

Memo

Date: March 10, 2026
To: Holly Ellis, Public Works Director, City of Sandpoint
From: Michael Adamson, PE, RSPi; Fehr & Peers
Subject: Boyer Avenue Cross Section Evaluation

The purpose of this memorandum is to evaluate the proposed cross section update to Boyer Avenue between Baldy Mountain Road to Mountain View Drive. This evaluation includes a comparison of the existing cross section along the corridor to understand the available paved area, a discussion on the corridor's defined identity and how the proposed cross section would interact with that, and general safety implications of the proposed cross section. The final outcome of this memorandum was to determine if the proposed cross section would be feasible/advisable within the available right-of-way (i.e. without additional paving and/or curb reconstruction).

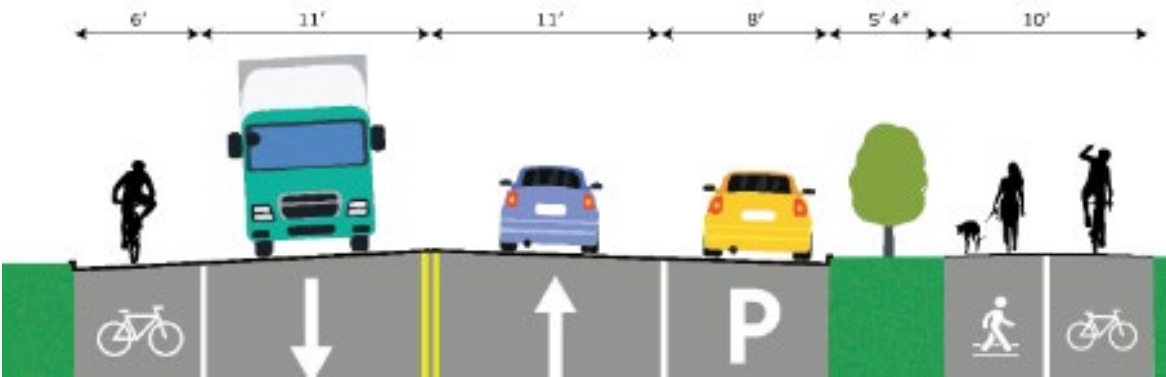
Proposed Cross Section

City Council has requested that City staff evaluate an update to North Boyer Avenue between Baldy Mountain Road and Mountain View Drive to accommodate on-street parking on the east side of the street as part of a development proposal that would have housing face Boyer Avenue. This cross-sectional update would include the following elements, as illustrated in **Figure 1**:

- Travel lanes reduced to 11 feet
- The existing northbound bike lane being replaced with on-street parking
- Northbound bicycle traffic being routed to a parallel multi-use path

As part of these updates, the dedicated southbound bicycle lane would remain in place, while the speed limit would be reduced from 35 miles per hour (mph) to 25 mph. It should also be noted that, although the figure shows the pedestrian path on the east side of the road as having a 10-foot width, existing conditions show an 8-foot width except at intersections. Recognizing the City's hope that this proposed project would not require any more paving, the width of the path within the proposed cross section was considered to be 8 feet, consistent with existing conditions.

Figure 1. Proposed Cross Section, Boyer Avenue between Baldy Mountain Road and Mountain View Drive



Source: City of Sandpoint, 2026

Evaluation of Proposal

The City requested that Fehr & Peers answer the following questions as part of this memorandum:

1. From an engineering and safety perspective, is the proposed configuration recommended or acceptable?
2. Would Boyer Avenue require additional improvements to safely accommodate on-street parking, or is on-street parking generally discouraged or prohibited on minor arterials and truck routes?

Existing Paved Area

Providing two 11-foot travel lanes, an 8-foot parking lane, and a 6-foot bike lane would require approximately **36 feet of paved roadway width**. The existing cross section of Boyer Avenue was reviewed, and an evaluation of this cross section and where it meets this minimum width requirement is provided in **Figure 2**. Based on this figure, the only area where the width would be adequate to allow the minimum cross sections for all the elements previously shown in **Figure 1** would be from approximately 75 feet north of Herring Avenue to just north of Moscow Street. This is directly in front of the proposed development's right of way.

Based on this, accommodating all these elements simultaneously along the full corridor extent would likely require further narrowing travel lanes or cutting into the buffer on the east side of the road to expand the paved area along stretches of Boyer Avenue outside of those directly in front of the proposed development. Narrower lanes may be undesirable on corridors carrying significant truck traffic,¹ and the current 8- to 10-foot path is already too narrow to accommodate mixed-modal bicycle and pedestrian traffic. As such, **the potential to implement this cross section remains limited to the portion of Boyer Avenue directly adjacent to the development proposing facing their housing towards Boyer Avenue.**

¹ See AASHTO's *A Policy on Geometric Design of Highways and Streets* (2018), where typical guidance is that freight corridors should maintain a 12-foot width where possible, although 11-foot may be acceptable when circumstances are constrained.



