

CONSTRUCTION AHEAD

Arthur Holmes, Jr., Director, Department of Transportation

MAY 2009

Urgent Repair of East Deer Park Drive Bridge over CSX Railroad

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Transportation Engineering

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Construction Ahead is a
project newsletter published
by the Montgomery County
Department of Transportation
(MCDOT).

PURPOSE

The purpose of this newsletter is to inform you of urgent repairs to the bridge carrying East Deer Park Drive over the CSX Railroad. *The bridge currently is safe for use*, however, it is urgent to undertake repairs quickly to ensure its continued safe use. **In order to complete the repairs, it will be necessary to close East Deer Park Drive between Central Avenue and Railroad Street between June 17, 2009 and August 30, 2009.**

INTRODUCTION

The bridge carrying East Deer Park Drive over the CSX Railroad was constructed in 1946. The three span structure consists of an asphalt wearing surface that is supported by a timber bridge deck resting on steel beams. Concrete abutments and timber bents support the steel beams. Over the past several years, the Montgomery County Department of Transportation (MCDOT) has monitored the bridge closely as it has deteriorated with age.

FACILITY PLANNING PHASE I STUDY

In December 2002, MCDOT initiated a Facility Planning Study to evaluate the structure for a safe and efficient crossing over CSX Railroad. In 2005, concepts were presented to the public which included geometric improvements to adjacent roadways. Concerns were raised by the community as to whether or not any improvements were necessary. Between 2005 and 2008, the MCDOT placed the project on

hold to further evaluate and monitor the condition of the bridge.

In 2008, as part of the facility planning study, DOT conducted full scale load testing of the structure and the United States Forest Products Laboratory (USFPL) undertook an extensive examination of the timber bents. The USFPL notified MCDOT in November 2008 that the timber bents were in an advanced state of decay and must be replaced as soon as possible, preferably within twelve (12) months.

Accordingly, the East Deer Park Bridge, Facility Planning Phase I Study concluded that swift replacement of the timber bents is required and the existing humpback bridge will be preserved and maintained after the bent replacement.

SCOPE OF REPAIRS

The elements of the superstructure (the deck and steel beams) as well as the concrete abutments are currently in satisfactory condition and do not require rehabilitation at this time. The timber bents that support the superstructure have deteriorated beyond repair and will be replaced with new timber bents that match the current configuration. Only the timber supports below the bridge will be replaced at this time, the superstructure will remain unchanged and in its existing configuration.

The structure is listed in the *Locational Atlas and Index of Historic Sites*. In accordance with Chapter 24A-10 of the County Code, the Montgomery County Historic Preservation Commission (HPC) has reviewed the proposed work. The HPC concluded that the replacement of the existing timbers in-kind is not a substantial alteration of the resource, allowing MCDOT to proceed with the repairs.

There are many unique features of the bridge that present challenges in undertaking these repairs. The need to act quickly to replace the supports leaves no time to relocate overhead utilities to allow the use of large cranes to remove the superstructure to access the supports below. There is insufficient vertical and horizontal clearance to the railroad tracks to install temporary supports below the bridge. As a result, an innovative method of supporting the superstructure from above has been developed.

Temporary steel beams will be placed across the bridge and hangers will be installed to lift the superstructure from its supports. A small electric crane will be suspended from the hangers below the superstructure. It will be used to lift the existing timber members from below the bridge and install new timber members. After the new timber bents are installed, the temporary support beams will be removed. To minimize the weight that must be supported by the temporary beams, the asphalt wearing surface will be removed as the first order of business. A new water proofing membrane and asphalt wearing surface will be installed prior to reopening the bridge to traffic.

TRAFFIC CONTROL AND PHASING

The selected method of construction addresses the issues related to railroad and utility clearances. However, it requires that the bridge be closed during construction, since the roadway will be obstructed by the temporary support beams. A detour route utilizing Railroad Street will be posted with signs directing the flow of traffic.

Prior to and after the temporary road closure, it may become necessary to close a lane on the approach roadways or stop traffic altogether for brief periods to allow our contractor to complete a critical activity such as positioning equipment or material. Before and after the road closure, the work zones will be left passable and access to driveways will be restored at the end of each day.

