

**Town of Fort Frances  
Administrative Report**

**TO:** Planning and Development Executive Committee  
**FROM:** Cody Vangel, Chief Building Official & Municipal Planner  
**SUBJECT:** **B2-2022: Zoning By-law Amendment – 1229 Cornwall Avenue (Lagoon Property)**  
**DATE:** May 2, 2022

**Issue:**

Consideration of zoning by-law amendment B2-2022 submitted by 2670568 Ontario Limited seeking to add the following multiple site-specific permitted uses at 1229 Cornwall Avenue (locally known “Lagoon Property”):

- 1) To add a site-specific permitted use for Industrial Scale Computing;
- 2) To utilize sea-cans or containers converted to Buildings and/or a constructed structure to house the Industrial Scale Computing equipment;
- 3) To add a site-specific permitted use for the establishment of a 150 MW Solar Farm to produce solar energy and/or feed into the electrical grid;
- 4) To add a site-specific permitted use for Transmission of electricity, including infrastructure (towers and lines);
- 5) To add a site-specific permitted use for Electric substations; and
- 6) To add a site-specific permitted use for Battery Energy Storage System (BESS)

The site-specific permitted uses would all be subject to the specific provisions of the Waste Disposal industrial (M3) zone.

**Strategic Impact:**

1. Attracting new industry and attracting investment for local business development.
16. Mitigate risks of climate change
25. Preserve Power Agreement and support Fort Frances Power Corporation

**Options/Alternatives:**

1. Recommend approval of application;
2. Recommend amendment to application; or
3. Recommend rejection of application.

**Administrative Recommendation:**

Recommended to agree with the recommendation of the Committee of Adjustment and the Planning and Development Executive Committee:

THAT the 150MW Solar Farm including the transmission of electricity, electric substation, and battery energy storage system site-specific uses be approved; and

THAT the property be designated as a Site Plan Control Area which will require a site plan agreement prior to any further development taking place on the property; and

AND THAT the following conditions and criteria be applied to the Industrial-Scale computing use and associated components:

- THAT a noise mitigation study and noise mitigation plan among other potential studies for the development be required as part of the site plan control agreement; and
- THAT the sea-cans, if approved, not be allowed to stack on top each other; and
- THAT the structures, associated components and operations associated with the industrial-scale computing be located not closer than 300m to any surrounding residential use or residential zoned properties, and further that these be located not closer than 850m to McIrvine Road and Eighth Street West; and
- THAT the proponent provide documentation from the MOECP stating whether an Environmental Compliance Approval will be necessary for this project aspect as a requirement of the site plan control agreement; and
- THAT the site plan control agreement outline requirements for compliance with all regulatory body guidelines, statutes and regulations including but not limited to those specifying recommended noise mitigation levels as indicated within this report; and
- THAT the site plan control agreement contain verbiage and requirements for ongoing noise monitoring as well as enforcement provisions to ensure compliance with regulatory requirements; and
- THAT the noise mitigation consultant hired by the applicant consult with the Town of Fort Frances; and
- THAT all costs associated with the site plan control agreement, development, studies and other be at the cost of the applicant.

#### **History:**

It is understood that the subject property has been historically used as a wastewater lagoon site which received effluent wastewater from the former Kraft and Paper mill as part of the mills treatment facility requirements.

Information contained on file for this property indicates the following respective building permits being issued:

- 92-205: Construct a 16' by 40' motor control centre building (McIrvine Road)
- 92-206: Construct a 20' by 35' pumphouse building (Cornwall Avenue)
- 95-107: Construct a 20' by 20' addition to existing ASB pumphouse
- 2010-058: Construct a 20' by 20' pumphouse addition to existing blower building for effluent control
- 2010-059: Construct a new 42' by 62' nutrient building for pollution/effluent control

#### **Analysis:**

- The project component related to the solar farm proposal generally complies with the Town's Official Plan (OP) and the Provincial Policy Statement 2020 (PPS). The development of green energy is critical in a changing climate and is further supported by the Town's and Provincial policy documents
  - o The proposed location is generally ideal for potential locations within the municipality
- Adding the proposed uses would not neglect the ongoing use as a "Lagoon". The property owner's commitment to the MOECP for future remediation has been stated during the public meeting. Though all operations could be on the same property, the applicant has regulatory commitments to the province in regard to the Lagoon.
- There are residential zoned properties and residential uses located near the southeast corner and in close proximity to the subject property. Additionally, there are some, but limited, residential uses located northwest of the subject property.

