



Ref. No. DA10530

December 8, 2010

[REDACTED]
HRM Community Development
PO Box 1749
HALIFAX NS B3J 3A5

**RE: Traffic Impact Statement, Proposed Finntigh Mara Residential Development,
Kirk Road, Halifax, Nova Scotia**

Dear [REDACTED]

[REDACTED] is preparing plans for development of an approximately three acre estate property on Kirk Road, Halifax, in the area illustrated on Figure 1. While two as-of-right site plans which yield approximately 16 residential lots have been considered (Figures 2 and 3), the preferred development scenario is the Finntigh Mara Bare Land Condo Scheme (Figure 4) which provides approximately 14 residential lots. This is the Traffic Impact Statement (TIS) required to accompany the development application.

Description of Study Area - The proposed development area is adjacent to the western side of the Northwest Arm (Figure 1). The three development schemes have varying connections to the local street network in the study area as illustrated on Figures 1 to 4. While some site generated trips may use Albion Road to access Purcell's Cove Road, most trips that will be generated by this development are expected to access the regional street network at the Parkhill Road / Purcell's Cove Road intersection which has All-Way STOP traffic control.

Traffic Volumes - A manual turning movement count was obtained at the Parkhill Road / Williams Lake Road / Purcell's Cove Road intersection during AM and PM peak travel periods on Wednesday, November 10, 2010. The counted volumes are tabulated in Table A-1, Appendix A, with AM and PM peak hours indicated by shaded areas.

The manual count indicated that Parkhill Road has very low peak hour volumes at the Purcell's Cove Road intersection including an AM peak hour two-way volume of 45 vehicles per hour (vph) and a PM peak hour two-way volume of 49 vph. Purcell's Cove Road has moderate volumes north of the intersection including an AM peak hour two-way volume of 511 vehicles per hour (vph) and a PM peak hour two-way volume of 407 vph.

Intersection Performance - Since existing volumes on Parkhill Road are very low and other intersection approach volumes are moderate, the All-Way STOP control and the Parkhill Road / Williams Lake Road / Purcell's Cove Road intersection provides very good levels of traffic performance during AM and PM peak hours.



DEVELOPMENT AREA



SHEET DESCRIPTION

STUDY AREA

FIGURE 1

PROJECT

Traffic Impact Statement - Proposed Residential Development
KIRK ROAD, HALIFAX, NS

GENIVAR



**Description of Local Road Site
Accesses**

- While 12 of the proposed 16 lots included in the as-of-right development scheme illustrated in Figure 2 access the local street system via Marine Drive, only one lot shown on the other as-of-right scheme (Figure 3) and the Bare Land Condos scheme access Marine Drive. Marine Drive is a short cul-de-sac that connects to the east end of Parkhill Road (Figure 1).

McManus Road and Kirk Road (Figure 1) provide the primary local road accesses for the as-of-right scheme in Figure 3 and the Bare Land Condos scheme (Figure 4). While both McManus Road and Kirk Road are narrow roads as illustrated in Photos 1 to 4, they have very low traffic volumes and serve only local traffic. The existing narrow roads have preserved the rustic and scenic nature of this area for many years.



Photo 1 - Looking east on McManus Road towards the Northwest Arm at the cul-de-sac intersection for Figure 3 and Roost Road intersection of the Bare Land Condo scheme (Figure 4).



Photo 2 - Looking west on McManus Road towards Kirk Road at the cul-de-sac intersection for Figure 3 and Roost Road intersection of the Bare Land Condo scheme (Figure 4).

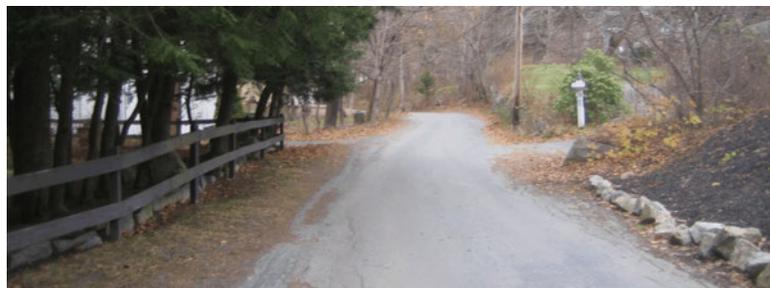


Photo 3 - Looking north on Kirk Road towards the McManus Road intersection from the frontage area of Lots 1, 2, and 3 of the as-of-right schemes (Figures 2 and 3) and the Finntigh Lane intersection of the Bare Land Condo Scheme (Figure 4).



Photo 4 - Looking south on Kirk Road towards the Parkhill Road intersection from the frontage area of Lots 1, 2, and 3 of the as-of-right schemes (Figures 2 and 3) and the Finntigh Lane intersection of the Bare Land Condo Scheme (Figure 4).

