

Presentation to Mayor Kenneth Craig, Council and Staff at the Municipality of Kincardine

January 10th, 2024 at 5 pm

Presented by: Nancy Michie
Chief Administrator
519-357-7344
nancy.michie@bruceenergycentre.com

Subject: Potable Water for the Bruce Energy Centre Industrial Park and 1554 Bruce Road 23

Request:

The Bruce Energy Centre Inc hereby requests that the Council of the Municipality of Kincardine, give consideration for an extension of potable water, to provide potable water for the occupants and owners of land located at the Bruce Energy Centre Industrial Park and 1554 Bruce Road, which will provide potable water for the current Commercial and Industrial uses and for future commercial and Industrial uses.

Background:

We have been in contact with your staff and consultant for the past year, with this request. We realize that potable water is an important factor for a developer who gives consideration to a location of a business and is an important asset for the production of products produced and processed at the site and for staff, who should be provided with safe drinking water at their work place.

We attended the Notice of commencement of the project to update the Master Plan, for water and waste water services:

1. On November 29, 2022, and the Public Information Centres – virtual March 30, 2023 to April 28, 2023 and in-person July 24, 2023.
2. We attended the Council meeting on September 13, 2023, when the extension of potable water to the Bruce Power site was considered by Council.
3. I connected with your Clerk following the October 11th, 2023 Council meeting to confirm that the Council had passed the By-law for the extension of water to Bruce Power.

We followed your process and were advised by your staff to request a presentation to Council with a request for an extension of potable water to the Bruce Energy Centre Industrial Park.

During the process we conversed with:

1. B M Ross Consultants,
2. Adam Weishar- Director of Infrastructure and Development and
3. David Kielstra – Stantec,

to advise that the Bruce Energy Centre was interested in an extension for the water service.

We were advised in May, 2023 that the Bruce Energy Centre was not within the study area and that a request to Council for the extension would be required. We were also advised that a Capacity Report, prepared by an engineering company, would be necessary to give the consideration to the request.

Cobide Engineering Inc prepared a high level review, which we received September 27, 2023.

Following the decision of the Kincardine Council for the Bruce Power request, on October 11, 2023, we submitted our report to Adam Weishar. His team reviewed the report and advised us on October 18th, 2023 that his team gave us approval to make a presentation to Kincardine Council.

During the discussion period with the Municipality of Kincardine we also reviewed the past history documents for the services at the Bruce Energy Centre Industrial Park and note that the roads and services were transferred to the Municipality of Kincardine by By-law on August 11th, 2010, being an agreement with Bruce Power, OPG and the Municipality. The services included roads, sewage lines and plant, non potable water lines and tower and the necessary easements.

In 1996, a study was drawn by Ontario Hydro to review the possibility of the installation of potable water to the site. Ontario Hydro did not proceed with the installation of the potable water, at that time.

We are aware that individual wells for potable water can be drilled for each lot for development, however, we feel that that would not be the best option for the environment and the aquifer, when the potable water connection is located so close to the site.

Therefore, we have researched the proposal and followed the process and here we are today before Council asking for your consideration.

We have attached for your information :


1. Cobide Engineering Inc, high level review.
2. Drawing of the Municipal Sewage line and easement into the Bruce Energy Centre Industrial Park
3. Master Plan Project overview map, showing the location of the Bruce Energy Centre Industrial Park to the study area.
4. Potential Development Area map from the Master Plan update, showing the lots at the Industrial Park and the lot at 1554 Bruce Road 23.

Conclusion:

1. That we hereby ask that the Council of the Municipality of Kincardine, review our proposal and give consideration for approval.

We thank you for your time and consideration for this proposal that will provide a valuable service to the owners and occupants and staff at the Bruce Energy Centre Industrial Park and 1554 Bruce Road 23. Potable water will be a valuable asset to attract future developers to the site and the area within the Municipality of Kincardine.

Respectfully submitted,



Nancy Michie

September 27, 2023

BY EMAIL ONLY

Nancy Michie, Chief Administrator
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**Subject: Proposed Domestic Water Supply
 Bruce Energy Centre
 Municipality of Kincardine**
O/Ref.: 99000

Dear Ms. Michie,

Cobide Engineering Inc. was retained to present a high-level review for the option of providing domestic water supply to the Bruce Energy Centre, which is located on Farrell Drive, Lot C to E, Concession 4, Bruce Road 20, Municipality of Kincardine, County of Bruce.

Included within this review, is the option of providing domestic water supply to the property located on the southeast corner of Bruce Road 20 and Bruce Road 23 (Lot F, Concession 4) for a potential future restaurant with a drive-thru.

Currently, the lots located in the Bruce Energy Centre (BEC) lands are serviced with a 300 mm dia. PVC non-potable watermain. This watermain is fed from an elevated storage tower located in the northwest corner of the industrial park. Water distributed from the watermain is used for processing and fire flow purposes and not as a domestic drinking water supply. Therefore, only the drinking water supply was included in this review.

