

# REPORT TO COUNCIL



**Date:** December 4, 2017

**RIM No.** 0940-00

**To:** City Manager

**From:** Community Planning Department (CD)

**Application:** DP17-0116

**Owner:** Fortis BC Inc.

**Address:** 2147 Pier Mac Way

**Applicant:** Fortis BC Inc.

**Subject:** Development Permit

Existing OCP Designation: Resource Protection Area

Existing Zone: A1 – Agriculture 1

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## 1.0 Recommendation

THAT Council authorizes the issuance of Development Permit No. DP17-0116 for Lot 2, Section 23, Township 23, ODYD, Plan 2257 except Plan H15414, located on 2147 Pier Mac Way, Kelowna, BC to allow the placement of 720 Solar Panel Modules subject to the following:

- 1) The siting of the solar panel modules be installed on the land in general accordance with Schedule "A";

AND THAT this Development Permit is valid for two (2) years from the date of Manager issuance, with no opportunity to extend.

## 2.0 Purpose

To consider a Development Permit to allow the placement of 720 Solar Panel Modules, which will be used to supplement electrical output at Fortis BC's Pier Mac Way substation.

## 3.0 Community Planning

The Community Planning Department supports this proposal. Fortis BC is proposing a photovoltaic solar panel system to supplement electrical output at their Pier Mac Way substation. The solar panel array would be located on the same property as the substation, which is owned by Fortis BC. The subject property is currently zoned for utilities to accommodate the location of the substation and agricultural for the area of the proposed solar panel array (it is to be noted that this property is not in the Agricultural Land Reserve). The A1 zone does allow for minor utility services where impacts on the environment and adjacent land uses would be minor by virtue of its appearance, noise, size, traffic generation and operational characteristics.

## 4.0 Proposal

### 4.1 Background

For many Fortis BC customers, ownership of a photovoltaic solar system is not feasible. Customer ownership and operation requires upfront capital costs, as well as ongoing operation and maintenance expenses. Additionally, customers who live in rental properties, multi-unit residential buildings or townhomes are limited in their options. Other customers that have aging rooftops or an unsuitable roof top orientation, may also be unable to install a photovoltaic system. Fortis BC's proposed solar array will allow these customers to have an option for making solar power part of their energy options.

### 4.2 Project Description

The solar panel array is proposed to be built on land currently owned by Fortis BC, adjacent to its existing Pier Mac Way substation. The subject property is considered ideal from an electrical perspective as it is located adjacent to a substation and allows for relatively simple inter-connection to the Fortis BC distribution system. The proposed facility would be comprised of 720 – 335 watt solar photovoltaic modules mounted on steel posts. The modules will be oriented due south and at a fixed tilt angle of 35 degrees to maximize their output on an annual basis. Each solar panel module will stand 3.0 meters above grade. Other components located on the site include inverters and transformers (see Attachment "A").

The solar panels would be arranged in four rows separated by an east/west lane. Spacing between the rows is necessary to ensure that self-shading does not occur. The solar panels used in this system are designed to produce less glare and reflectance than normal glass. The manufacturer declares that the modules will utilize antireflection coated glass, which would create little to no impacts on vehicular traffic on Highway 97 or air traffic coming into the airport.

The solar facility would be surrounded by a 2.13-meter-high galvanized chain link fence with 0.3 meter high barbed wire, which is in conformance with the Canadian Electrical Code requirements.

