



November 10, 2017

Ref: 26288.00

Mr. Peter Belmonte
Belmonte Builders
1743 US Route 9
Clifton Park, NY 12065

Re: Traffic Evaluation, Kaydeross Park Drive Subdivision, City of Saratoga Springs

Dear Mr. Belmonte,

VHB has conducted a traffic evaluation to assess the potential traffic impacts associated with the proposed Kaydeross Park Drive Subdivision located between Arrowhead Road and Kaydeross Park Drive, south of Julians Way, in the City of Saratoga Springs.

This letter includes an evaluation of the peak hour site trip generation and a review of the potential impacts to the surrounding neighborhood roadways as a result of the project. As detailed herein, the proposed project is expected to have minimal impact on local traffic operations.

Site Location and Proposed Development

The approximate 12.8-acre project site, as shown in the site location map on the following page, is located between Arrowhead Road and Kaydeross Park Road, south of Julians Way, in the City of Saratoga Springs. The site is currently undeveloped. The proposed project includes construction of 22 single family homes. Seven of the homes will have direct driveway access (via seven individual driveways) to Arrowhead Road and the remaining 15 homes will have access onto an extension of Julians Way that will intersect with Kaydeross Park Drive approximately 130 feet south of Lakeview Road. The presence of the existing roadway spur at the south end of Julians Way, rather than a hammerhead or circle, indicates that an extension of Julians Way is a planned connection. The proposed development plan is illustrated on the attached Subdivision Plan developed by the Environmental Design Partnership, LLP.

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Site Generated Traffic Volumes

To estimate the site-generated traffic, the Institute of Transportation Engineers' (ITE) publication *Trip Generation, 9th Edition*¹ was utilized. The number of vehicle trips generated by the proposed project were estimated based on ITE land use code (LUC) 210- Single Family Detached Housing. A summary of the trip generation breakdown is provided in Table 1.

¹ Trip Generation Manual, 9th Edition, Institute of Transportation Engineers, Washington D.C., 2012.



Table 1 Trip Generation Summary

Weekday Time Period	Movement	Single Family Housing ^a
AM Peak Hour	Enter	4
	<u>Exit</u>	<u>13</u>
	Total	17
PM Peak Hour	Enter	14
	<u>Exit</u>	<u>8</u>
	Total	22

^a Trip generation estimate based on ITE LUC 210 (Single Family Detached Housing) for 22 units

Based on the projections outlined above, the proposed project is expected to generate 17 new vehicle trips during the AM peak hour and 22 new vehicle trips during the PM peak hour. The site generated trips will result in less than the New York State Department of Transportation (NYSDOT) and ITE threshold of the generation of 100 vehicle trips on an approach to an off-site intersection to identify the need for off-site intersection analysis. These agency thresholds were developed as a tool to identify locations where the magnitude of traffic generated has the potential to impact operations at off-site intersection and screen out locations the do not meet the threshold and are therefore unlikely to require mitigation. Based on these industry guidelines and a review of the project area, detailed intersection analyses were not conducted or needed as part of this evaluation.

Neighborhood Roadways

Arrowhead Road is an approximate 0.7 mile local road providing access between Crescent Avenue and residences to the south where the roadway dead ends. As shown on the Subdivision Plan, seven of the 22 proposed homes will have direct access to Arrowhead Road via individual residential driveways, consistent with the other existing homes on this roadway. These seven homes will increase traffic volumes on Arrowhead Road by approximately six trips during the AM peak hour and seven trips during the PM peak hour; one new trip every eight to ten minutes. This very low volume increase can be accommodated by the existing roadway and no mitigation is recommended.

Julian's Way is a neighborhood road providing access to Crescent Avenue for 34 existing single family homes. Based on ITE trip generation data, the existing homes currently generate approximately 26 trips to and from Crescent Avenue during the AM peak hour and 34 trips to and from Crescent Avenue during the PM peak hour. With construction of the proposed project, 15 homes will have access to Julians Way through an extension of the roadway to Kaydeross Park Road. The proposed 15 homes will generate approximately 11 trips during the AM peak hour and 15 trips during the PM peak hour, resulting in one additional trip every four to five minutes during the peak travel periods. Both Julians Way and Kaydeross Park Road intersect Crescent Road to the north which will be used by all residents when traveling to and from the neighborhood. Based on the location of the proposed homes along the extended Julians Way, it



is anticipated that a percentage of drivers of the new homes will enter and exit via Kaydeross Park Drive when traveling to and from their homes. Regardless of the distribution of trips, the very low increase of traffic on both Julians Way and Kaydeross Park Drive will be accommodated for by the existing roadway network and no mitigation is recommended.

