



DDI CHARACTERISTICS

Design Features	
Roadway	<ul style="list-style-type: none"> • Provides two lanes in each direction on PA 851. • Movements onto I-83 ramps from PA 851 do not require crossing oncoming traffic.
Structure	<ul style="list-style-type: none"> • Deer Creek culvert under the interchange will be replaced • Bridge replaced with two-span structure over PA 851 with higher vertical clearance.
Traffic Control	Staged construction maintains access through the interchange area throughout construction.
Drainage / Stormwater	Traffic islands and infield areas of the DDI design provide locations for stormwater management facilities.
Bicycle / Pedestrian Access	5' wide shoulders are provided for bicycles. Sidewalks and pedestrian signals are provided to guide pedestrians through the interchange area on PA 851.
Operations and Safety	
Operations	<p>The proposed design provides:</p> <ul style="list-style-type: none"> • Acceptable traffic operations through year 2060 • 2 signal phases per light cycle increases green light time
Safety	<p>DDI anticipated to reduce crash rate and severity compared to a traditional diamond interchange (TDI):</p> <p>DDI: Less conflict points: 14 Less left-turn conflicts: 2 TDI: More conflict points: 26 More left-turn conflicts: 8</p>
Environmental Impacts	
Wetlands	No notable impacts to wetlands
Streams	The DDI design reduces length of impacts to Deer Creek (460 ft), compared to a more traditional diamond interchange design (600 ft).
Right-of-Way	DDI stays mostly within the existing highway footprint and minimizes the land needed to be acquired for construction from adjacent properties.
Utilities	Electric, gas, sewer, and telephone utilities will require relocation through the intersection.
Cost	Estimated construction cost of the DDI is \$23,671,695

Constructing a Diverging Diamond Interchange at Exit 4