

---

# 1 Introduction

---

## 1.1 Description and Location of the Project

The City of Decatur requested and accepted proposals in December of 2009 for a preliminary design study to determine the most feasible option for providing adequate capacity to handle present and future traffic volumes in a safe and efficient manner for the Brush College Road crossing of the Norfolk Southern track yard south of Faries Parkway. In January 2010, URS Corporation was selected to perform the study. URS received notice to proceed on October 22, 2010. The study was funded by the Illinois Jobs Now program.

Brush College Road (FAU 7448) is a north-south minor urban arterial located on the east side of Decatur in Macon County. The road extends from East Lake Shore Drive, just south of William Street (Illinois 105), and extends north to IL Route 48, just south of Interstate 72. It provides access to a residential area, several commercial and industrial areas, Richland Community College, and the grounds for the Farm Progress Show (Progress City). The road also provides northern access from the Decatur Airport. Refer to Exhibit A-1 and Exhibit A-2.

An underpass carries Brush College Road under the Norfolk Southern (NS) rail yard approximately 1,600 feet south of Faries Parkway. The roadway crosses a single NS track at grade on the north leg of the Faries Parkway intersection. The crossing is not protected by gates and the traffic signals are synchronized to turn red when a train is approaching.

A single Illinois Central Railroad (ICRR) track runs in a north-south direction along the west side of Brush College Road. The track services Tate & Lyle. The Canadian National (CN) acquired the Illinois Central Railroad, but according to the CN the track is owned by Illinois Central and should be referred to as an ICRR track. CN/IC refers to this track as the “Staley Lead Track”. The layout of the existing track has been studied and there is not any way to re-route the track that would not involve using the lines of other carriers. Tate & Lyle does not want to lose access to the Canadian National / Illinois Central Railway. Alignment and structure options considered assumed that the tracks will remain at their existing location.

The ICRR track passes under the NS rail yard via the underpass and crosses Faries Parkway and the single NS track at grade. The roadway crossing at Faries Parkway is not protected by gates and the traffic signals are synchronized to flash red when a train is approaching. A small gate is present across the ICRR track on the north side of the diamond at the ICRR and NS track and is generally in the down position

The proposed improvement extends along a 1.21-mile section of Brush College Road, generally between William Street (Illinois Route 105) on the south and Faries Parkway on the north. Intersection improvements at William Street and Faries Parkway will result in roadway changes

---

immediately south of William Street and north of Faries Parkway. Major project components include adding two lanes to Brush College Road between Williams Street and Faries Parkway, replacing the existing underpass at the Norfolk Southern (NS) railroad yard with an overpass, constructing a grade-separated interchange at Faries Parkway and the existing NS track at that intersection, adding additional turn lanes at the William Street intersection, and adding a traffic signal and turn lanes at the entrance to the Archer Daniels Midland Company (ADM) James Randall Research Center (JRRC). The total length of the Project, including improvements to intersecting roadways, is 2.0 miles.

## **1.2 Project History**

Brush College Road was originally constructed in the 1920s as a two-way asphalt pavement having a width of 18 feet with variable shoulder widths.

A portion of the existing underpass, carrying the Norfolk Southern rail yard over Brush College Road and an Illinois Central Railroad track, was constructed around 1929 and remains in service today. In the early 1950's, the original underpass was extended to the south and a new 78-foot wide section was constructed approximately 54 feet to the north. The underpass provided two 10-foot lanes for Brush College Road. Today the Norfolk Southern rail yard is the largest flat switching yard in North America and the existing underpass carries 8 tracks over Brush College Road and the Illinois Central Railroad track. See Exhibit A-4.

In 1983 and 1984, Brush College Road was reconstructed from William Street to Harrison Avenue just north of Faries Parkway. See Exhibit A-3. As part of the reconstruction, the underpass was widened from two 10 foot wide lanes to two 11 foot wide lanes. A portion of the east abutment footing was removed to gain the additional two foot of roadway. A concrete parapet was added along the east edge of roadway to provide a 2'-4" wide walkway along the underpass. North-bound and south-bound lanes were widened and a variable width bi-directional left turn lane was added north and south of the underpass. As part of the reconstruction project, the intersections at Faries Parkway/Brush College Road and William Street/Brush College Road were upgraded by adding turn lanes and traffic signals.

In the early 1990s, the section of Brush College Road from Faries Parkway north to IL Route 48 was upgraded from a two-lane two-way roadway to a five-lane roadway with two 12-foot thru-lanes in each direction and a 12-foot bi-directional left turn lane. This improvement included additional widening of Brush College Road from Olive Street north to Faries Parkway and reconstruction of the Brush College Road/Faries Parkway intersection. Additional lanes were added at the intersection and traffic signals were upgraded.

In 2004 a planning study was prepared by Blank, Wesselink, Cook & Associates Inc. for future improvements of Brush College Road between William Street and Faries Parkway. Although the

---

study considered improvements along alternate alignments, the conclusion was that maintaining the existing alignment offered significantly less construction costs and had the least social and economic impact on the area.

### 1.3 Discussion of Design Criteria

The design criteria utilized for developing the proposed improvement was established based on the criteria set forth in the Illinois Department of Transportation (IDOT) Bureau of Local Roads & Streets Manual (2012 Edition) and the Bureau of Design Environment (BDE) Manual (2012 Edition). Criteria for new construction was used for the following roadway classifications:

|  |                          |
|--|--------------------------|
| Brush College Road                           | Minor Arterial (Urban)   |
| Brush College Road – south of William Street | Local Road               |
| Faries Parkway – west of Brush College Road  | Minor Arterial           |
| Faries Parkway – east of Brush College Road  | Collector                |
| William Street                               | Other Principal Arterial |
| Other residential streets and access roads   | Local Road               |

### 1.4 Project Development Process

This Design Report is a summary of the study of engineering alternatives, including the No-Build Alternative. The study includes the selection of a roadway alignment and design features based on the best combination of social, environmental and engineering aspects of the project. In order to assure that the final decisions on the project are made in the best overall public interest, public input was an important element of this study.

To accomplish the task of alternative analysis and selection, the following process was used:

- Establish and study preliminary alignments and grade separation options within the study corridor based on preliminary engineering, environmental and socio-economic aspects of the project.
- Present preliminary alternatives to the public and obtain public information and comments.
- Evaluate the final engineering, environmental, and socio-economic aspects of the project along with the public input. Prepare the Draft Environmental Assessment (EA) and obtain approval of geometrics from IDOT/Federal Highway Administration (FHWA).
- Complete the Environmental Assessment (EA). The Illinois Department of Transportation and Federal Highway Administration approved the EA on January 17, 2014.

- 
- Present the most desirable improvement alternative at a public hearing. The public hearing was held on April 22, 2014.
  - Obtain Finding of No Significant Impacts (FONSI).
  - Complete the Combined Design Report and submit for approval.