

Traffic Safety Report

November 4, 2015

The Traffic Safety Committee (TSC) review of traffic safety matters occurred on November 04, 2015. The Transportation Planner, Traffic Safety Coordinator, Sign Coordinator, Assistant City Planner, City Engineer, the Police Department Lieutenant, and Public Works Director were in attendance at this meeting.

From these reviews, the recommendations below are provided. On each of the items, persons involved have been contacted and staff recommendation has been discussed with them. They were informed that if they disagree with the recommendation or have additional facts to present, these can be included on the November 19 Edina Transportation Commission (ETC) and the December 15 City Council agenda.

Section A: Items on which staff recommends action.

A1. Request for change in speed limit signage at 70th Street, east of Highway 100

This request regards the signage on 70th Street east of Trunk Highway 100. This requestor references city maps, which show that the speed limit of 25 mph starts before the signage which informs drivers of this speed limit, and that this signage is obscured and drowned out by the amount of signage in the area as well as the geometry of the street. The speed limit sign for eastbound traffic is 184 feet from the start of the eastbound bike lane, 155 feet from the two-way left turn only lane signage, and 100 feet to the end of the westbound bike lane. Speeds on this road are seen as an issue, with an 85th-percentile speed of 33.2 mph, even after the sign, and a volume of 11,530 vehicles per day.

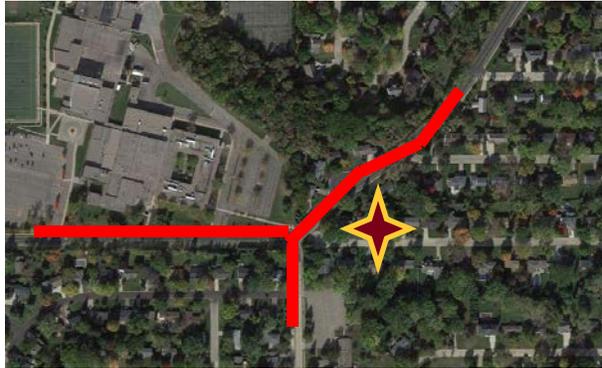
After review, staff found that the bike lane marks the start of the lowered speed limit by City Council resolution and state law. Therefore the signage informing drivers of this speed limit should be further west so drivers are aware of this speed limit. Staff recommends adding the speed limit signage to the post which currently has the Two-Way Left Turn Lane signage, and moving the center turn lane signage down on the post, such that the speed limit signage is in the current location of the center turn lane signage.



Photo : Center turn lane signage eastbound on 70th Street, the speed limit sign in circles in the back

A2. Request for moving, alteration, or removal of the 30 mph speed limit sign from Valley View Road, east of Antrim Road

This request comes from a resident who lives within the area designated for a school speed zone, where Valley View Road's speed limit is reduced to 20 mph when children are present. However, two blocks (nearly 650 feet) before the school speed limit zone ends, there is a sign stating that the speed limit is 30 mph. The requestor believes that this makes for a confusing situation, especially for emerging skill drivers, who may not be aware that they are still



Map : Valley View Road and Antrim Road, red is the school speed limit area, the 30 mph speed limit sign is marked with a star.

in the school speed zone. The requestor believes that this will also assist the movement of vehicles into and out of the driveway of the requestor's residence on Valley View Road. A similar situation can be seen on Normandale Road, in front of Our Lady of Grace church and school. No crashes have been reported during school release or start times in the last ten years along this stretch of roadway. The 85th-percentile speed of this section of Valley View Road is 38.1 mph and Valley View Road has an ADT of 7543 in this segment. This item was previously recommended for further study, for investigation for on the lawfulness of the signage as placed, as well as the school speed zone plan from 2009, which identified crashes in the school zone east of the school itself. The law for the school zone speed reduction states as follows : *The school zone is legally defined as that section of road which abuts the school grounds where children have access to the street or highway from school property, or where there is an established school crossing with advance school signs that define the area.* Further guidance on the issue includes the item 6) *Sidewalks – children walking in the street is dangerous. Continuous sidewalks that do not intermittently disappear and force children into the road are the best.* The sidewalk in this area is continuous, but is only on one side of the road and is on the opposite side of the street of the school. According to the MNMUTCD, the use of a normal speed limit sign may be used alone to signify the end of a school speed zone, and when placed, does indicate that the school speed zone has ended (Figure 7B-3). Copies of the school speed zone study's site enhancement maps for this area, as well as Our Lady of Grace and Normandale Road, are available in appendix C.



