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**Re: Bare Bones Distillery, #705/#719 Closson Road, Prince Edward County
c/o RFA Planning**

Subject: Commercial Entrance / Traffic Brief

Project Number: 2138425

Having visited the subject property and reviewed the available documents, the following is provided in support of the development application process.

Existing Conditions

The subject property is located at 705 / 719 Closson Road in Prince Edward County. An aerial and street level image of the property and building being converted is provided below.

There is an existing house and small farm building that will remain unchanged and a larger single storm concrete block barn that will be converted into a distillery.



Closson Road is a rural, 2 lane municipal road. Despite the rural environment Closson Road has a posted speed of 50 km/h.

Traffic activity is a mixture of local, tourism and agricultural. While there has been a significant influx of winery and other rural commercial businesses, traffic

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volumes remain low.

The property currently has 3 gravel entrances. One for the house and two for farm vehicle access.

Proposed Development

The existing residential home will remain unchanged.

The smaller of the two existing farm buildings will remain unchanged.

The larger existing single storey concrete block farm building will be converted into a distillery.

A construction schedule and opening date is not known.

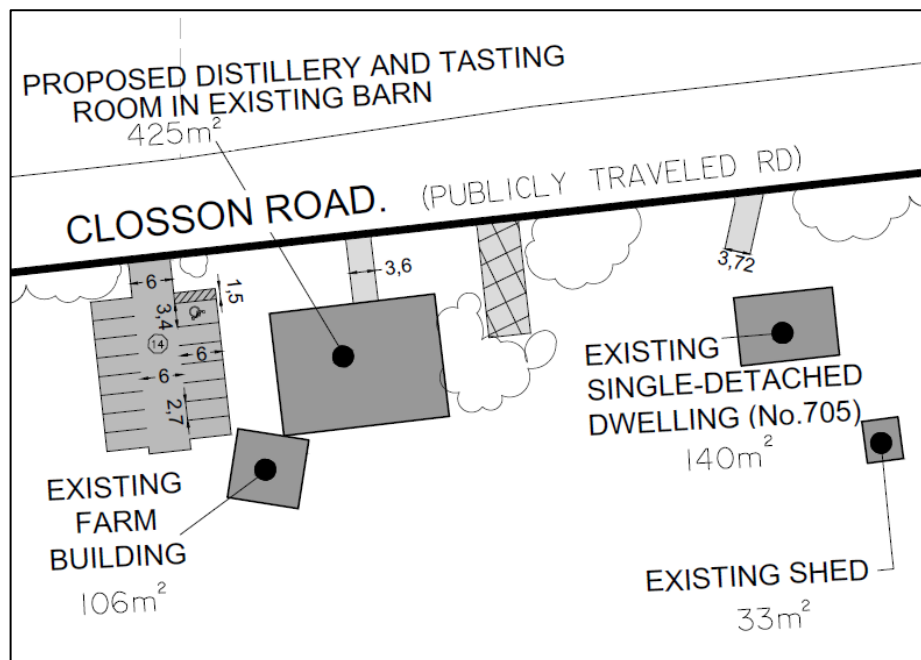
It is proposed that the existing house entrance remain unchanged and the two farm entrances be removed and replaced with a new single entrance west of the farm buildings.

Similar to other wineries on this and surrounding roads, it will be accessed via a gravel entrance and parking provided by a gravel parking lot (15 spaces).

The principal function of the property (based on occupied area) will remain agricultural.

It is understood the converted structure will have a mixture of distillery, tasting and boutique product sales services.

A preliminary proposed site plan provided by RFA Planning is attached for reference. (While this plan is likely to change as the development process proceeds, the scale and fundamental elements will remain similar.)



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Trip Generation

It is difficult to estimate peak hour traffic activity for a small boutique style business such as this but even if full parking lot turnover is assumed during the peak hour a modest 15 trips would enter and exit the site.

Traffic Volumes / Entrance Level of Service

Due to COVID restrictions and the time of year this document was drafted, collection of detailed existing traffic counts was not possible. Based on the available County traffic counts and site observations, its clear existing traffic volumes are low and detailed counts are not necessary.

The County was able to provide the background traffic counts below:

ROAD	DESCRIPTION	TRAFFIC VOLUME (24h)	POSTED SPEED	Date of Counts
CLOSSON ROAD	175 metres North of Danforth Rd	126	50	July 11, 2012
		239	50	August 8, 2018
CLOSSON ROAD	280 metres West of County Rd 2	222	50	June 17, 2014
		484	50	August 8, 2018

The County's population has been expanding at a rapid pace for some time now and is likely to continue doing so into the future. Looking at the worst case count and more relevant location "280m west of County Road 2" it is felt likely that the 22% increase over the 4 years between these records would have continued resulting in a current daily traffic count estimate in the order of 868 vehicles per day.

Following Ontario Good Roads Association procedure for relating shorter duration counts to AADT, if a current AADT of 868 vehicles is presumed; approximately 30% (261 vehicles) of that daily volume can be assumed to occur during the 4 hours between 2-6 pm; leaving roughly 65 vehicles (total in both directions) for the peak pm hour.

RFA's concept plan shows 15 parking spaces.

