

B. **Accident Analysis:** Safety is of primary importance when considering design exception approval. If relevant, include an accident data analysis to identify prevalent accident types and causes, plus an evaluation of the effect of the requested design exception on accident types and frequencies.

C. **Attachments:**

1. Provide a location or vicinity map for the project.
2. Provide plan sheets, cross sections, profiles and/or special details to clearly illustrate the proposed design exception.
3. Attach pertinent letters, resolutions, meeting minutes, studies, etc., which further develop or clarify the proposed design exception.

107 BICYCLE FACILITIES

107.01 GENERAL

The bicycle has become an important element for consideration in the highway design process. Fortunately, most of the mileage needed for bicycle travel is comprised of the street and highway system. While many highway agencies allow bicycles on partially access controlled facilities, most highway agencies do not allow bicycles on fully access controlled facilities.

Measures such as the following, which are generally of low capital intensity, can considerably enhance a route's safety and capacity for bicycle traffic:

- Paved shoulders.
- Wide outside traffic lane (4.2 m minimum) if no shoulder.
- Bicycle-safe drainage grates.
- Adjusting manhole covers to the grade.
- Maintaining a smooth, clean riding surface.

For further information and guidelines on bicycles, refer to the latest edition of AASHTO, Guide for Development of Bicycle Facilities.

107.02 SPECIAL BICYCLE FACILITIES

At certain locations or in certain corridors, it is appropriate to supplement further the existing highway system by providing specifically designated bikeways (for either exclusive or non-exclusive bicycle use). Rural arterials often are the only direct connection between areas of population and locations to which the public wishes to travel. Schools, parks, and rural housing developments are usually located to be readily accessible by automobile. However, pedestrians and bicycle riders may also wish to travel to the same destination points. When such a situation exists, the designer should consider the effects on the safety and operation of the arterial. A special effort should be made to provide the greatest degree of safety within the economic constraints that must always be considered.

107.03 BICYCLE CHARACTERISTICS

To provide for bicycle traffic, it is necessary to become familiar with bicycle dimensions, operating characteristics, and requirements. These factors determine acceptable turning radii, grades, and sight distance. In many instances design features of separate bike facilities are controlled by the adjoining roadway, so that even then consideration of bicycles is an essential element the design of the highway itself.

107.04 BICYCLES AT INTERSECTIONS

When on-street bicycle lanes and/or off-street bicycle paths enter an intersection, the design of the intersection should be modified accordingly. This may mean special sight distance considerations, wider roadways to accommodate on-street lanes, special lane markings to channelize and separate bicycles from right turning vehicles, provisions for left turn bicycle movements, or special traffic signal designs (such as conveniently located push buttons at actuated signals or even separate signal indication for bicyclists).