, New Bedford, MA prepared by PRINCE LOBEL TYE LLP dated January 13, 2021
- Letter to Riverside Landing, LLC– Parking Agreement prepared by Southcoast Apothecary, LLC dated September 20, 2019

Traffic Impact Study Methodology

The analysis and documentation submitted by the project proponent were generally prepared in accordance with accepted industry procedures and standards including the 2014 MassDOT Transportation Impact Assessment (TIA) Guidelines. We offer the following comments:

Existing Conditions

The project proponent should consult with the City of New Bedford Department of Public Infrastructure as to the existing conditions noted along the corridor, with specific attention to the timeframe and scope of the STIP reconstruction project, provision of bicycle detection at the intersections, non-actuated concurrent pedestrian phasing, and limits of bicycle shoulders.

Study Area Intersections

The study area presented includes the existing unsignalized access point, located between the existing Urgent Care and the Popeye's fast food restaurant, as well as four signalized intersections on Coggeshall Street: at Ashley Boulevard, at Acushnet Avenue, at Belleville Avenue, and at I-195 Westbound Exit 17 Ramps and Veterans Memorial Way.

MassDOT TIA Guidelines Section 3, Part I C. states: "Intersections (to be assessed by approach) or roadway segments where site-generated trips increase the peak hour traffic volume by a) five (5) percent or more or b) by more than 100 vehicles per hour should be included in the study." As such, the approaches of the following intersections should be reviewed to determine if volumes are increased by five (5) percent or more due to the proposed site-generated trips:

- Belleville Avenue at Sawyer Street (see additional commentary below)

Belleville Avenue at Sawyer Street likely captures local traffic approaching from the north.

Additional site access is limited to a driveway immediately adjacent to the existing structure which has been designated for deliveries only. It is recommended that the Study document the proposed delivery vehicle size, turning maneuvers and delivery frequency to determine if use of this driveway will impede traffic flow along Coggeshall Street.

Traffic Volume and Counts

The turning movement counts were conducted on Thursday, December 3, 2020 between 4:00 PM and 6:00 PM, and on Saturday, December 5, 2020 between 11:00 AM and 1:00 PM; subsequently adjusted using a seasonal factor determined from a MassDOT permanent count station, as well as a 3.5% COVID-19 'factor' and a background future conditions growth rate. The Attachments to the Study do not include any documentation related to the seasonal growth rate calculations, the pandemic factor calculations, nor the future conditions background growth rate. As such, these calculations cannot be confirmed. Further, based on a review of traffic data collected at the

intersections of Coggeshall Street with Ashley Boulevard, Acushnet Avenue, and Belleville Avenue between 2009 and 2011, the entering intersection volumes during the Saturday peak are at least 10% lower in the Study than the data collected previously.

The project proponent should conduct turning movement counts at intersections added to the study area as noted above.

The northbound and southbound approaches to Coggeshall Street along Ashley Boulevard and Route 18 north are classified by MassDOT as 'Urban Principal Arterials'; therefore, the seasonal adjustment factor for these approaches should be 1.00 instead of 1.04 during the month of December.

The MassDOT TIA Guidelines Section 3, Part II I. state the following requirements for transit service frequency: "Transit routes, stops, passenger loads (when available), frequency of service, and service operating hours shall be documented." Some of this information has not been documented in the Study for the STRA Route 2 and Route 11 busses that travel this project area.

Future Conditions

Ascend Mass, LLC is to occupy 5000 of the available 5300 square feet of the building. According to the parking agreement provided, a total of 15 parking spaces are allocated for redevelopment use, and shared parking with the other nearby businesses is allowed. The Study and site plan indicate 16 spaces will be designated; this discrepancy requires clarification. The Study should identify any other background or planned projects in this project area, per MassDOT TIA Guidelines, section II.J.

Trip Distribution

Trips were distributed with 60% coming from Coggeshall travelling eastbound, 10% coming from Coggeshall Street traveling westbound, and 30% coming from I-195 WB Exit 17. These percentages are then further broken up into individual turning movements for each of the five studied intersections. We have the following comments on the trip distribution:

- It is unlikely that no new trips will use Ashley Boulevard or Belleville Avenue to Sawyer Street to access the northern driveway (Taco Bell at Veterans Memorial Way).
- Similarly, it is unlikely that a significant amount of traffic is accessing the site from Ashley Boulevard then turning left onto Coggeshall Street, as traffic traveling southbound on Ashley Boulevard are more likely to turn left onto Sawyer Street in advance of Coggeshall Street; this path is shorter and has fewer traffic signals.
- It is also unlikely that most of the site generated traffic (35% out of 60%) traveling eastbound on Coggeshall Street would by-pass the unsignalized Coggeshall Street driveway

to turn left at the signalized intersection and then left into the Veterans Memorial Way driveway.

The project proponent should justify the trip assignment methodology or revise accordingly.

Trip Generation

ITE Trip Generation Land Use Code 882 – Marijuana Dispensary was used to determine the increase in traffic associated with the proposed redevelopment. For the 'Weekday Peak Hour of Adjacent Street Traffic between 4 and 6 p.m.' and 'Saturday, Peak Hour of Generator', the data point with the maximum square footage was 3,411 square feet, as compared to the proposed project which is 5,000 square feet. While the PM Peak Hour is based on 12 data points, the Saturday Peak Hour is based on only 4 data points and includes the warning 'Caution – Small Sample Size'.