Photos : These photos illustrate the order of the signage along Valley View Road, the requestor would like to move the Speed Limit 30 sign such that it is not within the school speed zone.

After review, staff recommends maintaining the current School Speed Zone, but changing the signage by removing the End School Speed Zone signage and moving the current Speed Limit 30 signage to the End School Speed Zone sign's vacated position. This is being done to be consistent with the MNMUTCD as shown in Appendix C.

A3. Request to maximize safety for school crossing at Gleason Road and Indian Hills Pass

North of Creek Valley Elementary School, the school requested that the City of Edina look at the intersections of Gleason Road and Indian Hills Pass, and to a lesser extent, Creek Valley Road. A video study of Gleason Road and Indian Hills Pass was conducted. This study found that because school release is also during the evening rush hour, the traffic loads at this intersection had enough traffic on all streets to force traffic to come to a full and complete stop before entering the intersection. Several school children cross Gleason Road at this crosswalk. Awkward situations were observed, including several vehicles not yielding to pedestrians in the hours after school release, or other times when there is not enough traffic on the cross streets to “force” traffic to stop on Gleason. Another common awkward occurrence was with bicyclists crossing from the school grounds to the Indian Hills neighborhood. Because there is a sidewalk on one side of the intersection, and the crosswalk across Gleason Road connects only to a curb, and not to a sidewalk or pedestrian ramp, bicyclists cross the intersection diagonally so that they are biking on the correct side of Indian Hills Pass when they leave the school grounds. This is seen most with child bicyclists who are sidewalk-riding as they leave the school grounds. This diagonal biking has been seen as causing some confusion for drivers who appear to assume that they would be able to complete a movement at this intersection concurrent with the bicycles, as the driver’s desired movement would not conflict with a crossing in the crosswalk. There are no school patrols at this time, but a teacher is stationed at Gleason Road and Indian Hills Pass and conducts children across the street, but wears no reflective clothing nor has a sign for flagging operations.



Map : Indian Hills Pass and Gleason Road

After review, staff recommends that the school reinstate the school patrol, to bring attention to crossings related to the school day. Further, staff recommends adding a pedestrian landing pad at the south corner of the intersection, and upgrading two pedestrian ramps at the school entrance to be ADA compliant. Staff also recommends that the existing marked crosswalk be replaced with the standard school zone “ladder” crosswalk, and it be realigned slightly to match the new landing pad.

Section B : Items on which staff recommends no action

B1. Request for crosswalks at Arbor Lane and Arbor Avenue

This request comes from a resident who would like a crosswalk south from Countryside School’s schoolyard, to highlight the pedestrian movements in this area. This summer, a sidewalk was added on the east side of Arbor Avenue, along school grounds. Examination of the city’s proposed sidewalks indicates that the sidewalk in this area should extend a block further south, which was outside of this year’s reconstruction



Photo : Arbor Lane and Arbor Avenue, looking south

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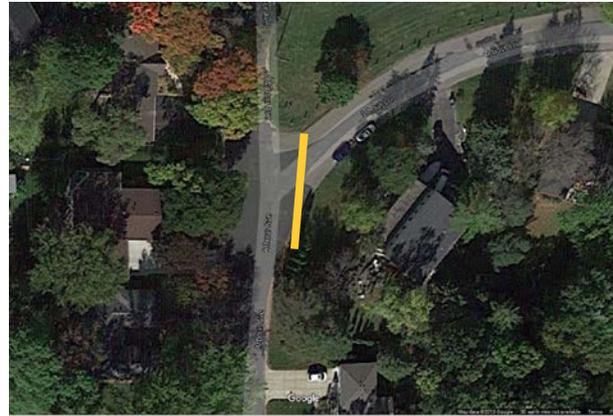
project. This means that at this time, there is no pedestrian landing or sidewalk across the street from the existing sidewalk. A video study was performed and found that during days of normal usage the maximum number of crossings in a two hour period was seventeen (17). These volumes do not meet volume warrants for crosswalks. No crashes related to this intersection have been reported in the past five years. Full warrants may be seen in appendix A.

