

TRAFFIC COMMITTEE AGENDA

July 17, 2019 – 7:30 P.M.

Lower Level Conference Room - Troy City Hall, 500 West Big Beaver Road

- 1. Roll Call
- 2. Minutes February 20, 2019

PUBLIC HEARINGS

3. Request for Sidewalk Waiver – 1585 Rockfield Drive (Sidwell #88-20-14-401-037)

REGULAR BUSINESS

- 4. Request for Traffic Control Alfred Drive at Edith Street
- 5. Request for No Parking Zone Country Ridge Drive
- 6. Public Comment
- 7. Other Business
- 8. Adjourn

cc: Item 3: Jeff Robertson, 1585 Rockfield

Properties within 300'

Item 4: Laura Azoni, 2091 Alfred

Properties within 300'

Item 5: Kathi Strickland, 6242 Carriage Trail

Properties within 300'

Traffic Committee Members
Sgt. Mike Szuminski, Police Department
Lt. Eric Caloia, Fire Department
William J. Huotari, City Engineer/Traffic Engineer

TRAFFIC COMMITTEE

MESSAGE TO VISITORS, DELEGATIONS AND CITIZENS

The Traffic Committee is composed of seven Troy citizens who have volunteered their time to the City to be involved in traffic and safety concerns. The stated role of this Committee is:

- a. To give first hearing to citizens' requests and obtain their input.
- b. To make recommendations to the City Council based on technical considerations, traffic surveys, established standards, and evaluation of citizen input.
- c. To identify hazardous locations and recommend improvements to reduce the potential for traffic crashes.

Final decisions on sidewalk waivers will be made by the Committee at this meeting.

The recommendations and conclusions arrived at on regular items this evening will be forwarded to the City Council for their final action. Any citizen can discuss these recommendations before City Council. The items discussed at the Traffic Committee meeting will be placed on the City Council Agenda by the City Manager. The earliest date these items might be considered by City Council would normally be 10 days to 2 weeks from the Traffic Committee meeting. If you are interested, you may wish to contact the City Manager's Office in order to determine when a particular item is on the Agenda.

Persons wishing to speak before this Committee should attempt to hold their remarks to no more than 5 minutes. Please try to keep your remarks relevant to the subject at hand. Please speak only when recognized by the Chair. These comments are made to keep this meeting moving along. Anyone wishing to be heard will be heard; we are here to listen and help in solving or resolving your particular concerns.

PUBLIC HEARING

3. Request for Sidewalk Waiver – 1585 Rockfield Drive (Sidwell #88-20-14-401-037)

Jeff Robertson of 1585 Rockfield, requests a sidewalk waiver for the sidewalk at 1585 Rockfield Drive (Sidwell #88-20-14-401-037). Mr. Robertson states "there are no sidewalks on either side of Rockfield except for a small portion at the east end".

The Department of Public Works (DPW) <u>recommends approving</u> the waiver request and <u>not requiring</u> the installation of sidewalk "due to the lack of sidewalk on the surrounding parcels, the open drainage ditches and grading of the area", contingent upon the submission of a cash deposit for future construction and to assure consent and participation in any future sidewalk installation.

SUGGESTED RESOLUTIONS:

 WHEREAS, City of Troy Ordinances, Chapter 34, allows the Traffic Committee to grant waivers of the City of Troy Design Standards for Sidewalks upon a demonstration of necessity; and

WHEREAS, Jeff Robertson has requested a waiver of the requirement to construct sidewalk based on lack of sidewalk on surrounding parcels; and

WHEREAS, the Traffic Committee has determined the following:

- a. A waiver will not impair the public health, safety or general welfare of the inhabitants of the City and will not unreasonably diminish or impair established property values within the surrounding area, and
- b. A strict application of the requirements to construct a sidewalk would result in practical difficulties to, or undue hardship upon, the owners, and
- c. The construction of a new sidewalk would lead nowhere and connect to no other walk, and thus will not serve the purpose of a pedestrian travel-way.

NOW THEREFORE, BE IT RESOLVED, that the Traffic Committee **GRANTS** a waiver of the sidewalk requirement for 1585 Rockfield Drive (Sidwell #88-20-14-401-037) contingent upon the receipt of a cash deposit commensurate with the cost of sidewalk construction.

WHEREAS, the Traffic Committee has determined, after a public hearing, that Petitioner failed to establish the standards justifying the granting of a waiver,

NOW THEREFORE, BE IT RESOLVED, that the Traffic Committee **DENIES** a waiver of the sidewalk requirement for 1585 Rockfield Drive (Sidwell #88-20-14-401-037).

REGULAR BUSINESS

4. Request for Traffic Control – Alfred Drive at Edith Street

Laura Azoni of 2091 Alfred states that the lack of traffic control at the intersection of Alfred at Edith creates a hazardous condition.

SUGGESTED RESOLUTIONS:

- a. RESOLVED, that the intersection of Alfred Drive at Edith Street be **MODIFIED** from no traffic control to STOP signs on the Edith Street approaches to the intersection.
- b. RESOLVED, that **NO CHANGE** be made at the intersection of Edith Street at Alfred Drive.