- Proponents stated during the public meeting that the industrial scale computing and the solar farm are not directly linked nor reliant on each other. One could essentially proceed without the other.
- Industrial scale computing is a relatively new industry that is known for its significant energy consumption and often significant noise outputs. This project aspect generally complies with some provisions of the OP and PPS from an economic development aspect and promotion of new industry. However, this project component does not generally comply with the provisions regarding energy conservation.
  - o The Town would be considered limited in viable locations for noise generating industry to locate due to size and accessible locations, if this such location were not considered. Locating this operation in the northeast corner of the property would situate the use approximately 550m to the nearest residential use.

### **Noise Research:**

Guideline [D-6 Compatibility between Industrial Facilities](#) (D-6) is an Ontario Ministry document that can be used in the land use planning process to assist to prevent or minimize land use issues between industrial uses and sensitive land uses.

The proposed Industrial Scale Computing use for the sake of this report is considered as Class III in [D-6-1 Industrial Categorization Criteria](#) due to the anticipated noise output frequently audible off property.

A Class III Industrial Facility is defined as follows: *A place of business for large scale manufacturing or processing, characterized by: large physical size, outside storage of raw and finished products, large production volumes and continuous movement of products and employees during daily shift operations. It has frequent outputs of major annoyance and there is high probability of fugitive emissions.*

Per [D-6-3 Separation Distances](#), Class III Industrial refers to a potential influence area of 1000m, and a recommended 300m minimum separation distance from incompatible development.

Subsection 4.5.1 of D-6 summarizes to say that when a development occurs within a potential influence area, evidence should be provided to substantiate the absence of problems between the two land uses. This could summarize to mean that studies may be required to show there will not be an issue. Given that this proposal for industrial scale computing (Class III Industrial) is likely to fall within the potential influence area of 1000m to a residential use, studies may be required to substantiate the use.

Subsection 4.6.1 of D-6 states that noise (studies) shall be addressed through [Ministry Publication LU-131](#).

Ministry Publication LU-131 is titled "Noise Assessment Criteria in Land Use Planning". Stated in the Purpose of this document is the following *"This guideline outlines the position of the Ministry of the Environment (MOE) on noise criteria for planning of sensitive land uses, in support of the Provincial Policy Statement under the Planning Act and in accordance with the Ministry of the Environment Guideline D-1 "Land Use Compatibility". It is intended for use in planning of noise sensitive land uses adjacent to facilities such as but not limited to airports, road and rail transportation corridors, industrial facilities, aggregate facilities, major commercial facilities, sewage treatment facilities, and waste sites."*

Section 4 of Ministry Publication LU-131 refers to Noise Impact Assessment, Stationary Sources. This would pertain to the Industrial Scale Computing as a stationary industrial use.

Subsection 4.1 of Ministry Publication LU-131 furthers to state the following *“The sound levels anticipated on the site of a proposed noise sensitive land use shall be established in accordance with References [8], [9], [10] and [11], including all the appropriate adjustments. The assessment of noise impact shall reflect the “predictable worst case” situation, i.e. the largest difference between source sound levels and the applicable criterion”*. This would refer to procedures on modeling and assessing noise.

Per section 2 definitions in Ministry Publication LU-131 the surrounding area would be classified as a Class 2 Area based on the following definition *means an area with an acoustical environment that has qualities representative of both Class 1 and Class 3 Areas, and in which a low ambient sound level, normally occurring only between 23:00 and 07:00 hours in Class 1 Areas, will typically be realized as early as 19:00 hours. Other characteristics which may indicate the presence of a Class 2 Area include:*

- *absence of urban hum between 19:00 and 23:00 hours;*
- *evening background sound level defined by natural environment and infrequent human activity;*
- *no clearly audible sound from stationary sources other than from those under impact assessment.*

Section 4.4 of Ministry Publication LU-131 sets out recommendations for outdoor sound level criteria. For a Class 2 Area the following sound level criteria for an outdoor point of reception from a stationary source is recommended:

- 50dBa from 07:00 – 19:00
- 45dBa from 19:00 – 23:00

Section 4.5 of Ministry Publication LU-131 sets out recommendations for sound level criteria in the plane of a window. For a Class 2 Area the following sound level criteria in the place of a window from a stationary source is recommended:

- Day-time
  - 50dBa from 07:00 – 19:00
  - 45dBa from 19:00 – 23:00
- Night-time
  - 45dBa from 23:00 – 07:00

With the above information being presented to PDEC, the Committee may consider assigning the noise limitations and schedules to the by-law. Administration advises caution to the Committee such to not become too prescriptive with assigning noise level targets in the by-law, as these would ultimately be set and followed through the applicant’s noise mitigation study and plan in conjunction with all applicable Ministry guidelines, consultation and regulations.

