

February 18, 2024

Re: Bull's Head Street Improvements Proposal of 2025.02.04

Dear Ms. Reyes,

As a strategic partner with the City of Rochester on improving street safety, expanding multimodal transportation options and enabling a more vibrant and equitable community, Reconnect Rochester has taken a special interest in the Bull's Head Street Improvements project. We are certain you agree that this is a once in a lifetime opportunity to build a new streetscape that future generations will enjoy whether by foot, by bike, by transit or by personal vehicle.

For this reason, we have remained engaged throughout the project offering detailed comments following previous public meetings (March 2024 and August 2024). Given that the Bull's Head Redevelopment proposal is slated to include roughly 800 residential units and over 100,000 square feet of office/retail/urban agriculture space in a transit rich corridor, we believe it is crucial to the success of the project to make it a safe, comfortable pedestrian, cyclist, and transit rider experience for all people of any age and ability.

In light of the <u>2023 Active Transportation Plan (ATP)</u> and the <u>ROC Vision Zero</u> initiative, we are offering suggestions to strengthen the design to meet the aspirations of these plans. Furthermore, in December of 2024, <u>AASHTO (The American Association of State Highway Transportation Officials)</u> released the fifth edition of the <u>Guide for the Development of Bicycle Facilities</u>. The latest edition of this guide classifies many of the design elements suggested in our <u>August 2024</u> input letter as the preferred standard design in the United States. As such, this letter provides references to the new guidelines to support previous input.

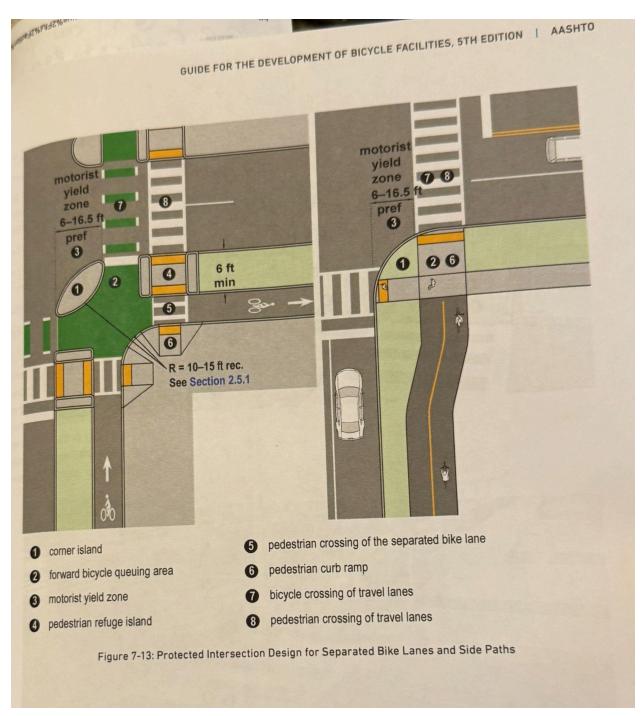
As discussed in our <u>March 2024</u> and <u>August 2024</u> public input letters, the ATP identifies two citywide bike spine corridors which intersect in the project area. The bike spine is the minimum viable network of protected bikeways which will allow residents of all ages

and abilities to ride from one corner of Rochester to another. Bike spine B and bike spine H connect at the intersection of West Main Street and Genesee Street and bike spine H continues west on Chili Ave to the city line (page 77-80 ATP). Despite these plans, and the recent SS4A award to fund construction of the Chili Ave bike spine, westbound cyclists do not have a direct connection to Chili Ave. Channeling cyclists to ride through a pocket park area behind a "Neighborhood Sign" will provide an uncomfortable environment for pedestrians as well as visually block cyclists from vehicles turning onto West Ave from West Main Street.

## W Main & Genesee Street Protected Intersection Design

Reconnect Rochester's previous input stressed the need for the intersection of West Main Street and Genesee Street to be constructed as a protected intersection. Chapter 7 of the AASHTO Bike Guide discusses the design details of separated bike lanes and side paths. Section 7.2.1 discusses the tradeoffs between retrofit and permanent designs saying, "...capital improvement projects should also incorporate the preferred design features such as sloping curbed medians instead of flexible delineator posts and pavement markings, and protected intersections instead of mixing zones" (AASHTO 7.2.1).