5. Request for No Parking Zone – Country Ridge Drive

Kathi Strickland of 6242 Carriage Trail requests that a NO PARKING zone be established on the north and east side of Country Ridge (around the inside of the curve at 6078 Country Ridge Drive).

Ms. Strickland reports that vehicles parked along the inside of the curve create a vision obstruction for vehicles traveling around the curve.

She requests that a No Parking zone be established to encompass the inside of the curve.

The outside of the curve, south and west side of Country Ridge Drive is posted No Parking as the fire hydrant side of the road.

- a. RESOLVED, that a No Parking zone be **ESTABLISHED** along the inside of the curve between a point twenty-five (25) feet east of the drive to 6078 Country Ridge Drive and a point twenty-five (25) feet north of the end of radius of the inside curve.
- b. RESOLVED, that **NO CHANGE** be made along the inside of the curve on Country Ridge Drive.

6. Public Comment

7. Other Business

8. Adjourn

A regular meeting of the Troy Traffic Committee was held Wednesday, February 20, 2019 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: Don Johnson

Richard Kilmer Cindy Nurak Al Petrulis Sunil Siyarama

Sunil Sivaraman Cynthia Wilsher Pete Ziegenfelder

Marvin Jiang, Student Representative

Absent: None

Also present: Rick LaFave, 3154 Wendover

Tony & Ann Ross, 2528 Hampton Lauren Jones, 3293 Wendover Robert Everson, 2509 Wembly Lt. Eric Caloia, Fire Department

Sgt. Mike Szuminski, Police Department Bill Huotari, City Engineer/Traffic Engineer

2. Minutes - January 16, 2019

Resolution # 2019-02-05 Moved by Kilmer Seconded by Wilsher

To approve the minutes as printed.

Yes: Johnson, Kilmer, Nurak, Petrulis, Sivaraman, Wilsher, Ziegenfelder

No: None Absent: None

MOTION CARRIED

PUBLIC HEARINGS

3. No Public Hearings

REGULAR BUSINESS

4. Request for Traffic Control – Caswell at Hampton

Traffic Committee members requested that the intersection of Caswell at Hampton be reviewed

for purposes of traffic control.

The intersection is YIELD controlled on Caswell Drive and uncontrolled on Hampton Lane.

Traffic Engineering received four (4) emails in support of a Stop sign and one (1) email opposed to any changes.

Tony Ross of 2528 Hampton discussed that the All-Way Stop at Wendover and Hampton has helped. Mr. Ross is concerned that the bush at the corner of Caswell and Hampton is a vision obstruction. He described that the primary cut through route is Beach to Hampton to Caswell to Big Beaver and vice versa. He believes that a Stop sign would improve safety at the intersection.

Bob Everson of 2509 Wembly has lived in this neighborhood for over 43 years. A stop sign would not be a huge inconvenience but he feels that the existing yield sign is sufficient as most traffic is already slowing down as they approach this T-intersection. He would not want to see a Stop sign just to have a sign.

Lauren Jones of 3293 Wendover stated that drivers just need to slow down. She has done research and stop signs are not intended to control speed and in fact may do just the opposite when used at locations where they are not warranted.

Rick LaFave of 3154 Wendover has lived in the neighborhood for over 25 years and raised six children. He believes that the real issue is the bush at the corner and lack of maintenance/trimming over the past few years. He agrees that unnecessary stop signs should not be installed just for the sake of a sign. He is not aware of an incident at the intersection in his 25 plus years in this area.

Mr. Ziegenfelder reiterated that stop signs are not intended to be traffic calming devices and do not slow drivers down. Improperly placed stop signs can make people drive faster. Stop signs are used to assign right-of-way at an intersection. However, he is in favor of stop signs at intersections rather than yield signs as stop signs remove the ambiguity at an intersection.

Mr. Petrulis has lived in this neighborhood for over 22 years. The intersection is wide open with good sight lines other than adjacent to the bush at the corner. Drivers naturally slow down as they approach the T-intersection. People will roll through a stop sign as the intersection is open and drivers will be able to see approaching traffic as they approach the intersection.

Mr. Sivaraman asked about the location of bus stops. There is no bus stop at this intersection.

Mr. Johnson asked about the bush at the corner. The bush appears to be in the 25° x 25° corner clearance area and on private property so it would be reviewed by the Zoning and Compliance Specialist.

Ann Ross of 2528 Hampton discussed that she is picked up daily by a medical provider and the drivers of those vehicles comment frequently on the difficulty of backing out of their

driveway. They state that traffic moves fast in this area.

Lauren Jones of 3293 Wendover discussed the All-Way Stop that was recently installed at Hampton and Wendover.

Ms. Nurak discussed that people typically know who has the right-of-way at a T-intersection, such as at this location and a stop sign is not typically necessary. Drivers will naturally slow and stop as they approach the intersection.

Sgt. Szuminski reported that there have been no crashes at this intersection in the past five (5) years. He would defer to the requests of the residents in this instance. It is more difficult to enforce yield signs versus stop signs. A yield sign requires some discretion for enforcement.

