

Project No.: 18003

January 25, 2019

Dual Mechanical Ltd.  
208- 19232 Enterprise Way  
Surrey, BC V3S 6J9

Attention: **Mr. Jason Collett**

Dear Sir:

**Re: Sorrento Village Centre Development, Sorrento BC  
Traffic Review**

**COST**

**TIME**

**QUALITY**

We are pleased to provide the following review of traffic generated by the proposed 84 modular home residential and commercial development. The site location is shown on the **Figure 1** air photo on the following page.

In support of the anticipated traffic generation from the project, we have reviewed the existing configuration and condition of the roadway infrastructure for the Trans-Canada Highway, Notch hill Road and McKenzie Road. Access to the site is planned via the existing shared commercial access off of the Trans-Canada Highway, and via a new access onto Notch Hill Road at the southern end of the site. There is an emergency access planned at the interface of the residential and commercial zones, allowing for egress from the residential site in the event of a disruption of access at the Notch Hill exit from the site. The proposed site development plan is as per the attached Franklin Engineering Ltd. Preliminary Layout Plan.

#### **A) Background Information**

In support of our review, we have reviewed the following documents:

- Columbia Shuswap Regional District (CSRD) – Zoning Bylaw No. 701-88;
- Ministry of Transportation and Infrastructure (MoTI) – Traffic Data Report 22-006EW;
- Franklin Engineering Ltd. – Preliminary Layout Plan SK-01 Rev 3 ;
- Google Earth GIS Mapping.

