The Traffic Committee meeting was called to order at 7:35 p.m. in the Lower Level Conference Room of Troy City Hall on March 17, 1999 by Vice-Chair Michael Palchesko.

1. Roll Call

PRESENT:

Michael Culpepper John Diefenbaker Ted Halsey

Michael Palchesko

ABSENT:

Arthur Cotsonika

Jan Hubbell Charles Solis

Also present were the following:

- 6. Rick Marshall, 1730 Chatham
- 7. Dennis Smoke, 4321 Clarke William Guilbert, 4335 Clarke Ed Barr, 4295 Clarke Brian Nufer, 4276 Clarke Bob Andonisio, 4281 Clarke Cathy Callis, 4304 Clarke
- 8. Frances Williams, 920 John R, Apt. 412

and Lt. Robert Matlick, Fire Dept.

John Abraham, Traffic Engineer

2. Minutes - February 17, 1999

Moved by Diefenbaker Supported by Culpepper

That the minutes of February 17, 1999 be accepted as printed.

YEAS:

4

NAYS:

0

ABSENT:

3

MOTION CARRIED

3/29/99 G-2

Motion to Excuse

Moved by Culpepper Supported by Halsey

That Mr. Cotsonika, Ms. Hubbell, and Mr. Solis be excused.

YEAS:

4

NAYS:

0

ABSENT:

3

MOTION CARRIED

3. Visitors' Time

No one appeared to address the Committee on any items not on the agenda.

Motion to take Items Out of Order

Moved by Diefenbaker Supported by Halsey

To take items 6, 7 and 8 out of order.

YEAS:

4

NAYS:

0

ABSENT:

3

MOTION CARRIED

6. Install Multi-way STOP Signs at Caliper and Chatham

Mark Blazevic of 1561 Martinique, has suggested the installation of STOP signs at the intersection of Caliper and Chatham as a means of reducing the speed of traffic. Mr. Blazevic reported that he has had many 'near miss' accidents in the neighborhood related to high speeds by younger drivers. He felt that STOP signs at Caliper and Chatham may help regulate traffic better and make the area safer.

City of Troy experience has been that STOP signs are not effective in controlling speeds on residential streets. The attached article from ITE Journal describes this experience.

If STOP signs were to be installed at Chatham and Caliper, a multi-way stop would be created. Installation of a multi-way stop would be warranted under one of the following conditions:

- Where traffic signals are warranted and urgently needed, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for traffic signal installation.
- An accident problem as indicated by five or more reported accidents of the type susceptible of correction by a multi-way stop during a twelve month period. Such accidents include right and left turn collisions as well as right angle collisions.

The intersection of Caliber and Chatham does not meet any of the above requirements. First, a traffic signal is not warranted at the location. Secondly, the traffic accident experience, for the past three years, shows no accidents at the intersection. Further, the traffic volumes on these streets were found be well within the range of volumes for the City of Troy residential streets (300-3000 vehicles per day). The traffic volumes were 597 vehicles per day on Chatham and 1425 vehicles per day on Caliper. A sight distance study was also performed for the intersection. The sight distances from all approaches were determined to be adequate for 25 mph speeds. There were some sight obstructions when traveling north on Chatham, however, Caliper dead ends on Chatham, which would give Chatham the right of way at the intersection, and therefore these sight obstructions are not of much concern.

Rick Marshall, of 1730 Chatham, lives on the comer of Chatham and Caliper. He told the committee that he does not want a STOP sign installed right in front of his house, since a STOP sign may result in bottles/garbage being discarded in his yard by people stopping at the STOP sign. He suggested that if the residents really want to slow down traffic they could have a STOP sign at Martinique and Chatham. No one else appeared to address the committee on this item.

Moved by Halsey Supported by Diefenbaker

Recommend that STOP signs not be installed at Caliper and Chatham.

YEAS:

4

NAYS:

0

ABSENT:

3

MOTION CARRIED

7. Install 3 Way STOP Signs at Reilly and Clarke

Brian Nufer of 4276 Clarke requested all-way STOP signs at the intersection of Reilly and Clarke. The intersection has three roadway approaches and the fourth leg is a pedestrian walkway leading to Costello Elementary School.

Clarke is a 0.6 mile long road that begins at Shallowdale and ends at Eleanor. Reilly intersects Clarke at a point just west of Eleanor. Due to the landscaping and houses, the pedestrian walkway cannot be seen by eastbound traffic. However, there are "Pedestrian Crossing" signs on both approaches of Clarke to Reilly.

A speed study was performed and indicated that average approach speeds on Clarke were around 29 mph when children were not around. The approach speeds averaged 19.5 mph when children were around.

A pedestrian study was performed at the intersection during school dismissal time (3:35 p.m.). Eleven pedestrians crossed Clarke to get to Reilly. There were safety patrol students at the intersection; however, they did not wear their safety vests and were not found to be very attentive. On many occasions, children darted out onto the street and ran across Clarke. Safety at the intersection can be enhanced by training the safety patrol to be more attentive to the traffic.

Traffic volumes on Clarke west of Reilly were 971 vehicles per day, and on Reilly south of Clarke, 773 vehicles per day. There were around 90 vehicles that used the intersection between 3 p.m. and 4 p.m.

Mr. Nufer feels that having STOP signs at the intersection will enhance safety of the pedestrians walking to school. Discussions with the Costello Elementary School staff revealed that the school is encouraging more students to walk to school since they have a parking/traffic circulation problem at their school.

There have been no traffic accidents at the intersection between 1995 and 1997.

At the February 17, 1999, Traffic Committee meeting, Dennis Smoke of 4321 Clarke reported that he is concerned about the safety of the children and that it was at his request that the City installed pedestrian crosswalk signs and pavement markings. He estimates around 25 kids crossing the intersection during warm weather.

Bob Boehle of 4313 Reilly indicated that installing STOP signs would make for too many traffic control devices in the area. He also pointed out that this would be a mid-block STOP control, and that it may have very low compliance.

Mr. Diefenbaker referred to the comments of the traffic engineer that the safety patrol was not functioning effectively and suggested referring this item to Gary Wood, principal of the school.

One of the residents indicated that they received the notice for the meeting very late and also that many neighbors have not received notices. Ms. Hubbel suggested that this item be tabled to the next meeting of the Traffic Committee to allow sufficient notice to the residents.

Gary Wood, principal of Costello School, was informed about the situation (see attached letters).

Dr. Abraham said that Mr. Wood has reminded the safety patrol kids of their responsibilities, and from his observations, are doing a better job of controlling pedestrian traffic. If this is not sufficient, the next step would be an adult crossing guard. An engineering study would have to establish need for this.

Brian Nufer, Dennis Smoke, and William Guilbert addressed the committee. They are also concerned about the safety of children when school is not in session. Children cross these streets to get to the soccer fields, play hockey in the streets, and there are also a lot of small children in the neighborhood.