After review, staff recommends no action on this request, as there are not enough crossings to warrant installation of a crosswalk. Future consideration of a crosswalk should be considered when the sidewalk is constructed further, as this is seen as possibly increasing pedestrian volumes and further channelizing the crossings into one crosswalk.

B2. Request for stop control at the intersection of W. 61st Street and Oaklawn Avenue

This request comes from a resident who is concerned that previous traffic safety requests failed to consider pedestrian movements at the intersection of 61st Street and Oaklawn Avenue. Previous investigations of the area resulted in yield signs being placed for 61st Street, on the east and west legs of the intersection. A video study was performed and found that 934 movements are made in this intersection on the average day, including bicycling and pedestrian movements. This is half of what warrants would require. The number of entering movements on 61st Street is 271 while Oaklawn has 663 entering movements. Two right angle crashes have occurred at this intersection in the past five years. All these crashes have been property damage only. These crashes are seen a susceptible to correction by stop signs. Full warrants for stop signs may be seen in appendix B.

After review, staff recommends no action on this request. This recommendation considered warrants for stop signs, and existing volumes being less than half of what is needed to warrant signage. In addition the traffic patterns as observed on the camera were not seen as abnormally dangerous.



Map : Arbor Lane and Arbor Avenue, the crossing is marked, the sidewalk is not shown



Map : Oaklawn and W. 61st is circled, W. 59th and Kellogg is starred, and the line represents speed concerns on Oaklawn



Photo : 61st Street and Oaklawn Avenue, looking west

B3. Request for creation of a 4-way stop at 59th Street and Kellogg Avenue to slow traffic in the neighborhood

This request concerns the intersection of Kellogg Avenue and 59th Street. Currently the intersection is controlled by stop signs on 59th Street, but a request was received for the intersection to have stop signs added to it specifically. The request also included an ask for slowing traffic in the neighborhood using stop signs at intersections. Even when informed that this strategy was not used by the City of Edina and alternate traffic calming measures were presented, the requestor continued to ask for more stop signs to slow traffic in the neighborhood. Counters were placed and Kellogg Avenue was found to carry 207 vehicles per day with an 85th-percentile speed of 28.1 mph. These numbers are very similar to studies conducted in 2007, 2012 and 2013 on this roadway. 59th Street was seen as carrying 85 vehicles per day with an 85th-percentile speed of 17.9 mph. This may be due to the extremely narrow construction of 59th Street, which is only 18 feet wide east of Kellogg and 23 feet wide west of Kellogg. Complete warrants for stop signs can be seen in appendix B.



Photo : Kellogg Avenue and 59th Street, looking east



Photo : Kellogg Avenue looking south from 59th Street, even with a 27 foot roadway, two sided parking can make a narrow driving surface.

After review, staff recommends no action on this request. Counters placed did not observe excessive speeds, and stop sign warrants were not met. Using stop signs to control volumes and speeds is not recommended by the City of Edina.

B4. Request for slowing traffic on Oaklawn Avenue south of 59th Street

This request concerns traffic on Oaklawn Avenue, which is perceived to be very fast moving and detrimental to the safety and tranquility of the area. A counter was placed in this location and found that an average of 422 vehicles use Oaklawn Avenue in this location, with an 85th-percentile speed of 29.7 mph. Only one crash has occurred in the last five years on this stretch of Oaklawn Avenue, this was a rear-end crash which was determined to be due to driver distraction.



Photo : Oaklawn Avenue, looking south from 59th Street

After review, staff recommends no action on this request. The requestor's concerns were not supported by traffic data.



Photo : 57th and Abbott, looking west

B5. Request for stop signs at the intersection of 57th Street and Abbott Avenue

This request concerns the intersection of 57th Street and Abbott Avenue. 57th Street has 226 ADT and a 25 mph 85th-percentile speed from a 2014 study. A 2015 count on Abbott Avenue found that the street had 140 ADT and 23.8 mph 85th-percentile speeds. There has been one crash at this intersection in the last ten years, in 2007, as a vehicle southbound and eastbound collided in the intersection. The crash did not result in injury and was not noted as having any influencing or improper factors by the reporting officer. This intersection had some sightline issues, of which those covered by city ordinance have been removed. The intersection also is skewed, with the streets connecting at an angle of approximately 70-degrees instead of the full 90-degrees associated with the grid in the surrounding area. This skew can make some drivers uncomfortable. Full warrants for stop signs may be seen in appendix B.