Section 7.9 details intersection principles including: minimizing exposure to conflits, reducing speeds at conflict points, providing clear transitions when elevation changes, signaling right-of-way priority, having clear sight distance, and restricting motor vehicles from driving in spaces for bikes. "Considering the principles discussed in sections 7.9.1 through 7.9.5, protected intersections are preferred over designs that require bicyclists to mix with motor vehicle traffic. Well-designed protected intersections are intuitive and comfortable, provide clear right-of-way assignment, promote predictability of movement, and allow eye contact between motorists, bicyclists, and pedestrians. They also clearly define pedestrian and bicyclist operating spaces within the intersection and minimize potential conflicts between users" (AASHTO 7.9.7).



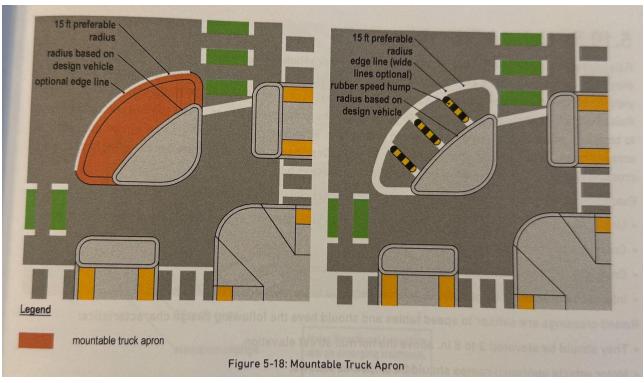
AASHTO Bike Guide, Page 7-37

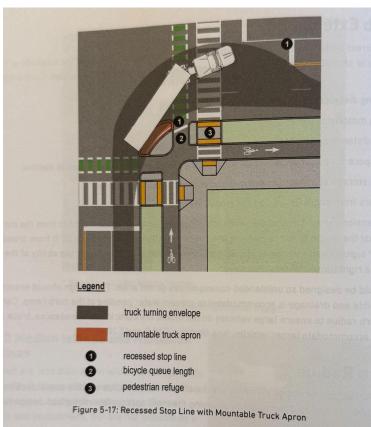
It is important to note that the AASHTO Bike Guide does not suggest anywhere in its chapter discussing protected bike lanes that it is acceptable for cycle tracks to become shared use paths temporarily at intersections. Instead, AASHTO discusses the tradeoffs between protected intersections and mixing zones before going though several pages

discussing strategies to implement protected intersections in constrained areas. "It is important to provide clear and direct paths for pedestrians across bike facilities and to provide intuitive separated bike lane intersection design to reduce the likelihood that pedestrians will use a bike lane as a walkway" (5.8.5). We recommend that the Bull's Head Street Improvement Project incorporate protected intersections as depicted on the left side of figure 7-13. All elements of protected intersections described by AASHTO 7.9.7 should be included in design but we wanted to specifically call out corner islands and reduced turn radii.

Corner islands allow protected bike lanes to be "physically separated up to the intersection crossing point where potential conflicts with turning motorists can be controlled more easily" (AASHTO 7.9.7.1). This is important to communicate right-of-way and to ensure that all roadway users can easily predict each other's movement. Corner islands can also reduce the turning radius of the intersection ensuring turning vehicles slow down as they cross conflict points. AASHTO calls for small turning radii saying; "Where bikeways cross roadways within intersections, the smallest feasible curb radius should be selected for corner designs based on the design vehicle's effective turn radius. A small curb radius requires motorists to slowly navagait the turn, which improves yielding behavior and reduces stopping distance requirements" (AASHTO 5.10.3).

Our previous letter stressed the need to reduce the turning radii of the intersections across this project to prioritize slower speeds. Narrow turn radii can be used while simultaneously allowing larger (WB-50 or WB-67) vehicles to make turns. **We suggest considering the use of Mountable Truck Aprons which slow drivers while allowing trucks to make turns without encroaching on pedestrian and cyclist space.** "Where the design vehicle exceeds an SU-30, a mountable truck apron can be considered to supplement the corner island (see section 5.10.4); however, the corner island should not be eliminated, as it serves important functions in protecting crossing bicyclists and pedestrians and controlling motorist speeds" (AASHTO 7.9.7.1). Other strategies such as recessed stop lines (discussed in AASHTO 5.10.3) can tighten curb radii and allow larger vehicles to make turns. Some of these strategies are depicted in figures 5-17 and 5-18.





Figures 5-17 and 5-18 from pages 5-54 and 5-55 of the AASHTO Bike Guide

The sidewalks at the intersection of West Main and Genesee are planned to be 10' wide leaving ample room to accommodate ADA curb ramp specifications and corner islands. We suggest considering a protected intersection within the current geometry of the intersection; however, AASHTO's "constrained locations' guidance begins by saying: "Assuming each roadway element (motor vehicle lanes, buffers, separated bike lane, and sidewalk) has been narrowed to its minimum dimensions (and number of travel lanes), the first strategy is to eliminate the sidewalk buffer while still providing a detectable edge for pedestrians with disabilities located at the edge of the separated bike lane" (AASHTO 7.9.8).

