



Tienken Road Bridge and Traffic Signal by Kings Cove Drive

Work Session Presentation to City Council on May 24, 2006

Project Location and Objectives

- Install a traffic signal at a realigned intersection for Kings Cove, Tienken and Oakbrook West
- Rebuild and widen the existing Tienken Road bridge over the Paint Creek
- Redirect Paint Creek Trailway users to cross Tienken at the new traffic signal



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Existing Tienken Road Bridge




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Overhead DTE Lines with Temporary Guards Installed and looking east to the Tienken Bridge




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Existing Intersection Configuration at Kings Cove and Oakbrook West



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Existing Paint Creek Trailway Crossing of Tienken Road



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Initiation of the Proposed Project

- Initial request for a traffic signal by the Kings Cove Association
- City retains Hubbell, Roth & Clark (HRC) to perform a traffic signal warrant study
 - Review of possible traffic signal configurations
 - Consideration to rebuild the Tienken Road bridge
 - Review of the Tienken Road traffic counts to determine proposed bridge width
- Proceed with HRC recommended project design for a 5-lane wide bridge and traffic signal

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Project Approval Dates Given by City Council

Initial Traffic Signal Warrant and Bridge Study	August 7, 2002
Design plan and specification approval	November 5, 2003
Design plan and specification amendment	April 6, 2005
Project Cost Participation Agreement with RCOC (postponed by council 5/3/06)	?

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Average Daily Traffic (ADT) Recorded for Tienken between Livernois and Rochester Roads

- Actual 2001 ADT: 19,716
- Actual 2002 ADT: 23,055
- Actual 2003 ADT: 22,681
- Actual 2005 ADT: 20,806
- Estimated 2025 ADT: 30,200

2015 ADT forecasted for Tienken Road between Livernois and Rochester per the 1998 Rochester Hills Master Thoroughfare Plan Update: 21,200

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Capital Improvement Plan and Budget Inclusion

- Tienken Road bridge (MR-06A) and traffic signal (MR-06B) has been in the Capital Improvement Plan for the years 2002, 2003, 2004, 2005 and 2006. The bridge has been specifically been described as a 5-lane bridge for years 2003-2006 in the CIP
- The Rochester Hills budget first included the traffic signal design in the 2002 adopted budget. The bridge design was added into the 2003 adopted budget and both projects have been included in the adopted City budget under major road construction for years 2003-2006

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Other Key Project Meeting Dates

- February 19, 2002 – Resolution from the Paint Creek Trailway Committee (PCTC) supporting the traffic signal installation at Kings Cove
- Other updates with the PCTC included May 18, 2004 and August 16, 2005 at the City of Rochester and October 28, 2004 and August 10, 2005 in the City of Rochester Hills
- Kings Cove information meeting participation have included updates on October 28, 2004, August 16, 2005 and condominium association annual meetings in 2004 and 2005.
- Phone calls and easement acquisitions have further involved Kings Cove, Oakbrook Condominiums and the PCTC at additional times

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Project Funding Sources

- Tri-party program
- Road Commission for Oakland County construction engineering work
- State Funding earmarked appropriation from Congressman Knollenberg
- Rochester Hills major road fund

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Project Schedule and Cost Estimate

Complete traffic signal warrant study	November, 2002
Complete bridge and signal design	April, 2006
Project bids received	May 5, 2006
Start of construction	July 3, 2006 estimated
Closure of Tienken Road	July thru October, 2006
Project Completion	Mid-November, 2006

Initial Traffic Signal & Bridge Study	\$ 16,037
Bridge and signal design cost	\$ 302,840
Construction Cost	\$ 2,504,970
Construction Engineering*	\$ 375,750
DTE Utility Relocation	\$ 65,139
TOTAL	\$ 3,264,736

*donated soft-match cost estimate for RCOC contribution

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Coming Soon: Revisiting the Tienken Road Corridor Study

Approximately \$9.7 million is available to the RCOC and Rochester Hills in the new federal highway SAFETEA-LU bill (Safe, Accountable, Flexible and Efficient Transportation Act – A Legacy for Users) for the Tienken corridor between Livernois and Sheldon

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