After review, staff recommends no action on this request. This recommendation considers the lack of warrants met, and no recent crash history.



Photo : Sight obstructions on the north side of the intersection

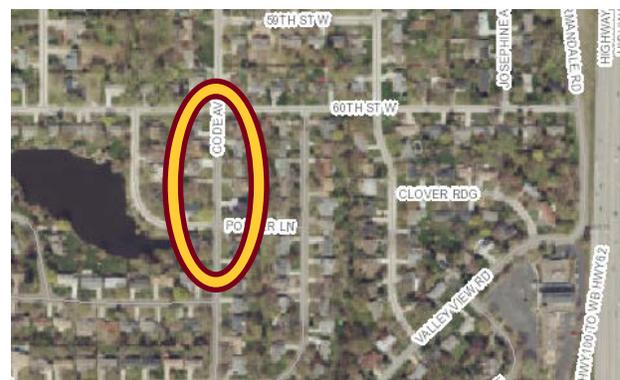
B6. Request for slowing traffic on Code Avenue between Porter Avenue and 60th Street

Over the summer, traffic from the Birchcrest B roadway reconstruction projects was perceived by residents as detouring down Code Avenue to reach Benton Avenue. Residents had concerns that traffic patterns would remain, and that the vehicle traffic was traveling too quickly as it descended a hill north of 60th Street and south of Porter Avenue. While data was not collected during the construction season due to the needed street sweeping in the area, counts taken after construction revealed that 369 vehicles per day used Code Avenue and the 85th-percentile speed was 27.9 mph. Both Porter Avenue and 60th Street maintain their crown through the intersection and create vertical deflection, acting slightly like speed bumps in reducing vehicle speeds. This area will be reconstructed in 2017. There have been two crashes on Code Avenue in the past five years, neither of which appear to be related to speed.

After review, staff recommends no immediate action be taken on Code Avenue. This request has been forwarded and added to the Birchcrest A reconstruction, which will include this street, such that calming measures may be added in the 2017 reconstruction.



Photo : Code Avenue at Porter Avenue



Map : Code Avenue between Porter Avenue and 60th Street

B7. Intersection lane assignment concerns at the intersection of 50th Street, and Halifax Avenue

This request concerns the lane assignments on Halifax Avenue as it intersects 50th Street. Currently there are two lanes entering the intersection on both the north and south approaches. On the north side, there is a right-turn only lane and a shared left/through lane, while on the south side of the intersection there is a left-turn only lane and the right lane is a shared right/through lane. The requestor feels that this set up is confusing and causes persons traveling north to assume that the lane assignments for southbound traffic mirror their own, and thus begin their left turns in front of oncoming traffic. There have been no crashes at this intersection in the past five years that reflect such confusion.



Photo : This is a close up aerial of the intersection of Halifax Avenue and 50th Street

After review, staff recommends no action on this item. There have been crashes at this intersection, but none of them reflect the scenario as described by the requestor. Therefore, there is no evidence that this situation causes dangerous confusion. The requestor did not leave contact information with staff to be informed of this recommendation.

Section D : Other items handled by traffic safety

D1. The Edina Colonial Church and Edina Methodist Church wish to change or add signage on Tracy Avenue concurrent with reconstruction of the road. The relevant code sections were examined and found to be acceptable so long as the signs were brown with white lettering, at least fifty feet from any traffic control devices and intersections.

D2. A Deaf Child sign was slated for removal, as the child for which it was placed is now eighteen, in college, and no longer residing with her parents.

D3. A resident wished to express concern on the future of Maloney Avenue as U.S. 169 is reconstructed in the coming years. The area has several pre-existing counts, and there is a good understanding of how the area functions currently. When U.S. 169 is shut down counts may be retaken to understand if this area warrants traffic calming, diversion or other measures to maintain its safety for residents.