The latest design presented at the public meeting has a narrow cycle track with a small buffer while lane widths remain far above minimum dimensions. Chapter 2 of the <a href="NYSDOT Highway Design Manual">NYSDOT Highway Design Manual</a>, updated on January 24th 2025, defines the minimum width of non NHS urban roadways to be 10' in residential and commercial areas such as Bull's Head (<a href="Page 2-60 of NYSDOT HDM">Page 2-60 of NYSDOT HDM</a>). Using the NYSDOT minimum lane widths on West Main Street as prescribed by AASHTO would result in 7' of savings at the intersection and across the West Main ROW. These savings can be used to more easily accommodate a protected intersection and/or bring the cycle track width up to AASHTO standard (as discussed below).

Reducing lane widths would also reduce the pedestrian crossing distance which would help to make the intersection safer and easier for pedestrians to cross. Our previous input letter cited recent scholarship which has demonstrated that wider travel lanes are not safer than narrow lanes contrary to typical traffic engineering knowledge. AASHTO goes on to say: "Research on the effects of 10- to 12-ft travel lane use travel lane widths on crashes for urban and suburban arterial roadways, with posted speeds of 45 mph or less, has found no general indication that the use of narrower widths within this range increases crash rates or decreases motor vehicle capacity. (See chapter 4 References: AASHTO, 2018; Potts, Harwood, and Richard, 2007; Potts, et al., 2007; Macdonald et al., 2008.) Research has also found that narrower lane widths can contribute to lower vehicle operating speeds, which can increase safety for all roadway users" (AASHTO 4.4.2.2).

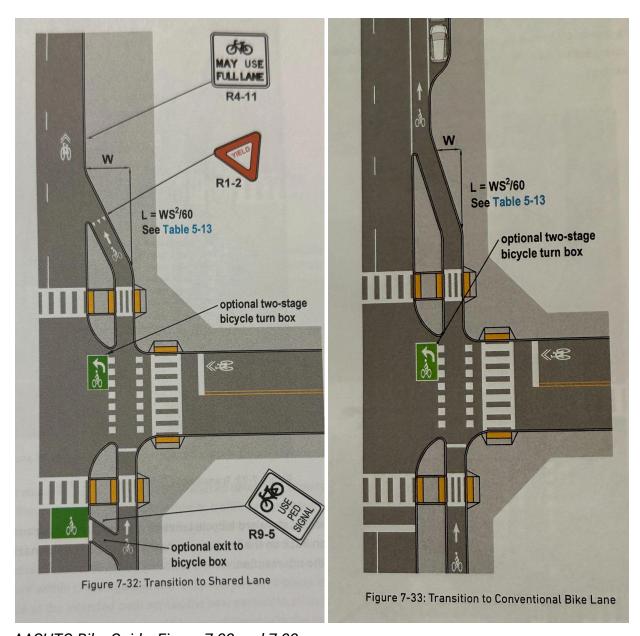
Project designers should also examine if the proposed second eastbound lane is really required in this project. For more detail on our suggestions regarding this topic, please

refer to Page 5 of the <u>August 2024</u> public input letter. West of the project, Chili Ave is slated to receive protected cyclist accommodations around 2028. East of the project, West Main St has recently installed bike lanes which will trial low profile concrete barriers this summer. The 2023 ATP identifies Genesee Street as a future segment of the bike spine carrying residents north and south. These will all have network effects resulting in modal shifts towards cycling and transit and away from personal vehicles.

Removing the extra though lane would also add space to accommodate a Median Island which would provide a safer pedestrian and cyclist crossing by allowing for two stage crossings and shortening the crossing distance. AASHTO 5.10.1 details medians as a "proven safety countermeasure associated with significantly lower pedestrian crash rates at multilane crossings" (AASHTO 5.10.1.1). We suggest that where feasible, pedestrian and cyclist refuge islands should be installed, or that centerline hardening be considered (assuming recessed stop bars are not utilised).

# **Bikeway Transitions**

The Bull's Head project includes cycle tracks which will eventually connect a citywide network of protected lanes. Until the network can be fully built out, **protected lanes should be planned to transition to in-street or painted accommodations.** "In general, it is preferable for a transition from a separated bike lane to a standard bike lane or shared use lane to occur on the far side of the intersection (see figures 7-32 and 7-33). This maximizes the safety and comfort of bicyclists through the intersection" (AASHTO 7.10). This will also ensure that future projects will be able to seamlessly integrate with the design while allowing for maximum comfort for roadway users. We recommend the transition between bike accommodations on Chili Ave resemble AASHTO's figure 7-32 and the transition to West Ave resemble figure 7-33.