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Meets Cross Sectional Requirements

- █ Meets
- █ Does not Meet

Figure 2



Existing Cross Section Compared to Cross Sectional Need

Corridor Identity

Boyer Avenue currently functions as a freight truck corridor, serving regional truck movements and accommodating larger vehicles. Freight routes typically prioritize:

- Wider travel lanes (often 11–12 feet, see Footnote 1)
- Minimal roadside friction (such as adjacent bicycle lanes and on-street parking)
- Fewer obstacles near the travel way

Because Boyer Avenue along the study extents will remain the only north–south freight corridor on the northern side of the City, at least until the Baldy Mountain extension is completed, this identity raises a few conflicts with the proposed cross-section:

1. Introducing on-street parking along a freight corridor can increase side friction and reduce the effective operating width for trucks. Large trucks may encroach into adjacent lanes when passing parked vehicles, potentially affecting operations, comfort and safety for other road users.²
2. A striped bicycle lane is not typically recommended on a freight-oriented corridor, for similar reasons of side friction as well as comfort and safety. Instead, it is generally recommended that vertically separated or at least buffered facilities be prioritized if bicycle traffic is being prioritized alongside freight traffic.³
 - a. Given the existing path is only 8 feet in width and thus does not meet design requirements to allow for bi-directional mixed pedestrian and bicycle travel, **the current cross section of Boyer Avenue would not allow for this without additional paving and/or reconstruction of the curb to bring the width to at least 10 feet, although 12 feet would be recommendable where possible.**
3. The reduced speed limit (35 mph to 25 mph) is not in keeping with MTMP’s defined purpose for the gateway corridor of moving goods quickly to/from/through the City to the larger regional network. Although this reduction can be done, it is atypical of arterials with a high freight priority.

Within the City’s Multimodal Transportation Master Plan (MTMP), North Boyer Avenue was flagged as a freight corridor with a majority of its traffic serving pass-through trips (vehicles not going to/coming from Sandpoint). This is consistent with the corridor’s identity as both a Gateway corridor and a freight corridor for the City’s northern industrial/manufacturing uses. Although an active transportation-oriented cross section can support multimodal mobility and corridor placemaking, **the proposed cross-section would be in conflict with Boyer Avenue’s important freight mobility function.**

² See AASHTO’s *A Policy on Geometric Design of Highways and Streets* (2018), where it is noted that side-street parking can reduce effective travel lane width and introduce conflicts when vehicles exit or enter parking.

³ See NACTO’s *Urban Bikeway Design Guide, 3rd Edition* (2024); FHWA’s *Small Town and Rural Multimodal Networks* (2016)

Safety Implications

Although introduction of on-street parking serving the housing proposed to face Boyer Avenue would improve the buffer between the path and Boyer Avenue, it presents a few potential adverse safety impacts that could reduce the efficacy of its implementation in this case:

- Large trucks may need to shift laterally to avoid parked vehicles, potentially encroaching into adjacent lanes or bike lanes. This condition can increase perceived and actual risk for cyclists traveling alongside freight traffic (see Footnote 2).
- The combination of freight trucks, cyclists, pedestrians on a shared-use path, and parked vehicles could create an environment in which freight traffic may have to make split-second decisions to avoid conflicts with parked vehicles and cyclists, particularly during periods of higher traffic volumes (see Footnote 3).

Next Steps

Restriping Boyer Avenue to add on-street parking on the east side between Baldy Mountain Road and Mountain View Drive (including reducing the speed limit) is not recommended. The corridor serves an important freight function, and adding parking and reducing the lane widths while maintaining the striped bicycle lane could reduce operational efficiency and increase conflicts between trucks, cyclists, and parked vehicles. Additionally, the cross sectional improvements would only be feasible for a limited section of the corridor, and would be inconsistent with development patterns recently approved further north along the corridor.

Instead, **the following recommendations are provided for the City's consideration:**

- Allow the proposed development to orient away from Boyer Avenue, using landscape buffering along the roadway rather than a formalized parking area. This is consistent with the development pattern that has already occurred along Boyer Avenue within and around the study segment.
- Preserve the corridor for freight movement, at least until the Baldy Mountain Road Extension is completed and corridor needs can be reevaluated (consistent with recommendations in the MTMP).
- Program in expansion of the shared-use path on the east side, including potentially removing the southbound bike lane, to create a wider vertically separated facility for pedestrians and cyclists.

These approaches would improve active transportation accommodations while maintaining the corridor's current role as a freight route.