



October 4, 2021
Revised November 8, 2021

Mr. Joshua Berry, Senior Planner
Cranston City Hall
869 Park Avenue
Cranston, RI 02910

Re: Proposed Commercial Redevelopment
777 Cranston Street, Cranston, RI
Responses to Traffic Review Comments

Dear Mr. Berry:

BETA Group, Inc. (BETA) is pleased to submit the following responses to review comments received from Fuss & O'Neill and the City of Cranston for the above referenced redevelopment project in the City of Cranston. We offer the following responses to address these comments:

Fuss & O'Neill

General

1. The number of spaces provided on site (180) exceeds the number required by the Cranston Zoning Code (103) by 77. The need for additional parking should be justified by the proponent

Response: Parking zoning requirements and demand was not reviewed as part of the Traffic Impact Study. This item is addressed by the Site Engineer who developed the parking layout including number of spaces required per potential tenant use.

2. The land uses at this proposed development are not expected to generate significant internal capture. More complementary uses should be considered to take advantage of the large development area and reduce trip generation. Additionally, the proposed uses require parking during daytime hours, and not at night. A co-located residential land use could better utilize the parking spaces on a 24-hour basis.

Response: No response required.

3. The proposed development is designed exclusively for vehicle traffic. Given the site's proximity to transit (RIPTA Route 30 Bus) and the Washington Secondary Bike Trail, as well as its location adjacent to densely populated residential neighborhoods, this site should be designed to serve all roadway users. We recommend a reduction in vehicle parking, the construction of sidewalks on site, and including bicycle parking onsite.

Response: A more detailed engineered site plan will be developed during later phases of review and approval specifically addressing these matters.

3.0 - Existing Conditions

3.1 - Roadways

4. The proponent does not analyze existing bicycle facilities in the area or assess the potential for implementing bicycle facilities on the project area roadways. Rhode Island's longest bike path, the Washington Secondary Trail, starts and ends approximately one quarter mile southeast of the proposed site driveway.

Additionally, the City of Cranston future land use map, developed in 2012 identifies the parcel immediately adjacent to the west side of the site as a potential future bike path location. For this reason, we believe the existing roadway network should be evaluated for the potential to introduce bicycle infrastructure.

Response: On-site accommodations will be provided to promote long term goals of the city relating to bicycle infrastructure.

3.3 – Traffic Flow Data

5. The 2019 traffic count data in Appendix A only includes automobile and truck traffic. We request that pedestrian count data be included in the appendix as well if it is available.

Response: Pedestrian and bicycle count data obtained as part of this study has been provided in the updated report.

4.0 – Safety Analysis

6. The proponent should address pedestrian safety in the report and indicate if any collisions with pedestrians took place in the study area. If pedestrian safety is found to be of concern, pedestrian safety improvements should be recommended.

Response: Based upon review of crash records from the local police department for the latest three-year period (2018 to 2020), there were no reported crashes involving pedestrians and/or bicyclists within the project area.

7. We concur with all other safety recommendations in this section.

Response: Noted.

5.0 - Impact Analyses

5.1– Trip Generation

8. Anticipated Trip Generation for the development has been calculated for the morning and afternoon peak hours. We recommend the Saturday midday peak hour also be included in analysis, as the development is expected to generate significant traffic at that time.

Response: Traffic count data has been obtained for this weekend period. In addition, the trip generation/distribution has been calculated and the analysis completed for Saturday midday peak hour and is provided in the updated report.

9. More information about the operation of the warehouse portion of the AutoZone is required to determine if the trip generation prediction for this land use is reasonable. The study conducted by the proponent does not account for employee trips or deliveries to the site, only deliveries deployed by the site. We recommend the proponent provide further justification or use ITE Land Use Code 150 "Warehousing."

Response: The additional area of the building not associated with the retail floor area is an expanded stockroom of parts where higher volume items and non-common specialty items are stored for direct sale to customers. These customers include purchases from local garages and repair shops as well as other AutoZone retail stores that have a smaller inventory and may not stock a particular item. Upon purchase at the local store or online for pickup, the part can be delivered to the store for convenient customer pick-up. This transfer of stock is a common practice among major retailers with multiple stores in a geographic region.

This use as defined, is not associated with a typical warehousing use under LUC 150, which is not appropriate for this application. LUC 150 is for large warehouse type facilities that are specifically designed for tractor-trailer storage, delivery and pick-up related to the storage and transfer of goods or materials, which is not proposed as part of the "stock room" operation for the AutoZone business.

