Chapter 1370

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1370.01 General

This chapter provides guidance for locating and designing median crossovers.

Median crossovers are provided at locations on divided highways for crossing by maintenance, traffic service, emergency, and law enforcement vehicles. The use of all median crossovers is restricted to these users.

Crossovers may be provided:

- Where main line safety will not be compromised by providing a crossover.
- Where access through interchanges or intersections is not practical.
- As part of region maintenance operations.
- As necessary for law enforcement and emergency services functions.

For information about median openings to provide turning movements for public access to both sides of the roadway, see Chapter 1310, Intersections at Grade.

1370.02 Analysis

A list of existing median crossovers is available from the Headquarters (HQ) Access and Hearings Section. The Statewide Master Plan for Median Crossovers website is: https://wsdot.wa.gov/business-wsdot/highway-access-requests-training

The general categories of vehicles recognized as legitimate users of median crossovers are law enforcement, emergency services, traffic incident response, and maintenance vehicles.

In urban areas with a high-occupancy vehicle (HOV) lane adjacent to the median, crossovers may be considered for law enforcement (see Chapter 1410).

In areas where there are 3 or more miles between access points, providing an unobtrusive crossover can improve emergency services or improve efficiency for traffic services and maintenance forces.

Maintenance crossovers may be needed at one or both ends of an interchange for the purpose of winter maintenance operations and at other locations to facilitate maintenance operations. In general:

- Existing crossovers may remain at their current locations.
- New crossovers should not be located closer than 1,500 feet to the end of a ramp taper or to any structure. This distance may be decreased to improve winter maintenance efficiency based on an operational analysis. Include an operational analysis in the Design Documentation Package (DDP).
- Crossovers should be located only where stopping sight distance is provided and preferably should not be located on superelevated curves.

1370.03 Design

Use the following design criteria for all median crossovers, taking into consideration the intended vehicle usage. Some of these criteria may not apply to crossovers intended primarily for law enforcement.

- Adequate median width at the crossover location is required to allow the design vehicle to complete a U-turn maneuver without backing. Use of the shoulder area is allowed for the execution of the U-turn maneuver. Typical design vehicles for this determination are a passenger car and a single-unit truck.
- When median barrier is placed in the vicinity of a median crossover, position the barrier to minimize the potential for errant vehicles to cross through the median. (See the *Standard Plans* for typical barrier layout.)
- Consider the types of vehicles using the median crossover.
- The minimum recommended throat width is 30 feet.
- Use grades and radii that are suitable for all authorized user vehicles (see Chapter 1340).
- In most cases, 10-foot inside paved shoulders are adequate for deceleration and acceleration lanes. Consider full 10-foot shoulders for a distance of 450 feet upstream of the crossover area to accommodate deceleration, and extend downstream of the crossover area for a distance of 600 feet to allow acceleration prior to entering the travel lane. In cases where the median width is narrower than the design vehicle turning path, widening shoulders may not provide a benefit. Document decisions to provide inside shoulders of less than 10 feet.
- Provide adequate stopping sight distance for vehicles approaching the crossover area. This is due to the unexpected maneuvers associated with these inside access points and the higher operating speeds commonly experienced in the inside travel lanes (see Chapter 1260).
- Provide adequate intersection sight distance at crossover locations where authorized user vehicles must encroach on the travel lanes (see Chapter 1310).
- For the crossing, use sideslopes no steeper than 10H:1V. Grade for a relatively flat and gently contoured appearance that is inconspicuous to the public.
- Consider impacts to existing drainage.
- Do not use curbs or pavement markings.
- Flexible guideposts may be provided for night reference, as shown in the *Standard Plans*.
- Consider the terrain and locate the crossover to minimize visibility to the public.
- Use vegetation to minimize the visibility of the crossover. Low vegetation with a 3-foot year-round maximum height is recommended for this purpose (see Chapter 900).
- In locations where vegetation cannot be used to minimize visibility by the traveling public, and there is a high incidence of unauthorized use, use appropriate signing such as "No U-Turns" to discourage unauthorized use.
- A stabilized all-weather surface is required. Paving of crossings is determined on a case-by-case basis.

1370.04 Plan Updates and Approvals

All approved crossover locations will be designated on the Statewide Master Plan for Median Crossovers. Contact the HQ Access and Hearings Section for the following:

- Proposed new crossings
- Relocation of previously approved crossings
- Removal of crossings that are no longer required

Plan updates and approvals involve coordination between the Assistant Regional Administrator for Operations or Project Development, the Washington State Patrol (WSP), the HQ Access and Hearings Section, the appropriate Assistant State Design Engineer (ASDE), and the Federal Highway Administration (FHA) Area Engineer (or their designees).

Once locations are identified, the region will send a package to the HQ Access and Hearings Section, which should include: a strip map showing MP locations of, and spacing between, existing and/or planned crossovers and interchanges; a justification for the crossover(s); a copy of any requests for crossovers from the WSP, emergency services, or maintenance; and a red and green marked-up plan sheet showing locations. Approval will be given by the ASDE. Construction may not proceed prior to approval.

After notification of approval, the HQ Right of Way Plans Section sends the region a reproducible revised right of way or limited access plan that includes the approved crossover location.

1370.05 Documentation

For the list of documents required to be preserved in the Design Documentation Package and the Project File, see the Design Documentation Checklist: https://wsdot.wa.gov/engineering-standards/design-topics/design-tools-and-support#Tools