Moved by Petrulis Seconded by Nurak

RESOLVED, that NO CHANGE be made at the intersection of Caswell Drive at Hampton Lane.

Vote on Resolution to Amend Agenda Item 4

Resolution # 2019-02-06 Moved by Johnson Seconded by Sivaraman

RESOLVED, that the Traffic Committee hereby **AMENDS** the resolution for Agenda Item 4 by **INSERTING** "pending a review of the bush at the corner".

Yes: Johnson, Kilmer, Nurak, Petrulis, Sivaraman, Wilsher, Ziegenfelder

No: None Absent: None

MOTION CARRIED

Vote on Agenda Item 4 as Amended

Resolution # 2019-02-07 Moved by Petrulis Seconded by Nurak

RESOLVED, that **NO CHANGE** be made at the intersection of Caswell Drive at Hampton Lane pending a review of the bush at the corner.

Yes: Johnson, Nurak, Petrulis, Sivaraman, Wilsher, Ziegenfelder

No: Kilmer Absent: None

MOTION CARRIED

5. Request for Traffic Control – Wendover at Chelsea and Tothill

Traffic Committee members requested that the intersection of Wendover at Chelsea and Tothill be reviewed for purposes of traffic control.

The subject intersection is a 3-legged, skewed T-intersection, located approximately 1,800 feet east of Adams Road and 1,700 feet north of Big Beaver Road. A short connection between Tothill Drive and Chelsea Lane exists just east of Wendover Street, separated by a landscaped island.

Traffic Engineering received two (2) emails in support of Stop signs and two (2) emails opposed to Stop signs.

Rick LaFave of 3154 Wendover spoke in opposition to a Stop sign at this location. He does not see the need to sign this intersection.

Mr. Ziegenfelder clarified that there would not be a Stop sign on Wendover but rather on Chelsea and Tothill.

Bob Everson of 2509 Wembly discussed traveling south on Wendover and then turning left to Tothill is a tight movement and a stopped vehicle on Tothill could make this more difficult. There may be times when there is traffic on Wendover, but it is very rare that there would be traffic coming at the intersection from all three legs of the intersection at the same time. Two yield signs would just add to the confusion at the intersection.

Sgt. Szuminski added that if there is no traffic control signage at an intersection and two vehicles approach at the exact same time, the vehicle on the right would have the right-of-way.

Mr. Petrulis discussed the unique layout and qualities of this intersection. He cannot imagine how traffic control signs would work at this location. It really is not feasible to control the intersection with signs. The landscaped island creates a natural barrier and provides traffic calming.

Ms. Nurak recalls that residents that attended the January meeting discussed that they felt stop signs were not necessary at this intersection.

Resolution # 2019-02-08 Moved by Johnson Seconded by Wilsher

RESOLVED, that **NO CHANGE** be made at the intersection of Wendover Street at Chelsea Lane and Tothill Drive.

Yes: Johnson, Nurak, Petrulis, Sivaraman, Wilsher, Ziegenfelder

No: Kilmer

Absent: None

MOTION CARRIED

6. Request for Traffic Control – Plum at Starr

Traffic Committee members requested that the intersection of Plum at Starr be reviewed for purposes of traffic control.

The subject intersection is a 3-leg, T-intersection located approximately 1,500 feet east of Livernois Road and 3,200 feet north of Maple Road.

Mr. Kilmer has lived in this area for over 50 years. He believes that this intersection should have at least one stop sign on Plum, if not All-Way Stop control. There is a landscape company that parks their trailers and equipment on the west side of Plum that causes vision obstructions as well as difficulty traveling on Plum.

Mr. Sivaraman noted that there were four (4) emails received and all four supported Stop signs at the intersection.

Ms. Wilsher agreed that this intersection should be stop controlled as she travels the area frequently.

Sgt. Szuminski reports that this is a high traffic area which is congested due to the school traffic and narrow roads. He would support a stop sign at this location.

Mr. Jiang had questions about stop sign locations and parking near a stop sign or intersection that is uncontrolled.

Mr. Petrulis questioned why this went from a single stop sign to an all-way stop control. The discussion centered on traffic in this area, cut through traffic from Livernois to Maple and vice versa, and congestion related to school pickup and dismissal times.

Resolution # 2019-02-09 Moved by Sivaraman Seconded by Kilmer

RESOLVED, that the intersection of Plum Drive at Starr Drive be **MODIFIED** from no traffic control to ALL-WAY STOP control.

Yes: Johnson, Kilmer, Nurak, Petrulis, Sivaraman, Wilsher, Ziegenfelder

No: None Absent: None

MOTION CARRIED

7. Election of Officers

In accordance with the By-Laws of the City of Troy Traffic Committee, Article III, nomination of officers shall be made from the floor on the third Wednesday of February of each year for the purpose of electing a Chairperson and a Vice-Chairperson.

A candidate receiving a majority vote of the members present at the meeting shall be declared elected and shall serve for one year or until his or her successor shall take office. Vacancies in offices shall be filled immediately by regular election procedure.

