

Consideration should be made for yield control vs. signal control for the DDI off-ramp left turns. One advantage to signalizing the DDI off-ramp left turn movement is it removes the weaving between those drivers and drivers on the cross street intending to turn left onto the downstream on-ramp.

Signing and Pavement Markings

Signing and pavement marking for the DDI shall follow the [MUTCD and the Virginia Supplement to the MUTCD](#). Since the DDI is a newer design, placement of markings, wrong-way signs, approach signing, overhead approach signage and wrong-way arrows/directional arrows to emphasize the correct direction of travel is critical. In addition, advance guide signs for drivers to stay in appropriate lane are equally important. Consideration should also be given to minimizing the amount of “sign clutter” that could cause driver delay or confusion.

Stop bars, yield bars and arrow lane markings are all standard applications. Dotted lane-line extensions are typically used to help guide motorists through the crossovers.

The potential for wrong way traffic movements in a DDI can be minimized with geometrics, signing, pavement marking, signals and lighting.

Although a DDI’s geometrics requires traffic on the cross route to move the left side of the roadway for the segment between signalized ramp intersections, the pavement marking used is similar to other interchanges. The yellow stripe shall be used on left of traffic and white on the right between crossovers.

6” wide lane and edge lines should be used through the DDI to improve driver recognition. Wider markings may be transitioned to normal markings downstream of the DDI at logical termini.

Snow-plowable reflective pavement markers (with red reflectors for the wrong-way movement) should be considered for use within the DDI for lane lines, wrong-way arrows and where appropriate on edge lines. Structure & Bridge Division approval may be required prior to installing raised pavement markers on bridge decks.

Guide signing is essential to proper operation of the DDI. Given the complex nature of the interchange, consideration should be given to mounting the guide signs for the cross street on overhead (butterfly, cantilever, or full-span) structures to safely guide drivers through the interchange and minimize the potential for confusion that results in drivers entering the wrong side of the DDI. If cantilever and/or full-span sign structures are used, they shall not exceed the maximum span lengths specified in the current version of [IIM-S&B-89](#).*

Raised reflective markers should not be used on or adjacent to edgelines in areas where bicycles might be expected to exit or enter the shoulder across the edgeline.

* Rev. 7/16