F-06

CITY COUNCIL ACTION REPORT

April 10, 2007

TO: Phillip L. Nelson, City Manager

FROM: Brian P. Murphy, Asst. City Manager/Economic Development Services
Steven J. Vandette, City Engineer
John K. Abraham, Deputy City Engineer/Traffic Engineer

SUBJECT: Traffic Committee Recommendations
March 21, 2007

Background:

The Traffic Committee considered these items at the March 21, 2007 meeting and made the following recommendations (minutes attached):

- Recommend installing STOP sign on northbound Barabeau at Cadmus.
- Recommend installing STOP signs at the intersection of eastbound Cadmus and westbound Delta at Shelldrake.
- Recommend no changes to the signage prohibiting right turns on red during morning and evening rush hours on Rochester at Stephenson and at the crossover for southbound to northbound Stephenson just south of Rochester Road.

Financial Considerations:

- The cost of installing a STOP sign is approximately $100.

Policy Considerations:

- Goal I – Enhance livability and safety of the community,
- Goal V – Maintain relevance of public infrastructure to meet changing public needs.

Options:

- Council can approve or deny the recommendations.

A regular meeting of the Troy Traffic Committee was held Wednesday, March 21, 2007 in the Lower Level Conference Room at Troy City Hall. Pete Ziegenfelder called the meeting to order at 7:30 p.m.

1. Roll Call

PRESENT: Sara Binkowski
John Diefenbaker
Ted Halsey
Jan Hubbell
Richard Kilmer
Gordon Schepke
Pete Ziegenfelder
Ted Hwang, Student Rep.

ABSENT: Prithvi Murthy, Student Rep.

Also present: Gregory A. Jolin, 2100 Stephenson Hwy.
Peter Conway, 318 Coachman Dr.
and John Abraham, Traffic Engineer
Lt. Scott McWilliams, Troy Police Dept.
Lt. Robert Matlick, Troy Fire Dept

2. Minutes – February 21, 2007

RESOLUTION #2007-03-29
Moved by Halsey
Seconded by Hubbell

To approve the February 21, 2007 minutes as printed.

YES: All-7
NO: None
ABSENT: None
MOTION CARRIED

REGULAR BUSINESS

3. Install STOP Sign on Northbound Barabeau at Cadmus

At the request of the Traffic Committee, a review was conducted to determine the need for a STOP sign for northbound Barabeau at Cadmus.

Barabeau ends in Cadmus, forming a "T" intersection. Barabeau is a short street, only two blocks long. Traffic on Barabeau has around 115 vehicles per day and traffic on Cadmus has around 175 vehicles in a day. Traffic on residential streets in Troy ranges up to 5000 vehicles per day. Field observations indicate that there are no major sight obstructions at this intersection.

Traffic crash studies show no reported crashes at this intersection in the past four years. The street pattern in this residential area does not lend itself to too much outside traffic.

Mr. Schepke has heard about some near misses at this intersection.

Mr. Halsey pointed out that there are 25-30 new houses going up to the west, and that will result in much more traffic in the future.

RESOLUTION #2007-03-30
Moved by Hubbell
Seconded by Diefenbaker

Recommend installing a STOP sign on northbound Barabeau at Cadmus.

YES: All-7
NO: None
ABSENT: None
MOTION CARRIED

4. Install STOP Signs at the Intersection of Eastbound Cadmus and Westbound Delta at Shelldrake

At the request of the Traffic Committee, a review was conducted to determine the need for STOP signs on eastbound Cadmus and westbound Delta at Shelldrake.

Shelldrake runs off South Blvd. and ends in Westpointe, and Cadmus runs from Brunswick and continues as Delta on the east side of Shelldrake. Traffic volume studies show that Shelldrake carries around 340 vehicles in a day and Cadmus carries around 200 vehicles in a day. Speed studies on Shelldrake show that the average speed on Shelldrake was 21.3 mph. Compared to a majority of residential streets in Troy, these streets are in the lower end of the traffic volume range. There have been no reported crashes at this intersection in the last four years.

Shelldrake drivers would most likely think they have the right of way at this intersection, and it would be better to make that clear. Lt. McWilliams feels that STOP signs at this location could help the police to determine fault in case of a crash.

RESOLUTION #2007-03-31
Moved by Hubbell
Seconded by Kilmer

Recommend installing STOP signs on eastbound Cadmus and Westbound Delta at Shelldrake.

YES: All-7
NO: None
ABSENT: None
MOTION CARRIED

5. **Remove NO TURN ON RED 7-9 AM and 4-6 PM signs on Rochester at Stephenson and at the Crossover for Southbound to Northbound Stephenson just south of Rochester.**

Mr. Peter Conway of 318 Coachman Dr., requests removal of the NO TURN ON RED 7-9 AM and 4-6 PM signs on Rochester at Stephenson and at the crossover for southbound to northbound Stephenson just south of Rochester.

