

June 16, 2019

Pete Parent, PE
CME Associates Inc.
33 Wilbur Cross Way, Suite 105
Mansfield, CT 06268

**RE: Traffic Assessment
Sunfox Campground – Lisbon, Connecticut**

Dear Pete,

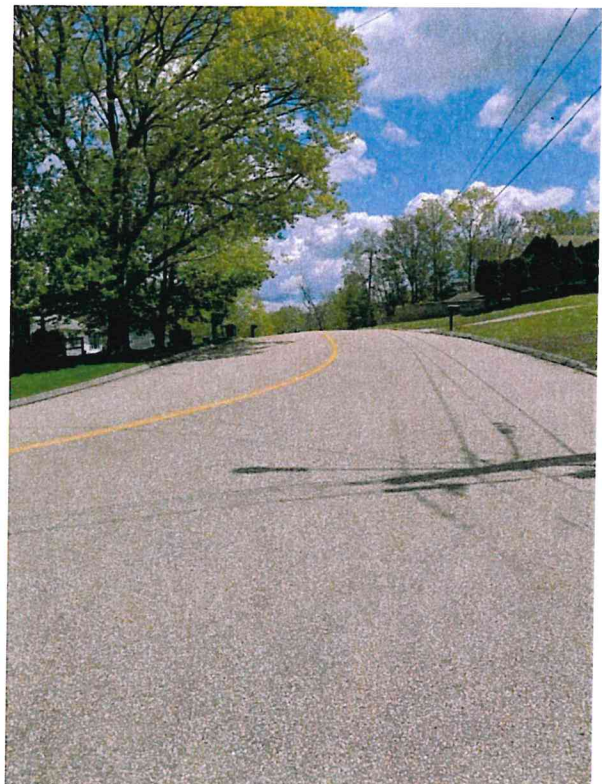
Tessera Engineering prepared this traffic assessment in support of a site plan approval for the proposed expansion of the Sunfox Campground from 80 sites to a total of 160 sites. The owner proposes to install a new driveway located either where Kenyan Road turns into Strnad Road or on Kendall Road approximately 2,800 feet west of Route 169 (South Burnham Highway).

Intersection Sight Distance Analysis

At the corner of Kenyan Road at Strnad Road, the sight distance to the right (up Strnad Road) is limited to approximately 100 feet by the vertical curve in the roadway. This is less than the required sight distance of 350 feet for a roadway with a design speed of 25 miles per hour. To the left (north) there is an unobstructed view to the cul-de-sac at the end of the road, approximately 525 feet. This is adequate to provide safe egress to the right (east) from the site. Left turns from this driveway should be prohibited.

The required sight distance for a design speed of 35 mph on Kendall Road and an SU-30 design vehicle (CT DOT design vehicle with the closest characteristics to an RV or pickup with camper trailer) on Kendall Road is 490 feet. Tessera measured the sight distance to the left (west) from the proposed driveway location to be 630 feet.

To the right (east) the sight distance was limited by vegetation on the south side of the



Limited sight distance on Strnad Road

road adjacent to the Blissville Brook culvert. With vegetation clearing and maintenance, 500 feet of sight distance is attainable, meeting the CT DOT requirements to provide safe egress from the site. Care should be taken not to place signs, fencing or other objects within the sight triangle.

It should be noted that the 85th percentile speeds measured on the roadway were 50 miles per hour, or 20 miles per hour over the posted speed limit. I recommend limiting traffic to right turns only exiting the driveway or installing warning sign W10-1d on westbound Kendall Road approximately 125 feet in advance of the horizontal curve in the road to alert drivers to the presence of the campground driveway at the end of the curve.



Vegetation to be cleared on Kendall Road



Traffic Volumes

The 10th edition of the Trip Generation Manual published by the Institute of Transportation Engineers is an industry standard publication for calculating site generated trips. This publication has limited data available for campgrounds. This is typical of uses that do not generate significant traffic, do not generate traffic during the adjacent street peak hours, and/or have insufficient data submitted to ITE.

To estimate the number of trips expected to and from the 80 new campsites, traffic volumes were counted at the existing driveway on Kenyon Road over Memorial Day weekend, Friday May 24, 2019 and Saturday May 25, 2019. Memorial Day weekend is typically the highest-volume weekend of the year for campgrounds.

A total of 42 trips (29 entering, 13 exiting) occurred during the Friday afternoon peak hour of the campground. During the Saturday peak hour of the campground, a total of 39 trips (21 entering, 18 exiting) occurred. These are also the anticipated peak hour volumes for the 80 site expansion to the campground.

An Automatic Traffic Recorder (ATR) was placed on Kendall Road over Memorial Day weekend May 24, 2019 and May 25, 2019 to record traffic volumes and 85th percentile speeds. During the weekday afternoon peak hour of the adjacent street traffic, 3:15 pm, to 4:15 pm, the eastbound volume on Kendall Road was 51 vehicles and the westbound volume was 40 vehicles. Traffic volumes during the Saturday peak hour from 2:30 pm to 3:30 pm were 41 eastbound and 33 westbound.

Collision Analysis

Tessera obtained crash data from the Connecticut Crash Data Repository for the most recent three years of available data, 2016 to 2018. During the three-year period of study there were no recorded crashes on this segment of Kendall Road.

Recommendations

The existing traffic volumes on Kenyon Road and Kendall Road are very low and minimal trip generation of less than 50 vehicle trips is expected during both the Friday afternoon and Saturday peak hours on the busiest camping days of the year.

The following recommendations are proposed to provide safe egress from the site:

- Refrain from placing signs, fencing or other objects within the sight triangles at the proposed driveway.
- If the driveway is located on Kenyon Road, traffic exiting the site should be limited to right turns only.
- If the driveway is located on Kendall Road, limit exiting driveway traffic to right turns only or install warning sign W10-1d on westbound Kendall Road approximately 125 feet in advance of the horizontal curve in the road to alert drivers to the presence of the campground driveway at the end of the curve.
- If left turns are allowed from the driveway on Kendall Road, clear vegetation near Blissville Brook to provide adequate sight distance to the right (east) from the proposed driveway location on Kendall Road.

It is my professional opinion that with the recommendations outlined above, the proposed development will not negatively impact the operations of the surrounding roadway network. If you have any questions or require further information, please contact me at (860) 698-1230 or tschwartz@tesseraengineering.com.

Sincerely,
Tessera Engineering



Theresa Schwartz, PE, PTOE
Principal