AASHTO Bike Guide, Figure 7-32 and 7-33

## **Cycle Track Width**

Protected bike lanes at the sidewalk level "should allow passing of slower bicyclists and side-by-side travel, where feasible (see Section 7.3.4)" (AASHTO 7.2.0). This bike lane will see increased ridership as network effects are amplified with the construction of the greater bike spine plan. **Updated guidance suggests a width of 5.5' to 7.5'. If 12' lanes** 

are reduced to 11' then this can easily be met. "The practical minimum widths are not recommended for long distances or in locations where there are higher volumes of bicyclists during peak hours" (7.3.4)

Peak Hour Directional Bicyclist Volume	One-Way Separated Bike Lane Width (ft) Recommended Values		
	Between Vertical Curbs without Gutter	Adjacent to One Vertical Curb	Between Sloped Curb, at Sidewalk Level, or Adjacent to Curb with Gutter
<150	6.5–8.5	6–8	5.5–7.5
150–750	8.5–10	8–9.5	7.5–9
>750	≥10	≥9.5	≥9
Practical Minimum*	4.5	4	4

AASHTO Bike Guide, Page 7-16

#### **Bus Stops & Protected Bike Lanes**

Throughout the project area, protected bike lanes and bus stops should be designed to not conflict with each other. **AASHTO emphasizes "floating transit stops" as the preferred design option** as described in 7.9.14. It is especially important that floating transit stops are considered as new curbs are installed throughout the project as this is the time to implement this design. Floating transit stops can be designed to provide in-lane or pull-out options depending on the bus stop's constraints.

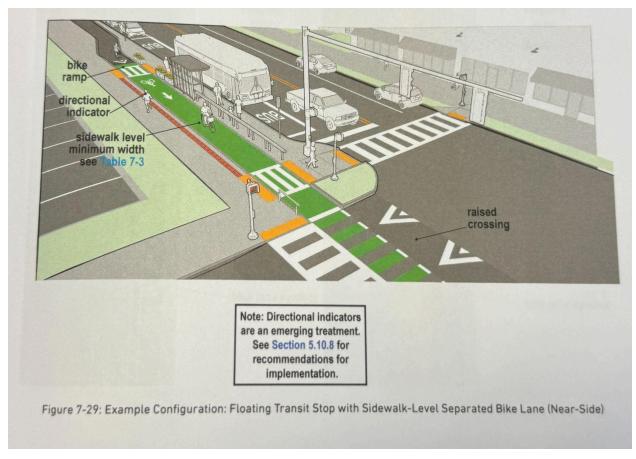


Figure 7-29, AASHTO Bike Guide on page 7-57

#### **Genesee Street & Protected Accommodations**

In the current design, cyclists headed southbound on Genesee Street will be given only a painted buffer. It is important that some sort of vertical elements are included in this part of the project if utility concerns remove the possibility of more permanent change. AASHTO's section 7.4.2 walks through 7 barrier types which could be considered in this segment including raised islands, concrete (jersey) barriers, vehicle parking, precast curbs, planters, rigid bollards, or flexible delineator posts. It is important for one of these barriers to be used to meet both the ATP's need to create a bikeway accommodating of all ages and abilities as well as to meet the definition of a protected bike lane. This segment of Genesee Street also includes two bus stops. Assuming that constructing a floating transit stop with new curbs is not possible due to utilities, a low cost solution such as Vectorial's modular bus platform should be considered. These platforms allow for protected bike lanes to pass transit stops without using the bike

lane as a transit stop. These have been effectively installed in many cities such as Oakland, California.

Thank you for the opportunity to provide input for your consideration.

Sincerely,

Bill Collins,

**Advocacy Committee Chair** 

Cody Donahue

Cody N. D

Director of Policy and Advocacy, Reconnect Rochester

Henry Listky

Policy and Advocacy Coordinator, Reconnect Rochester

And...

Mary Staropoli, MPA, Executive Director

Victor Sanchez, President Renée Stetzer, Vice President Jackie Marchand, Treasurer Michael Davis, Secretary Bill Collins, Chair, Advocacy Committee

Kathryn Austin

Josie McClary

Pete Nabozny Jason Partyka

Steve Roll

Brendan Ryan

**Erick Stephens**