- In areas with HOV lanes located in the median, future HOV connections to the overpass structure may not be feasible with a DDI configuration.

- If there is a high volume of pedestrians, additional signals may be needed and must be timed for adequate pedestrian crossing times, thus, potentially influencing the effectiveness of the interchange.

- Geometry and traffic control device design must be very carefully thought out to minimize any possibility of drivers and/or bicyclists entering the wrong direction between the crossovers. More overhead sign structures with larger guide signs may be needed at a DDI as compared to a traditional diamond interchange

- There are no U-turns at the intersections of a DDI at the ramp.

- Closely spaced intersections to the DDI could heavily influence traffic demand to/from the DDI, potentially limiting the operational effectiveness of the DDI for vehicular traffic

- Generally, a DDI is limited to one of two operational strategies: emphasized coordination to the off-ramp left turn movement or emphasized coordination of the through traffic movement across the interchange. If both movements are heavy, the overlap of queues can be difficult to overcome during peak periods without sufficient capacity.

- Future Traffic growth should be figured into the design including the modification for additional capacity.[*]

Crossovers (See Figures 2-17 & 2-18)

The horizontal crossover geometrics consist of three main interacting elements: 1) crossing angle; 2) tangent length approaching and following the crossover; and 3) superelevation and curve radii approaching and following the crossover. Placement of the two crossovers is largely dependent upon the spacing and location of the ramps. The space needed for vehicular storage between the crossovers must also be considered. When there is room, there is a fair degree of flexibility in the placement of the crossovers. If more length is needed than the distance between ramp termini provides, the crossovers may be located farther apart. As a result, the ramp entrances and exits will need to be configured to merge or diverge with the cross route by either extending or shortening them. For practical design application, the center of each crossover can be slightly skewed from the crossroad centerline and/or offset, as shown in Figure 2-17.

[*] Added 7/14