Mr. Halsey pointed out that streets are not playgrounds, they are there to accommodate traffic.

Mr. Smoke said that there is a 1.2 or 1.3 mile stretch of road with no STOP or YIELD signs (Shallowdale, which runs into Clarke) off Rochester Road, with a lot of cut-through and speeding traffic, much of it from the high school. He feels that STOP signs would at least slow down traffic.

The residents also said that the police are often in the area, but on Lamb and Hamman.

Moved by Diefenbaker Supported by Culpepper

Recommend no changes at Reilly and Clarke.

YEAS:

NAYS:

0

4

ABSENT:

3

MOTION CARRIED

8. Install Traffic Signal at Grand Haven and John R Road

Ms. Frances Williams of 920 John R requested that a traffic signal be installed at the intersection of Grand Haven Drive and John R Road. Ms. Williams explains the difficulties experienced in making left turns out of Grand Haven and other problems, in her attached letter.

John R Road is a county road and Grand Haven is a private road. As seen in the attached drawing, this intersection is around 950 feet north of the signalized intersection of Elliott and John R. Directly to the south of Grand Haven is Lovington Drive, which is also a private street, and to the north is Technology, which is a public roadway. The Road Commission for Oakland County (RCOC) has jurisdiction over John R Road and initial discussions with RCOC officials indicate that if a signal were to be approved and installed, the RCOC may not participate in the cost of installation and maintenance since Grand Haven is a private street.

A complete traffic signal warrant analysis was performed at the intersection to determine if the location warrants a signal. Traffic volumes on Grand Haven and John R were taken and found to be 1,968 vehicles per day on Grand Haven and 41,018 vehicles per day on John R Road. Traffic volume on Technology Drive was 3,000 vehicles per day. The maximum traffic out of Grand Haven was around 11 a.m. to noon, and the other peak use was at 2 p.m. On John R the peak traffic hours were 7-8 a.m. and 4:30-5:30 p.m.

Since Grand Haven is a drive leading to multistoried apartments, with a large number of residents, the traffic volume on Grand Haven was corrected to be 3,000 vehicles per day for purposes of this study. This is to account for any variation in traffic volume due to the wintry weather.

An analysis of the traffic volume warrants indicates that none of the warrants were met for this location. An analysis of the traffic collisions at the intersection indicates that the collisions that could have been avoided if a traffic signal had been present at the location were:

| 1998 | 1 from Grand Haven |
|------|--------------------|
| | 3 from Lovington |
| 1997 | 2 from Grand Haven |
| | 1 from Technology |
| | 1 from Lovington |
| 1996 | 1 from Lovington |

The traffic accident warrant states that an average of five correctable accidents per year in a three year period will warrant the installation of a traffic signal; therefore, the traffic accident warrant is also not met for the intersection. Further, half-mile spacing is deemed ideal for efficient traffic operations. This location is very close to the signalized intersection of John R and Elliott (less than 1/4 of a mile). Thus, the intersection does not meet any of the traffic signal warrants as required by the Michigan Manual of Uniform Traffic Control Devices.

Ms. Williams appeared before the committee and read a letter (copy attached) reiterating her concerns. She also presented a copy of a petition with 448 signatures and copies of approximately 125 letters from concerned citizens

Several Traffic Committee members drove to the site to investigate. The committee members feel there is a serious problem at this intersection, and suggested several alternative solutions, such as:

Aligning Grand Haven with Technology, where there is currently a signal.

Putting a traffic signal at Grand Haven and John R. However, due to the close proximity of Technology and Grand Haven there would be constant conflicts in the center lane with motorists trying to turn left into both roadways. This would result in more crashes.

Mr. Halsey pointed out that there is a county drain on the north side of the complex, and wondered if a road or driveway could be developed on that property. Mr. Culpepper said there is an office building in the way.

Mr. Diefenbaker wondered if Grand Haven could be extended eastward to connect with Milverton, which heads north to Maple. This had been suggested in the past and residents in the Milverton area objected. Further, it would not help Grand Haven residents who want to go south.

The City could also investigate the possibility of obtaining a cross-access easement with Canterbury Square apartments to the east, to allow access to Elliott where there is an existing traffic signal.

The center island could be extended northward to provide for indirect left turns. This could require acquisition of right of way to widen John R.

There is a third senior residence being constructed on Grand Haven. Mr. Culpepper commented that Grand Haven might possibly become a public road when the third building is completed.

Mr. Diefenbaker suggested a temporary ban on left turns out of Grand Haven. Mr. Abraham reminded the committee that the City can't post regulatory signs on private roads.

Moved by Culpepper Supported by Halsey

To request that City Council recognize this unique situation, look at it in a comprehensive manner and consider the following alternatives:

- Align Grand Haven and Technology Drive and install a signal at the intersection.
- b. Install a traffic signal at Grand Haven and John R.
- c. Negotiate a cross-access easement from Grand Haven through Canterbury Square apartments to Elliott Street.
- d. Extend the center median northward to provide for indirect left turns.

YEAS:

4

NAYS:

0

ABSENT:

3

MOTION CARRIED

4. <u>Install 4-way STOP Signs at the Intersection of Wilshire and Magna Corporation Driveways.</u>

Magna Corporation built the new facility north of Wilshire Drive, creating a four way intersection at the 90 degree curve Wilshire had previously. Wilshire's connection to Big Beaver has a wide median that continues onto the Magna Corporation driveway. On the east-west leg of Wilshire connecting to Crooks, the street has four lanes. When construction traffic started using Wilshire to get into the Magna Corporation site, due to the geometric design of the intersection, there was considerable confusion to traffic that was not familiar with the intersection functioning as a four legged intersection. The traffic engineer was alerted to this 'hazardous' situation. A traffic study showed a number of near miss accidents at the intersection. The sight distances were not adequate, particularly for northbound vehicles, and the new traffic patterns confused the motorists. Therefore, a temporary traffic control order was issued to install temporary 4-way STOP signs at the intersection.

After installation, an evaluation of the traffic conditions indicated safer traffic flow at the intersection. Traffic volumes indicated that the north-south leg of Wilshire carries

around 3000 vehicles per day. A spot speed study on Wilshire also indicated speeds ranging from 20 mph to 45 mph. As per the MMUTCD, the intersection comes close to satisfying the minimum vehicular volume warrant and has inadequate sight distance which may force motorists to reduce speeds approaching the intersection to less than 15 m.p.h.

A Temporary Traffic Control Order (98-01-SS) was issued on 9/30/98 to install temporary 4-way STOP signs at this intersection.

No one appeared to address the committee. Mr. Halsey commented that the STOP signs appear to have solved the problems at this location.

Moved by Halsey Supported by Diefenbaker

Recommend making the temporary STOP signs at the intersection permanent.

