

FINAL

The Traffic Committee meeting was called to order at 7:30 p.m. in the Lower Level Conference Room at Troy City Hall on November 17, 2004 by Charles Solis, Chairperson.

1. Roll Call

PRESENT: John Diefenbaker
Jan Hubbell
Richard Minnick
Charles Solis
Peter Ziegenfelder
Grace Yau, Student Representative

ABSENT: Ted Halsey
Richard Kilmer

Also present: John Abraham, Traffic Engineer
Lt. Scott McWilliams, Police Department
Lt. Bob Matlick, Fire Department

And Item 3 Barbara Fowler, Troy Schools, 4400 Livernois
Gerald Behl, 67 Hart

Item 4 Richard Kandarian, Metro Drill Corp., 1863 Larchwood

Motion to Excuse

RESOLUTION #TC-2004-11-74

Motion by Hubbell

Seconded by Minnick

To excuse Mr. Kilmer and Mr. Halsey.

YEAS: All-5

NAYS: None

ABSENT: 2

MOTION CARRIED

2. Minutes – October 20, 2004

RESOLUTION #TC-2004-11-75

Motion by Diefenbaker

Seconded by Hubbell

To approve the October 20, 2004 minutes as printed.

YEAS: All-5

NAYS: None

ABSENT: 2

MOTION CARRIED

REGULAR BUSINESS

3. Install Traffic Signal at Square Lake and Donaldson

(This item was tabled at the October meeting to obtain input from the Troy School District)

Mrs. Bela Shah, 123 Millstone Street, indicated that it is very difficult to make turns onto Square Lake from Donaldson. She also mentioned that this is a dangerous intersection and that she has seen near crashes many times. The morning peak hour between 7:00 am and 8:00 am is particularly busy due to the traffic from Smith Middle School at the south end of Donaldson, and she feels that a traffic signal will help make the intersection safer.

This is a 3-way intersection with Donaldson terminating into Square Lake road. The intersection is also around 1,350 feet from the signalized intersection of Square Lake and Livernois. Traffic signals are installed at locations that satisfy some thresholds of traffic volumes, traffic crashes traffic delays as stated in the Michigan Manual of Uniform Traffic Control Devices (MMUTCD). Traffic volume and traffic crash studies were performed for this intersection to see if the "thresholds," also called "warrants," are met for the intersection.

The intersection is controlled by a STOP sign on Donaldson at Square Lake, and sight distance studies show that there are no major sight obstructions at this intersection. Donaldson is a residential street and the approaches to Donaldson on Square Lake provide for a passing lane and a right turn lane to make left and right turns onto Donaldson safely.

Traffic volume studies show that around 7,600 vehicles enter the intersection from and east and west while around 1500 vehicles enter the intersection northbound from Donaldson in a day. There is heavy use of the intersection between 7:00 am and 8:00 am. During this one hour there were around 340 vehicles going east and west on Square Lake and around 250 vehicles going northbound onto Square Lake. However, none of the traffic volume warrants stated in the MMUTCD are met for this intersection. Adding traffic signals normally increases congestion on the major road; in this case on Square Lake Road.

A crash analysis revealed the following reported crashes in the vicinity of the intersection (200 feet radius):

Type of crash	2003	2002	2001
Angle (broad side)	1	1	1
Sideswipe	1	1	1
Rear end		1	

The MMUTCD traffic crash warrant states that a traffic signal is warranted if the installation of the signal will prevent at least 5 “correctible” crashes in a year. Traffic signals normally correct the angle-type crash concerns and as seen, the average crash experience at this intersection has been one per year. Therefore, the traffic crash warrant also is not met for the intersection. National studies also show that installation of traffic signals that are not “warranted” as per the MMUTCD can result in higher traffic crash experience. Unwarranted signals have been documented to increase number of crashes, particularly of the rear-end type.

Traffic signals are located preferably at half-mile points for effective traffic flow. When the distance between signals is less than a half mile, progressive traffic flow may be adversely affected and may result in higher congestion, and backing up of traffic from one intersection to the other, creating gridlock. A signal at Donaldson would be around 1400 feet from the one at Livernois and Square Lake, which is around a quarter of a mile.

Traffic volumes and traffic crash history indicate that a traffic signal installation is not warranted for this intersection. However, Mr. Kilmer thinks that there should be a signal at this location that would be operational only during school times for the safety of the children walking the way to school.

