

# MEMORANDUM



**J.L. Richards  
& Associates Limited**  
864 Lady Ellen Place  
Ottawa, ON Canada  
K1Z 5M2  
Tel: 613 728 3571  
Fax: 613 728 6012

Page 1 of 2

To: Carole Lavigne  
Director of Economic Development and Tourism

Date: December 3, 2020

JLR No.: 28368 – 001.1

CC: Sylvain Charlebois, Consultant  
François Lafleur, EVB

From: Sébastien Racine, Associate, Senior Architect

Re: UCPR Food Hub – Site Requirements REV.2

Based on the most recent reports on the UCPR Food Hub Project, here are the basic site requirements:

- Site Area: 20 acres min.
- Appropriate Zoning
- Adequate Water Supply: approx. 1,400 m<sup>3</sup>/day
  - Peak hour – day shift :525 USgpm (2010 L/min) (8:00 am – 8:00 pm)
  - Peak hour – afternoon shift: 125 USgpm (480 L/min) (5:00 pm – 11:00 pm)
  - Assumed that sufficient storage is available on site to avoid coincident afternoon and morning peaks (approx. 29 m<sup>3</sup>)
- Adequate Sanitary Sewer capacity: approx. 1,400 m<sup>3</sup>/day
  - Domestic wastewater/sewage will be discharged directly to the municipal sewer
  - Process wastewater will be pretreated on site to meet municipal sewer discharge requirements
  - The on-site process wastewater treatment plant will have equalization to maintain a relatively constant flow through the treatment process
  - For current purposes it is assumed that  $1400/24 \times 1.25 = 73$  m<sup>3</sup>/h can be assumed for conveyance capacity. (total daily flow averaged over the day x 1.25 peaking factor)
- Adequate Electrical Service: Daily Avg 16,000kWh, Daily Peak 39,000kWh, Peak Load 3000kW
  - 3000 kVA 600 Volt 3 phase, 4 wire transformer with a 4000 Amp service entrance switchboard or switchgear acceptable
- Adequate Natural Gas Service: Daily Avg. 110,000 MJ. The projected peak natural gas demand is 29,000 MBh based on the following:
  - Assumed 10 ACH ventilation rate in processing areas (nominally 50% of plant area) with 60% heat recovery
  - Representative 30 Btu/h/ft<sup>2</sup> building envelope heating at design condition
  - Water demand peak for overlapping day and afternoon shifts coincide (i.e processing overlaps with initial cleaning operations)
- Adequate Internet Service
- Availability of services in the near future
- Low municipal infrastructure improvement cost / Development Charges
- Low site acquisition cost
- Relatively Good Access to a Major Highway

- Very low or no residential uses on its surroundings

Relevant importance of these requirements and other site considerations can be found in the Site Evaluation Matrix dated July 2020 prepared by JLR.

J.L. RICHARDS & ASSOCIATES LIMITED

Prepared by:



Sébastien Racine, OAA, OAQ  
Associate, Senior Architect