

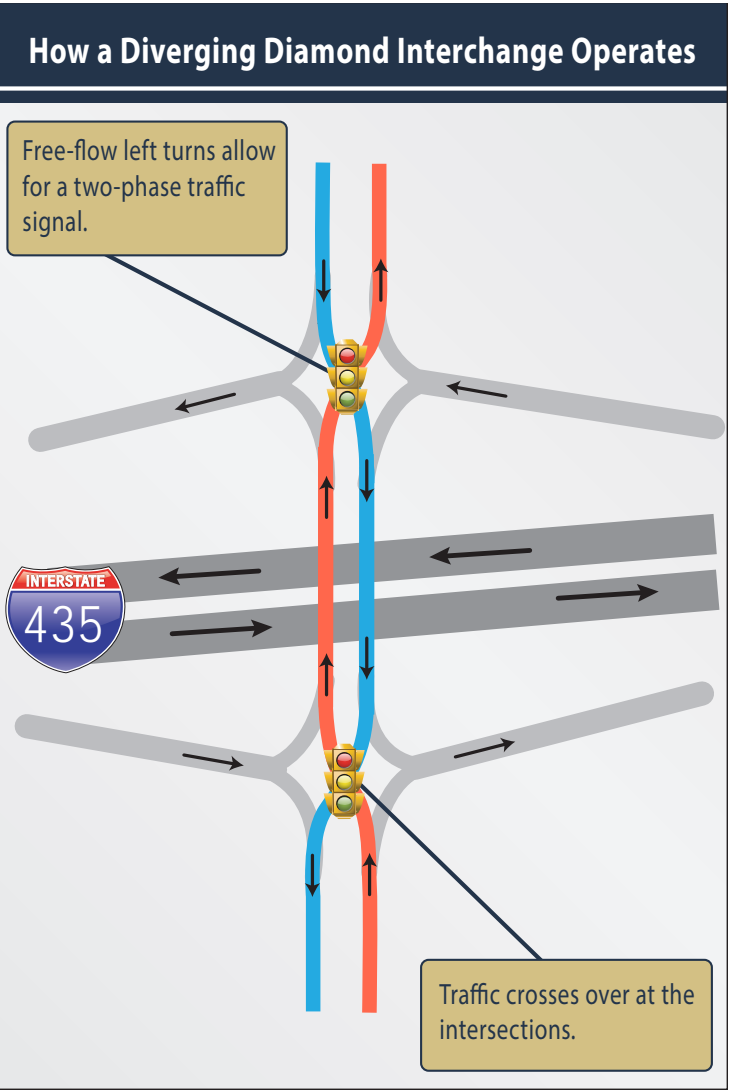
How will the DDI work?

The diverging diamond interchange will move traffic on Roe Avenue to the left side of the road for the segments between the ramp intersections. Drivers approaching the interchange can either turn right onto I-435 or proceed through the crossover intersection to the left side of the road. At the next intersection, drivers can make a “free” left turn onto I-435 without the need to wait for a green light, or continue through the intersection and cross back to the right side of the road to continue on Roe Avenue. Advantages of the DDI include:

- The DDI can accommodate more left-turn movements both onto and off of I-435 thereby improving the efficiency of the interchange.
- The DDI reduces the total conflict points inherent to a traditional diamond interchange and increases safety.
- The DDI shortens the overall traffic signal cycle length reducing delays and increasing safety and capacity.
- The DDI reduces the construction cost and construction time by reducing the width of the bridge needed to accommodate left turns.

The main disadvantage of a DDI is that it is still a relatively new interchange type and drivers in the area may not be familiar with navigating them yet. DDIs are quickly catching on across the country due to their safety and cost benefits. The nation's first DDI was completed in 2009 in Springfield, Missouri and several more have been built since then.

DDIs are being introduced to the traveling public at several locations in the Kansas City Metro Area. A DDI at I-35 and Homestead Lane in Johnson County was completed in late fall 2013. DDIs have also opened at I-435 and Front Street and at M-150 and Botts Road on the Missouri side of the Kansas City Metro Area.



# I-435 & Roe Avenue Interchange Project



March 2014

The original Roe Avenue Bridges over I-435 were built in 1970, and due to their age, have been identified for replacement as part of the Kansas Department of Transportation's (KDOT) T-WORKS Program.

Roe Avenue carries significant traffic and during peak travel times there is a delay for traffic trying to turn left onto I-435. Replacing the bridge will also allow for improvements to the traffic capacity of the interchange.

An interchange selection study completed in 2012 determined that a new type of interchange, a diverging diamond interchange (DDI), would manage traffic most efficiently in the future while providing the most cost-effective solution. See back page for a description of a DDI.

Construction

In December 2013, KDOT awarded Clarkson Construction Company the contract to replace the Roe Avenue Bridges over I-435, constructing a new DDI at a cost of \$9,472,000.

Bridge and roadway design have been completed. Construction on the interchange project will start in April, with a completion date in November 2014. In order to complete construction as quickly and efficiently as possible, KDOT will close the Roe Avenue Bridge to through traffic while the improvements are being made. Closing the bridge will:

- **Reduce construction time.** The bridge replacement phase of the project will be completed in 4-5 months instead of 8-9 months.
- **Save money.** The project construction costs will be 10 percent less than if construction had to occur while maintaining traffic.
- **Make construction easier.** With the bridge closed, there will be less risk of cost overruns, schedule delays and utility conflicts.