Resolution # 2019-02-10 Moved by Kilmer Seconded by Sivaraman

RESOLVED, that Pete Ziegenfelder be elected Chairperson of the Traffic Committee for calendar year 2019.

Yes: Johnson, Kilmer, Nurak, Petrulis, Sivaraman, Wilsher, Ziegenfelder

No: None Absent: None

MOTION CARRIED

Resolution # 2019-02-11 Moved by Wilsher Seconded by Sivaraman

RESOLVED, that Al Petrulis be elected Vice-Chairperson of the Traffic Committee for calendar year 2019.

Yes: Johnson, Kilmer, Nurak, Petrulis, Sivaraman, Wilsher, Ziegenfelder

No: None Absent: None

MOTION CARRIED

8. Public Comment

There was no public comment at the meeting.

9. Other Business

Sgt. Szuminski discussed Troy Police Department meetings with MDOT relative to the condition of I75 and continued safety concerns related to pavement condition. Troy Police recommended that the speed limit be lowered on I75 to 50 mph, but MDOT did not agree to this recommendation. Troy Police are in current discussions with MDOT and recommending that they switch to Stage I construction immediately (i.e. all traffic on the southbound side of I75) so that maintenance issues can be addressed.

Traffic	Committee	Minutes -	- February	20	2019
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DRAFT

10. Adjourn

The meeting adjourned at 8:49 p.m.	
Pete Ziegenfelder, Chairperson	Bill Huotari, City Engineer/Traffic Engineer

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May 31, 2019

TO:

The City of Troy Traffic Committee

FROM:

Kurt Bovensiep, Public Works Director

Scott Carruthers, Streets and Drains Operations Manager

SUBJECT:

Request for Waiver of Sidewalk Requirement

Sidwell Number 88-20-14-401-037

Per the attached waiver form, Jeff Robertson is requesting a waiver for the sidewalk on the property located at 1585 Rockfield Drive, Sidwell Number 88-20-14-401-037 in the Supervisor's Plat of Square Acres subdivision.

Chapter 34 City of Troy Sidewalks and Driveway Approaches Ordinance # 34-07 requires, all owners of lots and premises abutting dedicated streets open to the public shall be required to construct sidewalks and driveway approaches at the time of construction of any new buildings or structures, or additions to buildings or structures, or at the time a nonconforming use changes to a permitted use in the Zoning District. No occupancy permit shall be issued until such time as the owners of said property have complied with the requirements of this provision provided only that the Director of Building and Zoning may extend the time for completion of the required sidewalks and driveway approaches in accordance with established procedure.

City of Troy Sidewalks and Driveway Approaches Ordinance # 34.07.01 also requires that a sidewalk be installed in conjunction with the development of a parcel due to a recent lot split, combination of parcels or a re-platting.

Please be advised that there is currently not a sidewalk to the east or west of 1585 Rockfield or across the street.

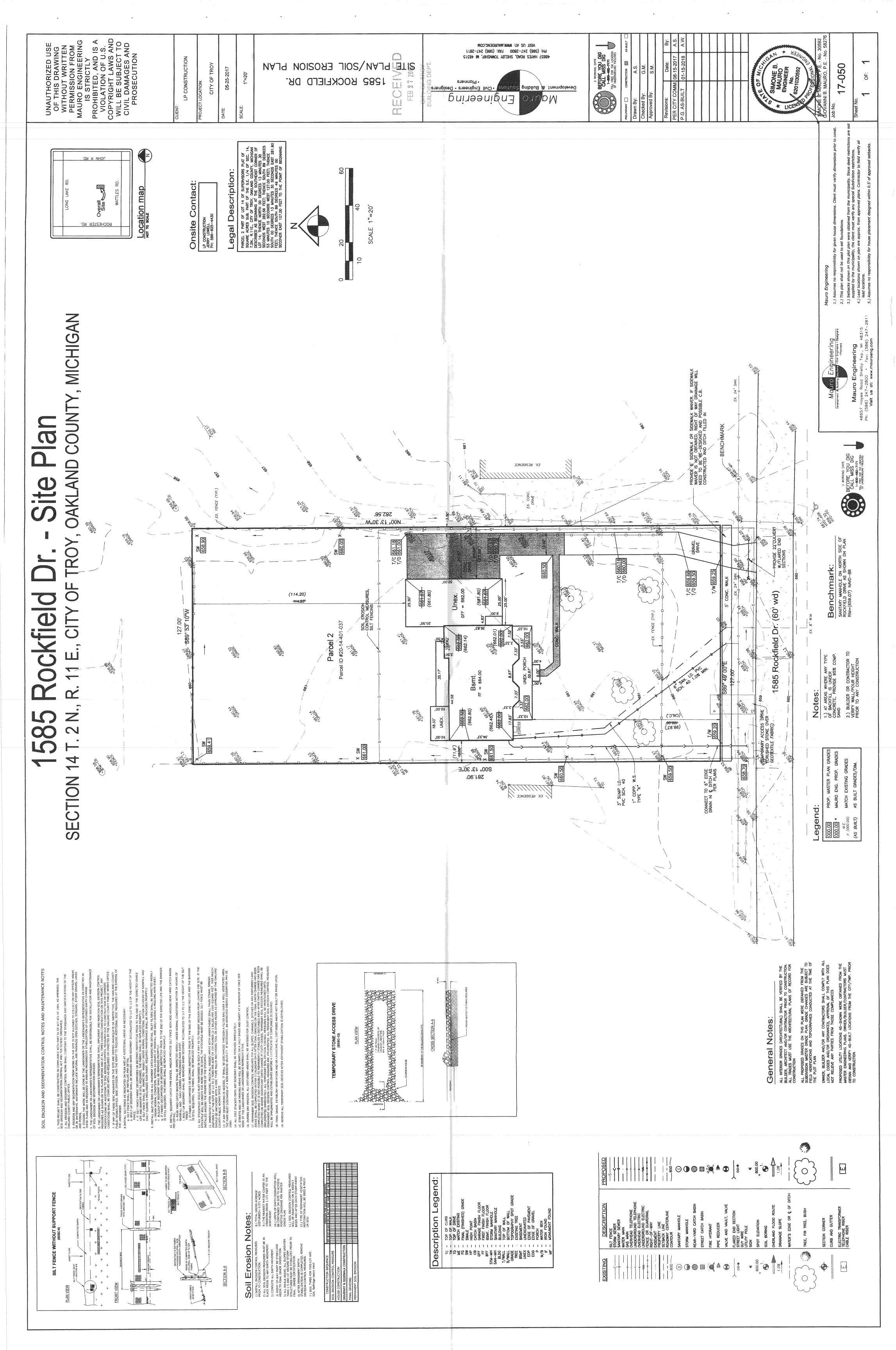
Due to the lack of sidewalk on the surrounding parcels, the open drainage ditches and grading of the area, we recommend that the sidewalk not be installed at 1585 Rockfield, as per ordinance #34.07.