Appendix A:

Crosswalk Warrants

- A. Marked crosswalks are placed at locations that are unusually hazardous or at locations not readily apparent as having pedestrian movement.
- B. Marked crosswalks will only be placed in an area that has 20 or more pedestrian crossings in a two-hour period.
- C. Marking for crosswalks will be established by measuring the “Vehicle Gap Time”. This is the total number of gaps between vehicular traffic recorded during the average five minute period in the peak hour. Criteria for markings are:
 - 1) More than five gaps – pavement marking and signage only.
 - 2) Less than five gaps – add actuated pedestrian signals.
- D. Crosswalks will not be placed on arterial roads or roads with a speed limit greater than 30 mph unless in conjunction with signalization.
- E. Other conditions that warrant crosswalks:
 - 1) Routes to schools
 - 2) Locations adjacent to libraries, community centers, and other high use public facilities.
 - 3) Locations adjacent to public parks.
 - 4) Locations where significant numbers of handicapped persons cross a street.
 - 5) Locations where significant numbers of senior citizens cross a street.
- F. Crosswalks will only be placed at intersections.

Appendix B:

Stop Sign Warrants

When it is determined that a full stop is always required on an approach to an intersection a STOP (R1-1) sign shall be used.

At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs.

The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:

- A. The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day;
- B. A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway.
- C. Crash records indicate that three or more crashes that are susceptible to correction with the installation of a STOP sign have been reported within a 12-month period, or that five or more such crashes have been reported within a 2-year period. Such crashes include right-angle collisions involving road users from the minor street failing to yield the right-of-way to traffic on the through street or highway.

Additional warrants which do not specify the type of control are as follows;

- A. An intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;
- B. A street entering a designated through highway or street; and/or
- C. An un-signalized intersection in a signalized area.

In addition, the use of YIELD or STOP signs should be considered at the intersection of two minor streets or local roads where the intersection has more than three approaches and where one or more of the following conditions exist:

- A. The combined vehicular, bicycle, and pedestrian volume entering the intersection from all approaches averages more the 2,000 units per day;
- B. The ability to see conflicting traffic on an approach is not sufficient to allow a road user to stop or yield in compliance with the normal right-of-way rule if such stopping or yielding is necessary; and/or
- C. Crash records indicate that five or more crashes that involve the failure to yield the right-of-way rule have been reported within a 3-year period, or that three or more such crashes have been reported within a 2-year period.

Additional warrants from the city of Edina list that:

1. If an intersection experiences five (5) or more right angle accidents in a three (3) year period, stop signs should be considered.
2. If the presence of a sight obstruction is contributing to accidents at an intersection, removal of the sight obstruction should be sought before considering a stop sign.
3. If the 85th percentile speed on any leg of an intersection is more than five (5) MPH over the posted speed limit, a stop sign should be considered for the intersecting street.
4. If traffic volumes exceed 1,000 vehicles per day on each of the intersecting streets, stop signs should be considered.
5. Residential stop signs shall not be installed in an attempt to control speed.
6. Residential stop signs shall not be installed in an attempt to control volume.

Appendix C:

