



**City of Rochester Hills
AGENDA SUMMARY
NON-FINANCIAL ITEMS**

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Legislative File No: 2006-0897

TO: Mayor and City Council Members

FROM: Roger H. Rousse, Director of Public Service, 656-4685

DATE: December 13, 2006

SUBJECT: Design change consideration for the Hamlin Road widening project between Crooks and Livernois at the Hamlin/Livernois intersection; City File No. E92-023

REQUEST:

City Council is asked to consider whether the proposed intersection of Hamlin and Livernois Roads should be designed for a roundabout instead of the previously approved boulevard intersection.

BACKGROUND:

The proposed project to reconstruct and widen Hamlin Road between Crooks and Livernois has slowly progressed throughout the design stage and is nearing completion. However, before it is finalized through an approval of the Environmental Assessment (EA) report, City Council is being asked to consider one significant change to the intersection design at Hamlin and Livernois. An overview of the project history is provided as follows to summarize some of the project timeline progression to this latest stage.

Rochester Hills originally submitted a funding application to the Oakland County Federal Aid Task Force in March 1992 for federal funding approval. The funding application was approved for Preliminary Engineering (PE) funding in 1993 to design a 4-lane boulevard with a 50-foot wide median, within a 150-foot right-of-way corridor.

In 1997/1998, a Rochester Hills community task force committee reviewed the project and recommended that the road section be changed to a preferred 4-lane narrow boulevard with a 120-foot right-of-way and 30-foot wide median.

In November 2000, Mayor Somerville sent a letter to the Road Commission for Oakland County (RCOC) inquiring as to whether Rochester Hills could still utilize the earmarked funds for Hamlin Road, Crooks to Livernois, if the road section was designed and constructed as a 5-lane road. After the question was then raised to the Federal Aid Task Force, the response was that Rochester Hills would not lose the project priority and could elect to construct a 5-lane roadway in lieu of the 4-lane boulevard.

In February 2002 a revised application was submitted to the Oakland County Federal Aid Task Force for the updating of the design, right-of-way acquisition, and construction costs. The application was submitted to the Task Force for a most expensive cost scenario (assuming boulevard construction). The revised total project cost was estimated to be approximately \$13.6 million.

The Oakland County Federal Aid Task Force and the City's engineering design consultant, Orchard, Hiltz & McCliment (OHM), requested that Rochester Hills define what road section should be designed and constructed. At staff's request, OHM was requested to prepare an engineering study to review the Hamlin corridor between Crooks and Rochester Roads. The resulting OHM study is titled Engineering Study for Hamlin Road – Crooks Road to Rochester Road and dated June 24, 2002. The engineering study reviewed many issues that are significant factors when deciding on a recommended road section, including safety, cost, utility placement, drainage, right-of-way impact, roadway continuity, tree loss & landscaping, property values, resulting setbacks, etc. The report addresses each of these issues in detail. In the OHM report, a wide median 4-lane boulevard was recommended for Hamlin between Crooks and Livernois if funding allowed; otherwise, a 5-lane road is recommended. Staff recommended that the 5-lane road option be supported for Hamlin Road. It was also mentioned that the RCOC is planning to eventually widen Livernois to a 5-lane road from Long Lake to Avon.

Council held a workshop session on May 16, 2002 and a second workshop meeting on July 17, 2002 prior to the regular meeting to review and discuss the draft version of the engineering report. Then, at their September 25, 2002 meeting, City Council voted 4-3 in favor of constructing Hamlin Road as a narrow median boulevard road with a transition to the existing taper back to a three-lane road design east of Livernois. It should be noted that the current Master Thoroughfare Plan (1998 version) assumed that a 4-lane boulevard along Hamlin between Crooks and Livernois would be built as previously planned. However, the future 3-lane road cross-section east of Livernois does not agree with the Master Thoroughfare Plan recommendation to construct a 4-lane boulevard east of Livernois to Rochester Road.

City engineering staff, RCOC and OHM have been working towards completing the project EA, however, progress has been slow. One unique difficulty in finalizing the EA concerns an adverse affect to the historic home located on the west side of Livernois just south of Hamlin. Recent progress with the current homeowner on how the structure will be mitigated has been favorable and we believe that the EA process can soon be finalized after City Council provides direction on whether incorporating a roundabout intersection design is desired.

Although similar in function to the existing Tienken Road roundabouts at Sheldon and Washington Roads, a proposed roundabout at Hamlin and Livernois is expected to be a dual lane roundabout due to greater traffic demand. The existing roundabouts on Tienken have single lane entries, meaning that only a single approach lane feeds traffic into the intersection from each direction.

Federal funds will cover 80% of the approved cost expenditures for the Hamlin Road widening project from Crooks to Livernois. In addition to the previous design funding approval, the Oakland County Federal Aid Task Force has subsequently earmarked project funding for the right-of-way and construction phase expenses in fiscal years 2007 and 2008 respectively. Since there is a significant number of right-of-ways/easements to obtain for the project, it is imperative that the project design not experience additional delays to jeopardize the project funds that have been previously programmed. Thus, staff believes that this is the last opportunity where a modification to the intersection design can be made without severely risking the loss of the federal funding.

Approximately 20 fewer right-of-way/easements will be required with the roundabout design compared to the full boulevard intersection. Furthermore, construction costs should be less for the roundabout design. It is expected that any additional engineering design expenses by approving a roundabout design will be easily offset by savings from the right-of-way acquisition and construction phases.

A presentation by Stephen Dearing, P.E., PTOE with Orchard, Hiltz & McCliment, Inc. (OHM) will be made to explain benefits and challenges associated with incorporating a round-a-bout intersection into the road network. The presentation will cover intersection concerns such as traffic flow, emergency vehicle response impacts and accommodations, pedestrian movements, accident frequency and severity, geometric impact to the surrounding area, and project costs (design, right-of-way and construction).

RECOMMENDATION:

The Department of Public Service recommends that City Council approve a design modification to a roundabout for the Hamlin/Livernois intersection for the Hamlin Road widening project between Crooks and Livernois.

RESOLUTION

NEXT AGENDA ITEM

RETURN TO AGENDA

APPROVALS:	SIGNATURE	DATE
Department Review		
Department Director		
Mayor		
City Council Liaison		