YEAS:

4

NAYS:

0

ABSENT:

3

MOTION CARRIED

5. Install STOP Signs on Cadmus and Delta at Shelldrake

Shelldrake is the major residential road from South Boulevard and carries higher volume. Traffic volume studies indicate Cadmus to have a volume of 760 vehicles per day while Shelldrake carries around 1400 vehicles per day. A sight distance study indicated substantial sight obstructions on the northwest and northeast corners. the obstructions on the other two quadrants are predominantly shrubs that may be trimmed. Due to the sight distance concerns, traffic operations may be improved at the intersection by STOP signs on Cadmus and Delta at Shelldrake.

No one appeared to address the committee on this item.

Moved by Culpepper Supported by Diefenbaker

Recommend no changes at this location.

YEAS:

4

NAYS:

0

ABSENT:

3

MOTION CARRIED

9. Other Business

Mr. Halsey asked the Traffic Engineer the criteria for installing STOP signs at the exits of private parking lots. Mr. Abraham explained that it is not a city function to regulate parking lot traffic.

10. Adjourn

The next meeting is scheduled for April 21, 1999.

Moved by Halsey Supported by Diefenbaker

To adjourn the meeting at 8:55 p.m.

YEAS:

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NAYS:

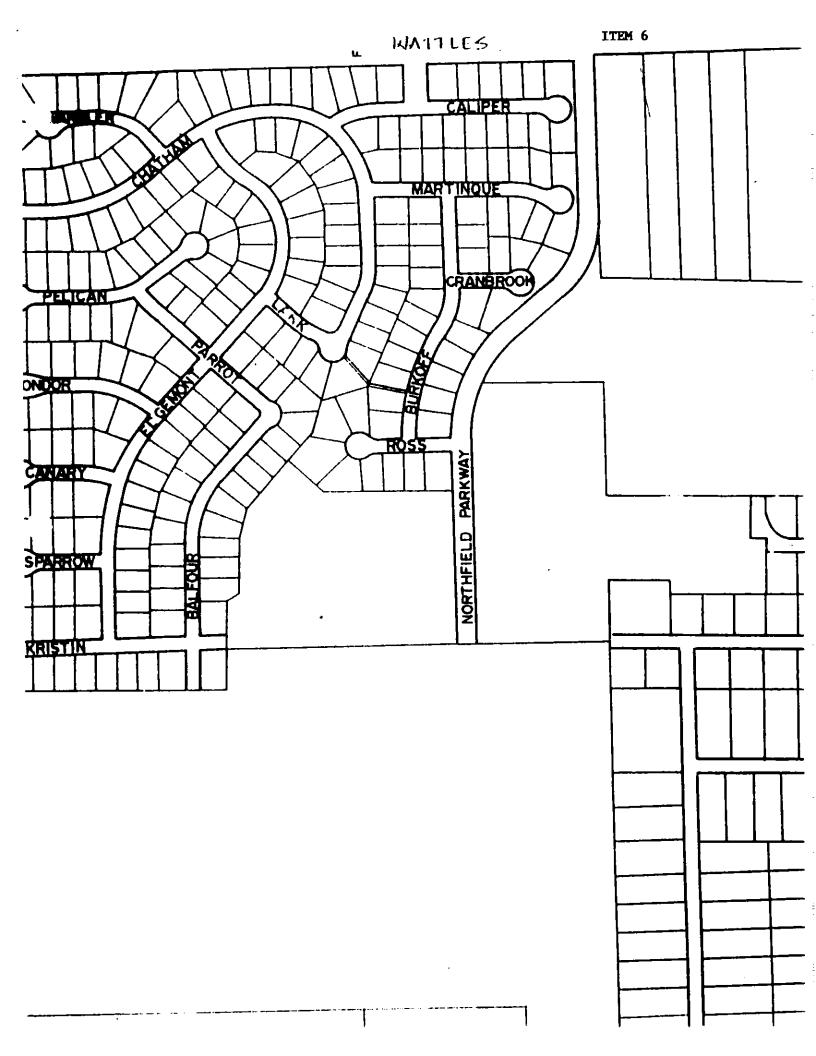
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ABSENT:

3

MOTION CARRIED





VOLUME 1. ISSUE 1 - MARCH 1!



Traffic engineering is a relatively new profession and many communities need guidance in this specialty field of engineering. The responsibilities of planning, design, and operation of streets and highway systems are often dispersed to the

ngineering Department, the Planning Department, the Public Works Department and the Police Department.

This Newsletter is dedicated to those public officials who find themselves with traffic engineering responsibilities. Traffic Tips will provide some of the information you need for better planning, design and operation of streets and highway systems.



Speeding On Residential Streets

Local government officials receive numerous complaints about vehicles traveling at a high rate of speed on residential streets. The complaints are accompanied by an understandable concern for the safety of residents along the street, particularly children.

In one suburban Detroit community, traffic studies related to this problem have shown that:

- 1. Approximately 75% of the citations issued for speeding on residential streets are issued to drivers who live in the neighborhood.
- 2. Approximately 70% of the traffic on residential streets is generated by vehicles based in the neighborhood.
- Drivers unfamiliar with the neighborhood tend to travel at a slower rate of speed than residents who drive the streets every day.

These studies indicate that the most effective way to control speeding on residential streets is through the collective action of a Homeowners group. Some communities in Oakland County have found that publication of

speeders' license numbers in the Homeowners' newsletter is an effective way to control speeds.

Local government usually becomes involved in the residential area speeding problem when residents request rada speed limit enforcement, installation of stop signs, or installation of speed bumps Radar enforcement is an effective deterrent to speeding for a period of severa. months after the enforcement action, but police manpower is limited. Assigning a significant portion of available police manpower to radar enforcement on subdivision streets would seem to be a misapplication of resources. In Troy. only 10% of the total accidents occur in residential or industrial subdivisions. The remaining 90% occur on arterial streets. As noted above, radar enforcement shows that almost all of the speeding in residential areas is done by drivers who live in the neighborhood.

Local governments receive several requests each year to install stop signs as a means of controlling speeds, but extensive traffic engineering studies have shown that stop signs installed for this purpose are not effective in reducing speeds. Radar checks showed that top speeds on a given street tended to be slightly higher after stop signs were installed. Speeds were lower in the area

100 feet on each side of the sign, but drivers tend to speed up on the remainder of the street to make up for "lost time."

An alarming sidelight to these studies was the observation that 25% of the drivers do not stop at all for speed control stop signs. Half of the drivers make only a rolling stop and the remaining 25% come to a full stop. Children generally believe cars will stop at stop signs and crossing is safe. This is a risky use of stop signs! These results explain why the guidelines issued by the Michigan State Police and the Highway Department forbid the use of stop signs for speed control.