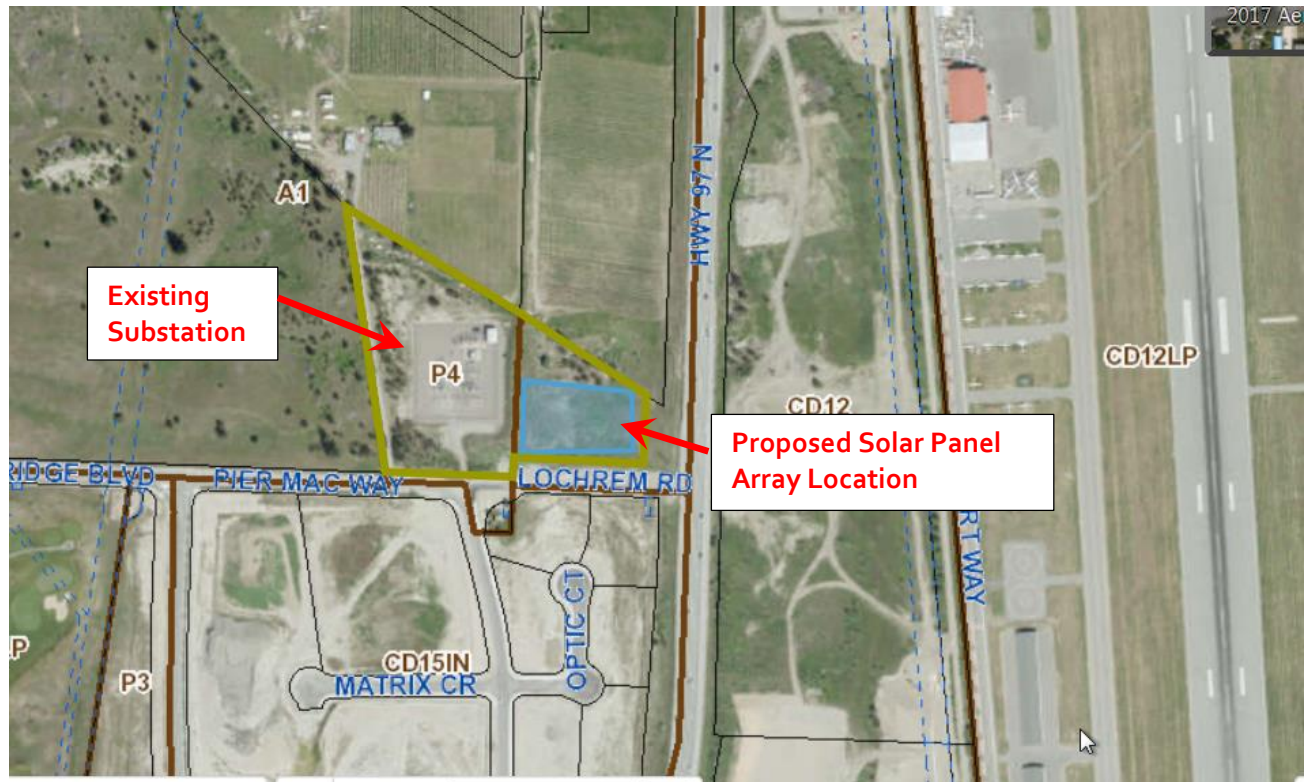
### 4.3 Site Context

The solar photovoltaic facility is proposed between the Pier Mac Way substation to the west and Highway 97 to the east. Agricultural lands surround the subject property to the north and west while the Airport Business Park is located across Pier Mac Way to the south. The Kelowna Airport is located across Highway 97 to the east of the site.

Adjacent land uses are as follows:

Orientation	Zoning	Land Use
North	A1 – Agriculture 1	Resource Protection Area
East	CD12 - Airport	Public Service/Utilities
South	CD15IN – Airport Business Park	Industrial
West	A1 – Agriculture 1	Resource Protection Area

<sup>1</sup>City of Kelowna Official Community Plan, Objective 6.2, Policy 1 (Environment Chapter).

**Subject Property Map: 2147 Pier Mac Way****5.0 Current Development Policies****5.1 Kelowna Official Community Plan (OCP)**

The City will support the reduced use of fossil fuels in buildings by encouraging renewable energy supplies, district energy systems and energy efficient technologies in new and existing buildings. By working with senior government partners, regulated utilities and others. The City will lead through example and strive to meet the BC Climate Action Charter targets for the reduction of GHG emissions.<sup>1</sup>

**6.0 Technical Comments****6.1 Ministry of Transportation and Infrastructure**

It appears the proposed site achieves the minimum structural setback from property line and no direct access to Highway 97. The provided plan does not indicate on how site drainage will be handled. On the condition that all on site drainage will be contained on site and not conveyed to the adjacent Highway 97 drainage ditch, the Ministry has no objection.

**6.2 NAV CANADA (Kelowna Airport)**

NAV CANADA has evaluated the captioned proposal and has no objection to the project as submitted provided that any glare or reflectivity issues that negatively impacts aircrews using Kelowna Airport or NAV CANADA operations is remedied by FortisBC upon request.

<sup>1</sup>City of Kelowna Official Community Plan, Objective 6.2, Policy 1 (Environment Chapter).

## 7.0 Application Chronology

Date of Application Received: May 12, 2017

Referral Comments Completed: October 30, 2017

### Report prepared by:

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Corey Davis, Environmental Coordinator

**Reviewed by:** ☐ Todd Cashin, Suburban and Rural Planning Manager

**Approved for Inclusion:** ☐ Ryan Smith, Community Planning Department Manager

### Attachments:

Letter of Rationale  
Schedule A - Site Plan  
Context/Site Photos  
Letter from NAV CANADA  
Development Permit

<sup>1</sup>City of Kelowna Official Community Plan, Objective 6.2, Policy 1 (Environment Chapter).