

# F.R. Berry & Associates

TRANSPORTATION PLANNING CONSULTANTS

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November 12, 2019

Our Ref. **1969**

B. M. Ross and Associates Limited  
2695 Hamilton Road  
P.O. Box 400  
Bright's Grove ON  
N0N 1C0

Attn. Mr. A. Morfin

Dear Mr. Morfin;

**RE: PROPOSED SARNIA PRODUCE EXPANSION  
707 – 709 LITE STREET, POINT EDWARD**

At your request, I have assessed the potential traffic impact of a proposed expansion to the existing Sarnia Produce business at 707 Lite Street in Point Edward. I understand that this assessment has been requested by the Ministry of Transportation in order to ensure that there are no adverse impacts on the operation of the intersections of Front Street with the Highway 402 ramps.

Sarnia Produce has proposed the construction of a 10 000sf building on an adjacent lot at 709 Lite Street. This lot is currently occupied by a car wash. The location of the site is shown in **Figure 1**. **Figure 2** shows a view of the existing Sarnia Produce building and the adjacent car wash.

**Existing Conditions**

Sarnia Produce is primarily a wholesale purchaser and distributor of fresh fruits and vegetables. Customers include restaurants, stores, institutions, casinos, franchises and other related businesses in Sarnia and Lambton County. In addition to the wholesale operation, Sarnia Produce offers a complete specialty retail area for walk-in customers.

The existing operation is located within a single building with a floor area of approximately 5 400sf. There is a single driveway access to Lite Street. The adjacent car wash contains five self service bays.



Lite Street is a two lane local street providing access between Front Street and the southern part of the Village of Point Edward. The intersection of Lite Street and Front Street is signalized. Each of the Front Street approaches has a dedicated left turn lane, a through lane and a shared through and right turn lane. The eastbound approach on Lite Street has a single shared lane. There is provision for an advanced green indication for northbound and southbound left turns on Front Street.

The intersection of Front Street and the north Highway 402 ramp terminal is unsignalized with stop control on the left turn lane from the exit ramp. The right turn movement from Highway 402 to southbound Front Street is channelized. There are two through lanes in each direction on Front Street and a northbound left turn lane to the Highway 402 on-ramp.

The intersection of Front Street and the south Highway 402 ramp terminals is signalized with an advance green provision from southbound Front Street to the Highway 402 on-ramp eastbound. Front Street has two through lanes in each direction plus a southbound left turn lane. The Highway 402 off-ramp has a left turn lane and a shared through and right turn lane.

### **Proposed Expansion**

Sarnia Produce has proposed the construction of a 10 000sf building dedicated to its retail operation. The site plan is shown in **Figure 3**. The new building will utilize the driveway access to the existing building. It is understood that the driveway will be reconstructed to appropriate current standards.

The existing retail operation specializes in fruits and vegetables. It is expected that the range of products will be expanded in the new facility. However, given its size and the primary focus of the business, it would not be reasonable to compare the proposed expansion with a full service food store or supermarket.

**Table 1** shows estimated peak hour vehicle trip generation based on rates contained in the Institute of Transportation Engineers (ITE) Trip Generation Manual, Tenth Edition, for ITE Land Use 850, Supermarket. These trip generations have been adjusted to reflect the size and nature of the operation and the fact that the existing retail operation is being transferred to the new facility. It was considered that a 50 percent reduction would be a reasonable adjustment.

**Figure 4** shows the assignment of peak hour trips generated by the proposed expansion. The assignment does not include trip generations from the existing facility.





It was estimated that about 20 percent of the new trips would be oriented to and from the west via Lite Street, Helena Street and St. Clair Street. The remainder were split equally among Front Street to and from the north, Front Street to and from the south and Highway 402 to and from the east.

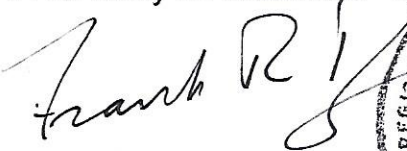
### Analysis

Ministry of Transportation staff have indicated that a traffic impact study brief or letter would be acceptable if it can be conclusively demonstrated that the proposed development would have little or no impact on the capacity or safety of the highway network. The incremental volumes of peak hour vehicle trips expected to be generated by the proposed expansion, as shown in **Figure 4**, meet this condition.