Speed bumps are often suggested as a solution to the speeding problem, but a recent California study has shown that bumps are ineffective, and can be dangerous. Study results led to the following conclusions:

- Speed bumps are not effective in reducing vehicle speeds. The faster the driver went over the bumps, the more comfortable the ride, and the less noticeable the bump.
- Speed bumps present an immediate and specific hazard to some vehicles, and a potential hazard to all vehicles. Speed bumps are a clear and immediate danger to bicyclists, motorcycle riders.

- and firefighters who ride on the back of the fire trucks.
- 3. It is impossible to design an effective, narro speed bump for all types of vehicles. When a full-sized automobile experienced a ride that was almost comfortable, other vehicles (small automobile, motorcycle, dump truck) suffered extreme discomfort.
- 4. Speed bumps cause noise pollution in residential neighborhoods. The noise generated by a vehicle hitting a speed bump could cause an increase of 10 to 20 decibels over that of a standard residential neighborhood. Houses would be subjected to the constant "plops" of cars hitting the bumps throughout the night.

In addition to the problems cited in the California study, speed bumps would create serious problems for snow plowing operations. Bumps would either be removed by the snow plow or cause an incomplete removal of snow and ice. The most effective deterrent to speeding in residential areas is a concerned Homeowners group. Experience has shown that the drivers most likely to be speeding on reside, streets are the ones who live in the neighborhood. If the Homeowners group can convince its own members to slow down, speeding in residential areas can be virtually eliminated.

HRC

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Controlling Speeds on Residential Streets

BY RICHARD F. BEAUBIEN

omplaints of speeding on residential streets are a continuing problem for local traffic engineers and police departments. The observations in this article describe the experiences of Troy, Michigan, in dealing with this problem over the past decade. Comparisons of 1975 speed study and observance study results with 1985 and 1986 results at the same locations are included.

The Nature of the Problem

Because the complaints of speeding in residential areas are often emotional, it is important to put the problem into perspective. By understanding the nature of the problem, we may be able to arrive at better solutions for our citizens.

The problem is partly social and partly political. Elected officials confronted with a citizen request for a stop sign might find it easy and inexpensive to grant the request, thus demonstrating their "compassion" and "concern for local needs." Although this demonstration of compassion is inexpensive in terms of immediate capital costs, its long-term impact can be detrimental to public health, safety, and welfare. Studies have shown that unwarranted stop signs are ineffective in controlling speeds; such signs are often disregarded, leading to a lack of respect for traffic control devices.

In 1987, 90% of all accidents and 96% of the injury accidents in Troy occurred on arterial, rather than residential, streets. This suggests that transportation professionals should be spending more than 90% of their time dealing with the problems of accidents on arterial streets. However, because the speeding problem in residential areas is "close to home," traffic engineers and police departments spend a disproportionate amount of their time addressing problems on local streets, which are not connected to accident experience.

Speeding on residential streets is a seasonal problem. In northern climates, such as in Michigan, the complaints of speeding on residential streets virtually disappear during the months of November through March; when residents spend less time out doors, the problem or perceived problem seems to disappear.

A 25-mph speed limit may be unreasonably low in new subdivision areas with adequate street design standards. The national basic speed limit recommended in the Uniform Vehicle Code is 30 mph. In Michigan, the lowest speed limit permitted under state law (except in park areas) is 25 mph. Naturally, residents insist that the speed limit be as low as possible in their neighborhood, although the design speed on their street may exceed 25 mph. Motorists who travel local streets every day tend to travel closer to the design speed than the speed limit, and this creates observed speeds in excess of the posted speed limit. This condition is viewed with alarm by neighborhood residents, but it may not actually be a traffic safety problem because the design speed may be greater than 25 mph.

The speeding problem on residential streets tends to become associated with the problem of through traffic in residential areas. The through traffic is, in part, a symptom of inadequate capacity on major arterial streets. If adequate capacity were available on the arterial streets, "outsiders" would stay on arterial streets rather than seek alternate paths through residential areas.

Stop Signs Not Effective

Many citizens, particularly those concerned about the safety of their children, suggest that "maybe a stop sign will slow traffic on our street."

Before-and-after speed studies conducted in the City of Troy indicate that stop signs are not effective in controlling speeds. Compliance with these stop signs is very poor, and over a period of years the compliance degrades to a point where motorists behave as if the sign were not present at all. This degradation is shown in Table 1, which compares the compliance rates for stop signs installed to control speeds on residential streets in Troy. The locations of these stop signs in relation to the surrounding street system are shown in Figures 1 and 2.

Tables 2, 3, and 4 compare the results of 1975 speed studies on streets with unwarranted stop signs to 1986 study results on the same streets. Sample sizes for these speed studies were limited because of the relatively low volumes present on these residential streets. Observers were instructed

to collect as much data as possible in a 30-to 60-minute time period. As a result, samples were generally in the size range of 40 to 100. In all cases the sample size was greater than 40.

Two-way daily traffic volume is approximately 1500 on Anvil Drive, 2700 on Niagara Drive, and 1100 on Robinwood Street. Peak hour volumes are approximately 170 on Anvil Drive, 300 on Niagara Drive, and 120 on Robinwood Street.

All of the intersection study sites were relatively flat in terrain, so there were no sight distance restrictions resulting from vertical curves. Horizontal alignment of these streets has a minimal impact on available sight distance. On Anvil Drive, horizontal alignment is relatively straight for a distance of 500 feet to the north and south of Forge Drive. It is also straight for a distance of 900 feet north and 700 feet south of Kettle Drive. On Niagara Drive, horizontal alignment is straight for a distance of 600 feet to the west and 300 feet to the east of Eagle Drive. On Robinwood Street, horizontal alilgnment is straight for a distance of 300 feet to the west and 1000 feet to the east of Van Courtland Street. Intersection sight distance at all locations is limited by houses at the corners. Houses at the Anvil/Forge intersection are 40 feet from the edge of the pavement, and houses at the Niagara/Eagle intersection are 40-50 feet from the edge of the pavement. Houses at the Robinwood/Van Courtland intersection are 30 feet from Van Courtland Street and 50 feet from Robinwood Street.

Unwarranted stop signs were placed on Anvil and Niagara in 1975. In 1979 the Anvil/Forge intersection was converted to a four-way stop, despite the fact that warrants for a multi-way stop were not met. Unwarranted stop signs were placed on Robinwood in 1964: they were removed for a brief trial period in 1975. In each case, the average speed in 1986 was higher than in 1975 at the same location. Although the differences may not be statistically significant, it seems apparent that the passage of time does not make stop signs effective in controlling speeds.

Speed studies were made using a radar unit on an unmarked city car. The highest speed observed for each vehicle for a distance of approximately 500 feet either side of the intersection was the speed recorded.