This item was first considered at the October meeting. No one, including the petitioner, attended the meeting to address the committee. However, Mr. Kilmer suggested that there could be a signal at this location that would be operational only during school times for the safety of the children walking to school. At that time, the committee tabled the item to give the Traffic Engineer an opportunity to consult with the Troy School District and Smith Middle School staff.

Dr. Abraham stated that if a traffic signal were installed solely for the purpose of enhancing safety of school traffic, cost participation from the school board would be required. Traffic signals cost around \$100,000 to \$120,000 installed, and it may be hard to justify public funds to pay for the signal when the major benefit is only to school traffic.

Barbara Fowler addressed the committee as a representative of Troy Schools. She said that she, Dr. Jopke, Superintendent of Schools, and Stu Redpath, principal of Smith Middle School, see no need for a traffic signal at this location. There are no students who have to cross Square Lake Road, as all students are bussed to school.

RESOLUTION #TC-2004-11-76

Motion by Hubbell

Seconded by Minnick

To recommend no changes.

YEAS: All-5

NAYS: None

ABSENT: 2

MOTION CARRIED

4. Install All-Way STOP Signs at Larchwood and Bellingham

John Marion of 1863 Larchwood and Carol Marshall of Executone Telecommunications have requested all-way STOP signs at the intersection of Larchwood and Bellingham. Mr. Marion contacted Lt. McWilliams regarding speeding concerns on Larchwood and in response the radar trailer was deployed on the street in addition to selective enforcement. Mr. Marion reported that he was in a near miss traffic crash at the intersection. The intersection has a small jog and since Bellingham has opened up to both Big Beaver and Maple, there is a marked increase in Bellingham traffic. Ms. Marshall wrote a letter to the Michigan Department of Transportation regarding this intersection, but since MDOT does not have jurisdiction over this intersection the matter was referred back to us.

The intersection of Larchwood and Bellingham is in the predominantly industrial area of Troy. Larchwood runs west off John R road and intersects Bellingham around quarter of a mile from John R. Bellingham today runs from Maple to Big Beaver. Previously Bellingham ended north of Larchwood, but with the development of the Big Beaver Airport into an industrial/office area, the road was extended all the way to Big Beaver. The intersection is controlled by 2 STOP signs on Bellingham at Larchwood, installed many years ago. The north and south legs of the intersection are offset by a few feet and the west leg of the intersection has a curve just west of the intersection. Field observations show that there were many STOP sign violations at the intersections and some confusion at the intersection due to the geometrics.

All-way STOP signs are meant to assign right-of-way at high volume intersections, and have been demonstrated not to be an effective speed control device. These are installed in accordance with the Michigan Manual of Uniform Traffic Control Devices (MMUTCD) that stipulates thresholds for traffic volumes and traffic crashes that have to be met. The MMUTCD states that 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 to correction by a multi-way STOP during a 12-month period. Such accidents include right and left turn collisions.*
- ❖ *Minimum Traffic Volume – The total vehicular volume entering the intersection from all approaches must average at least 500 vehicles per hour for any eight hours of an average day.*

Traffic studies indicate that Bellingham carries around 4800 vehicles in a day while Larchwood carries around 3100 vehicles in a day. The minimum traffic volume warrant is met for 5 hours of the day when 500 vehicles or more enter the intersection. For another five hours of the day the intersection had 400 or more entering vehicles.

Traffic crash records show that there were 4 broadside-type reported crashes at this intersection during the last 3 years.

Considering the high volume of traffic and intersection geometrics, four way STOP signs may help decrease confusion and increase safety at the intersection.

Richard Kandarian, owner of Michigan Drill Corp, addressed the committee on his own behalf and at the request of John Marion, the petitioner.

Mr. Kandarian said at times oncoming traffic is facing each other because there is a jog in the road and he has seen many close calls at this intersection. There is a high traffic volume throughout the day, mostly heavy trucks, which can cause a sight obstruction. Motorists unfamiliar with the area cannot see the dogleg in the road until it is too late.

James D. Burg, President of James Burg Trucking Company, 1743 Larchwood, sent a letter (attached) to the committee supporting the proposal for four-way STOP signs at this intersection.

Mr. Marion has been in touch with Lt. McWilliams about speeding in the area, the Traffic Safety Unit had been very helpful in putting out the speed trailer stepping up enforcement. The Lieutenant agrees that all-way STOP signs would increase safety in the area.