CONSTRUCTION HOURS AND INSPECTION

Construction will generally take place Monday through Friday between 7:00 a.m. and 4:00 p.m. The contractor may occasionally work on Saturdays to make up for weather delays. Throughout the construction process, a full-time County representative will be present on the job site during hours of construction. In addition to overseeing the construction progress and monitoring the work zone for pedestrian and traffic safety, the County representative will be available to answer questions that you may have about the project.

CONTRACTOR

Corman Construction, Inc. located in Annapolis Junction, Maryland, is the project contractor. They are an experienced contractor and have completed numerous similar construction projects in adjacent jurisdictions and the State of Maryland. The project cost is about \$450,000.

SCHEDULE

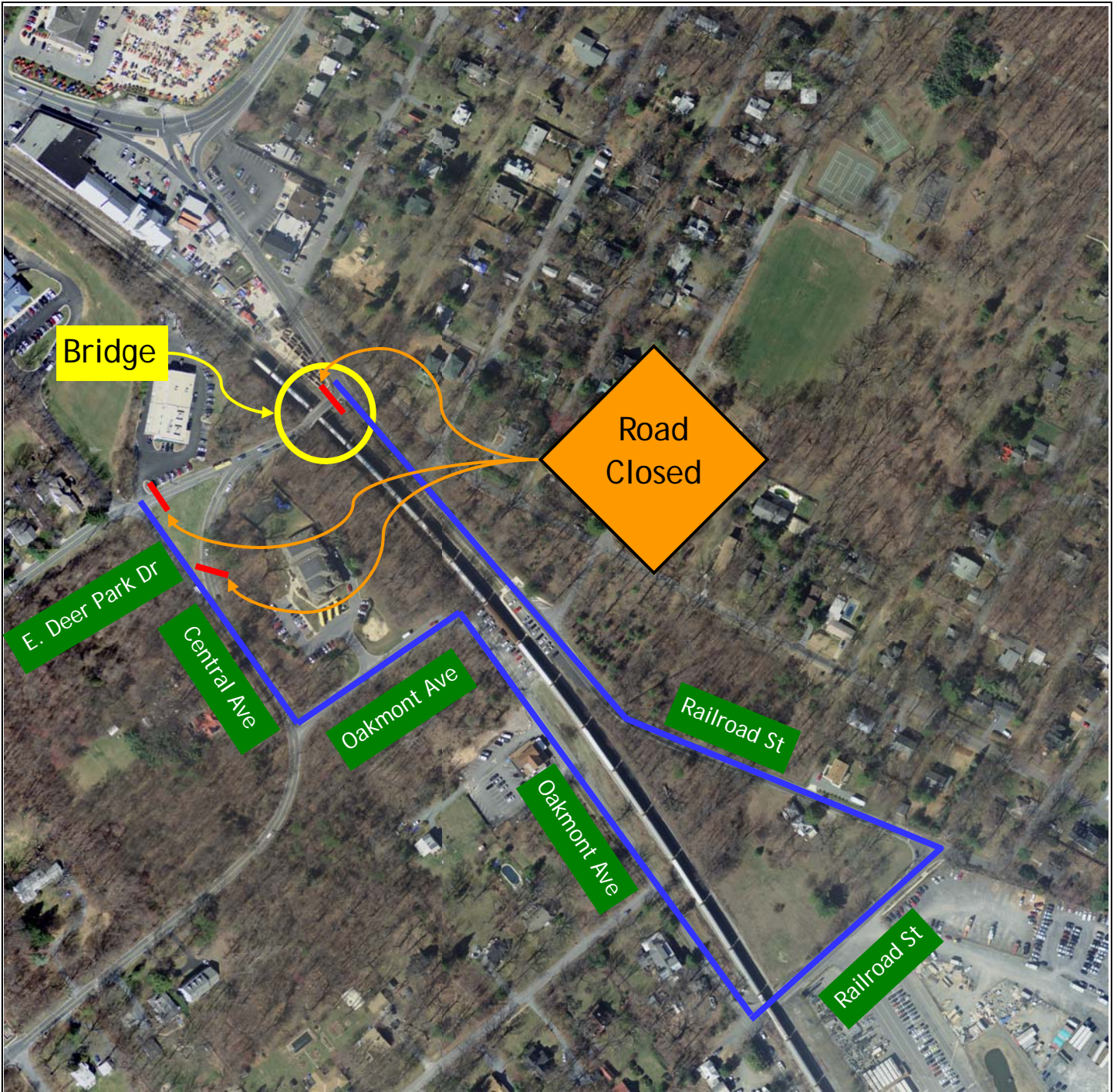
The construction contract was executed on March 11, 2009. Since then, the contractor has been developing designs for the replacement timbers as well as the temporary support system. Actual construction in the field is scheduled to commence once school is out for the summer. MCDOT expects to close the road on or about June 17, 2009. The construction contract requires that the majority of construction be complete and the road reopened before school begins again on August 30, 2009. Final clean up and punch list items are expected to be complete by October 2009.