Background of the signs (from the minutes of the Traffic Committee Meeting, March 1997):

> "Residents of Troy Mobile Home Villa, on Stephenson Highway, report that they have major difficulties entering and exiting the park since the recent revision of the traffic pattern for northbound Rochester Road traffic. When traffic is stopped on Stephenson, Rochester Road traffic is turning. Rochester Road traffic can also turn on red, which creates a steady flow of vehicles. The residents have sent a petition to the Traffic Engineer requesting "No Turn on Red" signs, along with police enforcement, to help alleviate this problem.
>
> "A traffic analysis was performed, the results of which are presented in the attached exhibit. It is observed that there is considerable traffic at the crossover and on the northbound Stephenson Highway approach. The Road Commission for Oakland County was contacted and requested to add "all-red" time for the signals to create enough gaps. However, field observations indicated that the motorists on Sylvia Drive, Piedmont and Wheaton still experience excessive delays to make right turns onto the northbound major roadway. The traffic volumes indicate that the maximum volumes on all the roadways in question are between 7-9 in the morning and 4-6 in the evenings. Therefore, it is recommended that a "No Turn on Red" sign be installed with an auxiliary sign that would read "7-9 am and 4-6 pm Monday through Friday."

Since installation of the signs, residents of the mobile home park and businesses along Stephenson north of the intersection have called the City to indicate that traffic has improved for them to exit onto Stephenson.

Traffic volumes at the two intersections show an increase from the numbers in 1997 for the PM peak hours. Traffic volume studies from October 2006 indicate:

Hour	NB Stephenson	Crossover	NB Rochester	SB Rochester (Stephenson)
7:00-8:00	472	72	413	1,465
8:00-9:00	536	130	439	1,131
4:00-5:00	986	158	607	1,250
5:00-6:00	1,123	169	494	1,319
Daily	10,000	2,200	7,065	15,940

The NO TURN ON RED at northbound Rochester and southbound Stephenson was installed decades ago due to its proximity to the freeway off-ramp and crashes related to high-speed ramp traffic merging in the area. Based on several studies, in 1997 the whole-day restriction was changed to 7-9 am and 4-7 p.m. Mr. Conway requests no restriction of turns on red.

Mr. Conway drives through these intersections 4 or 5 times a week, between 8:00 and 8:30 a.m. He sees cars stuck in the turnarounds waiting for the lights to change, and then just going through the red signal when they get impatient. He thinks these red-light restrictions encourage motorist to break the law.

Mr. Diefenbaker says those infractions call for more police involvement.

He also states that turns are allowed on red at all the Big Beaver traffic signals and turnarounds. He doesn't think cars exiting the freeway ramp and continuing south on Rochester Road are a problem as they stay in the far right lane.

Committee members often see a conflict with ramp exit traffic continuing south on Stephenson crossing the traffic traveling on southbound Rochester and curving to the right to continue on SB Rochester at this intersection. The traffic engineer notes that traffic coming off the ramp from I-75 moves very fast, and can be on top of a turning vehicle in a flash. Also that two lanes of traffic make right turns on northbound Rochester, the vehicle in the right lane may not be able to see oncoming vehicles if there is another vehicle in the left lane.

Gregory Jolin, manager of Troy Villas, has spoken with many of the residents of the mobile home park, and they indicate that they often have a hard time exiting their private road if there are no gaps in traffic. There are 268 homes in the park, and many residents are retirees who need a little more time to safely enter northbound Stephenson traffic, especially those wanting to get over into the left lane to make a U-turn and head south. There is also a school bus stop in front of the park. He also indicated that making a "U" turn to go south will be seriously hampered if northbound Rochester traffic can make turns on red.

Mr. Conway feels the mobile home park residents should go farther north to the next turnaround. The traffic engineer says that turnaround might have to be reconfigured to accommodate more traffic.

Mr. Conway says he doesn't notice any significant number of cars trying to get out of the mobile home park; Mr. Halsey says that is because the present system is working well and allowing them enough time to enter traffic.

Lt. McWilliams feels that the crossover light can stay red a little too long. He has seen a couple of crashes there.

Mr. Schepke says because there are two right turn lanes where northbound Rochester meets southbound Stephenson, the vehicle in the left lane can obscure vision for the one in the right lane. Therefore, the NO TURN ON RED signs should remain.

Mr. Diefenbaker suggested eliminating one right turn lane at that intersection. As it is now, the vehicle in the right turn lane often tries to get all the way over to the left lane to go northbound on Stephenson. The traffic engineer indicated that this may cause too much traffic backup at that spot, and also increase weaving of vehicles trying to merge into one lane.

RESOLUTION #2007-03-32
Moved by Schepke
Seconded by Kilmer

To recommend no changes.

YES: All-7
NO: None
ABSENT: None
MOTION CARRIED

During further discussion, Hubbell suggested closing the turnaround from northbound Stephenson to southbound Stephenson nearest Troy Villas, thereby forcing Troy Villas residents to turn at the next crossover, giving them more time to merge to the left lane.