Traffic on Roe Avenue will not be allowed to cross I-435 during construction, however right turns will be allowed during Phase 1 of the construction. Traffic impacted by the bridge closure will be detoured to Nall Avenue via 103rd Street to the north and College Boulevard to the south.

For Ongoing Project Information:



Real-Time Traffic Updates: [www.kcscout.net](http://www.kcscout.net)



Project Updates and Traffic Alert Information: [www.ksdot.org/kcmetro](http://www.ksdot.org/kcmetro)



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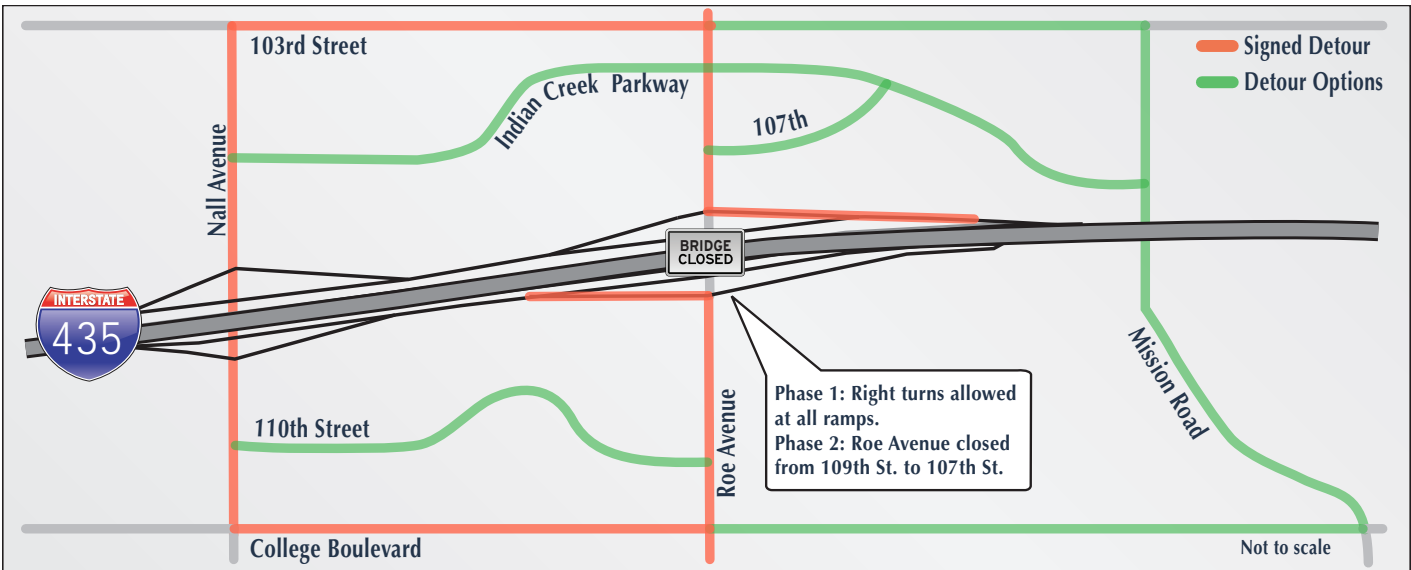
Questions or comments, contact: Kimberly Qualls  
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KDOT Project #435-46 KA 2100-01

**Public Open House**  
**I-435 and Roe Avenue Interchange Project**  
**Date:** Thursday, March 27, 2014  
**Time:** 6:00 pm - 8:00 pm  
**Location:**  
9700 Woodson Drive Overland Park, KS 66213

The Public Open House will show the construction schedule, traffic impacts and project phasing. KDOT staff and members of the design and construction teams will be available to answer questions.





## Phase 1

April - November 2014

### Scheduled Work

- Construct temporary connection from the eastbound collector-distributor road to I-435 between Nall Avenue and Roe Avenue
- Construct retaining wall extension along the westbound collector-distributor road
- Demolish existing Roe Avenue bridges
- Begin construction of Roe Avenue bridges, eastbound collector-distributor road retaining wall and shoulder replacements along I-435

### Traffic Impacts

- Short-term closure of westbound collector-distributor road to extend retaining wall (9-day maximum closure)
- Short-term closure of I-435 during bridge demolition (night work limited to one weekend)
- Short-term closure of I-435 for new bridge girder placement (night work limited to 2 weekends)
- Eastbound collector-distributor road to use temporary connection between Nall Avenue and Roe Avenue. This temporary connection will allow eastbound travelers to go from Nall Avenue to I-435 while the retaining wall on the eastbound collector-distributor road is replaced
- Closure of Roe Avenue to through traffic (154-day maximum closure). Right turns allowed at ramps except during Phase 2

## Phase 2

April - November 2014

### Scheduled Work

- Complete construction of Roe Avenue bridges, ramps, Roe Avenue roadway approaches and sidewalks

### Traffic Impacts

- Short-term closure of Roe Avenue from 109th Street to 107th Street (35-day maximum closure within the 154-day closure timeframe)

# I-435 & Roe Avenue Interchange Construction Phasing