#### **Official Plan:**

The Official plan designation for the subject property is “Employment”. Employment areas promote the development of a wide range of commercial and industrial uses. The proposed application generally complies with multiple provisions of the Official Plan in relation to industrial uses, employment opportunities, as well as green-energy:

2.2.2.ii. Fort Frances will promote social inclusion, improved access to housing, commerce, job opportunities and social services.

2.3.2.vi. Fort Frances will consider the potential impacts of climate change and encourage citizens, businesses and organizations to take measures to adapt to climate change.

3.1.7.(a) Energy Conservation: Fort Frances shall encourage and support energy conservation, district heating and combined heat and power, and alternative and renewable energy sources developed in accordance with Provincial and Federal legislation, policies and regulations. Fort Frances will also encourage the application of energy conservation measures in the design and construction of new buildings and in the rehabilitation and upgrading of existing buildings and structures.

3.1.7.(b) Flexibility in Development Approvals Process: Increased flexibility in zoning and site planning may be considered in order to accommodate variances in building orientation, landscaping designs, lot coverage and other site or building characteristics to provide for increased energy efficiency.

#### 3.4.1. Planning Objectives

- The Town will ensure there is a sufficient amount of land designated to accommodate infrastructure and utilities.
- The Town will ensure issues related to land use compatibility are addressed.
- The Town will work with appropriate providers to ensure the safe and efficient provision of power, cable and telecommunications in an environmentally acceptable manner.
- In the provision of infrastructure and utilities, the Town will encourage the use of innovative techniques and new technology.

3.4.2.(b) Permitted Uses: Uses include public and/or privately owned facilities, including water and sanitary sewage facilities, Stormwater Management Facilities, pumping stations, hydro corridors, communications/telecommunications infrastructure and facilities and transmission towers. These facilities are permitted in all land use designations, subject to the Policies of the Plan.

An excerpt of the Town's Official Plan, particularly Sections 3.4.5. to 3.4.8. referring to utility infrastructure green energy and energy conservation, has been included with this report to further demonstrate general compliance of this request as it relates to the Town's Official Plan.

Additionally, an excerpt of Section 4.2 Employment Areas has further been included for reference to demonstrate how this proposal generally complies with the Official Plan.

The Town's Official Plan outlines a number of studies that may be requested for a wide range of development. Upon review of the application and consideration of the potential noise that may be output by the industrial-scale computing, it would be recommended to require a noise mitigation study as a condition of approval of the industrial-scale computing use, or upon general approval through a required site plan control agreement.

#### **Zoning:**

The request submitted is to include the following as a site-specific permitted uses for the property, subject to the specific provisions of the Waste Disposal Industrial (M3) zone:

- 1) To add a site-specific permitted use for Industrial Scale Computing;
- 2) To utilize sea-cans or containers converted to Buildings and/or a constructed structure to house the Industrial Scale Computing equipment;

- 3) To add a site-specific permitted use for the establishment of a 150 MW Solar Farm to produce solar energy and/or feed into the electrical grid;
- 4) To add a site-specific permitted use for Transmission of electricity, including infrastructure (towers and lines);
- 5) To add a site-specific permitted use for Electric substations; and
- 6) To add a site-specific permitted use for Battery Energy Storage System (BESS)

The proponent offers the following definitions for the requested uses:

**Industrial Scale Computing:** The use of premises for the purpose of housing computer systems that collect, maintain, store, and/or process data for profit. Typical uses include but are not limited to blockchain/cryptocurrency mining and data centres.

**Solar Farm:** 150MW of Photo Voltaic Solar Generation utilizing either a fixed mounting or a variable tracking system.

**Transmission of electricity, including infrastructure (towers and lines):** Transmission is an interconnected group of lines and associated equipment for the movement or transfer of electric energy between points of supply and points at which it is transformed for delivery to customers or is delivered to other electric systems.

