

5.2.9 Road Intersections

Often, on difficult terrain, intersections are directly located to assure adequate design flexibility for vehicle safety and for the design and critical vehicle turning radius. When locating one-lane resource development road intersections to facilitate log hauling, the direction of haul must be known to assure that trucks can negotiate the turn.

The angle of an intersecting approach road should not be less than approximately 60 degrees when resource development traffic must turn on and off an approach road in two directions at through road intersection (Figure 53). Road intersection angles can be less than 60 degrees when the direction of haul is one way off an approach road onto a through road (Figure 54).

When possible, the grade of an approach road should not exceed 6 percent. Grade of intersecting roads in an intersection should be the same until adequate horizontal separation is achieved. On approach roads with fill sections, the common intersection grade must be carried a sufficient distance to preclude a portion of the vertical curve being in the intersection.

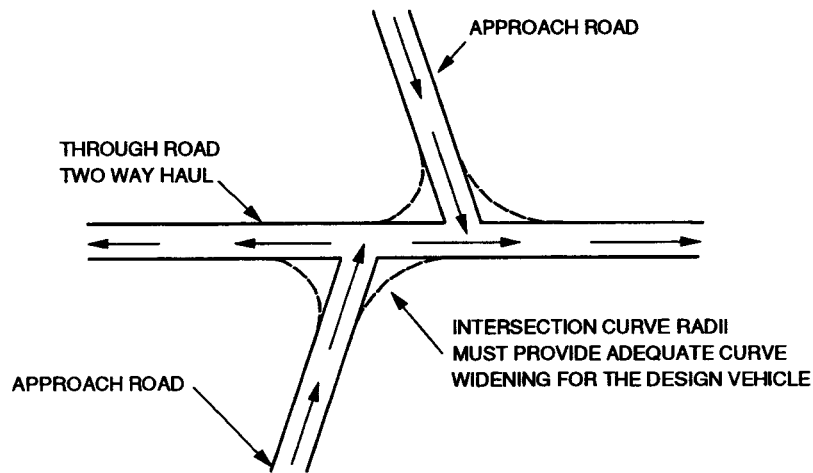


Figure 53. Intersection Location for Two-way Log Haul.

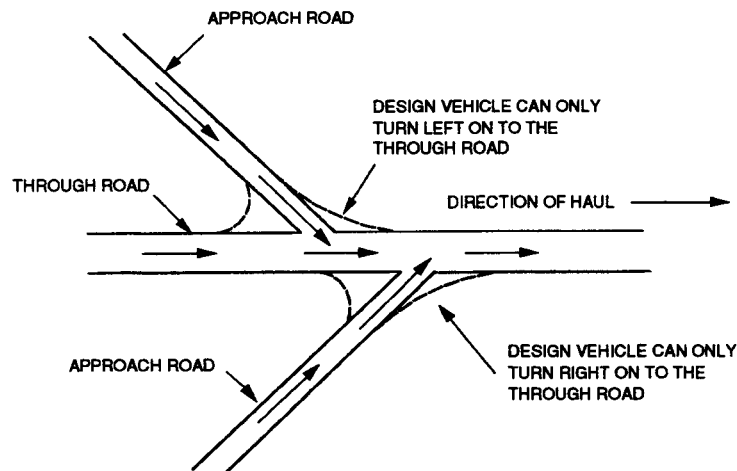


Figure 54. Intersection Location for One-way Log Haul.

5.2.10 Stream Crossing Bridge Sites

Ideal bridge approach alignments are perpendicular to a stream crossing and provide adequate sight distance. If horizontal curves are required on a one-lane timber bridge approach, adequate horizontal tangent distance from the curve point of tangent (P.T.) must be provided to prevent vehicle off-tracking onto the bridge deck (Figure 55). Bridges that are skewed, or require horizontal curves and grade change on a bridge superstructure, cost more to construct than a structure located perpendicular to a stream

channel. When possible, the crossing site should have solid bridge abutment foundations. Difficult stream crossing sites are often directly located to provide maximum design flexibility.

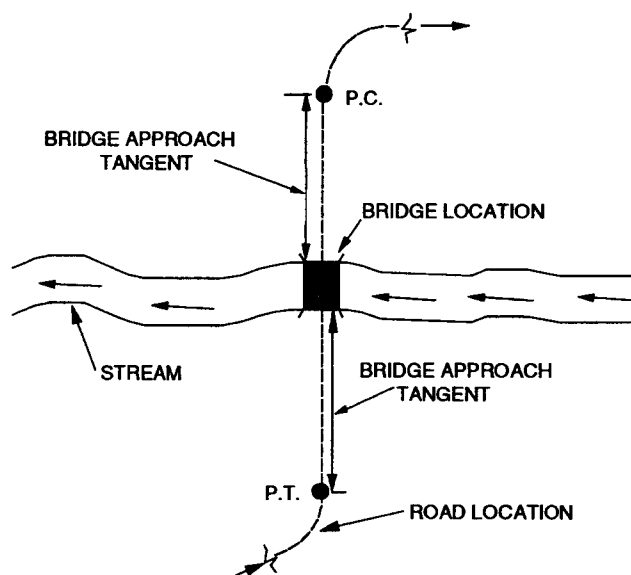


Figure 55. Stream Crossing Location.