Pat Somerville, Mayor

City Council Members: Bryan K. Barnett John Dalton

Jim Duistermars Melinda Hill

Barbara L. Holder

Linda Raschke

Gerald Robbins

DEPARTMENT OF PUBLIC SERVICE

Roger H. Rousse Director

Telephone 248.656,4685 FAX 248.656.4758

Billing / Account Information 248.656.4688

**Engineering Services** 248.656.4640

> Pathways 248.656.4640

Roads 248.656.4685

Water / Sewer 248.656.4685

September 20, 2005 Ms. Jill Laubach

Hunters Creek Homeowner's Association 435 Antoinette Rochester Hills, MI 48309

Traffic File

Re: Hunters Creek Subdivision Traffic Study Request – Section 7

Dear Ms. Laubach:

The City of Rochester Hills' Traffic Division has completed the traffic study, per your request, due to concerns of excessive speeding and cut-through traffic for the above-referenced subdivision. The study included reviewing intersection sight clearance distances, placing speed/volume counters, and obtaining traffic crash data. The speed/volume data was collected from Tuesday, September 6 through Thursday, September 8, 2005 along Plum Ridge Drive (in front of house #672), along Antoinette (in front of house #400), and along Rose Brier Drive (in front of the houses at #272 and #117).

Safe Intersection Sight Distance Clearances

Per the Road Commission for Oakland County's "Permit Rules, Specifications, and Guidelines", the minimum corner sight distance is 335' for a 30 M.P.H. roadway. Even though subdivision streets are posted at 25 M.P.H., the design speed of 30 M.P.H. is used. Based upon our field review, the following intersections have inadequate sight distance:

- Old Ridge Court at Rose Brier Drive
- Middlebury Lane at Plum Ridge Drive
- Pepper Tree Lane at Rose Brier Drive
- Worthington Court at Pepper Tree Lane

**Traffic Speed Data** 

Speed data was collected to investigate speeding concerns. The 85<sup>th</sup> percentile speed, which means that 85% of the drivers are driving either at or below this speed, is analyzed when performing traffic studies and is used when setting speed limits on non-subdivision streets. The following is a summary of findings:

City Hall General Information 248.656.4600

> Pat Somerville Mayor 248.656.4664

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## 85<sup>th</sup> Percentile Speeds

Street	Speed
Plum Ridge Drive	28-mph
Antoinette	28-mph
Rose Brier Drive (house #272)	28-mph
Rose Brier Drive (house #117)	30-mph

These values are either within or below the typical 85<sup>th</sup> percentile speed range of 30 to 32-mph for residential streets within Rochester Hills and indicate no unusual speeding problems.

## **Traffic Volume Data**

	Daily	Greatest
<u>Street</u>	<u>Volume</u>	1-hr Vol.
Plum Ridge	293-vpd	34-vph
Antoinette	295-vpd	34-vph
Rose Brier (house #272)	241-vpd	31-vph
Rose Brier (house #117)	750-vpd	82-vph

These traffic volumes <u>do not</u> indicate a cut through problem within your subdivision. Typical trip generations for residential homes within Oakland County average between 12 and 15 per household. Previous vehicle trip studies performed within the City of Rochester Hills have been as high as 17 trips per home per day.

## **Crash History Data**

Traffic crash history was provided by the Traffic Improvement Association (TIA), was obtained for the period of January 1, 2002 through December 31, 2004. There was no crash data available for these locations.

## Recommendations

Replace the existing "Yield" signs at Old Ridge Court, Middlebury Lane, and Pepper Tree Lane with "Stop Signs". The limited sight distance at Worthington Court is correctable by the removal of several shrubs. Additionally, the landscaping at house #134 Rose Brier Drive, at the intersection of Rose Brier Drive and Pepper Tree Lane, is obstructing the line of sight for both northbound Rose Brier Drive and southbound Pepper Tree Lane. The City will notify the property owners to remove these sight obstructions.

If your homeowner's association is interested, the Oakland County Sheriff's Department (OCSD) can place speed trailers followed by selective enforcement along Rose Brier, as OCSD staff resources permit. Staff recommends placing the speed trailers, followed by selective enforcement, during the hours of 4:00 to 6:00 pm.

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The City of Rochester Hills has considered implementing traffic calming measures, such as speed humps, to deter speeding along residential streets. Information regarding speed humps and the *Neighborhood Traffic Safety Program* are enclosed for your review. A policy for the use of speed humps has been developed and would require a majority of your homeowner's association to approve their installation. The average cost per speed hump is estimated to be between \$3,500 and \$4,500 and would be assessed to your association. An effective speed program relies on the education of neighbors on the problems associated with speeding, and using targeted enforcement.

Please review the enclosed material and discuss it with your neighbors. If you have any further questions, please feel free to contact me at (248) 841-2489. Also, the recommendation for changing the three (3) "Yield" signs to "Stop Signs", as referenced above, will be placed on the Tuesday, October 11, 2005 Advisory Traffic & Safety Board (ATSB) meeting agenda. You are welcome to attend the meeting to discuss the traffic study findings and to learn more about traffic calming measures. ATSB meetings are held at City Hall at 7:30 P.M. Thank you for your interest in the City's Traffic Safety Program.

Sincerely,

Paul G. Shumejko, P.E., PTOE

Transportation Engineer

PGS/jfd

Attachments:

One (1) copy of traffic speed data

One (1) copy of crash history data

One (1) copy of Advantages & Disadvantages or Speed Humps

One (1) copy of Speed Hump Request Policy

One (1) copy of Speed Hump Petition

One (1) copy of Neighborhood Traffic Safety Program One (1) copy of the ITE Speed Hump Description

One (1) copy of the completed Traffic Survey Request Form

One (1) copy of subdivision map

Roger H. Rousse, DPS Director Paul M. Davis, City Engineer

Marc G. Matich, Traffic Technician

Advisory Traffic and Safety Board Members w/ traffic speed data, crash history data, completed Traffic Survey Request Form, and subdivision map attachments

Traffic Section File w/ traffic speed data, crash history data, completed Traffic Survey Request Form, subdivision map attachments