

## 2 PURPOSE AND NEED

The purpose of this IMR re-evaluation is to modify the previous I-95/SJHPSE IMRs via analysis and technical documentation with comparisons between the previously approved I-95/SJHPSE PARCLO and the design-build DDI configurations. As previously discussed in Section 1.1, the original PD&E included a Diamond Interchange concept and was modified to a PARCLO concept due to revised peak-hour volume estimates.

This IMR is required by FHWA for approval of the awarded design-build DDI configuration. It is required to demonstrate that traffic operations and safety will not be reduced when compared to the PARCLO configuration. Utilizing the latest volume estimates with both the latest PARCLO and DDI concepts, this IMR re-evaluation contains the required technical information and addresses the requirements.

## 3 DESIGN ALTERNATIVES

The two alternatives analyzed in this IMR are the previously approved IMRs' PARCLO and the awarded design-build DDI. For this IMR, the PARCLO may be referred to as the No-Build alternative and the DDI may be referred to as the Build alternative. The PARCLO configuration includes a proposed loop ramp in the southeast quadrant for the SJHPSE eastbound to I-95 northbound movement with all remaining ramps maintaining the typical diamond ramps. The PARCLO concept is shown in **Figure 3-1**.

The DDI configuration involves the similar ramp geometry of the original Diamond Interchange concept, but diverges the eastbound and westbound directions onto the opposite side between the ramps. Between the ramps, the northbound left-turn movement at the northbound off-ramp will connect to westbound SJHPSE on the south side of the roadway. On the west side of the interchange, the southbound left-turn movement at the southbound off-ramp will connect to eastbound SJHPSE on the north side of the roadway. All off-ramp movements are under signal control. The DDI concept is shown in **Figure 3-2**.

The proposed DDI configuration is accommodated within the existing limited access right-of-way as identified and obtained for the PARCLO alternative. In addition, no further environmental impacts and mitigation efforts are required than what is already mitigated and permitted for the PARCLO alternative with the completed PD&E study.