If the sidewalk requirements were to be waived, we recommend the approval be subject to the submission of a cash deposit for future construction to assure consent and participation in any future sidewalk installation.



City of Troy Mr. Kurt Bovensiep Public Works Director 4693 Rochester Road Troy, MI 48098

Mr. Bovensiep,
I am/we are the owner(s) of the property at 1585 ROCKFIELD DR,
Lot number 20-14-401-037
Subdivision Name Supervisor's PLAT OF SQUARE ACROS
Sidewell Number 88-20-14-401-037
I/we would like to request a sidewalk variance for the following reasons: THERE ARE NO SIDEWALKS ON EITHER SIDE OF ROCKFIELD EXCEPT FOR A SMALL PORTION AT THE EAST END.
See attached plan/sketch.
I/We can be contacted at (248) 840 - 4322 TROBERTSON 1981@ ROTWAIL . Con Phone Number Email Address
JEFF ROBERTSON Name
1585 ROCKFIELD DR Address
City, State, Zip
Signature Signature



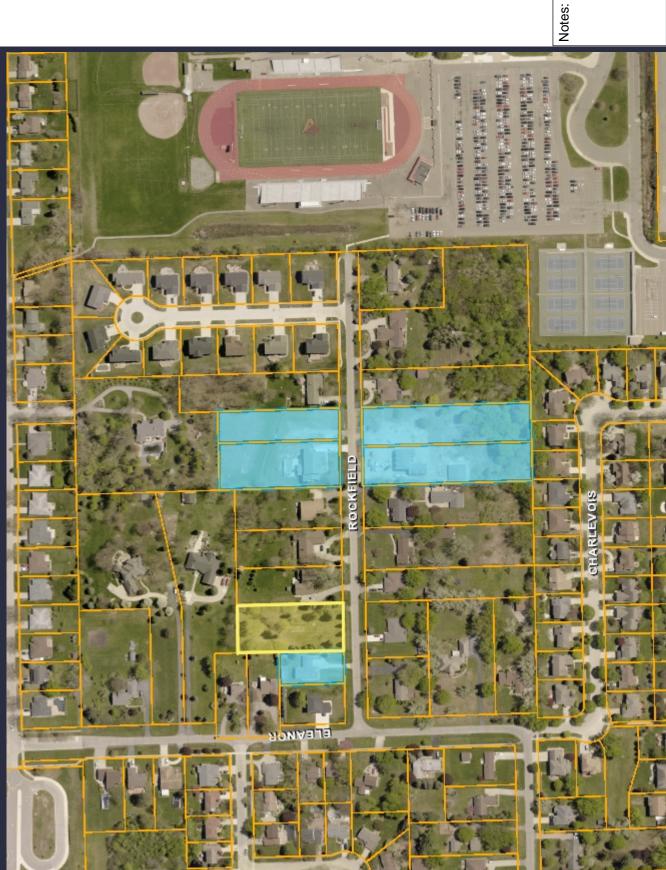


GIS Online

Legend:

Tax Parcel

Sidewalk Waiver



Map Scale: 1=348

Created: May 31, 2019

Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.

