

Noland Road & I-70 Interchange

INDEPENDENCE, MISSOURI
Missouri Department of Transportation



Winner: MoDOT, ACEC Missouri—2008 Award for Excellence—Large Bridge Project

Winner: ACEC—Honor Award 2009—Engineering Excellence Competition

DRG was selected to prepare detailed construction plans for the reconstruction of the Noland Road @ I-70 Interchange in Independence, Missouri. The interchange was an Urban Diamond Interchange, which was over capacity, with a structurally deficient and functionally obsolete bridge. The vertical clearance under the Noland Road Bridge was also substandard.

DRG prepared detailed final plans for the Missouri Department of Transportation. The final design for the interchange is a Tight Diamond Interchange—this is an Urban Interchange with high traffic counts. The Tight Diamond design was chosen over a Single Point Urban Interchange alternative due to better traffic flow and a far less costly interchange. The Tight Diamond allows the new interchange to be constructed entirely on existing right-of-way. This was key due to the many businesses in close proximity to the interchange. Traffic modeling was done for both proposed alternates. Also part of this project was the adjustment of the grades on Noland Road and I-70, retaining wall designs, and signalized ramp terminals.