

To: Infrastructure Committee
From: Engineering Department
Date: January 22, 2015
Re: Emera Substation at Saxl Park Update

For the last several months, Emera Maine has been meeting with the Saxl Park Committee to develop a location within the Park for a new substation to replace the existing substation behind the Bangor Water District. A new substation is necessary for several reasons including the age of the existing substation, (over 50 years old), need for additional electric capacity to adequately service the hospital expansion, and more reliable service for the east side neighborhood.

Both parties have worked well together and believe that they have found a location on the southeast side of the Park that can provide Emera with the space they need for a new substation while minimizing the overall impacts to the Park.

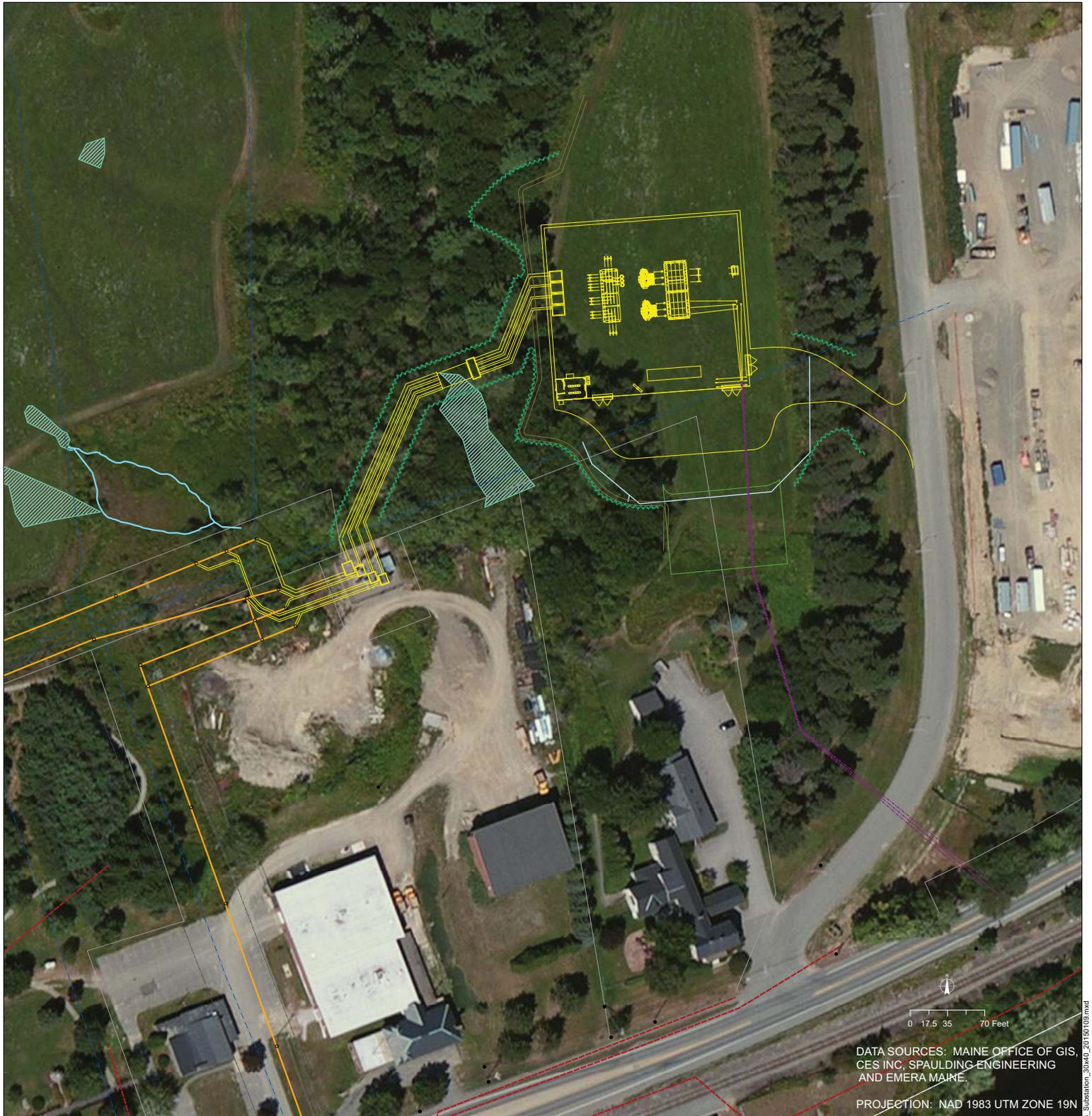
Emera has also committed to providing financial support to the Park to help with future improvements and maintenance. A summary of Emera's efforts to minimize impacts to the Park as well as their mitigation plan is included with this memo.

Impact Minimization Elements

- Placement in southeast corner of the Park
- Substation layout for best fit within natural terrain
- Site design to reduce elevation and impact with cut and fill
- Compact substation design to reduce overall footprint
- Underground distribution line connections
- Underground ducts located to utilize existing trails, replace foot bridge, follow natural terrain and avoid wetland impact and tree clearing
- Planted vegetative screening
- Strategic use of existing vegetative screening and preservation of old growth trees
- Natural re-vegetation of slopes
- Colored composite poles near the substation site
- Compact transmission line configuration and covered conductor
- Re-use of existing line corridors & substation site for line interconnectivity
- No expansion of Mount Hope ROW corridor

Mitigation Elements

- Reroute trails around site
- Provide \$10,000 for new signage, kiosks and gardens
- Establish \$100,000 perpetual maintenance fund for annual mowing and hay removal
- Provide \$15,000 for SPC to use to support long-term park protection
- Provide a letter of support for legislative action related to park protection



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| <ul style="list-style-type: none">  Transmission  Meadow Buffer  New Tree Line  Substation & Access Road  Stream (Approximate)  New Trail  Drainage Swale <ul style="list-style-type: none">  New Poles  Existing Poles | <ul style="list-style-type: none">  New Distribution  Parcels  Wastewater & Storm Lines  Relocated Bangor Water District Lines  Bangor Water District Lines  Existing Right-of-Way  Delineated Wetlands |
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DATA SOURCES: MAINE OFFICE OF GIS, CES INC, SPAULDING-ENGINEERING AND EMERA MAINE.

PROJECTION: NAD 1983 UTM ZONE 19N

PROPOSED WATERWORKS SUBSTATION & NEW ACCESS ROAD EMERA MAINE



DATE: JANUARY 2015