Allowing for a total of 65 vehicles on Closson Road; split 50/50 directionally; full turnover of the proposed parking spaces; and some additional cushion for conservative estimates we believe these volumes would fall well short of a concern from typical volumetric measurables and warrants.

Accordingly, we do not believe traffic modelling is necessary and the entrance will comfortably operate at an acceptable level of service with the proposed distillery works.

Entrance Safety

We are not aware of any existing concerns or history of accidents associated with this subject entrance. However, with the addition of the proposed commercial use an appropriate line of sight should be confirmed.

1. Ministry of Transportation Highway Access Management Guideline

The MTO Highway Access Management Guideline has been used as a line of

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sight standard in other instances in the County and is assumed to be the applicable standard in this case.

Stopping sight distance is from the point of view of a motorist travelling on the road. It is the distance that a motorist should be able to see to stop safely. This is the minimum standard that should be met.

Stopping Sight Distance (Table 9)

- Posted speed of 50 km/h (design speed +20 km/h).
- Roughly flat approach grade.
- Distance Required = 105m

The entering sight distance is from the point of view of a motorist waiting to enter or cross the highway. It is the distance a motorist should be able to see to safely enter the road and accelerate to the posted speed without being overtaken by an approaching vehicle.

Entering Sight Distance for 2 Lane Highways (Table 7)

- Commercial access.
- Posted speed of 50 km/h (design speed +20 km/h).
- Roughly flat approach grade.
- Distance Required = 225m

While meeting the entering sight distance standard is desirable, it is not necessarily a requirement. Maximizing the available line of sight to minimize the impact on through traffic while existing traffic accelerates is recommended.

There are existing entrances along the property frontage that to the best of our knowledge have been operating in a safe manner to date.

2. Transportation Association of Canada Geometric Design Guide (TAC)

It's noted that similar line of sight requirements are stated in the TAC Manual and are provided below for additional reference.

Stopping Sight Distance (Table 2.5.2 – Automobiles on level wet pavement)

- Roadway grade = less than 3%, no adjustment required.
- Posted speed of 50 km/h (design speed +20 km/h).
- Distance Required = 105m

Intersection Sight Distance: Right Turn (Table 9.9.6 – Automobile; Grade<3%)

- Distance Required = 130m

Intersection Sight Distance: Left Turn (Table 9.9.4 – Automobile; Grade<3%)

- Distance Required = 150m

Site Observations

A site visit was conducted on Sunday May 16th, 2021.

During the site visit, previous descriptions of existing conditions were confirmed.

While on site a total of 3 vehicles were observed over a period of 30 minutes. (It is acknowledged these observed traffic conditions represent lower than typical traffic volumes due to the COVID restrictions in place.)

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Field Measurements

Site distance measurements taken on site involved parking a vehicle in approximate location of the proposed entrance, walking either direction on the municipal road checking visibility from each lane back to the parked car.

Distance measurements were taken with a measuring wheel.

Travelling west, Closson Road is straight and flat. Line of sight is good and satisfies sight distance requirements.

Travelling east, Closson Road is straight and generally flat. There is a small roll in the vertical grade but this is not sufficient to affect driver visibility. Line of sight requirements are satisfied.

(Note: Field measurements are approximate, to some degree judgment based and affected by conditions such as roadside vegetation that can vary over time. Accordingly, some variation can be expected in these measurements from person to person or from time to time during the year.)

See attached images showing existing sightlines.

Regular maintenance of roadside vegetation and avoiding visual obstructions at the entrance is recommended.

Fire / Emergency Access

Based on Ontario Building Code requirements, an access must be provided for fire department (and emergency vehicle access) that shall:

- Have a clear width not less than 6m.
- Have a centreline radius not less than 12m.
- Have an overhead clearance not less than 5m.
- Have a change of gradient not more than 1 in 12.5 (8%).
- Be designed to support the expected loads imposed by firefighting equipment and be surfaced with concrete, asphalt or other material designed to permit accessibility under all climatic conditions.
- Have turnaround facilities for any dead-end portion of the access route more than 90m long.
- Be connected to a public thoroughfare.

The proposed parking facilities will satisfy these requirements including the following elements of note:

- Parking isle width will be equal to or greater than 6m.
- No centreline radius is required for the proposed access and parking layout.
- There will be no overhead obstructions.
- The surface will be more or less 'flat' with a minimal grade to shed surface water.
- A compacted gravel surface constructed in a manner that will provide year round access if such access is required.
- The access route will be less than 90m long and therefore no turnaround is required, but, the entire parking surface will be available to assist with vehicle turn around as might be required.
- Will be connected to Closson Road.

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May 19th, 2021



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Conclusion

Based on site observations; applicable standards; a lack of previous safety concerns; and our understanding that the proposed development expansion will not significantly affect existing traffic activity, we believe the proposed entrance will be acceptable for the proposed farm building conversion.

If there are any questions or comments, please contact the undersigned.

Yours very truly,
THE GREER GALLOWAY GROUP INC.
CONSULTING ENGINEERS



Matthew McIntosh, P. Eng.
Senior Engineer / Project Manager

Attachments:

1. Site Visit Photos (x2)

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Photo 1: Existing West Entrance Looking West



Photo 2: Existing West Entrance Looking East