RESOLUTION #TC-2004-11-77

Motion by Hubbell

Seconded by Ziegenfelder

To recommend installing all-way STOP signs at the intersection of Larchwood and Bellingham, and to recommend striping the intersection to guide motorists through the dogleg, if deemed necessary by the Traffic Engineer.

YEAS: All-5

NAYS: None

ABSENT: 2

MOTION CARRIED

5. Visitors' Time

Gerald Behl, 67 Hart, appeared to address the committee on items not on the agenda. He identified a possible hazard at Long Lake Road just west of Livernois, near Trevarrow Hardware. There are three small trees in the median which obscure vision. The Traffic Engineer will look at the area.

Mr. Behl also feels the crisscrossing traffic at the turnaround and Trevarrow's driveway is confusing and dangerous. He suggested having the westernmost driveway be "in" only and the one closer to Livernois be "out" only. This is something over which the City has no jurisdiction. The private property owner would have to do this.

The Committee members feel that the left turn traffic signal on westbound Maple at Chicago stays red much too long. Lt. McWilliams agreed that it needs a flashing red phase.

RESOLUTION #TC-2004-11-78

Motion by Hubbell

Seconded by Ziegenfelder

To request the Oakland County Road Commission to change the configuration of the traffic signal on westbound Maple at Chicago to add a flashing red phase.

YEAS: All-5

NAYS: None

ABSENT: 2

MOTION CARRIED

6. Other Business

Dr. Abraham asked Ms. Yau how the traffic situation has been at Troy High School. She said it is always congested, due in large part to the parents who drive their students to school. Dr. Abraham said the school is constructing a new parking lot to help ease congestion.

John Diefenbaker informed the committee that he would be out of the state for the January and February meetings.

Lt. Matlick related his experiences test-driving a fire truck over the new speed humps on Randall and Leetonia Streets. He found it a very jarring experience, and the glove box door fell completely off when the truck bounced. Even though the volunteer firemen are warned about the humps, in the excitement of a fire run they might be likely to forget. He recommends that warning signs be installed.

RESOLUTION #TC-2004-11-79

Motion by Hubbell

Seconded by Diefenbaker

To cancel the December meeting.


YEAS: All-5

NAYS: None

ABSENT: 2

MOTION CARRIED

The meeting was adjourned at 8:08 p.m. The next meeting is scheduled for January 19, 2005.



Charles Solis

LIVERNOIS

ITEM 3

CUTTING

ESQUIRE LAKE

DONALDSON

MARTELL

FOLKSTONE

TARA

COTSWOLD

0 105 210 420 630 840 Feet



Square Lake and Donaldson

Warrant Summary

Urban values apply.

Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 0 hours.

Criteria--Main St.: 500; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 0 hours.

Criteria--Main St.: 750; Side St.: See Volume Summary.

Warrant 3 - Minimum Pedestrian Volumes

NOT SATISFIED. Ped volume too low.

Criteria--Peak Hour: 190, 4th high Hour: 100

Warrant 4 - School Crossing

NOT APPLICABLE. Gap data has not been defined.

Warrant 5 - Progressive Movement

NOT SATISFIED for approach(es): Eastbound Westbound

Warrant 6 - Accident Experience

NOT SATISFIED. 1 correctable accidents is fewer than required 5.

Corr. Accidents: 1; RA Acc.: 1; LT Acc.: 0; Other Acc.: 1.

Warrant 7 - Systems Warrant

NOT SATISFIED. Peak hour total entering volume 989 < 800

- Approaches which are part of principal through traffic network.

E- Approaches which are highways outside, entering or crossing a city.

E- Approaches which appear as a major route in an official plan.

Warrant 8 - Combination of Warrants

NOT SATISFIED. Required values reached for 0 hours.

Criteria--Main: 600; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 0 hours.

Warrant 10 - Peak Hour Delay

NOT SATISFIED. Peak hour (17) volume too low.

Warrant 11 - Peak Hour Volume

NOT SATISFIED.

Press any key to see other warrants, or <esc> to return.

