## TMS Engineers, Inc.

## **Transportation Management Services**

4547 Hudson Drive Stow, Ohio 44224 www.TMSEngineers.com

RECEIVED

9/8/2014

Mr. Thomas J. Sheridan, P.E. City of Hudson 115 Executive Parkway Suite 400 Hudson, Ohio 44236

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ENGINEERING OF PO

Re:

"Children at Play" Signs

**Morning Song Lane Speeding Issues** 

Dear Mr. Sheridan,

This correspondence is in response to your request to review the use of "Children at Play" signs on City streets and issues regarding speeding concerns along Morning Song Lane in the City of Hudson.

Despite the continued preponderance of "Children at Play" on streets throughout northeast Ohio, "Children at Play" signs have been proven neither to change driver behavior nor to do anything to improve the safety of children in a traffic setting. The National Cooperative Highway Research Program, in its **Synthesis of Highway Practice No. 139**, advises that "non-uniform signs such as "CAUTION—CHILDREN AT PLAY," "SLOW—CHILDREN," or similar legends should not be permitted on any roadway at any time." Moreover, it warns that "the removal of any nonstandard signs should carry a high priority."

There are several reasons that these signs should not be utilized. The first, and most simple, is that if you are driving in an area where children are actually playing, you will, it is hoped, notice them before you notice a sign warning you of them. Or, more to the point, that you will have noticed that you are driving in a residential area where there are likely to be children about. If the driver does not notice the characteristics of a neighborhood as they drive down the street, why would they notice a sign as they pass it, or remember it for more than a few seconds once they have passed it.

Another problem is that many times a driver will drive down a street when no children are playing, gradually conditioning him to disregard the warning, or even view it with a bit of suspicion.

The **Ohio Manual of Uniform Traffic Control Devices** does not sanction "Children at Play" signs. It notes: "The use of warning signs should be kept to a minimum as the unnecessary use of warning signs tends to breed disrespect for all signs. In situations where the condition or activity is seasonal or temporary, the warning sign should be removed or covered when the condition or activity does not exist."

There are other problems. Does the presence of a "Children at Play" sign subtly hint that there aren't children at play in other locations? Does the sign breed a false sense of security? Does it encourage the idea that the street is to be used as a play area which could expose the City to the possibility of

Phone: (330) 686-6402 Fax: (330) 686-6417 E-Mail: Mail@TMSEngineers.com

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tort liability?

This is not to discount the concern of parents, or anyone else, about traffic speeds on residential streets. It's often the very same residents who are the problem. One of the things that is known is that increased traffic speeds (and volumes) increase the risk of children's injuries. But "Children at Play" signs are a symptom, rather than a cure. It is a sign of something larger that is not right, whether the lack of a pervasive safety culture in driving, a system that puts vehicular mobility ahead of neighborhood livability, or non-contextual street design. Our review of the plat for Morning Song Farm and our field site observations, leads us to believe that this is not a non-contextual street design problem.

The following is from the **Traffic Engineering Manual** of the Ohio Department of Transportation (ODOT). It discusses ODOT's position on the use of signs with wording such as children at play, slow children or watch for children.

"Signs intended to alert drivers that children may be present in an area, such as CHILDREN AT PLAY or WATCH FOR CHILDREN, have not been shown to have a discernable benefit to traffic safety but still remain popular with the public. No factual evidence has been presented to document the success of this type of signing in reducing pedestrian accidents, operating speeds or legal liability. Studies have shown that many types of signs attempting to warn of normal conditions in residential areas, or conditions that are not always present, have failed to achieve the desired safety benefits."

Children should not be encouraged to play in the roadway. If signs encourage parents and children to believe they have an added degree of protection, which the signs do not and cannot provide, this can result in a disservice. This type of signing has long been rejected since it is a direct and open suggestion that this behavior is acceptable.

For these reasons, ODOT does not provide CHILDREN AT PLAY or similar signing. This type of signing is not recommended for use on any roadway at any time. For more information on this subject, please see the following website from the University of New Hampshire Technology Transfer Center:

http://www.t2.unh.edu/sites/t2.unh.edu/files/documents/newsletters/2002/ChildrenatPlaySigns.pdf

On the issue of removal of "Children at Play" signs, it is our opinion that they should all be removed as soon as possible, as stated above in our reference to the NCHRP report, which concludes removal of these signs should be a high priority. We do note that many jurisdictions remove these signs on a gradual basis, such as when the signs wear out or are struck by an errant vehicle, or perhaps on a more orderly, defined schedule, such as when signage in a neighborhood is being upgraded. One of these should be considered if immediate removal is not deemed an option.

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On the issue of the use of other enhancements to signage, the only allowable enhancements at this time is the use of a flashing warning beacon mounted above the speed limit sign or LED lights installed in the border of the sign. The use of reflective orange or yellow tape around the sign or a high fluorescent border to call attention is not permitted by the **Ohio Manual of Uniform Traffic Control Devices**. It is my opinion that the allowable enhancements are probably not going to relieve the speeding issues.

Morning Song Lane was reviewed for other recommended traffic control device usage base upon the current geometry and operating conditions. The plat shows that the roadway as three horizontal curves measuring 200', 202' and 205' on the centerline. These radii were found to be appropriate for a 25 miles per hour operating speed which is the current legal speed on this roadway. The radii do not provide increased factor of safety normally recommended for a residential street. In ODOT's Location and Design Manual, a design speed of 5 miles per hour is suggested which would recommend the minimum curvature radius to be 327'. However, it should be noted that the existing radii provide a calming effect to encourage lower operating speeds. Our field investigation indicated that there is a level of driver discomfort when traveling greater than 25 miles per hour due to the curvature.

A question was raised as to the appropriateness of the use of a painted centerline for Morning Song Lane as a means to encourage lower operating speeds. Since the roadway is approximately 26' in width in the non-median section of the roadway, a dashed yellow centerline could be painted, otherwise a double yellow centerline could be painted if and only if parking were to be prohibited from both sides of the street. The use of a painted centerline has not been found to be effective in reducing operating speeds, particularly in residential areas.

We do make one recommendation as a safety precaution. A keep right sign (OMUTCD R4-7) should be installed on the center median just south of the Blackberry Drive intersection and at the W. Prospect Street intersection. This will help reduce the instances of vehicles traveling left of center at the beginning of the median.

If you have any questions regarding the preceding information, please do not hesitate to call me.

Very truly yours,

TMS Engineers, Inc.

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Michael W. Schweickart, P.E., PTOE President