Stop signs installed in the City of Troy that do not meet the warrants established in the Manual on Uniform Traffic Control Devices are considered to be legal and enforceable.

The signs were installed pursuant to an ordinance adopted by the Troy City Council, the local legislative body. There is no known case law in Michigan that would force the removal of unwarranted stop sign installations.

The Solution...in Parts

There is no one, simple answer to the problem of speeding in residential areas. The traffic engineering department in the City of Troy has suggested to residents that the neighborhood itself must take some responsibility for the solution. A majority of the speeding violations issued in residential areas go to residents of that street or to streets in the immediately surrounding area. Residents of the immediate area can thus address the problem by increasing the awareness of the problem in the neighborhood and by assisting the police department.

A program in which license plate number reports are used to identify the owners of

vehicles found to be speeding has been somewhat successful in controlling speed. In that program, neighborhood resident, report license plate numbers of speeding.

Table 1. Stop Sign Observance on Selected Residential Streets in Tray

| Location | 1975 (%) | 1985 (%) | |
|------------------|-------------|-------------|--|
| Anvil Drive | | _ | |
| Full stop | 25 | 13 | |
| Roll stop | 64 | 60 | |
| No stop | 11 | 27 | |
| Nlagara Drive | | | |
| Full stop | 51 | 21 | |
| Roll stop | 34 | 74 | |
| No stop | 15 | 5 | |
| Robinwood Street | | | |
| Full stop | 26 | 16 | |
| Roll stop | 48 | 65 | |
| No stop | 26 | -19 | |

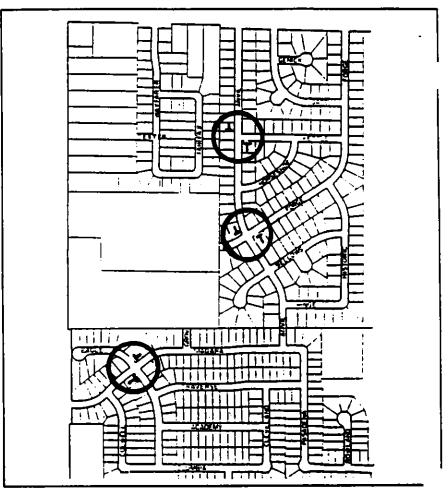


Figure 1. Street plan showing Anvil and Niagara study sites.

vehicles to the police department and the police department locates the vehicle owner through the secretary of state's records: the police department then writes to the vehicle owner, requesting safe driving practices and compliance with local traffic ordinances. One of the positive effects of this program has been to convert many of Troy's younger drivers into pedestrians: These younger drivers found that a vehicle was no longer available to them after the vehicle owner (a parent) learned how it was being used.

The City of Troy has a committee of citizens appointed to advise the City Council on proposed traffic regulations. This Traffic Committee gives a "first hearing" to neighborhood traffic problems and recommends new traffic regulations for City Council approval. Traffic Committee involvement is important because it allows the light of objectivity to shine on the problem before the political decision is made.² Discussions between committee members and citizens concerned about speeding on their neighborhood streets are helpful in achieving an understanding that stop signs are not a panacea and that there is no one easy solution. This discussion itself is part of the solution to the social and political aspects of the problem.

References

- 1. Beaubien, Richard F. "Stop Signs for Speed Control?" *Truffic Engineering* 46(November 1976): 26-28.
- 2. Beaubien, Richard F. "Citizen Participation in Traffic Safety." ITE Journal 52(March 1982):29-31.



Richard F. Beaubien is the transportation director for Hubbell, Roth and Clark, Inc., consulting engineers, Bloomfield Hills,

Michigan. Before entering this position in 1989, he served 14 years as transportation director for the City of Troy, Michigan. Beaubien received his M.S.C.E., B.S.C.E., and A.B. degrees from the University of Michigan. Beaubien is a registered professional engineer in Michigan, Illiniois, and California. He is a Fellow Member of the Institute of Transportation Engineers and currently serves as the Institute's International Vice-President.

Table 2. Speed Studies, Anvil Drive

| Speed (mph) | Without Stop Signs, 1975 | With Stop Signs, 1975 | With Stop Signs, 1986 |
|-----------------|-----------------------------|--------------------------|--------------------------|
| Low | 15 | 15 | 18 |
| Average | 24.1 | 24.6 | 26 |
| 85th Percentile | 28 | 28 | 30 |
| High | 38 | 35 | 34 |

Table 3. Speed Studies, Nlagara Drive

| Speed (mph) | Without Slop Signs, 1975 | With Stop Signs, 1975 | With Stop Signs, 1986 |
|----------------------------|-----------------------------|--------------------------|--------------------------|
| Low | 15 | 15 | 20 |
| Average 85th Percentile | 23.8 | 25.2 | 26 |
| High | 26 | 29 | 29 |
| in Air | 34 | 34 | 33 |

Table 4. Speed Studies, Robinwood Street

| Speed (mph) | Without Stop Signs, 1975 | With Slop Signs, 1975 | With Stop Signs, 1986 |
|-----------------|-----------------------------|--------------------------|--------------------------|
| Low | 10 | 13 | 21 |
| Average | 23.4 | 24.4 | 30 |
| 85th Percentile | 30 | 30 | 34 |
| High | 38 | 38 | 42 |

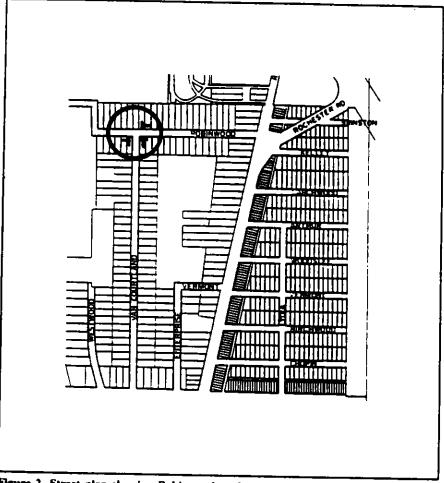
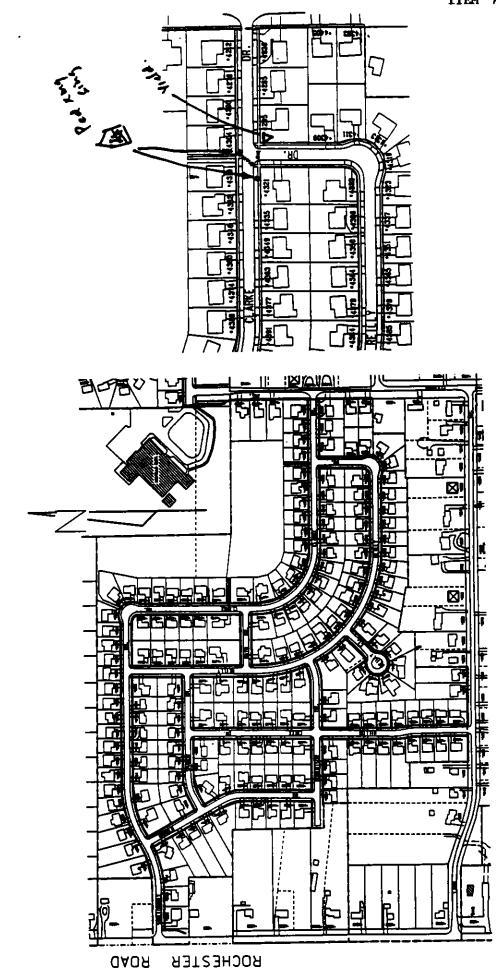


Figure 2. Street plan showing Robinwood study site.