Given the ITE Trip Generation warning regarding small sample sizes and the size of the proposed redevelopment (larger than the maximum ITE data point collection), actual peak hour turning movement counts should be collected at similar sites within the State of Massachusetts to confirm that ITE LUC 882 accurately represents Recreational Marijuana Dispensary activity for the proposed site in New Bedford. The site generated traffic volume should be updated as needed.

Intersection Capacity Analysis and Queue Analysis

The MassDOT TIA Guidelines III.A indicate that capacity analysis should be performed based on the most recent edition of the Highway Capacity Manual (HCM). It is not clear from this section which methodology was used to analyze the signalized intersections. In the tabulation, the HCM 2000 methodology results are illustrated; however, in the attachments, calculations are provided for the Synchro 10 methodology as well as HCM 2000 methodology.

The attachments at the end of the document also show that the unsignalized analysis was performed using the HCM 2000 methodology, but the description in in the 'Intersection Capacity Analysis' section refers to HCM6 methodology. In both cases, the latest HCM methodology, HCM6, should be used and summarized in the Study.

The intersection capacity analysis should also be expanded as needed to include intersections added to the study area and incorporate any changes to trip distribution as noted above.

The Study should also identify approaches in Table 3 that operate at LOS E or LOS F under both No Build and Build conditions.

The Study should identify available queue storage capacity for each approach.

The queue analysis should be expanded to include the intersections added to the study area and incorporate any changes to trip distribution as noted above.

The intersection phasing, cycle, split, and offset information is the same between the no-build and the build scenario. Consistent with other development projects, the project proponent should develop timing adjustment plans to mitigate the impacts of the proposed redevelopment to the roadway network, pending the adjustments to growth rates, trip distribution, and trip generation as listed above. Timing adjustments should return the Build conditions to the same level of service and queuing as the No Build conditions.

Crash Analysis

In this section, it reads, "*the Coggeshall Street Corridor has recently been improved with a focus on user safety, making it a safer area to accommodate additional traffic flow.*" The Crash Analysis was conducted based on data from 2015, 2016 and 2017. Since construction of the STIP project did not reach substantial completion until early 2019, it is recommended that more recent crash data be collected from the New Bedford Police Department. At a minimum, crash data should be collected along Coggeshall Street between Mitchell Street and Veteran's Memorial Way (including these intersections) as well as Belleville Avenue at Sawyer Street to assess the potential for additional crashes due to the redevelopment.

When determining the number of crashes at each intersection, the intersection limits should extend to capture the back of the queue length.

MassDOT TIA Guidelines Section 3 Part III, F. states the following requirements for safety analysis, "Calculation of the study area intersection(s) and segment(s) crash rates, as applicable, using the standard MassDOT Crash Rate Worksheet are required." Crash rate worksheets should be provided as well as collision diagrams for locations where the calculated crash rates exceed District 5 averages.

Parking Analysis

Based on the City of New Bedford Ordinance, 25 parking spaces are required for this redevelopment. According to the Study, there will be 9 proposed parking spaces located on the immediate development lot, one of which is shown to be accessible. According to the parking agreement with Riverside Landing, an additional 15 spaces within Riverside Landing will be allowed for use by patrons of the proposed facility. One additional space needs to be provided to meet the ordinance.

The Study performed a parking analysis during the weekday evening peak hour and determined that up to 62 parking spaces may be unoccupied. We have the following comments on parking use:

- The Study should document parking space usage during the Saturday peak hour

- The Study should identify how many of the inventoried parking spaces are accessible and used or available
- The Study should provide an assessment similar to that of the traffic volume adjustments to reflect the pandemic impacts on parking space occupancy.

Point of Sale Analysis

In this section, it is stated that Ascend Mass, LLC intends to provide 1 parking space per 2 employees currently working and that up to 12 employees may be required to handle peak hours. As such, 6 parking spaces will be used by employees, with the remaining 19 spaces being available for patrons only. We take no exception to this section.

Transportation Demand Management Plan

In this section, the methods with which Ascent Mass, LLC will encourage their clientele and their staff to use multimodal transportation is outlined. No exception is taken with this section.

Attachments

Peak Hour Traffic Counts, Traffic Volume Figures, Synchro Capacity Analysis Worksheets, and a Crash Data Summary Table has been provided.

The following additional information should be included in the Attachments as recommended by MassDOT TIA Guidelines, Section 5.II

- Signal Layout Plans
- Transit Service Existing Conditions Data
- ITE Trip Generation Land Use Code Sheets
- Calculations for alternative trip generation rates
- Calculations for Seasonal Adjustment Factors, Growth Rates, Count Station Data Used, and Pandemic adjustments

Summary

Based on our review of the Southcoast Apothecary Traffic Impact Study, we find that the study has generally been prepared in accordance with accepted industry standards and procedures. We do however recommend the proponent address the following concerns:

- Increase the study area to include the signalized intersection of Belleville Avenue at Sawyer Street if the traffic increases exceed 5% of existing volumes

- Provide the methodology and calculations for the seasonal adjustments, pandemic adjustments, and background traffic growth
- Compare the ITE trip generation rate calculations with locally collected retail marijuana facility data and use the higher (more conservative) to determine redevelopment impacts
- Update the trip distribution as necessary
- Update the crash summary with more recent data
- Provide additional transit route, frequency, and operating hours information

We appreciate the opportunity to provide the City of New Bedford with these peer review services. We anticipate providing review of the project proponent's responses to these comments in accordance with our task order contract. Please do not hesitate to call if you have any questions relative to our review of the traffic-related issues associated with the proposed redevelopment.

Sincerely,

Lisa Sherman, PE, PTOE
Project Manager
CDM Smith Inc.