



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

May 6, 2019

Ms. Stephanie Crampton, EIT
Engineering Supervisor
City of New Bedford
Department of Public Infrastructure
1105 Shawmut Avenue
New Bedford, Massachusetts 02746

Subject: Peer Review of 2880 Acushnet Avenue, New Bedford, Massachusetts

Dear Ms. Crampton:

In accordance with your request, we have undertaken a follow-up Peer Review of the Traffic Impact Study supplemental materials for the development of 2880 Acushnet Avenue in New Bedford. The current proposal includes the construction of a 5,275 square foot Cumberland Farms convenience market, five gasoline pumps (10 fueling positions), and a 2,640 square foot car wash. Access will be provided via two full access driveways on Acushnet Avenue, one north and one south of the signalized intersection of Acushnet Avenue at Ashley Boulevard (Route 18).

We have received a copy of the following documents pertaining to our follow-up peer review:

- Updated Traffic Impact Study Cumberland Farms 2880 Acushnet Avenue prepared by McMahon Associates, Inc. dated April 2019
- Cumberland Farms Traffic Impact Study Trip Generation Review – 2880 Acushnet Avenue, New Bedford, Massachusetts prepared by McMahon Associates, Inc dated April 26, 2019
- Proposed Cumberland Farms Response to Comments Memorandum prepared by McMahon Associates dated April 3, 2019
- Email dated April 26, 2019 from Jason Adam, PE, PTOE McMahon Associates to Lisa Sherman, PE, PTOE CDM Smith summarizing accident data analysis
- Alternative 1 Concept Plan dated March 6, 2019

Traffic Impact Study Methodology

The supplemental analysis and documentation submitted by the applicant's traffic consultant are generally in accordance with accepted industry procedures and standards including the MassDOT Transportation Impact Assessment (TIA) Guidelines.



Ms. Stephanie Crampton, EIT

May 6, 2019

Page 2

Peer Review

We have reviewed the supplemental materials provided, and have the following comments:

Study Area

The project proponent has expanded the study area to include the intersections suggested in the initial peer review commentary.

Existing Conditions

The project proponent included a discussion on the pedestrian facilities within the study area, including crosswalks and pedestrian traffic signal equipment.

Crash Summary

The project proponent expanded the crash analysis area to include the intersections of Acushnet Avenue at Bowles Street and at Phillips Road. Although initially the crash rate for the intersection of Acushnet Avenue at Phillips Road was 1.29, above the state and district averages, the project proponent identified that the bulk of collisions initially included were outside of the 'intersection boundary' and related to access management. Removal of the collisions not directly associated with intersection operations result in a crash rate of 0.60 which is below the averages.

Additional Field Review – Critical Gap Acceptance

The critical gap acceptance analysis is no longer relevant, as the proposed main access to the site will now be via a fully signalized intersection.

Site Generated Traffic

The project proponent has collected local data for the purposes of establishing a local trip generation rate. The project proponent has also submitted supplemental analysis of trip generation calculations which are acceptable and consistent with industry standards. The resultant trip generation calculation has been incorporated into the analysis. It is recommended that the project proponent provide traffic monitoring services following the opening of the site to confirm that the proposed traffic signal operation is adequate.

Traffic Operations Analysis

The project proponent has expanded the traffic analysis area to include adjacent intersections as requested.

Site Access and Circulation

The applicant has revised the site access and circulation which appears to facilitate traffic operations, provide adequate vehicle parking and queue storage. The applicant has provided a

Ms. Stephanie Crampton, EIT

May 6, 2019

Page 3

conceptual traffic signal upgrade plan. It is recommended that this plan include the following city standards:

- Confirm that large delivery trucks can make the northbound right-turn into the site by illustrating proposed Autoturn runs
- Show the proposed traffic signal cabinet door swing area, service connection and concrete pad
- Consider the use of multiple mast arms versus a single 60' mast arm
- Confirm proposed traffic signal equipment including mast arms, pedestals, conduit and hand holes will be contained within city right-of-way

Intersection Sight Distance

The applicant has illustrated anticipated sight distances on the proposed plan. We agree that the southern site driveway is beneficial for the signal operations, especially for those vehicles exiting the site to travel southbound on Acushnet Avenue. While the 'don't block the box' pavement marking and sign application will be helpful, the project proponent should confirm that left-turning vehicles will be able to exit the site with minimal conflict. Further clarification is required as follows:

- The sight line illustrated looking north crosses the proposed site, where a new sign and proposed landscaping are shown. This sight line also crosses where vehicles are expected to be queued waiting to exit the site at the signal. Confirm the proposed sign and landscaping will not block sight distance. Measure the sight distance to pass beyond the stop bar (see attached markup).
- Measure the sight line to confirm available stopping sight distance for vehicles approaching the site driveway along Acushnet southbound and that those vehicles exiting the site have at least the same sight distance to decide to exit.

Summary

Based on our review of the supplemental materials provided, we find that the study has been prepared in general accordance with accepted industry standards and procedures. Specifically, we recommend the following remaining issues be addressed:

- Address the site access comments noted above
- Evaluate the sight lines as noted above





Ms. Stephanie Crampton, EIT

May 6, 2019

Page 4

- Provide traffic monitoring services following occupancy permit

We appreciate the opportunity to provide the City of New Bedford with these supplemental peer review services. Please do not hesitate to call if you have any questions relative to our review of the traffic-related issues associated with the proposed development.

Sincerely,

A handwritten signature in blue ink that reads "Lisa Sherman".

Lisa Sherman, PE, PTOE

Project Manager

CDM Smith Inc.

