

## **Department of Transportation**

Monroe County, New York

Adam J. Bello
County Executive

Thomas J. Frys, P.E. Director

September 14, 2023

Mr. Josh Doolittle 68 Charlotte Street Rochester, New York 14607 Mr. Richard Rosen 20 Grove Place Rochester, New York 14605

RE: UNION STREET AT CHARLOTTE STREET

Dear Mr. Doolittle and Mr. Rosen:

In response to your May 22, 2022 emails to County Executive Adam Bello, the Department of Transportation evaluated the subject location to determine whether traffic signal control is appropriate. Our evaluation included field reviews of the area, a vehicular/pedestrian traffic count conducted during weekday AM and PM peak periods, and a review of the five year accident history through 2022.

Union Street has two travel lanes for northbound traffic and one travel lane for southbound traffic. Charlotte Street intersects Union Street from the east and west, and is stop controlled at Union Street. The intersection has a multi-level apartment complex on the northwest corner, a multi-professional building on the southeast corner, a parking lot on the northeast corner, and a vacant lot on the southwest corner. There are curb bump-outs on each corner with the exception of the northwest corner. There are parking lanes on both sides of Union Street. A two-way separated cycle track exists along the west side of Union Street adjacent to the sidewalk. There are marked crosswalks across Union Street on the north and south legs of the subject intersection. There is an eastbound stop bar at the stop sign. Sight distance for eastbound traffic looking to the north is limited by the building when stopped at the stop bar; sight distance is better after advancing past the cycle track.

The accident history revealed a minor pattern of right angle type accidents since the Charlotte Square on the Loop building was completed on the northwest corner in 2019. There was a one-year spike in 2021 however, it reverted back to norm in 2022. The right angle type accidents have been nearly evenly divided between vehicles in all four directions. The primary factor cited in most of the accidents has been failure to yield the right-of-way by eastbound and westbound vehicles on Charlotte Street.

Based on our findings, I do not recommend traffic signal control at the subject intersection; none of the warrants are met. All-way stop control (AWSC) is also not recommended for this location due to the ratio of traffic volumes on the major street (Union Street) compared to traffic volumes on the minor street (Charlotte Street), which is about six to one.

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All-way stop control is most effective when this ratio is close to one to one; it would be very inefficient at this location, which could result in noncompliance.

I recommend installing a westbound stop bar on Charlotte Street near the Union Street curb extension and relocating the eastbound stop bar on Charlotte Street closer to the cycle track. These would prompt motorists to stop closer to Union Street where there are better sight distances. These recommendations have been passed on to the City of Rochester for their concurrence and follow-through.

The upcoming Inner Loop North Transformation Project will have further impact on traffic patterns and street geometry at the subject intersection. The City of Rochester will complete additional traffic evaluation and modeling during the project's design phase to determine whether any additional changes to traffic control at the subject intersection may be warranted as part of the project; including traffic signal control and/or AWSC.

Should there be any questions regarding our evaluation, please contact Jim Fairchild at 585-753-7755, or me.

Sincerely,

Thomas J. Frys, P.E.

Director of Transportation

TJF;tdp;dph

cc:

A. Bello, Monroe County Executive

T. Polech

J. Fairchild

T. Harris

H. Barrett, City of Rochester DES, City Engineer

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