1585 Rockfield







TRAFFIC COMMITTEE REPORT

June 25, 2019

TO: Traffic Committee

FROM: Bill Huotari, City Engineer/ Traffic Engineer

SUBJECT: Request for Traffic Control

Alfred Drive at Edith Street

Background:

Laura Azoni of 2091 Alfred Drive states that the lack of traffic control at the intersection of Alfred Drive at Edith Street creates a hazardous condition.

There were no crashes in the past five (5) years at the intersection.

The posted speed limit on both streets is 25 mph.

Edith Street is currently uncontrolled and would be considered the minor road at the intersection. Alfred Drive is also currently uncontrolled and would be considered the major road as it connects to John R.

The major potential sight distance obstructions at the intersection are the vegetation and houses, predominately the shrubbery in the northeast quadrant of the intersection.

The safe approach speed was found to be 5.8 mph for a vehicle traveling south on Edith Street as a result of the sight obstruction from the vegetation at the northeast quadrant of the intersection, therefore STOP signs on the Edith Street approaches to the intersection are the recommended treatment.

The city requested that OHM review the intersection and provide their findings and recommendations (copy attached).



ARCHITECTS. ENGINEERS. PLANNERS.

June 20, 2019

Mr. William Huotari, PE City Engineer City of Troy 500 W. Big Beaver Rd Troy, MI 48084

RE: Traffic Control Recommendation for Alfred Drive at Edith Street

OHM JN: 0128-19-0010

Dear Mr. Huotari:

As requested, we have reviewed the intersection of Alfred Drive at Edith Street to determine the proper traffic control. The subject intersection is a 4-leg intersection located in the City of Troy approximately 700 feet east of John R Road and 2,500 feet south of South Boulevard. The speed limit on both streets is 25 mph. The intersection is uncontrolled on both Alfred Drive and Edith Street. Reference the attachments for aerial and intersection photos.

Types of Roadways

Both Alfred Drive and Edith Street are considered local streets. Alfred Drive runs east / west, providing access to / from the local neighborhood and John R Road (minor arterial). Edith Street runs north / south, providing access to several other neighborhood streets.

The surrounding land use is entirely single-family residential. On-street parking is permitted on the south side of Alfred Drive and on the west side of Edith Street in the vicinity of the intersection. Edith Street is currently uncontrolled and would be considered the minor road at the intersection, while Alfred Drive would be considered the major road as it connects to John R Road.

The ensuing traffic control analysis adheres to the guidance presented in the Michigan Manual on Uniform Traffic Control Devices (MMUTCD). A reference document explaining the background behind the analysis is attached to this memo.

Crash Analysis

Based on information obtained through the Traffic Improvement Association of Michigan, there were no crashes recorded in the past five (5) years at the intersection of Alfred Drive and Edith Street. The crash data does not constitute a compelling case for modifying the existing controls.

Traffic Volumes

Traffic counts were not collected in the vicinity of the intersection. Traffic volumes in residential areas are predominantly driven by the number of single family residential homes in the neighborhood. Based on the residential nature and the number of homes in the surrounding area, it is highly improbable that

Mr. William Huotari, PE June 20, 2019 Page 2 of 3



this location would satisfy any of the minimum volume warrants for an all-way STOP. Further explanation within the context of the minimum volume constraints is provided next.

It is extremely unlikely that Alfred Drive meets and sustains the 300 vehicles per hour threshold for a minimum of 8 hours. The combined vehicular, pedestrian, and bicycle volumes entering from Edith Street is similarly unlikely to average at least 200 units for any 8 hours. Additionally, since the posted speed limit is only 25 mph, it is reasonable to assume that the 85th percentile approach speed does not exceed 40 mph on either road; thus, the minimum vehicular volume warrants cannot be discounted to 70 percent of the values described previously. Finally, the study intersection is likely to fall significantly shy even of the reduced 80 percent volumes, based on expected trip generation for this neighborhood. Therefore, the minimum volume criteria for an all-way STOP has not been met.

Approach Speeds

The approach speed limit on both streets is 25 mph. Speed limits alone cannot be used in this case to determine which direction of traffic should be assigned the right-of-way.

Sight Distance

The major potential sight distance obstructions at the intersection is the vegetation and houses, predominately the shrubbery in the the northeast quadrant of the intersection. Reference the attachments for intersection photos. These obstructions come into play when determining the safe approach speeds for the intersection. The safe approach speed is the speed at which a vehicle can approach an intersection and still stop in time to avoid a collision with a vehicle on the cross street. Safe approach speeds are determined through calculations.

When the safe approach speed is found to be less than 10 mph, a STOP sign is recommended. In this case, the safe approach speed was found to be 5.8 mph for a vehicle traveling south on Edith Street as a result of the sight obstruction from the vegetation at the northeast quadrant of the intersection, therefore a STOP sign is the recommended treatment. The safe approach speed calculation spreadsheet is attached for your reference.



Recommendation

OHM recommends to install STOP signs on the Edith Street approaches to the intersection. The intersection should continue to be monitored if traffic volumes increase or crashes begin to occur.