10. Anticipated Trip Generation for the proposed Fast-Food restaurant has not been calculated for the weekday morning peak hour. Unless the operating hours of the restaurant are known to fall outside of the morning peak hour, it is assumed that this land use will generate traffic during the morning peak hour and therefore should be included in the morning peak hour analysis.

Response: The anticipated tenant for the fast-food restaurant will only be serving lunch and dinner, therefore no trips would be generated during the morning peak period for this use. In order to be conservative in our analysis of potential site development impacts, a morning peak condition was reviewed for this fast food land use and has been included in the updated report.

5.2 – Future Traffic Volumes

11. We recommend the proponent contact the City of Cranston to determine if any other approved developments in the area should be considered in the development of the No-Build condition.

Response: In coordination with the city, no new developments impacting traffic in this highly developed area are currently proposed. The base one percent growth rate utilized in the study represents a conservative increase to base traffic.

12. We recommend a computer drafted volume figure be provided of the 2024 No-Build

Response: The figures presented in the report provide the reader with graphic presentation of existing and future build conditions to define the estimated changes at the study intersections if the project were to be constructed. Detailed turning movement figures identifying each study intersection and the period reviewed, Existing, 2024 No-Build and 2024 Build conditions are provided for the technical reviewer in the Appendix.

13. A computer drafted volume figure of the anticipated trip distribution percentages should be provided for clarity.

Response: Trip distribution percentages are referenced in the body of the report for a general description of the anticipated site traffic demand flows. Detailed trip distribution volume figures are provided in Appendix C as part of the trip generation section for the technical reviewer. The figures clearly define estimated traffic volumes entering and exiting the site at specific driveway locations.

14. The 2024 Build Condition AM weekday peak hour traffic distribution figure in Appendix C contains a volume balancing error at the western site driveway.

Response: The figure has been updated and is provided in the revised report to show the correct value.

5.3 – Operational Analysis

15. The proponent has observed intersection blocking during the afternoon peak hour in the existing condition that causes extended delays and congestion. However, reported 95th percentile queues in the existing condition analysis do not appear to exceed available storage length. The proponent should clarify this inconsistency.

Response: Paragraph two on Page 18 under the Operational Analysis section clearly states the reasoning why this occurs which cannot be modeled in an analysis. The report also outlines potential solutions to help mitigate this condition.

16. The proponent states that capacity analysis is performed using HCM methodology, however the capacity analysis worksheets in the appendix do not appear to include HCM analysis. Capacity analysis should be re-done using HCM methodology.

Response: Synchro software utilizes HCM methodologies in the analysis procedures though is more robust in the calculation process of certain applications. For clarity, the HCS output results are provided in the updated report.

City of Cranston – Traffic & Safety Bureau

1. Scope of study may not be adequate... consider impact from Webster Ave to Huntington Ave.

Response: The project area will be expanded to the west to include Webster Ave in the City of Cranston and to the east to include Huntington Avenue in the City of Providence.

2. Potential traffic mitigation & improvements... signal upgrades & coordination, turn lanes; etc.

Response: Improvements are being proposed to include an eastbound left turn lane into the site along with signal phasing and timing optimization.

3. Significant trip generation for convenience market/gas station land use may be excessive for the site.

Response: This land use draws much of its traffic (>65%) directly from the adjacent street traffic, which will not be new to the adjacent servicing roadway. The study was conservative in not reducing traffic volumes to account for this "pass-by" traffic that is typical of this use.

4. Geometry of the proposed right in/out east of main signalized entrance does not appear adequate to deter prohibited left turn movements in and out of the site. Consider right-in only design similar to the right-out only at west end of the site.

Response: The design of this driveway will be further reviewed to determine if it can be designed to be prohibitive for left turning traffic. The intent of the design is to minimize minor approach calls at the traffic signal to promote arterial traffic flow and reduce delays.

5. On-site truck circulation associate with Auto Zone is unclear.

Response: A truck turning diagram will be provided by the site engineer to demonstrate delivery vehicle site access and circulation.

Should you have any questions or require additional information or copies of the updated report, please contact us at your earliest convenience in order to facilitate review of the application.

Very truly yours,
BETA Group, Inc.



Paul J. Bannon
Associate

cc: file