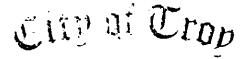


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March 2, 1999



Mr. Gary Woods Costello School 1333 Hamman Troy, Michigan 48098

Dear Mr. Woods:

I am writing to you regarding a traffic study performed at the intersection of Clark and Reilly Streets near your school. This was done in conjunction with a review of traffic conditions for a request for 3-way stop signs at the intersection.

The traffic study involved taking speed measurements and also observing vehicular and pedestrian activities. Following are my observations regarding pedestrians.

- a. At around 3:35 p.m., two students who appeared to be safety patrol students arrived at the intersection. These students did not have the safety patrol band/vests.
- b. At 3:40 there were four kids trying to cross Clarke from the pedestrian pathway. The safety patrol students were playing with snow when two of the kids darted onto the roadway.
- c. The safety patrol students were not attentive to the four more kids that followed, trying to cross the road. Two of the kids had to run across the road, seeing a vehicle approaching. At 3:50, parents picked up the safety patrols in their vehicles.

In my opinion, the safety at this intersection would very much be enhanced if the safety patrol students were more sensitive to the vehicular traffic and the pedestrians.

We from the Traffic Engineering Division and the Troy Police Department have been working with several schools in the City on projects to enhance safety, and would be happy to assist you in training the safety patrols, installing additional traffic controls (if needed), evaluate the need for an adult crossing guard, or with any other measures.

The request for stop signs was considered at the February 1999 meeting of the City's Traffic Committee and was tabled to the next meeting on March 17, 1999. We will send you a copy of the minutes of the February meeting and the agenda for the March meeting shortly.

If you need any more information, please do not hesitate to contact me at 524-3379.

Sincerely,

John KAbrahan Traffic Engineer

JKA/In

cc: John Szerlag, Asst. City Manager/Services

Neall Schroeder, City Engineer

Traffic Committee

500 W. BIG BEAVER ROAD . TROY, MICHIGAN 48084 . AREA CODE (248)

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| City Assessor | 524-3311 | Engineering | 524-3383 | Museum | 524-3579 | Recreation (Parks) | 524-3484 |
| City Attorney | 524-3320 | Finance | 524-3411 | Personnel | 524-3339 | Traffic Engineer | 524-3379 |
| City Clerk | 524-3316 | Fire | 524-3419 | Planning | 524-3364 | Treasurer | 524-3334 |
| City Manager | 524-1330 | information | 524-3300 | Pauce Dept | 524-3443 | | |

city of Trop

March 8, 1999

Mr. Gary Wood Costello School 1333 Hamman Troy, Michigan 48098

Dear Mr. Wood:

Enclosed is a copy of the Traffic Committee minutes from February and the relevant section of the agenda for this month's meeting. We will be addressing the traffic conditions at the intersection of Reilly and Clarke in conjunction with a 3-way stop sign request.

Will you please inform the concerned parents of children who cross at this intersection about the meeting? Their comments may be valuable to making a recommendation to City council on traffic control devices at this location.

If you need any more information, please do not hesitate to contact me at 524-3379.

Sincerely,

John K. Abraham Traffic Engineer

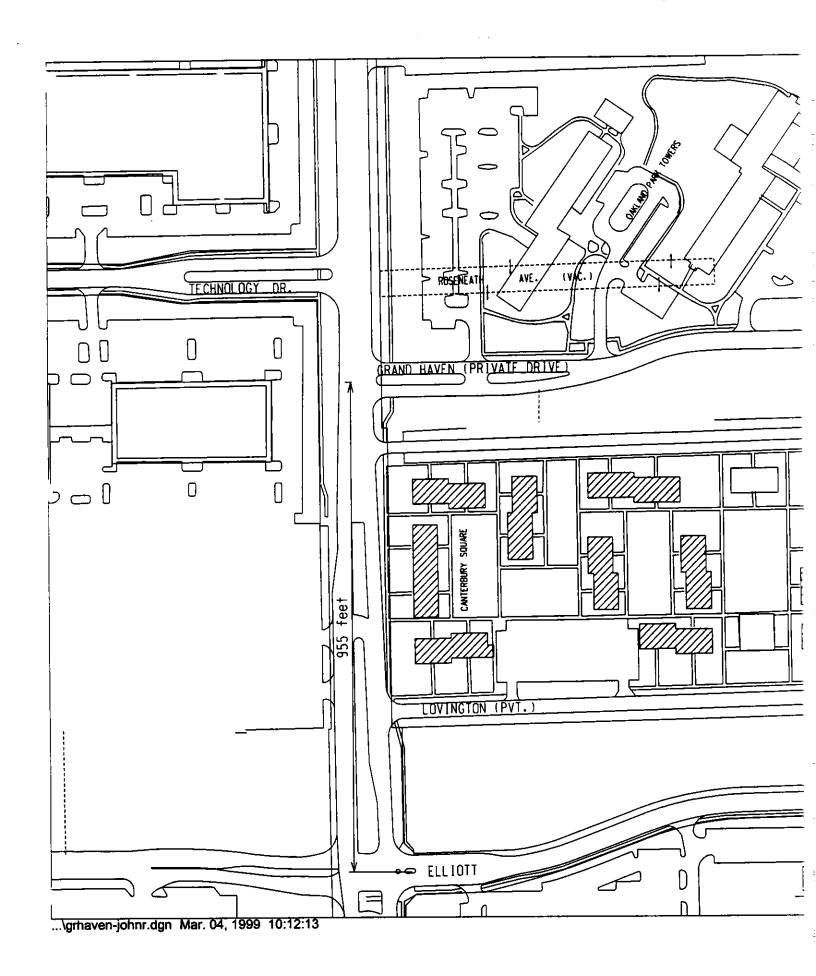
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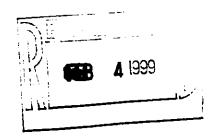
John Szerlag, Asst. City Manager/Services

Neall Schroeder, City Engineer

Traffic Committee



Mr. John Abraham Traffic Engineer City of Troy 500 W. Big Beaver Troy, Mi. 48084



Re: Traffic Light on John R. and Grand Haven Dr.