IMPACT TO YOU AND THE COUNTY SERVICES

Motorists can expect delays associated with the detour route during the period that the bridge is closed. Warning, guidance, and directional signs will be posted throughout the construction zone to keep motorists informed of conditions. Government services will not be interrupted by the construction, however those services that rely on the bridge for access may also experience delays associated with the detour route.

WHO IS RECEIVING THIS NEWSLETTER?

This newsletter is being sent to all citizens who are on the project's mailing list and to the owners of businesses located in the vicinity. Please share this information with your neighbors. If they want



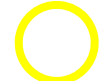


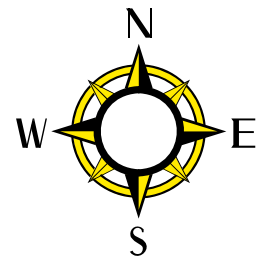
to receive future newsletters, please contact the MCDOT Construction Section, at 240-777-7210, to have their names added to the mailing list.

[Detour Route](#)

East Deer Park Drive will be closed between Central Ave and Railroad Street on or about June 17, 2009. The closure will last until on or about August 30, 2009. The points where East Deer Park Drive will be closed are shown in red. The detour route is shown in blue. Detour signs will be posted to direct traffic along the detour route. Please drive with caution through the work zone.

Legend

-  Detour Route
-  Road Closure
-  Bridge Site



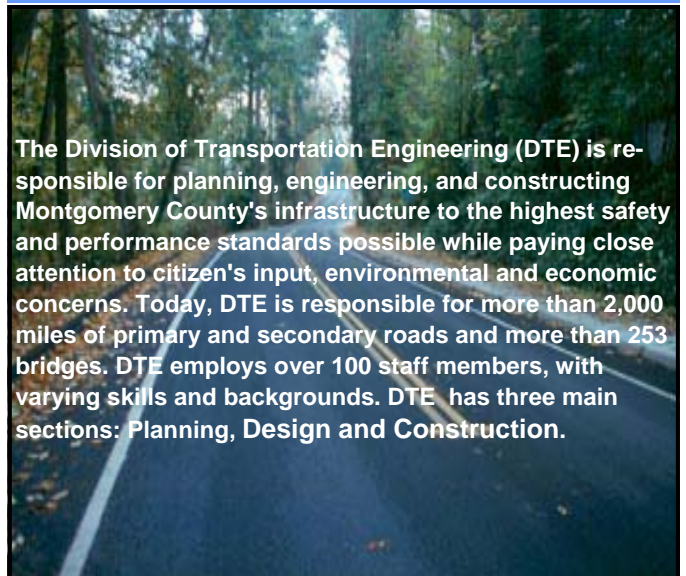


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DIVISION OF TRANSPORTATION ENGINEERING



The Division of Transportation Engineering (DTE) is responsible for planning, engineering, and constructing Montgomery County's infrastructure to the highest safety and performance standards possible while paying close attention to citizen's input, environmental and economic concerns. Today, DTE is responsible for more than 2,000 miles of primary and secondary roads and more than 253 bridges. DTE employs over 100 staff members, with varying skills and backgrounds. DTE has three main sections: Planning, Design and Construction.

We plan to provide you with periodic updates on this project.

<u>Questions About</u>	<u>Contact</u>	<u>Phone Number</u>
Construction Activities	Chabi Deoraj	240-777-7213
Traffic Control	Fred Lees	240-777-2190
Project Design	Chabi Deoraj	240-777-7213
Mailing List	Jackie Earp	240-777-7210

Website Information

For information on this, and other transportation projects in the County, please visit our website at: <http://www.dpwt.com>