School Speed Zone Figures

Figure 1 - MNMUTCD Figure

Figure 5

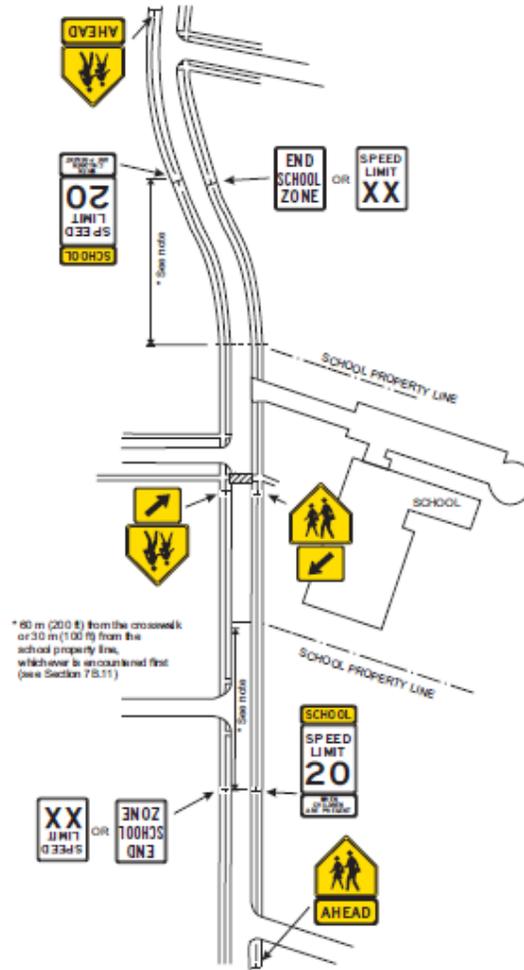


Figure 7B-3. Examples of Signing for School Area Traffic Control with School Speed Limits

MN MUTCD, Figure 7B-5. Examples of Signing for a School Zone with a School Speed Limit and a School Crossing

Figure 2 - Our Lady of Grace 2009 Signage Plan

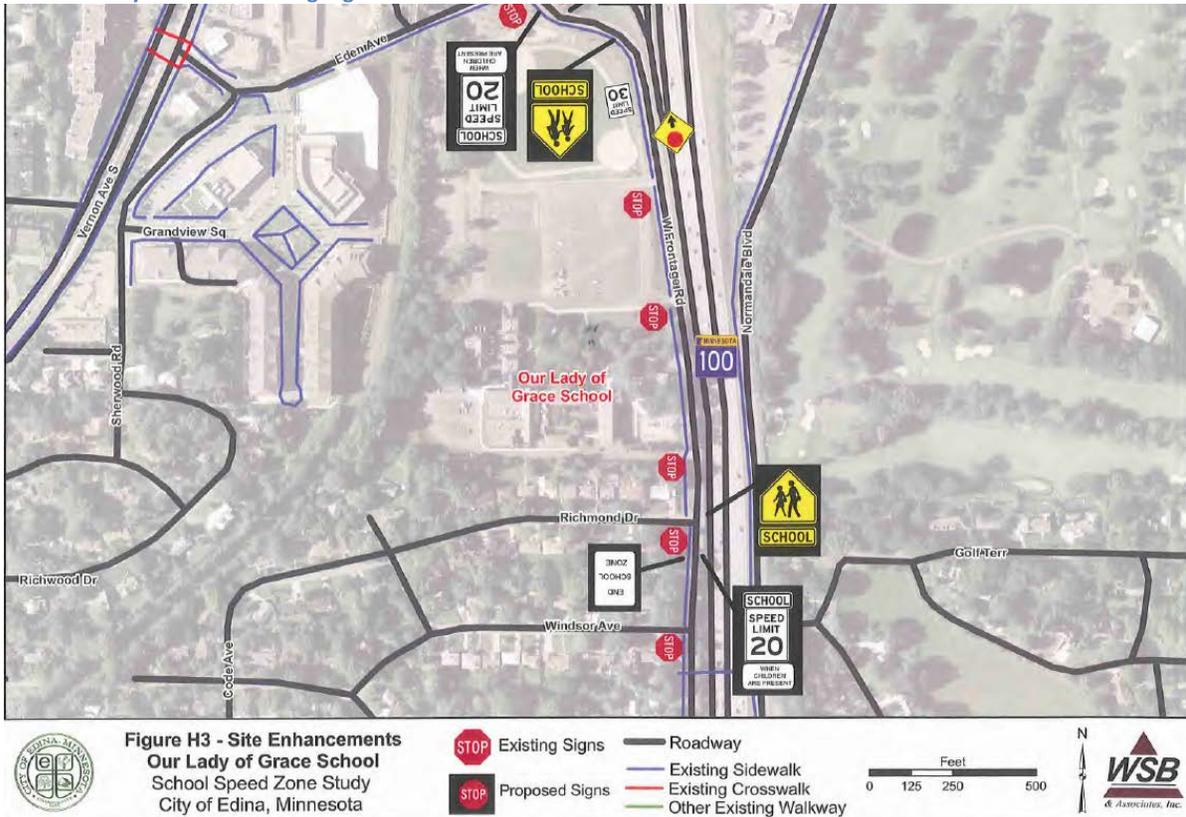


Figure 3 - Edina High School and Valley View Middle School 2009 Signage Plan

