

DEPARTMENT OF PUBLIC WORKS Engineering Division – Traffic Section 2625 E. Glendale Avenue Appleton, WI 54911 TEL (920) 832-5580 FAX (920) 832-5570

To: Municipal Services Committee

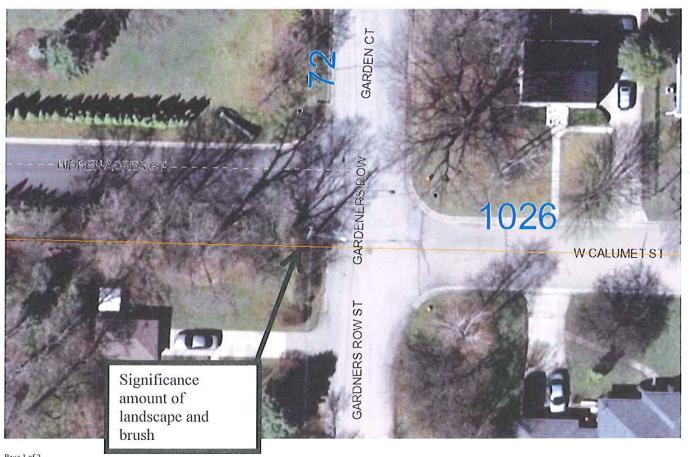
From: Michael Hardy, Assistant Traffic Engineer

Date: July 2, 2014

Re: Hidden Acres Ct & Gardeners Row St, Calumet St & Gardeners Row St - intersection control

At the request of a concerned citizen, the Traffic Section has reviewed the traffic control at the intersection of Hidden Acres Court (private road) and Gardeners Row Street. This individual had concerns regarding this intersection, specifically drivers headed east on Hidden Acres arriving at the intersection of Gardeners Row are not slowing down and paying attention to pedestrians walking or bicycling. They continue on Calumet Street like it's the main roadway.

This intersection is located just within the City limits, approximately two blocks west of Memorial Drive, at Calumet Street. Calumet intersects with Gardeners Row, approximately 30 feet south of the Hidden Acres. Both of these closely spaced intersections are uncontrolled, with all roadways functionally classified as *Local*. Hidden Acres and Calumet traffic should yield to Gardeners Row traffic based on rules of the road as defined in the State Statutes. The land use in this area is a residential, with a mix of City and Town of Menasha jurisdiction. There is also a significant amount of landscape and brush located in the southwest corner of Hidden Acres and Gardeners Row on a property within the Town of Menasha.



Due to the complexity of this situation, the procedure for evaluating *stop* control was applied. Based on City policy, as well as state and federal standards, we consider traffic volumes, crash experience, critical approach speeds, and the functional classification of the roadways when performing a typical intersection control study. Designated *school safe walking routes* are also considered when appropriate.

The City of Appleton policy states that *stop* control *may* be appropriate at a four-legged intersection when:

- 1. Entering volumes are greater than 3,000 vehicles per day, OR
- 2. There has been at least one preventable-type crash in the past 12-months, OR
- 3. The critical approach speed is less than 15 miles per hour, OR
- 4. If the roadway is intersecting with a roadway which is functionally classified as a Collector or Arterial.

An estimation of total entering volume for these intersections is at most, approximately 200 vehicles per day.

The most recent five years of crash experience indicates zero reportable crashes.

The critical approach speed is the speed that a vehicle may approach the intersection and safely stop if an opposing vehicle is sighted. The critical approach speed for this intersection was measured to be less than 5 miles per hour on the Hidden Acres approach, which is due to a significant amount of landscape and brush located in the southwest corner of Hidden Acres and Gardeners Row on a property within the Town of Menasha. If stop control were implemented, it would reduce the impact of sightline restrictions on the approaches and create a safer environment.

All intersecting streets are functionally classified as *Local*. There are also no sidewalks in the neighborhood, resulting in pedestrians sharing the roadway with vehicular traffic.

While these intersections do not meet the volume or crash criterion for *stop* control, one *does* meet the critical approach speed criteria based criteria. The sight line of vehicles and pedestrians on the Hidden Acres approach is very poor. The offset in roadway alignment of Hidden Acres and Calumet Street by about 30 feet is also considerable. Based on this review, stop control is recommended at these intersections.

To accomplish this, the following ordinance action is required:

- 1. Create: "Add Stop signs on Hidden Acres Street at Gardeners Row Street."
- 2. Create: "Add Stop signs on Calumet Street at Gardeners Row Street."