Mr. Halsey mentioned that there is a very sharp curve where southbound Rochester splits off to the right to continue southbound, causing many rollover accidents.

6. Visitors' Time

No one else wished to address the committee.

7. Other Business

Kilmer inquired about the distance vehicles are allowed to park from an intersection (15 feet). He wants the police to check the corner of Star and Plum, where there is a truck that always parks too close to the intersection.

Binkowski stated that all the drivers exiting I-75 onto northbound Rochester ignore the pavement lane markings. She wondered if the area could be repainted to reflect where the traffic actually goes. The traffic engineer indicated that the current markings are the legal ones, since the right-most lane has to make a right turn at Big Beaver.

8. Adjourn

The meeting adjourned at 8:25 p.m.

Pete Ziegenfelder, Chairman

Laurel Nottage, Recording Secretary

ITEM 4
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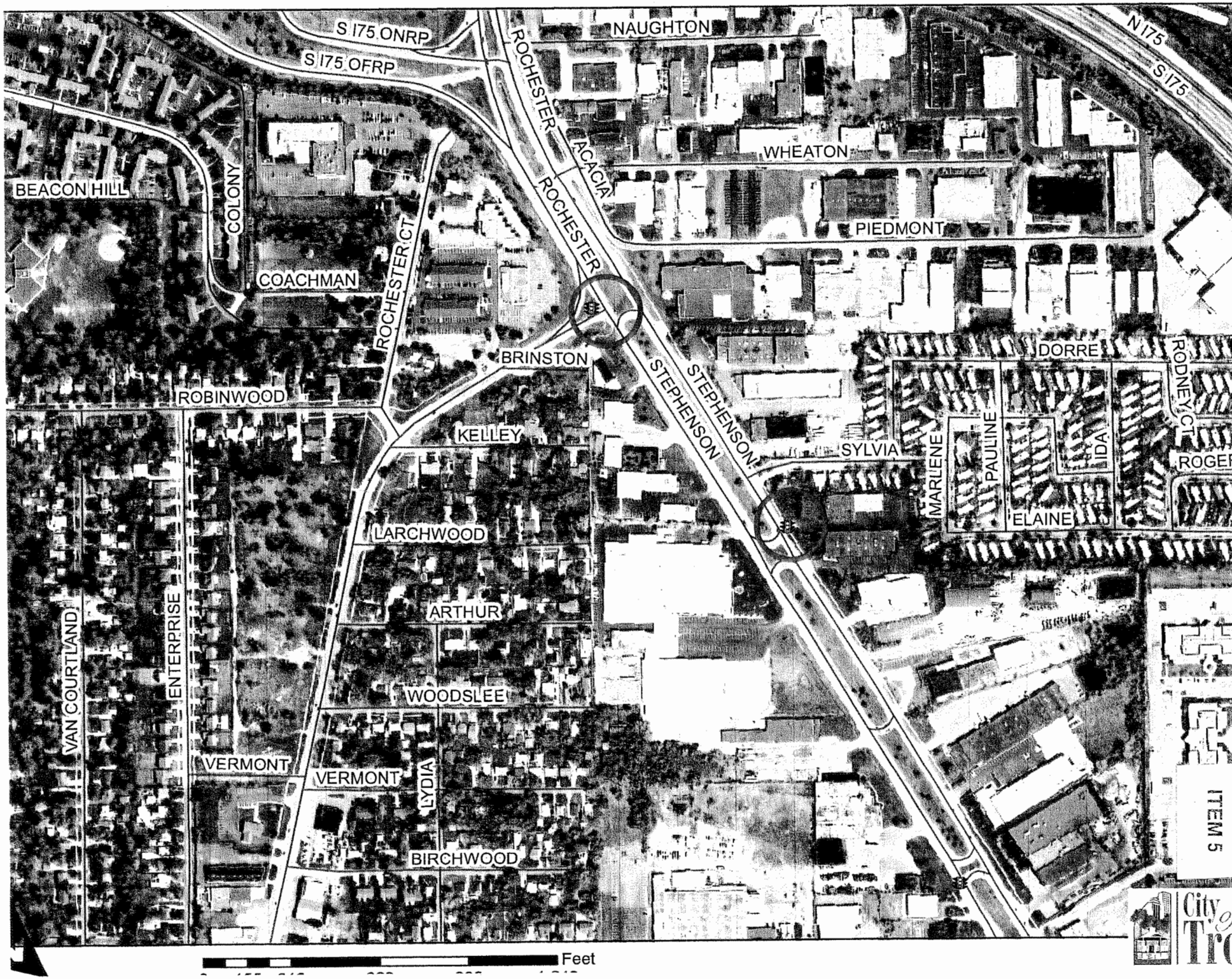
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KELLEY
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ARTHUR
VAN COURTLAND
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VERMONT
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ITEM 5