Sincerely,

Orchard, Hiltz & McCliment, Inc.

Stephan Maxe

Stephan Maxe, PE

Project Engineer

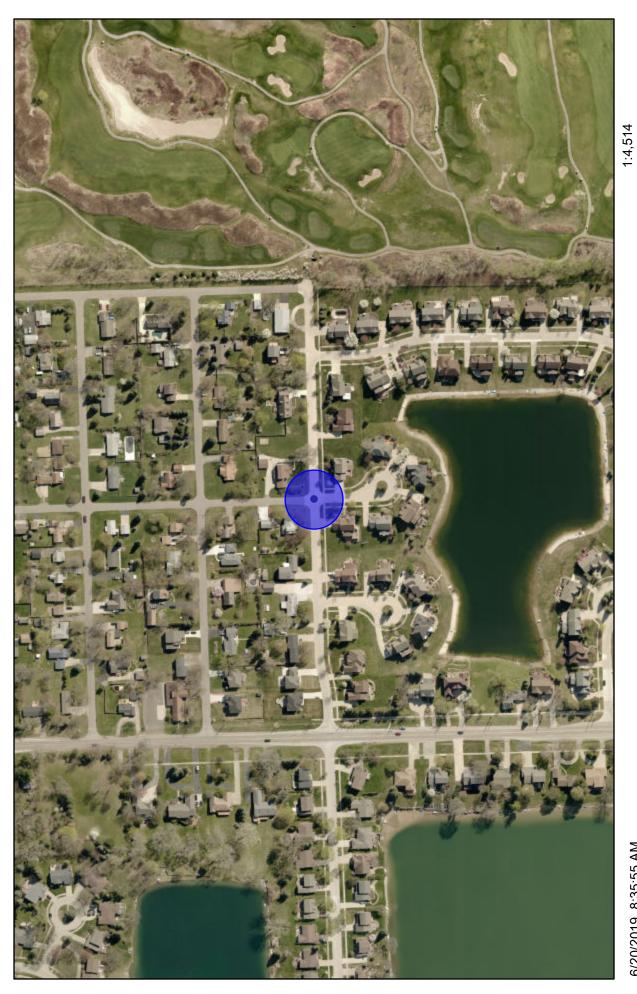
Sara Merrill, PE, PTOE

Traffic Project Manager

Attachments:

- Aerial Photo
- Safe Approach Speed Calculation Spreadsheet
- Intersection Photos
- Traffic Control Determination Reference Guide

Alfred Dr at Edith Street Aerial Photo

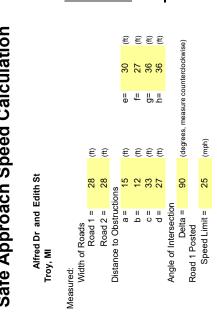


6/20/2019, 8:35:55 AM

0.11 mi 90.0 0.04 0.03

Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user

Safe Approach Speed Calculation



Speed of Vehicle A = Speed of Vehicle C = Posted Speed Limit on Road 1

Clearance distance in excess of safe stopping distance (AAA) Perception / Reaction Time (AASHTO) (mph) + 2 (mph) Deceleration rate (AASHTO) Assumed:

(mph) [Based on Veh. C] (mph) [Based on Veh. A] Calculated Safe Approach Speed for Vehicle B 10.6 5.8 Approaching on Road 2 or $V_2 =$ \ 2 =

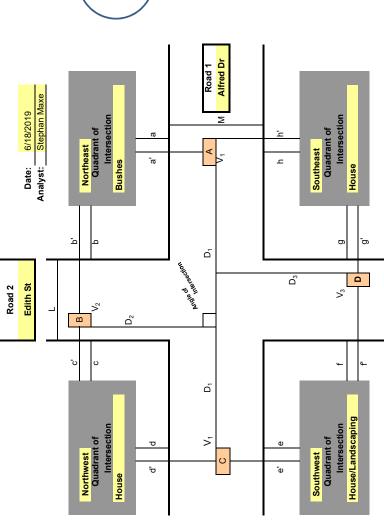
EC II

Calculated Safe Approach Speed for Vehicle D

(mph) [Based on Veh. A] (mph) [Based on Veh. C] 11.9 10.0 Approaching on Road 2 or $\sqrt{3}$ =

 $D_{3c} = 46.1$

Threshold of Safe Approach Speed (AAA, FHWA & NSC) to Recommend STOP Control 10.0 (mph), to Recommend YIELD Control 25.0 (mph), Otherwise Recommends NO CONTROL.