Square Lake and Donaldson

Hour	Main	Side--Dir.	Warrant 1	Warrant 2	Warrant 8
0	27	9 N			
1	20	3 N			
2	16	3 N			
3	13	1 N			
4	19	3 N			
5	32	8 N			
6	113	10 N			
7	316	40 N			
8	337	247 N	SIDE	SIDE	SIDE
9	296	117 N		SIDE	
10	315	51 N			
11	423	65 N			
12	524	57 N			
13	387	49 N			
14	473	70 N			
15	642	65 N	MAIN		
16	805	168 N	--BOTH--	SIDE	--BOTH--
17	834	155 N	--BOTH--	SIDE	--BOTH--
18	629	116 N	MAIN	SIDE	
19	462	78 N		SIDE	
20	314	43 N			
21	223	74 N			
22	115	24 N			
23	40	10 N			



JAMES BURG TRUCKING COMPANY
1743 LARCHWOOD • TROY, MICHIGAN 48083

ITEM 4

DISPATCH (800) 841-1289
OFFICE (248) 526-1433
FAX (248) 526-1436

November 15, 2004

City of Troy
Traffic Committee
500 W. Big Beaver Road
Troy, MI 48084

Re: Larchwood and Bellingham Intersection

Dear Traffic Committee Chair:

I am in receipt of the agenda for the November 17, 2004 Traffic Committee Meeting. My company is located at 1743 Larchwood, about 500' West of the subject intersection. I am in favor of this intersection becoming a four way stop.

My company has been at this location for six years and I have witnessed, and have been involved in, many close calls at this location. My observation is that many cars avoid the Maple and John R intersection by using Austin (North/South Road to the West) to Larchwood. Since Bellingham has opened up North from Larchwood to Big Beaver, I have noticed increased traffic on Larchwood by motorists navigating to Big Beaver.

The U.S. Postal Service has operations on Bellingham North of Larchwood. These trucks use Bellingham to ingress/egress from and to Maple. Cars traveling East from Austin easily reach 45 mph before the intersection. Cars traveling West from John R have the danger of Larchwood jogging to the North at the intersection. It takes almost the same time for a 70' tractor/trailer to clear the intersection from a dead stop as it does for a car to reach the intersection from Austin.

My business is trucking. My drivers use Bellingham as ingress to my facility. I hear constant complaints from my drivers of near accidents at this intersection. I have driven a truck through this intersection during peak times and acknowledge their legitimate concerns.

While am not available for the November 17th meeting, I ask that you accept this letter as my statement that I am in favor of a four way stop at the intersection of Bellingham and Larchwood.

Best regards,

James D. Burg
President



ITEM 4

JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
LANSING

GLORIA J. JEFF
DIRECTOR

October 13, 2004

Ms. Carol A. Marshall
Operations Director
Executone Telecommunications
30927 Schoolcraft Road
Livonia, Michigan 48150

Dear Ms. Marshall:

This is in response to your letter of September 28, 2004, regarding the intersection of Bellingame and Larchwood in the City of Troy. The Michigan Department of Transportation (MDOT) takes great pride in our transportation system. However, the intersection of Bellingame and Larchwood is not a state trunkline and is under the jurisdiction of the City of Troy. By copy of this letter, we will forward your correspondence to Mr. John Abraham, the city's Traffic and Safety Engineer for consideration. Mr. Abraham can be reached at 248-524-3300.

If you have any questions, please feel free to contact me, at 248-451-0001.

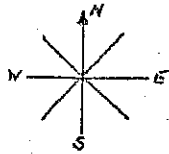
Sincerely,

Randy McKinney, P.E.
Manager
Oakland Transportation Service Center

cc: J. Abraham
L. Tibbits
G. Johnson

COLLISION DIAGRAM

ITEM 4



INDICATE NORTH
BY ARROW

PERIOD: 3yr
FROM 1/1/01
TO 12/31/03

LARCHWOOD

BELLINGHAM

4/4/01
7:40

5/7/03
19:39

4/19/01
13:45

2/11/03
6:30

SYMBOLS

- ← MOVING VEHICLE
- ↔ BACKING VEHICLE
- ← - - - PEDESTRIAN
- ▣ PARKED VEHICLE
- FIXED OBJECT
- INJURY ACCIDENT
- FATAL ACCIDENT

TYPES OF COLLISIONS

- ↔ REAR END
- → HEAD ON
- ↘ SIDE SWIPE
- ↘ RIGHT ANGLE
- ↘ LEFT TURN HEAD ON
- ↘ OUT OF CONTROL

FOR EACH ACCIDENT SHOW:

1. Date & Time
2. Weather & Road Surface Conditions

BELLINGHAM &

LARCHWOOD

BY: HA

DATE: 11/8/04



