



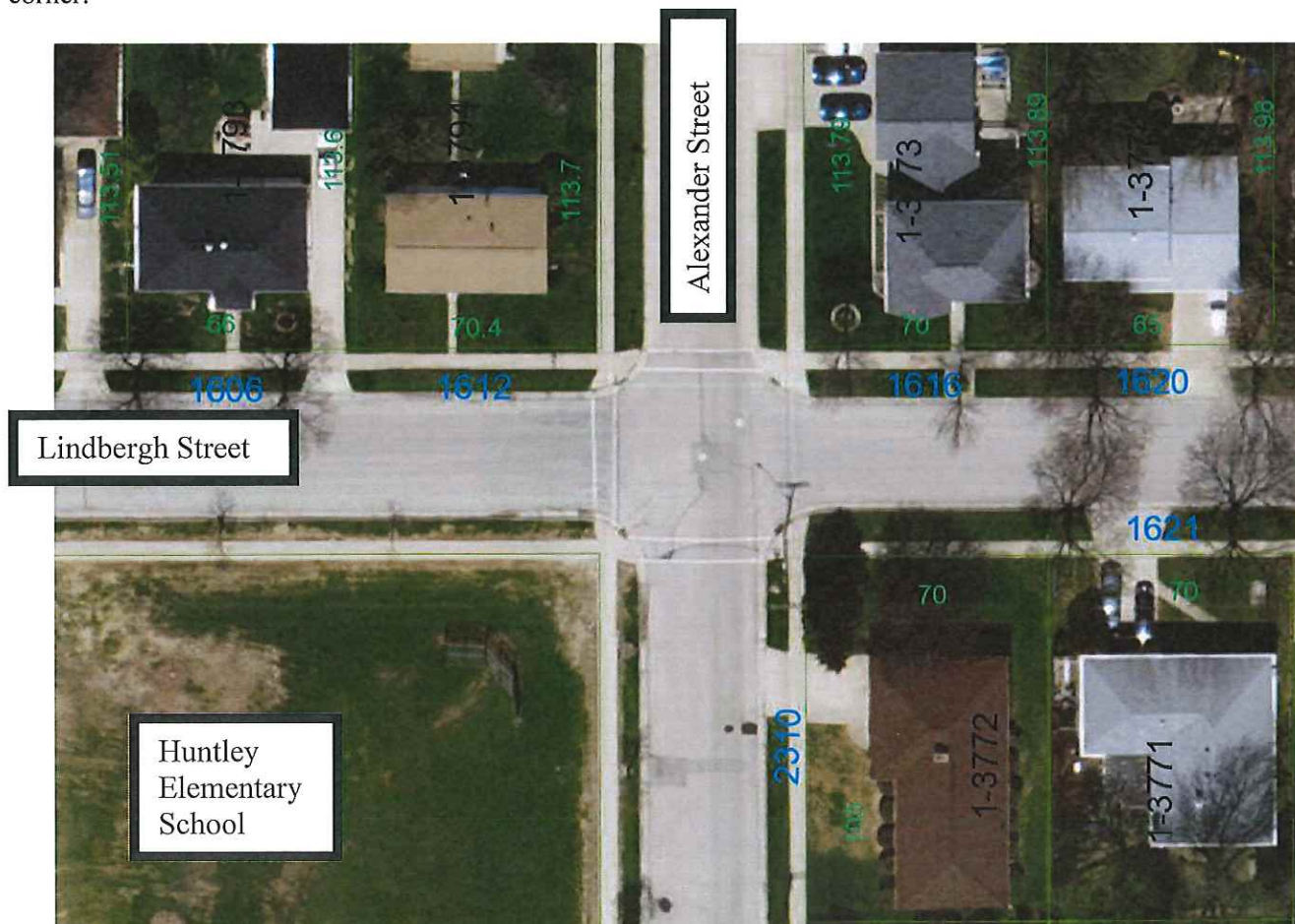
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DEPARTMENT OF PUBLIC WORKS
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To: Municipal Services Committee
From: Michael Hardy, Assistant Traffic Engineer
Date: June 28, 2016
Re: Alexander Street & Lindbergh Street - Intersection Control

At the request of a concerned citizen, the Traffic Section has reviewed the traffic control at the intersection of Alexander Street and Lindbergh Street. This individual had concerns regarding this intersection, specifically that drivers headed south on Alexander Street arriving at the intersection of Lindbergh Street are not yielding as the sign instructs, especially during school arrival times.

This intersection is located at the northeast corner of Huntley Elementary property. The existing control at this intersection has Alexander Street yielding to Lindbergh Street. Both roadways are functionally classified as *Local* at this intersection. The land use in this area is residential, adjacent to Huntley Elementary located in the southeast corner.



Aerial Photo, Intersection of Alexander Street & Lindbergh Street

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*.

Historical traffic counts at this intersection revealed estimated volumes of approximately 400 vehicles per day along Lindbergh Street, and over 200 vehicles per day on Alexander Street. These daily counts do not meet the volume criteria for a stop controlled approach.

The most recent five years of crash experience indicates there were two reportable crashes at this intersection in 2012. Of the two crashes, only one would be considered a preventable type.

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 10 miles per hour on the Alexander Street approaches, which is due in large part to the close proximity of houses and landscaping near the corners of the intersection. If *stop* control were implemented, it would create a safer situation.

All intersecting streets are functionally classified as *Local*. With a close proximity to Huntley Elementary, the sidewalks and crossings here are an active part of the safe walking routes to this school. In addition, Huntley Elementary has a student Safety Patrol posted at this intersection during school day arrival and release to assist children with crossing this intersection.

While this intersection does not meet the volume or crash criterion for *stop* control, it *does* meet the critical approach speed criteria based criteria. The presence of a Safety Patrol by Huntley Elementary School also favors *stop* control.

Based on this review, stop control is recommended at this intersection.

To accomplish this, the following ordinance action is required:

1. **Create:** “Replace Yield signs with Stop signs on Alexander Street at Lindbergh Street.”