43 52 II e c' = 39 d' = 43 a'= 21 Intermediate Calculations: $D_{2A} = 24.5$ $D_{2C} = 49.9$ D_{3A}= 57.1 $D_1 = 196$

(D₁ - f') $D_{2A} = a^{+} \cdot D_{1}$ or $D_{2C} = c^{+} \cdot D_{1}$ or $D_{3A} = g^{+} \cdot D_{1}$ or $D_{3C} = e^{+} \cdot D_{1}$ Based On $D_1 = (1.075 V_1^2/A) + 1.4667 V_1 t + EC$ (D₁ - h') (D, -d") (D1 - b1)

Enter field measurements in yellow highlighted area. Blue fields are std. default values; change only for cause. Calculated by spreadsheet Notes:

Recommended ROW control for Road 2

based on safe approach speed:

STOP Sign



Photograph No. 1: Alfred Drive – Heading West

Date: 6/18/2019 Photographer: Stephan Maxe



Photograph No. 2: Alfred Drive - Heading West and Looking Left
Date: 6/18/2019 Photographer: Stephan Maxe



Photograph No. 3: Alfred Drive - Heading West and Looking Right
Date: 6/18/2019 Photographer: Stephan Maxe



Photograph No. 4: Edith Street - Heading North

Date: 6/18/2019 Photographer: Stephan Maxe



Photograph No. 5: Edith Street – Heading North and Looking Left
Date: 6/18/2019 Photographer: Stephan Maxe



Photograph No. 6: Edith Street – Heading North and Looking Right
Date: 6/18/2019 Photographer: Stephan Maxe



Photograph No. 7: Alfred Drive - Heading East

Date: 6/18/2019 Photographer: Stephan Maxe



Photograph No. 8: Alfred Drive - Heading East and Looking Left
Date: 6/18/2019 Photographer: Stephan Maxe



Photograph No. 9: Alfred Drive - Heading East and Looking Right
Date: 6/18/2019 Photographer: Stephan Maxe



Photograph No. 10: Edith Street - Heading South

Date: 6/18/2019 Photographer: Stephan Maxe



Photograph No. 11: Edith Street - Heading South and Looking Left
Date: 6/18/2019 Photographer: Stephan Maxe



Photograph No. 12: Edith Street - Heading South and Looking Right

Date: 6/18/2019 Photographer: Stephan Maxe

Reference Guide on Traffic Control Determination in the State of Michigan

Background

This document is intended to be used as a reference guide for performing intersection traffic control studies of intersections on public roadways in Michigan. The document explains the procedure and requirements necessary to implement traffic control at an intersection as stipulated by the Michigan Manual on Uniform Traffic Control Devices (MMUTCD). Generally, the starting premise is an uncontrolled intersection. The first step would then be to verify if the intersection should remain uncontrolled or if YIELD or STOP controls on the minor street approach(es) should be provided. For locations with higher traffic volumes and /or crash issues, then an evaluation of the location for all-way STOP warrants would be performed. The appropriate analysis for each level of control described below.

YIELD Traffic Control Guidance

The use of a YIELD sign is intended to assign the right-of-way at intersections where it is not usually necessary to stop before proceeding into the intersection. Conversely, the STOP sign is intended for use where it is usually necessary to stop before proceeding into the intersection.

The following conditions should be fully evaluated to determine how the right-of-way should be assigned:

- Traffic Volumes: Normally, the heavier volume of traffic should be given the right-of-way.
- Approach Speeds: The higher speed traffic should normally be given the right-of-way.
- Types of Highways: When a minor highway intersects a major highway, it is usually desirable to control the minor highway.
- Sight Distance: Sight distance across the corners of the intersection is the most important factor and is critical in determining safe approach speeds.

STOP Traffic Control Guidance

Based on the MMUTCD there are four conditions where STOP signs may be warranted:

- At the intersection of a less important road with a main road where application of the normal right-of-way rule is unduly hazardous.
- On a street entering a through highway or street.
- At an unsignalized intersection in a signalized area.
- At other intersections where a combination of high speed, restricted view, or crash records indicate a need for control by the STOP sign.

Many times STOP signs are installed where they may not be warranted. Traffic experts agree that unnecessary STOP signs:

- Cause accidents they are designed to prevent.
- Breed contempt for other necessary STOP signs.
- Waste millions of gallons of gasoline annually.
- Create added noise and air pollution.
- Increase, rather than decrease, speeds between intersections.

There is also an explicit restriction in the MMUTCD that STOP signs are not to be used for speed control, in Section 2B.04.

Evaluation of All-Way STOP Traffic Control

Based on the MMUTCD there are four conditions where all-way STOP signs may be warranted:

- A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
- B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.
- C. Minimum volumes:
 - 1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and
 - 2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
 - 3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.
- D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.



TRAFFIC COMMITTEE REPORT

June 24, 2019

TO: Traffic Committee

FROM: Bill Huotari, Deputy City Engineer/ Traffic Engineer

SUBJECT: Request for No Parking Zone

Country Ridge Drive

Background:

Kathi Strickland of 6242 Carriage Trail requests that a NO PARKING zone be established on the north and east side of Country Ridge (around the inside of the curve at 6078 Country Ridge Drive).

Ms. Strickland reports that vehicles parked along the inside of the curve create a vision obstruction for vehicles traveling around the curve.

She requests that a No Parking zone be established to encompass the inside of the curve.

The outside of the curve, south and west side of Country Ridge Drive, is posted No Parking as the fire hydrant side of the road.

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Country Ridge





Country Ridge



