

## Interchange Review

Design Manual Chapter 1 General Information Originally Issued: 12-20-99 Revised: 09-30-09

Note: All interchange designs should be submitted to the Methods Section for review, regardless of whether or not FHWA submittal is required. Consultant designs should be routed through the appropriate District Office.

## **Preliminary Review**

The following information should be submitted to the Methods Section six weeks before the D2 event so the preliminary approval can be sent out 4 weeks prior to D2:

- Title sheet
- Typical paving cross sections for mainline, sideroad and ramps
- Mainline plan and profile sheets
- Sideroad plan and profile sheets
- Traffic projections (turning traffic volumes)
- Proposed interchange ramp configuration
- Proposed ramp profile grades
- Sideroad left-turn channelization and right-turn deceleration lanes required at ramp intersections
- Type of intersection traffic control
- Ramp intersection lane configuration
- Departure sight triangles at ramp intersections

## **Final Review**

The following information should be submitted to the Methods Section 4 weeks before the D5 event so the final approval can be sent out 2 weeks prior to D5:

- Final geometric plan of interchange showing ramp baseline geometry and curve data
- Final ramp plan and profile sheets
- Geometric and staking details of nonstandard ramp merge/diverge areas
- Mainline plan and profile sheets
- Sideroad plan and profile sheets
- Typical paving cross sections for mainline, sideroad, and ramps
- Traffic projections (turning traffic volumes)
- Ramp intersection geometric layout and details
- Ramp return geometry, jointing/staking and edge profiles

For review purposes only (do not show on the final plan) show the turning path off-tracking on the ramp intersection geometric layout (see Figure 1). The following items should be labeled:

- Design vehicle for each turning movement
- Turning radius of outside tire path for each turning movement
- Lane width dimensions



Figure 1: Ramp intersection geometric layout.