At this time, the following assumptions have been made:

| Property Type | Proposed Use | Estimated Population | Unit Flow Rate (L/d) | Avg. Day (L/s) | Max. Day Factor ⁽⁵⁾ | Max. Day Flow (L/s) | Peak Hour Factor ⁽⁵⁾ | Peak Hour Flow (L/s) |
|---------------|------------------------------|----------------------|----------------------|----------------|--------------------------------|---------------------|---------------------------------|----------------------|
| Industrial | Factory - Manufacturing | 1,000 ⁽¹⁾ | 125 ⁽²⁾ | 1.45 | 2.75 | 3.99 | 4.13 | 5.99 |
| Commercial | Food Service with Drive-Thru | 30 ⁽³⁾ | 400 ⁽⁴⁾ | 0.14 | 2.75 | 0.39 | 4.13 | 0.58 |
| | | | | | | 4.38 | | 6.57 |

(1) Estimated 50 employees per industrial lot x 20 lots

(2) Based on OBC Table 8.2.1.3.B., Item 10. Factory (excluding process or cleaning waters) – per employee per 8 hour shift, b) including showers

(3) Estimate 30 seats for Restaurant with Drive-Thru

(4) Based on OBC Table 8.2.1.3.B., Item 12. Food Service Operations, e) Donut shop, per seat

(5) Maximum Day Factor from the MOE DGDWS Table 3-1: Peaking Factors

The estimated total peak hour design flows for the domestic water supply are 6.57 l/s for the BEC and the proposed food service operation at Lot F, Concession 4. Further information would be gathered from each business that is currently operating in the BEC to establish more specific flows should this high-level review move forward to a more detailed evaluation.

It would also be prudent to include the proposed development located at Lot A and B, Concession 3 within this evaluation should this proposal continue and warrant future evaluation.

We thank you for the opportunity to provide our services to you and we trust that the information provided within this letter will be sufficient for your use. Should you have any questions regarding the information provided in this letter, please contact the undersigned at 519-506-5959 ext. 104.

Yours truly,

A handwritten signature in dark ink, appearing to read 'Amy Hoffarth', written in a cursive style.

Amy Hoffarth, E.I.T.

C:\Users\AmyHoffarth\Desktop\Bruce Energy Centre - Domestic Water\2023-09-27 le BEC domestic water servicing 99000.docx



INCLUDES MATERIALS & COSTS OF THE MINIMUM WATER FLOW REQUIRED

Project Overview

What are we doing?

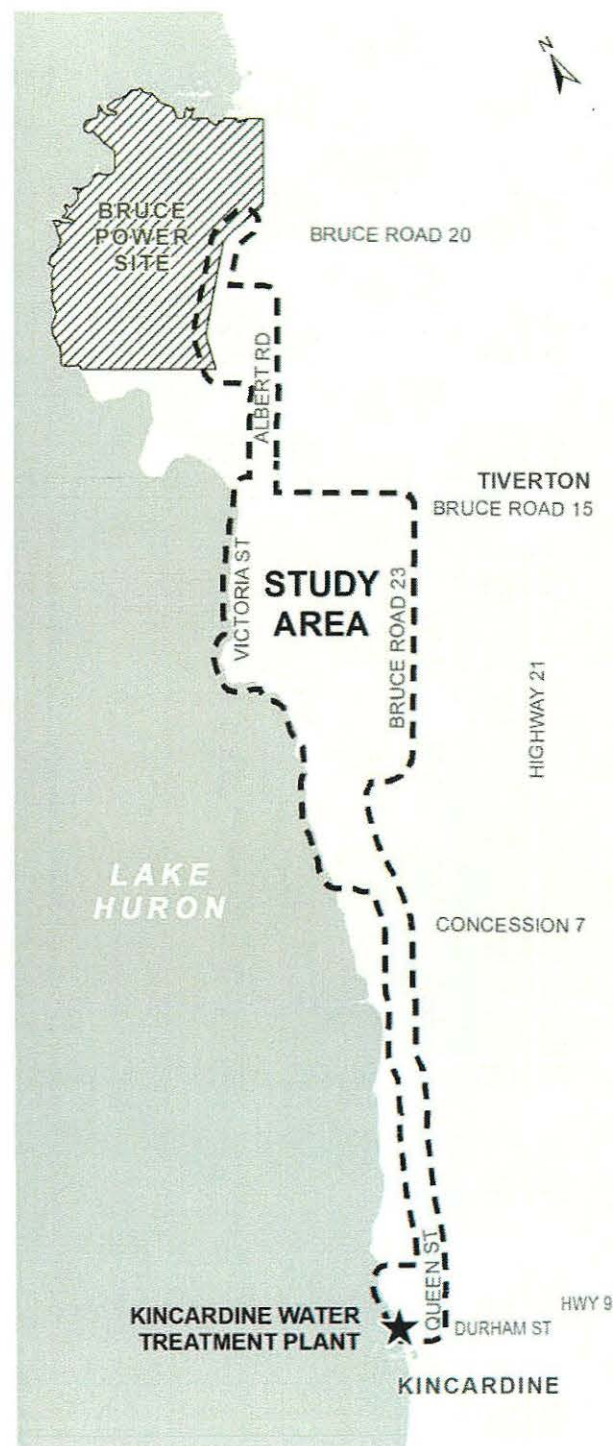
- The Municipality of Kincardine is developing options for expansion of the Kincardine Water System and Water Treatment Plant (WTP) at 155 Durham Street
- The project team is providing information regarding the proposed work

