



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

**1000 Rochester Hills Dr.
Rochester Hills, MI 48309
248.656.4630
www.rochesterhills.org**

Legislative File No: 2009-0145

TO: Mayor and City Council Members

FROM: Roger H. Rousse, Department of Public Services, Ext. 2497

DATE: May 4, 2009

SUBJECT: M-59 Widening between Crooks and Ryan (City File Number E01-017)

REQUEST:

City Council is requested to review the information included in this agenda summary and attachments regarding the noise barrier locations proposed by the Michigan Department of Transportation for the M-59 corridor between Crooks and Dequindre.

BACKGROUND:

City Council received an e-mail correspondence (copy enclosed) from a resident named Noelle O'Neill on March 23, 2009 regarding noise barrier construction for the M-59 widening project. Ms. O'Neill has appealed to City Council to formally request that the Michigan Department of Transportation (MDOT) review their model used to estimate sound increases resulting from the M-59 widening project to determine whether constructing a noise barrier between Joshua and John R roads along the north side of M-59 is now warranted. As noted in Ms. O'Neill's e-mail, she spoke with Mark Sweeney the MDOT project manager for the M-59 widening project and it appears that City Council support could help convince MDOT to spend the time to review and run the noise barrier model analysis.

A copy of the Noise Analysis Report dated September, 2008 and prepared for the MDOT by HNTB Michigan, Inc. is enclosed for council review and reference. This report was obtained from an MDOT link on April 27, 2009 by engineering staff. A review of the report indicates that thirteen (13) sites were reviewed for potential noise barrier construction, twelve of which were located within Rochester Hills' limits. The report also explains that the existing land use was reviewed for the project corridor and was determined to be closest to Activity Category B on Table 2, page 8 of the report. MDOT policy is to use 1 decibel less than the value listed in Table 2 so a baseline noise abatement criteria value of 66 decibels was used for the study.

It is noted that all thirteen locations for potential noise barrier construction studied met the criteria for *feasibility* since the upper range of existing noise levels exceeded 66 decibels. However, the construction of noise barriers must also meet the criteria to be considered as a *reasonable* expenditure. The threshold for a noise barrier being *reasonable* is that the construction cost of the barrier is at or below \$38,600.00 per benefitting units. Only two sites meet the MDOT criteria for being *feasible and reasonable* for noise barrier construction.

The first qualifying noise barrier locations is located along the eastbound on-ramp (Ramp F) from Rochester Road along the south side of M-59. This barrier wall is estimated to be 2,863 feet in length and varying from 15 to 21 feet in height. The cost to construct the barrier wall per Table 7 of the report is \$1,685,623 and will provide a noise reduction between 5 and 11 decibels for 55 benefitting units.

The second location is for the westbound on-ramp (Ramp K) from Dequindre Road along the north side of M-59 and is proposed to be 1,689 feet in length. Heights of the concrete barrier will vary between 15 to 24 feet above existing ground elevations. The cost to construct the barrier wall is \$1,174,840 and will provide a noise reduction between 5 and 10 decibels for 40 benefitting units.

The M-59 widening project is planned for construction with the federal stimulus monies and requires that chosen projects provide a shovel-ready status. Projects built with federal stimulus funding do not require a local share unless the project costs exceed the stimulus fund amount made available to the project. MDOT policy requires that a public hearing be held for projects that propose noise barrier construction. Unfortunately, incorporating the public hearing process does not permit MDOT to keep the project schedule for a July 2009 bid letting for the stimulus project timeframe. Thus, MDOT has decided to pull the barrier constructions out of the M-59 widening project and construct them with a separate contract so that the public process can be upheld and to also stay within the allocated project cost allotment of \$60 million (the project cost previously exceeded \$60 million with the barrier walls included).

The decision to pull the noise barrier construction from the stimulus project means that Rochester Hills will be charged a local share for the two approved noise barriers in accordance with the Act 51 percentage of 12.5%. **The expected local share from the two approved locations is currently estimated at \$357,557.88.** Addition of other noise barrier construction sites will increase the City share and the increase will be higher than the 12.5% Act 51 charge for an approved location. Appendix B of the Noise Analysis Report states on page 3, item 4 under Type I Projects Procedures and Rules that the local community will be asked to determine whether locations not deemed *reasonable* will be funded by the local community in excess of the \$38,600 per benefitting unit.

The following costs for noise barrier construction to be covered by the local community per each of the 10 locations in Rochester Hills deemed not reasonable for noise barrier construction is estimated as:

NB-1:	\$ 702,543 – (\$38,600 x 7)	=	\$ 432,343
NB-2:	\$ 1,036,382 - (\$38,600 x 10)	=	\$ 650,382
NB-3:	\$ 943,674 - (\$38,600 x 14)	=	\$ 403,274
NB-4:	\$ 929,041 - (\$38,600 x 19)	=	\$ 195,641
NB-5:	\$ 1,644,989 - (\$38,600 x 28)	=	\$ 564,189
NB-9:	\$ 1,856,202 - (\$38,600 x 18)	=	\$ 1,161,402
NB-10:	\$ 2,603,612 - (\$38,600 x 35)	=	\$ 1,252,612
NB-11:	\$ 1,294,407 - (\$38,600 x 13)	=	\$ 792,607
NB-12:	\$ 839,630 - (\$38,600 x 10)	=	\$ 453,630
NB-13:	\$ 971,385 - (\$38,600 x 15)	=	\$ 392,385

The above costs total approximately \$6.3 million and are based on the subtracting \$38,600 times the number of units from the cost estimates provided in Table 7. The noise barrier wall addition requested by Ms. O'Neill is NB-10. It may be argued that additional benefitting structures have been built since the initial Noise Analysis Report was completed. A total of 68 benefitting structures will be needed for this location to be considered *reasonable*.

Although some additional homes may have been or will be constructed at the Country Club Village development, the Noise Analysis Report also estimates the 66 decibels (dBA) setback to be between 280 and 409 feet. Beyond those distances, it is not expected that noise levels will reach 66 dBA. Thus, the additional homes would probably need to be at least built within 409 feet of M-59 to qualify as a benefitting structure and it is likely that there are not enough proposed homes or homes built after this study period to move NB-10 into a qualifying condition for being considered *reasonable*.

MDOT intends to schedule and hold a public hearing for the two currently proposed barrier locations and the public will have an opportunity to provide comment on the noise barrier report and recommendations.

On a final note to council, Rochester Hills does not have a separate Capital Improvement Project for noise barrier construction along the M-59 corridor and there has not been funding included for noise barrier construction in the 2009 budget.

RECOMMENDATION:

It is recommended that City Council determine what level of participation in funding noise barrier construction is desired for the community along the M-59 corridor between Crooks and Dequindre Roads given that the Michigan Department of Transportation will require a local cost share.

Enclosure(s): March 23, 2009 e-mail from Noelle O’Neill (NoelleOneill.doc)
M-59 Crooks to Ryan Road Noise Analysis Report

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