Where a slope of 1:2 or greater exist within 5 feet of a path and the fill is greater than 10 feet, a physical barrier such as dense shrubbery, railing or chain link fence should be provided along the top of slope. Other situations may also dictate a physical barrier, such as the height of embankment and condition at the bottom.

The vertical clearance to obstructions should be a minimum of 8 feet. However, vertical clearance may need to be greater to permit passage of maintenance and emergency vehicles. In under crossings and tunnels, 10 feet is desirable for adequate vertical shy distance.\*

• Design Speed

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 minimum design speed 20 mph should be used. When a downgrade exceeds 4 percent, or where strong prevailing tailwinds exist, a design speed of 30 mph or more is advisable.

• Horizontal Alignment

Most shared use paths built in the United States must also meet the requirements of the Americans with Disabilities Act, ADA guidelines require that cross slopes not exceed 2% to 3% to avoid the severe difficulties that greater cross slopes can create for people using wheelchairs. Thus, for most shared use paths, the maximum superelevation rate will be 3%. When transitioning a 3% superelevation, a minimum 25 foot transition distance should be provided between the end and beginning of consecutive and Reversing horizontal curves.

The coefficient of friction depends upon speed; surface type, roughness, and condition; tire type and condition; and whether the surface is wet or dry. Extrapolating from values used in highway design, design friction factors for paved shared use paths can be assumed to vary from 0.31 at 12 mph to 0.21 at 30 mph.