**Electric substations:** A facility for switching electrical elements, transforming voltage, regulating power, or metering.

**Battery Energy Storage System (BESS):** A Battery Energy Storage System (BESS) is a type of energy storage that uses a group of batteries to store electrical energy.

The following specific provisions apply to the Waste Disposal Industrial zone:

#### **4.14 WASTE DISPOSAL INDUSTRIAL (M3) ZONE**

No person shall within a Waste Disposal Industrial (M3) Zone, use any land or erect, alter or use any building or structure except in accordance with the following:

##### **4.14.1 Permitted Uses**

- a) recycling facility
- b) salvage or wrecking yard
- c) sewage lagoon
- d) solid waste disposal or management facility

##### **4.14.2 Regulations for Permitted Uses**

- a) Minimum Lot Area 10,000 m<sup>2</sup>
- b) Minimum Lot Frontage 60 m
- c) Minimum Yard Requirements
  - Front Yard 30 m
  - Interior Side Yard 20 m
  - Exterior Side Yard 30 m
  - Rear Yard 20 m
- d) Maximum Lot Coverage 80%
- e) Minimum Landscaped Open Space 20%
- f) Maximum Height of Building 10 m

As it currently sits, the subject lands appear to generally comply with the specific provisions of the M3 zone.

**Provincial Policy Statements:**

The Planning Act requires that zoning by-law amendments be consistent with provincial policy statements as identified in the 2020 Provincial Policy Statements (PPS). The proposed site-specific permitted uses appear to be consistent with the 2020 PPS as follows:

- 1.1.1. Healthy, liveable and safe communities are sustained by:
  - g) ensuring that necessary infrastructure and public service facilities are or will be available to meet current and projected needs;
  - i) preparing for the regional and local impacts of a changing climate.

1.3.1 Planning authorities shall promote economic development and competitiveness by:

- a) providing for an appropriate mix and range of employment, institutional, and broader mixed uses to meet long-term needs;
- b) providing opportunities for a diversified economic base, including maintaining a range and choice of suitable sites for employment uses which support a wide range of economic activities and ancillary uses, and take into account the needs of existing and future businesses;
- c) facilitating the conditions for economic investment by identifying strategic sites for investment, monitoring the availability and suitability of employment sites, including market-ready sites, and seeking to address potential barriers to investment;
- d) encouraging compact, mixed-use development that incorporates compatible employment uses to support liveable and resilient communities, with consideration of housing policy 1.4; and
- e) ensuring the necessary infrastructure is provided to support current and projected needs

1.6.1 Infrastructure and public service facilities shall be provided in an efficient manner that prepares for the impacts of a changing climate while accommodating projected needs. Planning for infrastructure and public service facilities shall be coordinated and integrated with land use planning and growth management so that they are:

- a) financially viable over their life cycle, which may be demonstrated through asset management planning; and
- b) available to meet current and projected needs.

1.6.2 Planning authorities should promote green infrastructure to complement infrastructure.

1.6.11.1 Planning authorities should provide opportunities for the development of energy supply including electricity generation facilities and transmission and distribution systems, district energy, and renewable energy systems and alternative energy systems, to accommodate current and projected needs

1.7.1 Long-term economic prosperity should be supported by:

- a) promoting opportunities for economic development and community investment-readiness;
- j) promoting energy conservation and providing opportunities for increased energy supply;



1.8.1 Planning authorities shall support energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions, and preparing for the impacts of a changing climate through land use and development patterns which:

- a) promote compact form and a structure of nodes and corridors;
- b) promote the use of active transportation and transit in and between residential, employment (including commercial and industrial) and institutional uses and other areas;
- c) focus major employment, commercial and other travel-intensive land uses on sites which are well served by transit where this exists or is to be developed, or designing these to facilitate the establishment of transit in the future;
- d) focus freight-intensive land uses to areas well served by major highways, airports, rail facilities and marine facilities;
- e) encourage transit-supportive development and intensification to improve the mix of employment and housing uses to shorten commute journeys and decrease transportation congestion;
- f) promote design and orientation which maximizes energy efficiency and conservation, and considers the mitigating effects of vegetation and green infrastructure; and
- g) maximize vegetation within settlement areas, where feasible.

