

Under certain conditions it may be necessary or desirable to increase the width of a shared use path to 12 feet, or even 14 feet, due to substantial use by bicycles, joggers, skaters and pedestrians, use by large maintenance vehicles, and steep grades.

A minimum 2 foot wide graded area with a maximum 6:1 slope, shall be maintained adjacent to both sides of the path. A minimum 3 foot clearance shall be maintained from the edge of the path to signs, trees, poles, walls, fences, railing,\* guardrail, or other lateral obstructions. Where the path is adjacent to canals, ditches or slopes 3:1 or steeper, a minimum 5 foot wide separation from the edge of the path pavement to the top of slope is required.

If the separation is less than 5 feet wide and the drop-off is 2 feet 6 inches or greater, a physical barrier, railing or chain link fence 42 inches high is required. When the separation from the edge of the shared-use path to the top of the slope is 5 feet or greater situations may dictate a physical barrier such as the height of embankment or conditions at the bottom (i.e. - water greater than 2 feet deep). See [Appendix A, Figures A-5-6](#).

When a shared-use path is along a retaining wall or any vertical drop-off greater than 6 inches a railing or chain link fence 54 inches high is required. See [Appendix A, Figures A-5-7](#).

The vertical clearance to obstructions shall be a minimum of 8 feet. However, vertical clearance may need to be greater to permit passage of maintenance and emergency vehicles. In underpasses and tunnels, 10 feet is required for adequate vertical shy distance.

Shared use paths should be designed for a selected speed that is at least as high as the preferred speed of the faster bicyclists. In general a design speed of 20 mph should be used. Long grades should be kept to a minimum. Grades greater than 5 percent are undesirable because the ascents are difficult for many bicyclists to climb and the descents cause some bicyclists to exceed the speeds at which they are competent or comfortable. In locations where grades exceed 5 %, Table 5 shows recommended maximum grade lengths.