



Pilgrim's Rest Campground

Fire Route 24 Access

Township of North Kawartha

Traffic Impact Statement

Final Report

Prepared by:

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Prepared for:

Royal Homes Limited

Per EcoVue Consulting Services

August, 2016

August 29, 2016

EcoVue Consulting Services Inc.
311 George St. North, Suite 200
Peterborough ON K9J 3H3

**Attn: Peter Josephs,
Senior Planner**

Dear Sir:

**RE: Fire Route 24 Entrance Assessment - Pilgrim's Rest Campground
2250 Northey's Bay Road, Peterborough County Road 56**

1.0 BACKGROUND

In November, 2011 Tranplan Associates completed a traffic impact assessment for the proposed relocation of the site entrance to *Pilgrim's Rest Campground*. The entrance was relocated from Peterborough County Road (CR) 56 also known as Northey's Bay Road to the adjacent Cheboutequion Road (see *Exhibit 1 - Key Map*). The study was carried as part of an overall redevelopment plan for the *Pilgrim's Rest Campground* that will see the site converted from the existing seasonal campground operation to a recreational condominium development.

As part of the ongoing redevelopment plans, Tranplan Associates has been retained to complete an assessment of the current Fire Route (FR) 24 entrance to Cheboutequion Road. This entrance is now being considered as an additional access point to accommodate 3 lots in the redeveloped *Pilgrim's Rest* site as illustrated in *Exhibit 2 - Site Plan*.

2.0 SITE VISIT

Tranplan Associates staff completed a site visit to the Cheboutequion Road corridor on May 18, 2016 to assess the potential use of the FR 24 access as an additional site entrance location for the redeveloped *Pilgrim's Rest Campground*. The assessment consisted of the following evaluations:

2.1 The Posted Speed Limit

The posted speed limit on this section of Cheboutequion Road is 40 kph. This is an acceptable speed limit for a local rural road that provides access to recreational homes in a shoreline environment. Sight line requirements that would normally be associated with an unposted rural road are normally based on 80 kph standards. In the case of Cheboutequion Road, sight lines can be based on the lower 40 kph posted speed.

2.2 Available Sight Distance at the FR 24 Entrance

The sight lines for the FR 24 entrance to Cheboutequion Road were measured following current County and Ministry of Transportation Ontario (MTO) procedures for assessing turning sight distances (TSD) at entrances¹ to adjacent roadways. The TSD to the south around the horizontal curve (see *Exhibit 3*) was measured and found to be about 90 - 92 m. This particular sight line is limited by the horizontal curve on Cheboutequion Road south of the FR 24 entrance. If the “inside” of the curve were brushed out within the right-of-way (ROW), it would likely provide up to an additional 5 m of sight distance. It is noted that the 90 m of available stopping sight distance (SSD) will meet MTO requirements for a speed of 60 - 65 kph. The TSD was then measured to the north along Cheboutequion Road and found to be over 170 m. This sight distance is limited by a crest vertical curve north of the FR 24 entrance. The available SSD in both directions exceeds the SSD requirements for the posted speed of 40 kph.

2.3 The Angle of Intersection of the FR 24 Alignment

The FR 24 alignment meets the Cheboutequion Road alignment at an angle of about 108 degrees of arc as illustrated in *Exhibit 1*. This is an acceptable angle of intersection based on current Transportation Association of Canada (TAC) criteria. The TAC standards allow road intersection angles ranging from 70 to 110 degrees of arc.

2.4 Future Traffic Volumes

Cheboutequion Road is forecast to carry about 30 - 35 vehicles per hour (vph) during future summer peak hour periods. With these relatively low volumes, the Cheboutequion Road corridor will be able to accommodate additional traffic from 3 new lots in the south portion of the *Pilgrim's Rest* development. These lots are proposed to front directly onto FR 24 as illustrated in *Exhibit 2 – Concept Plan*. *Exhibit 2* illustrates a concept plan that is an ongoing working draft.