**Northern Ontario Growth Plan:**

The proposal appears to generally comply with the Northern Ontario Growth Plan based on the following:

**2.3.9 Renewable Energy and Services**

Efforts by the Province, industry and, where appropriate, other partners, to grow and diversify the *renewable energy* sector should include:

- a. facilitating the entry of new participants and entrepreneurs, including Aboriginal communities, co-operatives and commercial developers, in the development of *renewable energy* generation and sustainable energy solutions
- b. attracting investment by enabling municipalities and local distribution companies to invest in community-based *renewable energy* projects
- c. identifying and promoting manufacturing and service industries related to *renewable energy* generation
- d. undertaking an approach to energy planning that supports regional needs by applying staged, flexible options that effectively address the unique needs and priorities of all communities, including those not connected to the grid, as well as the industrial sector in the North
- e. promoting Northern Ontario as a location for *renewable energy* investment, research and commercialization.

**5.6 Energy**

5.6.1 The Province, working with the Ontario Power Authority and licensed transmission and distribution companies, will identify investment opportunities in Northern Ontario's transmission and distribution systems to maintain reliability, meet new and growing demands, and accommodate *renewable energy* generation.



5.6.2 The Province will work with Hydro One, the Ontario Power Authority, remote off-grid communities and the federal government to identify opportunities and assess the feasibility of long-term alternatives to diesel-generated power.

5.6.3 The Province will work with the Ontario Power Authority and local distribution companies to seek opportunities to increase the efficiency of energy use in Northern Ontario communities.

**Consultation:**

- Operations and Facilities
- By-law Enforcement
- Fort Frances Fire Rescue
- Fort Frances Power Corporation
- Committee of Adjustment
- Planning And Development Executive Committee

**Public Meeting**

An open public meeting was hosted on Monday April 11, 2022 with notice of the meeting being provided by way of newspaper on March 10, 2022. A copy of the meeting minutes have been attached with this report. During the public meeting, two members of the public spoke in opposition to the application:

- Pam Munn
  - o Requested to be informed of decision and updates
  - o Attached letter of objection
  - o Expressed extreme concerns over the potential noise output
  - o Expressed concerns over the possible decrease in property value due to the noise
  - o Concerned that the lagoon size was not illustrated appropriately
  - o Concerns over the discharge location of cooling water
- Jim Strachan
  - o Requested to be informed of decision and updates
  - o Attached letter of objection
  - o Concerns over the lagoon being developed prior to any sort of remediation
  - o Concerns over waters within the lagoon leaching to nearby properties
  - o General concerns over the development

In addition to the objection provided during the public meeting, these two members provided written objections to the application, as did several other citizens. Each of the letters of objection have been included with this report and summarize the following concerns:

- Concerns over water flow from the lagoon site leaching throughout Town
- Concerns that the lagoons should be cleaned up prior to development
- Curiosity as to how the lagoon may service or not serve new business in Town
- Concerns that the solar farm components will be placed within the lagoon ponds
- Concerns on the general configuration of the sea-cans
- Concerns that this project is to avoid dealing with the remediation of the lagoons
- Concerns that the Town claimed that once the lagoons were no longer used the property would be returned to its original state (farm and forest land)
- Concerns over reduced property value due to further development on the lands
- Significant concerns expressed regarding output of noise from cooling fans
- Concerns that this project will affect the bird habitat

- Most concerns lay around objection to the industrial-scale computing, however, written objections do indicate objection to the solar as well
- Concerns over health impacts related to noise output
- Concerns over conditions of the sanitary sewer and its ability to receive waste cooling water
- Concerns over cooling water contamination of nearby properties and water sources
- Concerns over health impacts as a results of high voltage lines for solar component
- Concerns over disposal of solar panels at end of life
- Concerns over noise by-law noncompliance
- Concerns over increased hydro usage and rates

In addition to the letters of objection, two letters of support were provided which have been attached.

**Supporting Document / Financial Documents:**

- B2-2022 Zoning Amendment Application – Final – Signed
- Official Plan – Section 3.4.5. to 3.4.8.
- Official Plan – Section 4.2
- GIS Imagery
- Letters of Objection
- Letters of Support
- Public Meeting Minutes
- D-6-3 Separation Distances
- D-6-1 Industrial Categorization Criteria
- D-6 Compatibility between Industrial Facilities
- Ontario Ministry of the Environment-LU-131