

MEMORANDUM

To: Gregory Jackson, Village Manager
Village of Long Grove

Fr: Geoffrey L. Perry, P.E., Village Engineer

Date: February 22, 2022

Re: Checker Road Traffic Calming
Update Summary
Village of Long Grove

In response to the discussions at the January 25, 2022 Board Meeting, our office has prepared the following additional information for the proposed Checker Road Traffic Calming.

As discussed at the January 25, 2022 meeting, concerns regarding the traffic volume and safety concerns have been raised by residents on Schaeffer Road and Checker Road, between North Arlington Heights Road and West Lake Cook Road. Motor vehicles are using these Village roads as a cut-through to bypass the intersection of Arlington Heights Road and Lake Cook Road. This has led to many complaints and reported incidents of unsafe conditions for children to get on/off the school bus, unsafe traffic conditions for bus drivers, residents' inability to exit their driveway, and speeding vehicles.

Alternate Traffic Calming Locations:

Our office has reviewed alternate locations for traffic calming measures. The exhibits presented show the choker option; however, these locations have been reviewed for any proposed traffic calming device. Below is a summary of the traffic calming location options reviewed by our office:

Location Alternate 1:

Alternate Location #1 is located on Checker Road, approximately 1800' east of the intersection at Checker Road and Schaeffer Road and 500' west of the bridge that spans over Buffalo Creek. (This was the presented location at the January 25, 2022 Board Meeting.) The Lake County Forest Preserve District owns the property south of this location and the property north this location is private property / 1877 Checker Road.

Pros

- This location is located approximately halfway along the cut-through route on Checker Road providing a suitable area to slow down traffic from either direction and deterring vehicles from reaching high speeds for the entire cut through route.
- This location will require motorists to slow down along the cut-through route and discourages use of adjacent subdivisions to avoid the traffic calming device.

Cons

- As this area is located beyond most adjacent subdivisions on Checker Road, motorists may reach high speeds along the residential entrances near Schaeffer Road.
- If a choker is installed at this location, required signage would need to be extended in front of 18376 Checker Road which is in Vernon Township. The Village would need approval to install a sign in the right-of-way at this location.

Location Alternate 2:

Alternate Location #2 is located on Checker Road approximately 1300' east of the intersection at Checker Road and Schaeffer Road. The property south of this location is private property / 1858 Pheasant Run and the property north of this location is private property / 1865 Pheasant Run.

Pros

- This location is located near adjacent resident subdivisions and would slow down traffic near Schaeffer Road, which has been cited as a high safety concern.
- This location should deter vehicles from reaching high speeds for long stretches of the cut through route.

Cons

- This location may promote vehicles to use Pheasant Run as a turnaround during long waiting periods.
- This location may allow motorists to reach high speeds east of the traffic calming device.

Location Alternate 3:

Alternate Location #3 is located on Checker Road approximately 700' east of the intersection at Checker Road and Schaeffer Road. This alternate would be both appropriate for either a Traffic Calming Choker or Speed Hump. The South side of the road is near private property at 1854 Checker Road. The north side of the road is near private property at 1859 Cardinal Way.

Pros

- This location is offers maximum clearance from driveways.
- This location is located near adjacent resident subdivisions and would slow down traffic near Schaeffer Road, which has been cited as a high safety concern.
- This location is located at a critical point between both Checker and Schaeffer Road which may deter drivers from using the cut through route.

Cons

- This location may cause a back-up near the intersection of Checker Road and Schaeffer Road which could force northbound vehicles traveling on Schaeffer Road to turn left on to Checker Road.
- This location could cause a bottleneck near the intersection of Checker Road and Schaeffer Road which could cause drivers to perform unsafe driving maneuvers to turn around and head south back on Schaeffer Road.

Location Alternate 4:

Alternate Location #4 is located on Schaeffer Road approximately 1800' south of the intersection at Checker Road and Schaeffer Road. The property east and west of this location are owned by the Lake County Forest Preserve District.

Pros

- This location is located at an at-grade pedestrian crossing which will improve safety in this area.
- This location does not impact any driveways or sidestreets.

Cons

- This location is not located on Checker Road which was the main area of concern along the cut through route.
- The location may allow motorists to reach high vehicle speeds on Checker Road, after passing the traffic calming device on Schaeffer Road. It will not force reduced speeds in residential areas of high safety concern.
- Installing a traffic calming device in this area is subject to Vernon Township approval.

Traffic Calming Trial, i.e. Beta, Testing

In response to discussions regarding trial traffic calming devices at one or multiple of the locations described above, our office offers the following comments regarding a trial that would allow the Village to gather data on both the positive and negative effects of installed traffic calming devices.

Temporary Choker

A temporary choker could be installed with either water-filled jersey barriers (like was used at the covered bridge when the cover was removed) or concrete jersey barriers at any of the contemplated locations. Either type of jersey barrier can be installed with the geometry of a traffic choker and allow data gathering on the effectiveness of the traffic calming device.

The water-filled jersey barriers require purchasing and the usefulness of those used at the bridge needs to be confirmed. If additional barriers need to be purchased, we estimate this would cost less than \$1,000. The concrete jersey barriers can be rented. The cost for the rental is dependent on time desired and availability.

The water-filled jersey barriers are less expensive; however, they can be more easily moved or tampered with. If the barriers are moved, that is useful information.

Our office recommends a single-choker in this trial / beta test.

Temporary Speed Humps

Rubberized temporary speed humps are also a candidate for trial testing and are low cost to procure and install, estimated at \$2,500 each. Any speed hump would need to be affixed to the pavement to avoid sliding and excessive maintenance issues during the trial period.

If the Village desires to pursue a trial / beta test of temporary speed humps, multiple locations could be considered.