2.5 The FR 24 Corridor

Fire Route 24 has a rural cross-section with a 4.0 m gravel platform from the vicinity of a potential Pilgrim's Rest access point to the intersection with Cheboutequion Road. The alignment of FR 24 from this potential access location to Cheboutequion Road is relatively straight with a uniform grade line (see *Exhibit 4*). The overall FR 24 cross-section and geometrics should be assessed against current Township standards to determine if any geometric improvements might be required to bring FR 24 up to Township standards for a private recreational access road.

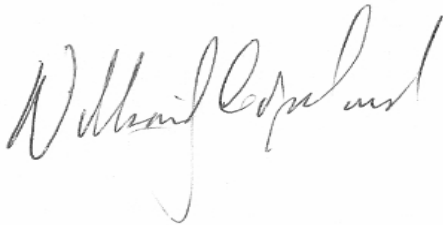
¹ See “Visibility”, pg. 2 and Table 1 pg.6, Commercial Site Access Policy and Standard Designs, MTO, 1994.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Fire Route 24 and its intersection with Cheboutequion Road will provide acceptable access for 3 new lots to be located in the southern portion of the proposed *Pilgrim's Rest* development. This conclusion is supported with a set of field observations and measurements described above in *Section 2.0*. The FR 24/Cheboutequion intersection has sufficient turning sight distance for drivers to select acceptable gaps in Cheboutequion Road traffic stream. Cheboutequion Road has sufficient residual traffic capacity to accept any additional traffic from the 3 lots in the *Pilgrim's Rest* development that will utilize the FR 24 access.

On behalf of Tranplan Associates I would like to thank you for the opportunity to work with your study team on this project. If we can be of any further assistance please contact me at your convenience.

Yours truly,



William Copeland, P.Eng.

WJC/tlg

EXHIBITS

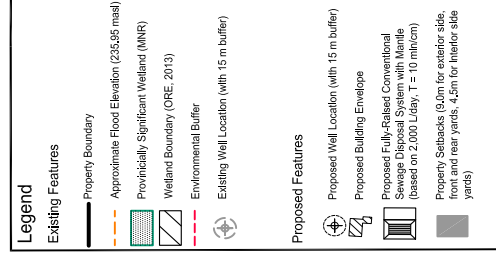
Exhibit 1

Key Map - Pilgrim's Rest



Exhibit 2 Concept Plan

Lot #	Area (ha)	Road Frontage (m)
1	0.44	59.6
2	0.56	59.0
3	0.51	78.2
4	0.55	48.2
5	0.55	46.3
6	0.66	39.7
7	0.57	59.5
8	0.57	59.5
9	0.57	42.9
10	0.50	42.8
11	0.51	42.4
12	0.53	48.8
13	0.52	51.7
14	0.50	51.7
15	0.53	51.9
16	0.46	66.8
17	0.44	51.3
18	0.46	42.3
19	0.47	42.3
20	0.46	59.2
21	0.50	59.5
22	0.51	57.6
23	0.52	39.7
24	0.51	39.7
25	0.51	39.4
26	0.49	52.4
27	0.43	64.3
28	0.41	40.7
29	0.50	40.7
30	0.52	42.4



**3 Lots with Access
To FR 24**



PROJECT NO: 14-1468
DATE: July 29 2016
HORIZ. SCALE: 1:1,500

Concept Plan
Pilgrims Rest Condominium

Part of Lot 3 and 4 Concession 11
Burleigh Ward, Township of North Kawartha

Exhibit 3 FR 24 Intersection

Sight Distance Looking South
Along Cheboutequion Drive



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Sight Distance Looking North
Along Cheboutequion Drive

Possible Additional Access



Cheboutequion Drive

Exhibit 4 Fire Route 24

**Looking West towards
Cheboutequion Drive**



Peterborough County Cr
Main Entrance

**Looking East towards
Pilgrim's Rest Lots**



Possible Additional Access

Cheboutequion Dr.