Dear Mr. Abraham,

I am faxing a letter to you that I wrote to the Oakland County Traffic Safety Dept. I live in the Oakland Park Towers in Troy. We are getting absolutely no where with these people.

I was told that if I wrote you a letter to please help us, then we would get results. My letter to them is self-explanatory. This is really a critical and dangerous area.

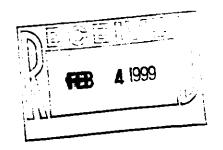
PLEASE HELP US.

FRANCES WILLIAMS 920 John R. Apt. 412 Troy, Mi. 48083

[248] 589-5580

Please call or write to me with good news.

Oakland County
Road Commission
Traffic Safety Dept.
2420 Pontiac Lake Rd.
Waterford, Mi. 48325



February, 1999

ATTENTION: Mr. Daniel Bednarski

OR: To Whom It May Concern

Re: Traffic light to be installed at John R. and Grand Haven Dr. in Troy

Per my phone conversation with your office two weeks ago regarding a very dangerous situation entering John R. from Grand Haven driveway [and this has been going on for years], I was told after my conversation with you that you were going to file my request. FORGET IT. MY REQUEST OR COMPLAINT WILL NEVER GET OUT OF YOUR FILE CABINET, LIKE YEARS AGO, WHICH IT DIDN'T. I WANT AND DESERVE IMMEDIATE ACTION ON THIS MATTER. This is why I am faxing this letter to you at 2488587607.

In the 14th Amendment to the Constitution of the United States it requires every state to extend to all persons within its jurisdiction equal treatment and protection under the laws of that state. We at Oakland Park Towers are senior citizens and feel that we are discriminated against in your failure to treat all persons equally. What is at issue is we want you to comply with our request for a traffic light on John R. and Grand Haven. We want you to send a special field investigator to make a thorough analysis of the traffic light situation without delay.

The administrative law suggests that that branch of law which deals with various agencies of government prescribing what they should do and how they should do it, SO DO IT NOW, NOT A YEAR FROM NOW. WE WAITED TOO LONG ALREADY.

I have over 445 senior signatures on a Petition which is a formal application signing their names requesting action from you concerning this matter and who have allocated with a particular purpose in mind and a request for some rights. I also have numerous signed letters by some of the seniors, myself included and who on Dec. 26, 1998 was involved in an accident on John R. and Grand Haven, whereby the other car cut me off.

We want full consideration on this matter immediately. We want to indemnify whereby given security against future loss and damages

if a traffic light is not installed immediately. There is a nuisance whereby which could cause harm, damage or death. This is a matter of great public interest. This is an exclusive right belonging to us at Oakland Park Towers. This is our remedy of enforcing our rights.

We all feel that we are "sentenced" and taking a risk with a degree of hazard of a loss. This situation must be corrected NOW. We are a considerable distance from Office Depot, Troy Ford and the small shopping strip many blocks from our buildings. We feel abandoned and you probably feel "why should we car?" Well, we care. We lived this long and want to live to our full age without driving across John R. and praying to God that we make it.

Human negligence on your part in not acknowledging, confirming and approving meeting of the minds is a decision that we wouldn't want to be in your shoes and therefore, you must exercise your authority to satisfy, approve and confirm our protest with a formal reply immediately to me without delay. We've waited way too long.

Don't file this letter or not pay attention to it, as we will, with the speed of light, go over your heads with management of the executive

department of Government and see why you are putting off or postponing this plea. We want to be awarded a quick, competent decision NOW. Place us immediately on your calendar and do your job without delay. Support the trafffic light for us and that you appreciate the importance of our request.

The City of Troy conducting business with dedication, obligation and a quick confirmation for a much needed traffic light at John R. and Grand Haven will prove that YOU CAME, YOU SAW AND YOU CONQUERED for we seniors in the Oakland Park Towers and that the Act of God will watch over all of us everyday, including yourselves.

Very Respectfully, Frances Williams 920 John R. Apt. 412 Troy, Mi. 48083 [248] 589-5580

P.S. The over 445 names collected on the Petition will be sent to you upon request.
Over 445 votes will count at Voting Time.

February 5, 1999

Ms. Frances Williams Apt 412 920 John R Troy, Michigan 48083

Dear Ms. Williams:

Thank you for your fax dated February 4, 1999, enclosing the letter you sent to the Road Commission for Oakland County.

As requested, we would be glad to perform the necessary traffic studies at the intersection of John R Road and Grand Haven Drive. Traffic signals are normally installed based on demonstration of a need as per national standards. In other words, the location has to satisfy certain requirements (warrants) which include, among other things, traffic volumes on both streets in question, number of traffic crashes at the location, and proximity of the location to existing traffic signals. Once the study is complete, the matter will be taken up at the City's Traffic Committee meeting, which makes recommendations regarding traffic matters to the City Council.

We will make an effort to include this item in the March meeting of the Traffic Committee. The committee normally meets on the third Wednesday of each month at 7:30 p.m. at City Hall. We will send you a copy of the agenda to let you know when this issue will be discussed, and you are welcome to attend the meeting.

If you need more information, please call me at 524-3379. Thank you for your concern for safe and efficient traffic in the City of Troy.

Sincerely,

John K.\Abraham Traffic Engineer

JKA/In

cc: John Szerlag, Asst. City Manager/Services

C. Neall Schroeder, City Engineer

500 W. BIG BEAVER ROAD . TROY, MICHIGAN 48084 . AREA CODE (248)

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| City Attorney 524-3320 | | Personnel | | Traffic Engineer | 524-3379 |
| City Clerk | | Planning | 524-3364 | Treasurer | 524-3334 |

My name is Frances Williams. I and 300 plus senior citizens reside at the Oakland Park Towars 920 and 930 John R. on Grand Haven Drive off of John R. in Troy. Before I read my letter to you I would like you to know that I had previously faxed my original letter in February to the Oakland County Road Commission in Pontide...to Mr. James Bacon, Troy City Managar...Governor John Engler...Mr. John Abraham, Traffic Engineer for the City of Troy in which he was kind enough to send me a reply...and Mr. Rady D. Lozano, Chair Person for Oakland County at the Road Commission in Beverly Hills. in which he was kind enough to contact me by phone. The key issue here is for a working traffic light to be installed on John R. at Grand Haven Drive. I have with me and will at the end of this Meeting, furnish you with copies of the Patition signed by 448 sanior citizans and also copies of 128 written letters from our senior citizens, which I will also

fornish you with at the end of this Meeting. I have all the originals.

