

Station Plan: Penn & Dowling

This station will serve the intersection of Penn Avenue and Dowling Avenue. This location will have unique station spacing as a result of surrounding land uses. The Penn & 43rd Avenue station is located about 0.65 mile to the north, a longer distance than typical due to the disruption of the street grid from the Crystal Lake Cemetery. The Penn & 36th Avenue station is about 0.25 mile to the south, a shorter distance than typical to provide transit access for strong transit demand between Lowry Avenue and Dowling Avenue. Modest ridership surrounding the Penn & Dowling station reflects that transit predominantly serves single-family residential land uses in this area.

Table 1: Station Plan Summary – Penn & Dowling

Penn & Dowling		
	Station Characteristic	Planned Condition*
CORE STATION PLAN	Intersection Location	Penn & Dowling Provides adequate station spacing and transit access to northern portion of Penn Avenue corridor.
	Platform Location	SB: Nearside (NW corner) SB platform must be sited nearside due to existing NB constraints and limited roadway width. A bus stop currently exists at this location. NB: Nearside (SE corner) Crystal Lake Cemetery limits feasibility of farside platform. A bus stop currently exists at this location.
ADDITIONAL STATION DETAILS	Shelter	SB: Install new shelter No shelter currently present. Will install new shelter with enhanced amenities. NB: Install new shelter No shelter currently present. Will install new shelter with enhanced amenities.
	Curb Configuration	SB: Bumpout Maximizes operational efficiency and pedestrian space. No space constraints exist that will restrict bumpout construction. NB: Bumpout Maximizes operational efficiency and pedestrian space. No space constraints exist that restrict bumpout construction.
	Platform Length	SB: 60' long Will use C Line design standard to accommodate 60' BRT vehicle. NB: 60' long Will use C Line design standard to accommodate 60' BRT vehicle.

*Final conditions to be developed during the engineering/design process.

Notes and Discussion

A major station planning consideration is the potential for connections to existing transit service. Aside from Route 19, there are no intersecting bus routes at this location. Reduced Route 19 local service will be maintained at this location. Dowling Avenue also carries Route 19 "H" branch service west to 42nd Avenue and York Avenue.

The intersection of Penn Avenue and Dowling Avenue is signalized. While nearside station platforms limit the potential for transit signal priority, signal priority will be considered for implementation and is dependent upon a traffic analysis balancing acceptable traffic operations for all street users. This work will be completed within the detailed design and engineering phase.

On-street parking will be impacted by this station. The addition of curb bumpouts will result in a reduction of on-street parking on Penn Avenue by approximately four to five parking spaces per platform.

Curb Bumpouts

A micro-simulation traffic model was developed as part of the Penn Avenue Community Works planning process to help determine the feasibility of deploying curb bumpouts at C Line stations throughout the Penn Avenue corridor.

Modeled factors included farside bumpouts at both directional platforms, additional C Line service frequency, and traffic volume growth through year 2035 throughout the corridor. Bumpouts have been included within the station plan resulting from these models indicating future traffic operations would remain acceptable with BRT operations.

Other Alternatives Considered

Site Station Platforms on Farside (NE and SW) Corners of Penn & Dowling Avenue

Station platforms will remain on the nearside of the intersection for both the northbound and southbound buses. The intersection is signalized, suggesting farside platform siting is preferable to maximize transit signal priority potential. However, the Crystal Lake Cemetery in the northeast quadrant of the intersection restricts the feasibility of farside platforms for northbound buses. There are no sidewalks along Penn Avenue cemetery frontage, and a northbound farside platform would function as the only generator of pedestrian activity in the quadrant. In addition, a cemetery driveway restricts the length available to construct a 60' platform.

Since Penn Avenue's roadway width prevents both bumpouts from being constructed on either the northern or southern halves of the intersection, diagonally opposite bumpouts are required. Therefore, the southbound platform and bumpout must be constructed on the northwest quadrant of the intersection.

Project Delivery

Penn Avenue Community Works Project

Station design and construction will be coordinated with the Hennepin County-led Penn Avenue Community Works project.¹⁸ Hennepin County plans to reconstruct intersections of the Penn Avenue corridor in coordination with C Line construction.

¹⁸ Additional information available at: <http://www.hennepin.us/residents/transportation/penn-avenue-community-works>

Figure 1: Station Layout – Penn & Dowling