About 10 vehicle trips in the morning peak hour and 25 in the afternoon peak hour, all but 6 of which would be through traffic, would be added to the total traffic passing through the intersection of Front Street and the north ramp terminal. At the intersection with the south ramp terminal, about four vehicle trips would be added in the morning peak hour and 19 in the afternoon peak hour. About six vehicles would be added to each of the Highway 402 entrance and exit ramps in the afternoon peak hour. These volumes would have no significant impact on the operation of the intersections or the highway ramps.

Very truly yours

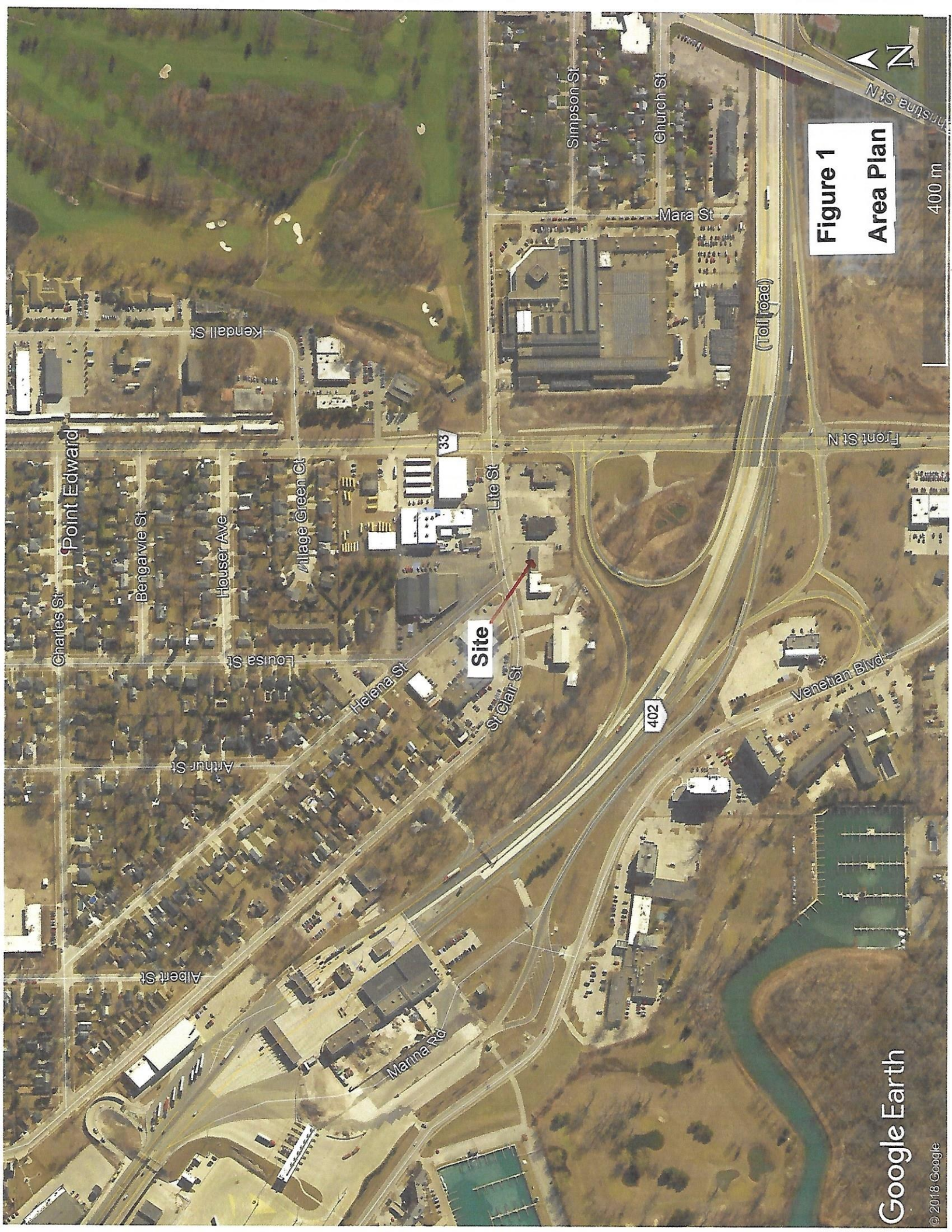
F. R. Berry & Associates



Frank R. Berry, P.Eng.  
Principal







**Figure 1**  
**Area Plan**





**Figure 2**

**Existing Building and  
Expansion Site**