Troy is a thriving commanity. We want you to serve and protect we senior ore oll M3 ଝାଁଝାଁଅଉଲ୍ଞ. grandmothers and grandfathers. M^{3} have a tragic situation and we are trying to embrace life as long as we can without being involved in a car accident whereby we will be permanently injured or die. We would like you to break the stronghold you have on as. We want democracy at work here. Trying to make a left hand turn onto John R. from Grand Haven Drive is troublesome, a huge struggle and a challenge.

We seniors range from ages 32 to 100 plus years old and are good drivers. We have handleapped and physically challenged seniors with heart problems with passmakers, defibrilators, walking with canes, walking some in wheelchairs

that's aplifted into vans, many wearing hearing aids, others with portable oxygen tanks and other physical problems, and all of as at oar ages have much slower reflexes and we need someone to make a difference in oar lives to vote our way on this key issue and to install a working traffic light...for you to support as and give as your thumbs up so that we are given security against future loss of our lives or permanent damage.

There is a milestone in our lives and the severe unexpected can happen like the deaths of Lyla Evans, Helen Bush and the injury of Margaret Harding which caused her death later on as a result of her injuries...as well as Jake and Ester Capola...Florence Atwood...and Frances Williams being involved in an accident here but the police were not called because of a fender-bender. Oh yes, let's not forget Sister Gloria Kelly who was involved in an accident and injured,

cousing \$10,000 damage to her car and her injury caused her to have a knee operation, and not saying how many more accidents there were. We want to feel freedom of mind and for you to take a candid look at the stress focused apon us. Don't condemn or persecute us. At bod to sbadd odd air ore ow sailt sidt when trying to make a left tarn onto John R. which is a 5-lane street. Traffic is hozordous in this orgo. There org certain things in life you cannot ignore. We want you to consider we senior citizens special people facing a special need. We feel we are entering a firing squad. No one gets out of life without pain of some kind, but to be hit by another car and possibly injured for life or die, we fear this. There is a bailding being bailt behind as as of the vitting of this letter which means more troffic on Grand Haven Drive when completed trying to enter John R. You have conducted an investigation for one day, whereby a cable counter was put across arand Haven Drive to see how many cars for that one day traveled arand Haven Drive. The results were 700 cars in only one day.

Consolidate your power. Don't hold your power over us. Don't give us a dum-rap. We have a chronic problem here and politicions and Business leaders are threatening the lives and fatare of we senior citizens if they refuse to help us by not installing a traffic light at John R. and Grand Haven Drive. Let we senior sitizens hear the sound of sweet music which will be o precious gift of life everlasting. At our ages we want to be touched by an angel and you members on the panel...that's you. Life is beautiful and no one has the right to take it away from us. We don't want to win the battle and lose the war. We pledge your cooperation to take effect and for all of

you to support a plan NOW, NOT Tomorrow.

the 14th Amendment to લાઇ Constitution of the United States requires every state to extend to all persons within its jurisdiction equal treatment and protection ander the laws of that state. We at Oakland Park Towers are senior citizens and feel that we are discriminated against. We want in this motter full consideration immediately. We want to indemnify and given security against fatare loss and domages if a traffic light is not installed immediately. There is a naisance whereby which could couse harm, damage or death. This is a matter of great public interest. This is an exclusive right belonging to us at Oakland Park Towers. This is our remedy of enforcing our rights. We all feel that we are oditiw aking a risk with a degree of hazard of a loss.

Talking with Mr. Rady D. Lozano, Chair Person at the Oakland County Road Commission Policy Board by phone on March 12, 1999 I informed him of our Meeting today to install a traffic light on John R. and Grand Haven Drive. Ma would like to bear from you by letter with the results now. YOU MUST **authority** OT exercise your Satisfy, approve and confirm our protest with a formal immediately to Mr. Lozano and Myself without delay. Thank you.

Mr. Lozano's address and phone number:
Mr. Rady D. Lozano, Chair Person
Of the Oakland County Road
Commission Policy Board
3 1001 Labser Road
Beverly Hills, Michigan 43025
[243] 345-2000

matter & one rolling your discretion and your some and your sometime and your

Referring to the Bible....

and all things whatsoever we ask in prayer, we shall receive. Matthew 21:22

Frances Williams
920 John R.
Apt. 412
Troy, Michigan 48083
[248] 589-5580

P.S. Attached to this letter is a copy of Sister Gloria Kelly's letter Mentioned on Page 3 and Continued on Page 4.

Thank You for Your Time

Gloria Kelly, O.P. 920 John Road, #314 Troy, MI 48083

Deblard County Treffer Sept. Sept. 5, 1999

Dear 1: Den Sire: I am writing to ask that a traffic light de installed at the Oakland Park Tancer entrace - John R. Grand Horan DR. This is a very dangerous extract exist. I had a terrible accelert at this very spot. They can had 910, our dange. end my insuscerce Company dropped se. (another can hit me while I was trying to make a left turn.) The officer said, "I was lucky I want killed." I see since, I have had, realth problem resulting from the truply . Last Jan. I had to home my knee reploced. Sometimes, I end others, west 10 to 15 ninetes to get into or out of the entrese. Please Take action in this notice as som as possible. He don't wont one of our dear series citizens killed in the matter because of back of a traffic tight. matter because of back of a traffic tight.

FOR YOUR INFORMATION

- 1. Regarding Grand Haven Drive. The Fourmidable Group who owns the Oakland Park Towers Apartments was informed by the City/County that once the 3rd building on Grand Haven Drive is built [which it practically is], then Grand Haven Drive will become a City/County Street and not a private drive.
- 2. In Madison Heights [and I realize it's not Troy] there are senior apartments on Dequindre named Madison Senior Campus. The street is called Madison-Solberg Drive. There is a working traffic light at their driveway and only 3 blocks from a working light at the Universal Mall.
- 3. On John R. in Troy between 12 ¾ Mile and 13 Mile at the John R. Shopping Strip Center there is a working traffic light only 3 blocks from 13 Mile Road. Why?

These Are Copies of My Originals. [Petition and Letters written by Residents.

To: Oakland County Road Commission-Traffic Safety Dept.

PETITION

for Tradice Light at

For a working traffic light at both Oakland Park Towers and Magnolia Gardens at the intersection of Grand Haven and John R. in Troy, which is a high traffic area. Senior Citizens residing at this location are exposed to accidents that can, have, and will occur due to fearful attempts entering or exiting traffic both Left and Right turns onto or off of John R. Road, even where cautious attempts are made.

Manager (Vactoria)

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To: Oakland County Road Commission-Traffic Safety Dept.

PETITION

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For a working traffic light at both Oakland Park Towers and Magnolia Gardens at the intersection of Grand Haven and John R. in Troy, which is a high traffic area. Senior Citizens residing at this location are exposed to accidents that can, have, and will occur due to fearful attempts entering or exiting traffic both Left and Right turns onto or off of John R. Road, even where cautious attempts are made.

Manager

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