Trip Generation - Trip generation estimates (Table 1) have been prepared using published data from *Trip Generation, 8th Edition*. The following peak hour trip generation has been estimated for proposed development schemes:

- 16 residential units - 12 vph (3 vph entering and 9 vph exiting) during the AM peak hour and 16 vph (10 vph entering and 6 vph exiting) during the PM peak hour.
- 14 residential units - 11vph (3 vph entering and 8 vph exiting) during the AM peak hour and 14 vph (9 vph entering and 5 vph exiting) during the PM peak hour.

Land Use ¹	Units ²	Trip Generation Rates ³				Trips Generated ⁴			
		AM Peak		PM Peak		AM Peak		PM Peak	
		In	Out	In	Out	In	Out	In	Out
Single Family (Land Use 210)	16	0.19	0.56	0.64	0.37	3	9	10	6
Single Family (Land Use 210)	14	0.19	0.56	0.64	0.37	3	8	9	5

NOTES: 1. Land Use Codes are from *Trip Generation, 8th Edition*, Institute of Transportation Engineers, Washington, 2008.
 2. 'Number of residential units' for single family detached dwellings.
 3. Trip generation rates are 'vehicles per hour per unit'.
 4. Trips generated are 'vehicles per hour' for AM and PM peak hours

Summary and Conclusions -

1. The proposed development of approximately three acres will include 14 to 16 single family residential units depending on the final development scheme. While some site development trips may use Albion Road, most trips are expected to access the regional street network at the Parkhill Road / Purcell's Cove Road intersection which has All-Way STOP traffic control.
2. Trip generation estimates for 16 residential units include about 12 vehicles trips (3 vph entering and 9 vph exiting) during the AM peak hour and 16 trips (10 vph entering and 6 vph exiting) during the PM peak hour. Trip generation estimates for 14 residential units include about 11 vehicles trips (3 vph entering and 8 vph exiting) during the AM peak hour and 14 trips (9 vph entering and 5 vph exiting) during the PM peak hour.
3. Parkhill Road has very low peak hour volumes at the Purcell's Cove Road intersection including an AM peak hour two-way volume of 45 vehicles per hour (vph) and a PM peak hour two-way volume of 49 vph. Purcell's Cove Road has moderate volumes north of the intersection including an AM peak hour two-way volume of 511 vehicles per hour (vph) and a PM peak hour two-way volume of 407 vph.
4. Since AM and PM trip generation estimates are low, trips generated by this development are not expected to have any significant impact to the level of performance of the local road system, the Purcell's Cove Road / Parkhill Road intersection, or the regional road network.

If you have any questions or comments, please contact me by Email to ken.obrien@genivar.com or telephone 443-7747.

Sincerely:



Ken O'Brien, P. Eng.
Senior Traffic Engineer
GENIVAR Consultants Limited Partnership



<p>Table A-1</p> <p>Purcell's Cove Road</p> <p>@</p> <p>Williams Lake Road / Parkhill Road</p> <p>Halifax, Nova Scotia</p> <p>Wednesday, November 10, 2010</p>													
Time	Purcell's Cove Road Northbound Approach			Parkhill Road Westbound Approach			Purcell's Cove Road Southbound Approach			Williams Lake Road Eastbound Approach			Total Vehicles
	A	B	C	D	E	F	G	H	I	J	K	L	
07:30-07:45	15	55	0	0	0	9	3	9	8	65	1	12	177
07:45-08:00	8	50	0	3	1	7	1	13	7	40	2	15	147
08:00-08:15	12	47	0	0	0	4	3	6	14	37	4	15	142
08:15-08:30	17	46	0	1	2	3	1	21	17	45	0	14	167
08:30-08:45	15	33	0	0	3	3	1	11	27	34	2	12	141
08:45-09:00	17	39	1	0	1	4	0	16	8	22	1	10	119
AM Peak Hour	52	198	0	4	3	23	8	49	46	187	7	56	633
15:30-15:45	13	23	0	0	1	2	2	31	21	15	3	17	128
15:45-16:00	8	21	2	0	3	2	6	28	30	15	3	16	134
16:00-16:15	13	24	1	2	2	2	2	29	32	9	2	15	133
16:15-16:30	14	21	0	0	5	1	2	24	20	11	3	14	115
16:30-16:45	10	20	1	0	0	1	2	23	35	16	2	13	123
16:45-17:00	16	12	0	0	2	1	10	41	32	13	5	12	144
17:00-17:15	9	18	0	0	3	2	5	30	38	29	4	18	156
17:15-17:30	7	14	0	1	0	4	6	29	26	8	2	13	110
PM Peak Hour	49	71	1	0	10	5	19	118	125	69	14	57	538