



October 18, 2022

Mr. John Walsh  
Comstock Industrial, LLC  
36 Sherwood Place  
Greenwich, CT 06830

Re: Traffic Engineering Peer Review  
Proposed Mixed-Use Development Project  
Comstock Crossings  
Cranston, Rhode Island

Dear Mr. Walsh:

As requested, BETA Group, Inc. (BETA) has conducted a traffic engineering peer review for the proposed Comstock Crossings mixed-use development project proposed along the eastern side of Comstock Parkway approximately 200 feet south of Plainfield Pike (Route 14) in the City of Cranston, Rhode Island. The site is partially wooded and currently contains what appears to be a storage site for earth materials with no existing structures. The proposed development project would consist of the construction of a 6,720 square foot (SF) self-storage facility, a 7,000 SF retail store, and an 84-seat coffee shop with a drive thru. Access to the site would be provided via a one full access driveway, and one right-in/right-out driveway on Comstock Parkway.

BETA reviewed the Traffic Impact Assessment (TIA) for the development project, Comstock Crossings prepared by the Pare Corporation (Pare) and dated February 2022. The review focused on the completeness and accuracy of the Pare report, while also evaluating the potential traffic impacts to the proposed Industrial Warehouse development on Comstock Parkway proposed by Comstock Industrial, LLC further to the south across from Western Industrial Drive. This letter has been prepared to outline our findings and comments related to the material provided. Our key comments are bolded in the letter.

## EXISTING TRAFFIC VOLUMES

Manual turning movement counts (TMCs) were collected on Wednesday, February 2, 2022, from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM at the two study intersections of Plainfield Pike (Route 14) at Comstock Parkway/CVS driveway and Scituate Avenue (Route 12) at Comstock Parkway (Route 12). The study area was found to be sufficient.

Historical traffic volume data on Comstock Parkway was requested from the Rhode Island Department of Transportation (RIDOT). Traffic volume data on Comstock Parkway from July 2019 was provided and a comparison was performed between the 2019 and 2022 data. The 2019 data was projected to February 2022 to match the recent data collected. It was determined that the 2022 volumes were higher than the grown 2019 volumes, and therefore the 2022 data was used for the analysis.

It is unclear how the 2019 volumes were projected forward to February 2022, and which factors were used to account for the seasonal variations. In addition, the existing volumes presented for the intersection of Plainfield Pike (Route 14) and Comstock Parkway in the TIA shows 1,750 total vehicles entering the intersection during the morning peak hour which is approximately 200 vehicles less than the Industrial Warehouse study completed by BETA, which shows 1,950 total vehicles. In both studies, the intersection was found to operate efficiently at an overall LOS B and C for existing conditions during the peak daily traffic demands with the volumes utilized, resulting in no operational concerns at this junction.

## SAFETY ANALYSIS

### CRASH DATA

Crash data was collected and compiled from the Cranston Police Department for the study area intersections for the most recent three-year period prior to COVID from January 2017 through December 2019. The crash data also included the section of Comstock Parkway between the study area intersections.

The Plainfield Pike (Route 14) and Comstock Parkway (Route 12) intersection experienced the most crashes with 25 crashes over the three-year period while the Scituate Avenue (Route 12) at Comstock Parkway intersection experienced 15 over the same time period.

The crash data analysis was found to be complete and sufficient.

### SIGHT DISTANCE

Vehicle speeds were measured on Comstock Parkway near the site on February 5, 2022. The posted speed limit is 25 miles per hour (mph) on Comstock Parkway. The 85<sup>th</sup> percentile speed is 32 mph for both the northbound and southbound directions which is 7 mph higher than the posted speed limit.

The 85<sup>th</sup> percentile speed is typically used to determine the required sight distance for a street or driveway. Based on the 32 mph 85<sup>th</sup> percentile speed, all sight distances were found to exceed the minimum required distances.

The sight distance measured for the roadway geometric conditions and vehicle speeds provide for sufficient sight distance for entering and exiting driveway traffic. It should be noted though that during peak periods of the day, vehicles periodically queue back to the proposed site frontage. This queuing would potentially limit the sight lines for exiting vehicles, and the ability for vehicles to access the driveway.

## NO-BUILD CONDITIONS

The No-Build condition includes the addition of background development-related growth which may increase traffic within the study area. For the commercial plaza study, the proposed industrial warehouse development traffic was included in the analysis.

In addition, the existing traffic volumes were increased from 2022 to 2027 by 0.5% which is reasonable based on the census data noted in the TIA.

The Industrial Warehouse study applied a 1.0% annual growth rate which is also reasonable, more conservative, and would include any unknown future growth in the area during the time period.

## BUILD CONDITIONS

### TRIP GENERATION

Project-generated traffic volumes were determined by utilizing trip-generation statistics published by the Institute of Transportation Engineer's (ITE) Trip Generation Manual, 11<sup>th</sup> Edition for land use code (LUC) 937 (Coffee/Donut Shop with Drive-Through Window, LUC 822 (Retail Plaza), and LUC 151 (Mini-Warehouse). The Coffee/Donut Shop land use trips are for all new trips, however, this type of land use generates approximately 50% pass-by trips according to the Trip Generation Handbook, 3<sup>rd</sup> Edition. Pass-by trips for this project are the trips that are on route to a different point and stop along the route to get some food and/or drink while travelling to the destined stop. Pass-by trips do not generate new trips on the adjacent roadways to the development.

The project site is expected to generate a total of 174 new and 120 pass-by morning peak hour trips, and 149 new and 54 pass-by evening peak hour trips on a weekday.

The land uses and methodology chosen are accurate and consistent with industry standards.

### TRIP DISTRIBUTION

The TIA stated that the trips would be distributed according to the existing traffic patterns within the study area, however, it does not appear that the trips were distributed according to existing patterns. The existing traffic is pretty evenly split in either direction along Comstock Parkway during peak periods, but the analysis had a higher percentage to the north.

Ultimately, we concur with how the trips were distributed with the higher percentage of vehicles exiting the site towards the north direction on Comstock Parkway, destined for the Plainfield Pike (Route 12) intersection.

## CAPACITY ANALYSIS

Traffic operations analysis was performed with Synchro software for the existing 2022, 2027 no-build, and 2027 build conditions at the study intersections of Comstock Parkway with Plainfield Pike and Scituate Avenue and under future conditions at the proposed site driveway(s) to the new plaza. Overall, the signalized study area intersections are anticipated to operate at level of service (LOS) C or better during the build condition with the Comstock Parkway northbound left-turn/through movement operating at a LOS E during the peak period.

The site driveway to the new commercial plaza would operate at LOS F during the evening peak period typical of most driveways and intersections along this segment of road due to the volume of traffic on Comstock Parkway during this period. The analysis found minor acceptable queuing on the driveway, which per the Pare report would not cause congestion issues at the driveway or impact the plaza site circulation.

## CONCLUSION

Overall, the study was done professionally and according to industry standard guidelines and procedures. Based on the information provided, the data and analysis results are consistent with the study completed by BETA. In summary, it does not appear that this proposed commercial plaza project would have a discernable impact to the Industrial Warehouse project driveway operations, and therefore the conclusions and recommendations made by BETA as part of the original approvals remain valid.

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,  
BETA Group, Inc.



Jaklyn Centracchio, PE, PTOE  
Project Manager