The proposed plan includes a boulevard at the approach to the existing Julians Way and at the intersection with Kaydeross Park Drive. The boulevard design is consistent with existing features along Julians Way and will provide a traffic calming effect for residents travelling along the roadway. The project also includes the construction of sidewalks along both sides of the extension of Julians Way, which will connect to the existing sidewalks on Julians Way. The extension of Julians Way to Kaydeross Park Drive with boulevards and sidewalks follows good access management principles by minimizing dead end roadways, providing connectivity to an existing roadway reducing the number of new curb cuts, and providing access for all users.

There is access to other existing homes to the south of the site that currently travel to and from the neighborhood via Arrowhead Road or Kaydeross Park Road. The introduction of the extension of Julians Way to the neighborhood does not create a shorter or more direct route to Crescent Avenue than the existing routes using Arrowhead Road and/or Kaydeross Park Road. These two roadways will remain the most direct and attractive travel routes.

The proposed Julians Way extension will intersect Kaydeross Park Drive approximately 130 feet south of Lakeview Road (centerline to centerline). The separation between the two low volume intersections is enough so that the intersections operate independently and vehicle maneuvers at each intersection can be made without conflicts. The intersection spacing does not provide a safety concern.

Conclusions

VHB has conducted a traffic evaluation for the proposed Kaydeross Park Drive Subdivision in the City of Saratoga Springs. The proposed project includes the construction of 22 single family homes; seven with access to Arrowhead Road and the remaining 15 will have access to Crescent Avenue and Kaydeross Park Drive via an extension of Julians Way. The following is noted regarding the traffic evaluation:

- The proposed Julians Way extension will intersect Kaydeross Park Drive approximately 130 feet south of Lakeview Avenue. The intersection spacing is adequate and does not provide a safety concern.
- The proposed project is expected to generate 17 vehicle trips (4 entering, 13 exiting) during the AM peak hour and 22 vehicle trips (14 entering, 6 exiting) during the PM peak hour. This magnitude of traffic increase is less than the NYSDOT and ITE vehicle trip thresholds of 100 vehicle trips; therefore, the increase in traffic will be accommodated for on the existing roadway network and no off-site mitigation is recommended.
- The layout of the site results in a maximum increase of 11 vehicle trips on the existing Julians Way during the AM peak hour and 15 vehicle trips during the PM peak hour; one additional trip every four to five and a half minutes. Based on the location of the proposed homes along the extended



Julians Way, it is anticipated that a percentage of drivers of the new homes will enter and exit via Kaydeross Park Drive when traveling to and from their homes.

- Traffic on Arrowhead Road will increase by six trips during the AM peak hour and seven trips during the PM peak hour; one additional trip every eight to ten minutes. This magnitude of traffic increase can be accommodated by the existing roadway network.
- The extension of Julians Way to Kaydeross Park Drive with boulevards and sidewalks follows good access management principles by minimizing dead end roadways, providing connectivity to an existing roadway reducing the number of new curb cuts, and providing access for all users.
- The introduction of the extension of Julians Way to the neighborhood does not create a faster or more direct route to Crescent Avenue than the existing Arrowhead Road and Kaydeross Park Road. These roads will remain the most direct and attractive travel routes.

If you have any questions on the above information, please call.

Sincerely,

VHB Engineering, Surveying and Landscape Architecture, P.C.

A handwritten signature in black ink, appearing to read "Wendy C. Holsberger".

Wendy C. Holsberger, PE, PTOE

Director of Transportation
wholsberger@vhb.com

A handwritten signature in black ink, appearing to read "Alanna M. Moran".

Alanna M. Moran

Senior Traffic Designer
amoran@vhb.com

Attachment

cc: Joe Dannible, EDP