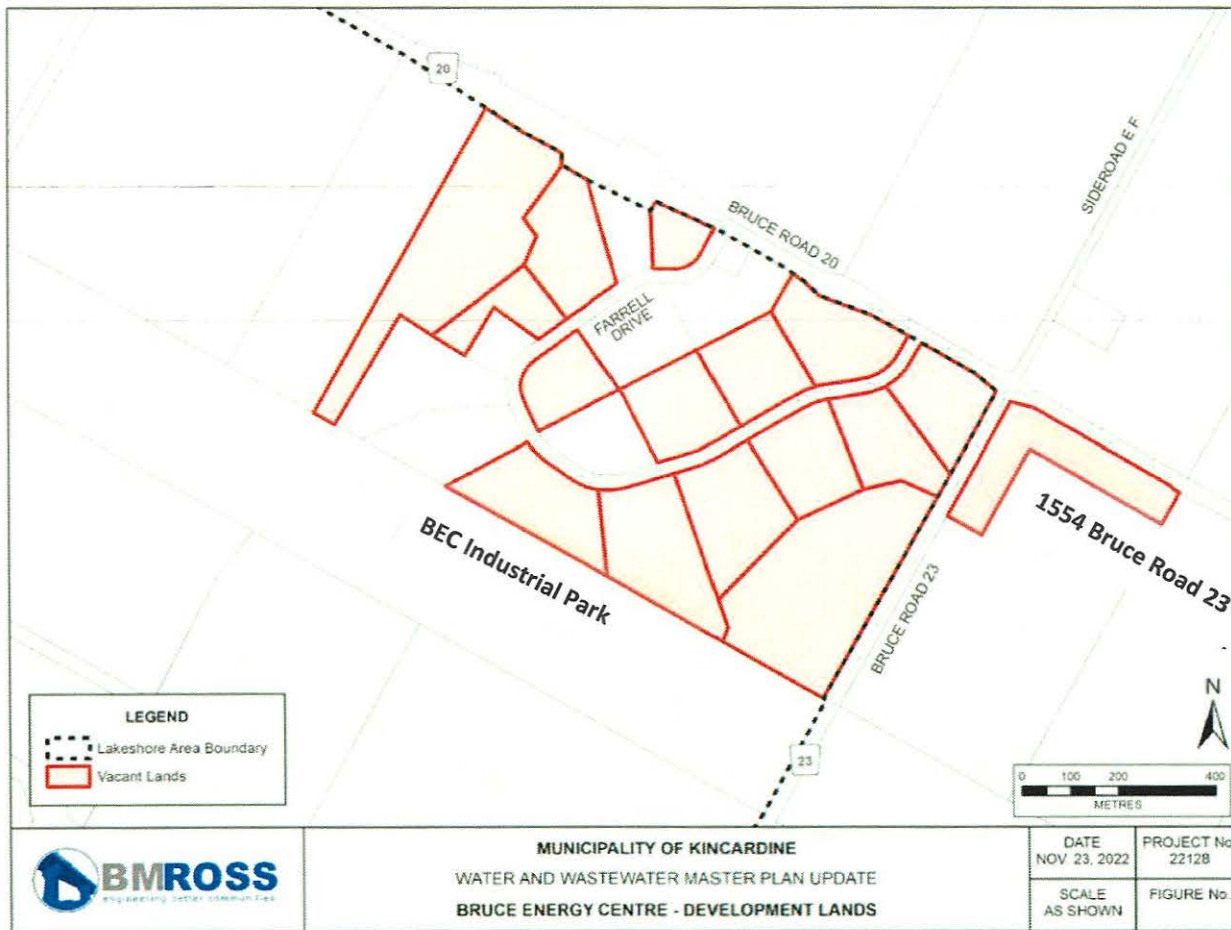
Why are we doing it?

- The purpose of this Schedule C EA study is to review expansion alternatives for the existing WTP and supply system to service anticipated community growth
- Specifically, the project will consider servicing requirements to extend water supply to the Bruce Power site

What does the Study Area include?

- The study area includes the Kincardine WTP, the existing watermain on Bruce Road 23, and nearby areas that could possibly be serviced or impacted by a water supply extension





Potential Development Areas – BEC