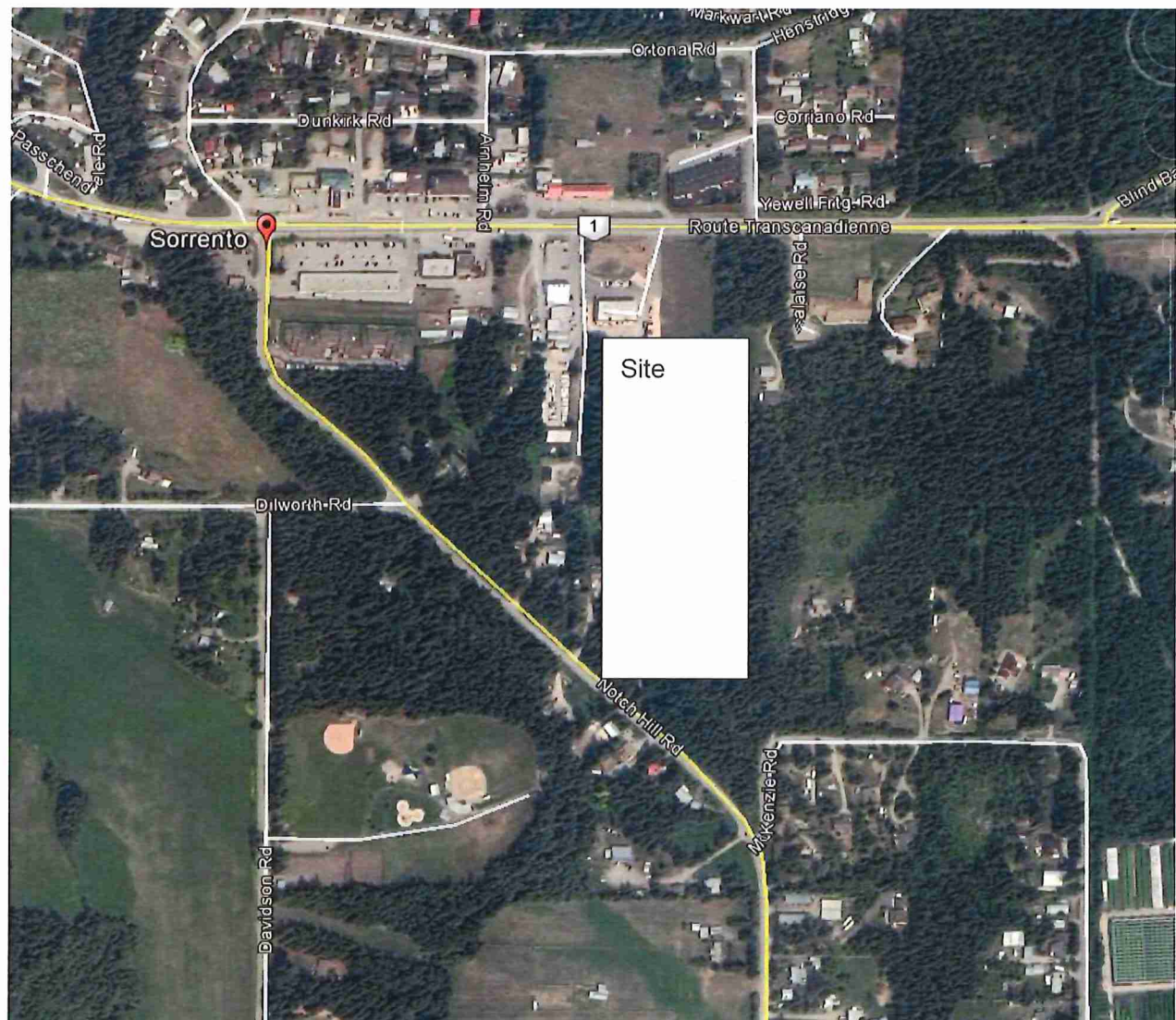


Figure 1 - Site Location

## B) Existing Conditions

Sorrento with a population of 1,300 is an unincorporated area in the Columbia Shuswap Regional District (CSRD) 28 km west of Salmon Arm. The Trans-Canada Highway (TCH) runs east west through the center of Sorrento and is the main artery providing direct access to the commercial core of the area. The TCH is a two lane rural arterial with paved shoulders and has a posted speed of 60 km/hr, with 50 km/hr when children on the Highway warning signage. The MoTI traffic count station 22-006EW located at Squilax, 7 km west of Sorrento, recorded Annual Average Daily Traffic of 6,782 and Summer Average Daily Traffic of 9,362 in 2016.

Notch Hill Road connects with the TCH and provides access to the rural residential and farm lands to the south of the TCH. Notch Hill Road is a two-lane rural collector with gravel shoulders and has a posted speed of 60 km/hr.



### C) Site Generated Traffic

We anticipate the development will generate traffic of a similar proportion and distribution to the Institute of Transportation Engineers Trip Generation 9th Edition Manual for Modular Homes (ITE Land Use Code 240), and Shopping Center (ITE Land Use Code 820) as presented in Table 1:

#### Sorrento Village Centre Development

25-Jan-19

#### ITE Trip Generation Rates - 9th Edition

Description ITE Code	Units	ITE Vehicle Trip Generation Rates (peak hours are for peak hour of adjacent street traffic)								Expected Units	Total Generated Trips			Total Distribution of Generated Trips						
		Weekday	AM	PM	Pass- By	AM In	AM Out	PM In	PM Out		Daily	AM Hour	PM Hour	AM In	AM Out	Pass- By	PM In	PM Out	Pass- By	
Modular Homes 240	Occ. DU	4.99	0.44	0.59		20%	80%	62%	38%	84.0	419	37	50	7	30	0	31	19	0	
Shopping Center 820 (Equation)	KSF <sup>2</sup>	Equations				34%	62%	38%	48%	52%	2.5	617	16	51	7	4	6	16	17	17

DU = Dwelling Unit KSF<sup>2</sup> = Units of 1,000 square feet

Table 1 – ITE Trip Generation Rates

The ITE Trip Generation rates from Table 1 produce the following average weekday traffic volumes:

- AM Peak Hour - 34 out bound trips, 14 inbound trips;
- PM Peak Hour – 53 outbound trips, 47inbound trips.

The Institute of Transportation Engineers Trip Generation 9th Edition Manual is used as an industry standard to provide estimates of vehicle trips for specific developments. The rates are based on information collated from actual traffic studies and presented for the average weekday Peak Hour volumes the specific land use will generate, during normal operations.

Based on a review of the background traffic volumes from the Trans-Canada Highway, combined with the anticipated areas of employment, and commercial activity for the area, we anticipate the following traffic distribution to and from the site:

- 60% of the commercial traffic will be to and from the west and 40% to and from the east;
- 90% of the residential traffic will be to and from the north via Notch Hill Road.
- 40% of the residential traffic will be to and from the west and 60% to and from the east at the Notch Hill Road and TCH intersection.

### D) PEDESTRIAN CONECTIVITY

The residential area adjacent to the site is made up of rural open shoulder roadways, and do not include sidewalks or dedicated bike lanes. There is a cross walk on the TCH on the east side of the Notch Hill Road intersection.

## E) Conclusions

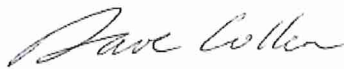
The Ministry of Transportation and infrastructure uses a threshold of 100 trips or more during the PM Peak Hour for anticipated traffic from a proposed development as justification to complete a traffic impact analysis of the development on the adjacent roadways and infrastructure.

With the site anticipated to generate 51 two-way trips during the PM Peak Hour for the commercial site with access on the TCH, and 50 two-way trips during the PM Peak Hour for the residential site with access onto Notch Hill Road, with only emergency access between the two land uses on the site, the requirement for a full traffic impact study and analysis of the adjacent intersections is not warranted for the proposed Sorrento Village Centre development.

We trust the above meets with your requirements. Please contact the undersigned if you have any questions on the above or require further information.

Sincerely,

CTQ CONSULTANTS LTD.



Mr. David D. Cullen, P.Eng.  
Transportation Engineer  
DDC: dc

