



STAFF REPORT TO COUNCIL ENGINEERING and PUBLIC WORKS

1100 Patricia Boulevard, Prince George, B.C., V2L 3V9

DATE: December 2, 2015
TO: MAYOR AND COUNCIL
FROM: DAVE DYER, GENERAL MANAGER, ENGINEERING AND PUBLIC WORKS
SUBJECT: TREE ILLUMINATION PROJECT- VETERAN'S PLAZA AT CITY HALL

RECOMMENDATION:

1. That the report dated December 2, 2015 titled "Tree Illumination Project- Veteran's Plaza at City Hall" be received for information.

PURPOSE:

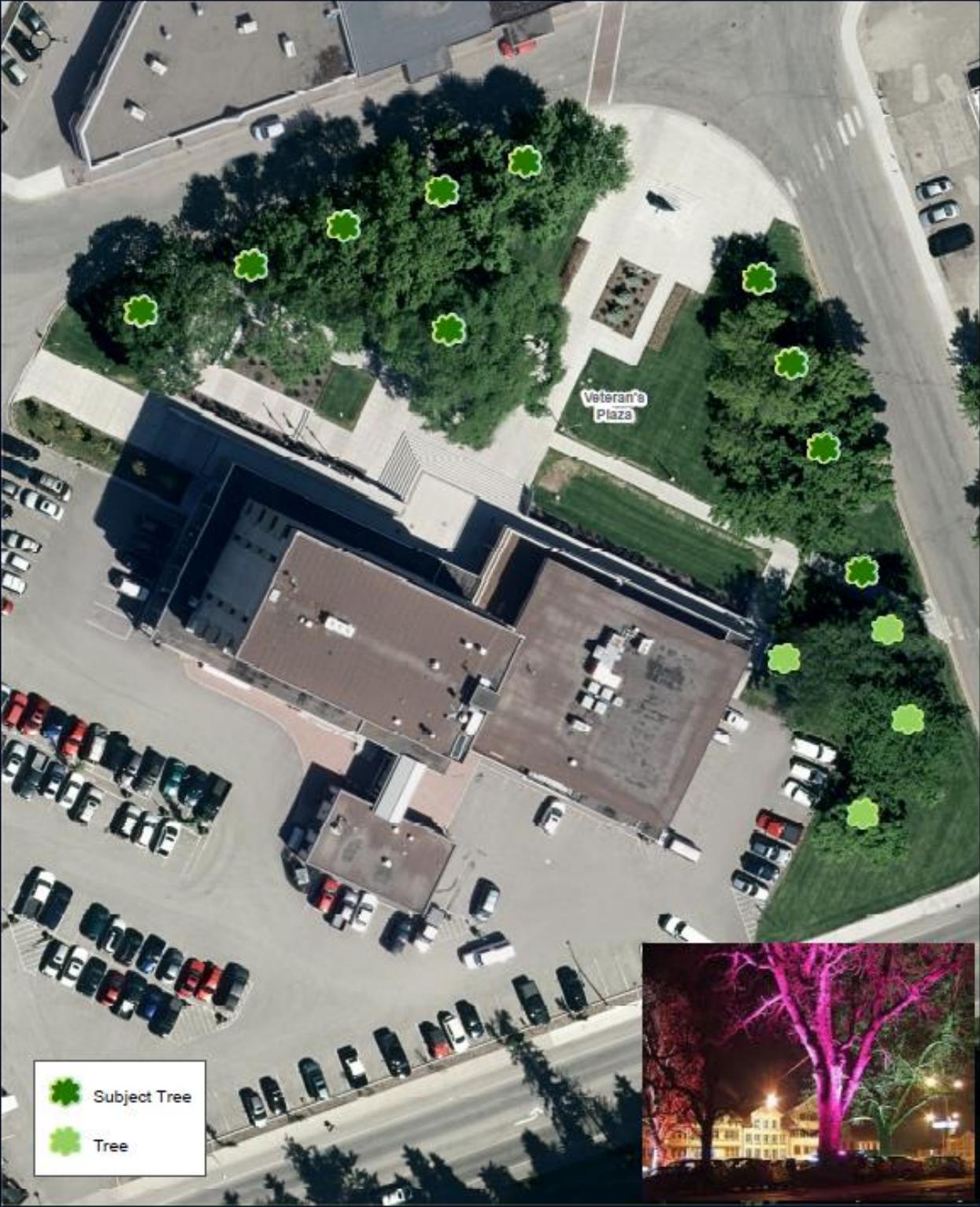
To provide information for Council with respect to Mayor Hall's request for information and budget on a capital expenditure project to illuminate the trees in Veteran's Plaza at City Hall.

BACKGROUND:

In 2015, the Parks Division conducted research on the illumination of the heritage trees in Veteran's Plaza at City Hall. There are concerns with the use of string lights as a method for lighting the trees with respect to the health and growth of the trees and the extensive labour and maintenance needed for the upkeep of the lights.

In the process of exploring best practices for the lighting of the trees at Veteran's Plaza, it was determined that there are non-invasive methods of lighting the trees while still getting the desired effect. It was determined that the best practice for lighting the trees would be LED (light emitting diode) up-lighting. This method would not utilize strings of lights but instead two to three light fixtures at the base of the trees. There is an available power source at each tree and the use of in-house electrical and arborist expertise would reduce the costs. The use of LED lighting rather than conventional lighting would minimize energy consumption and each light has a 50,000 hour life expectancy.

The diagram below displays the Veteran's Plaza at City Hall and the heritage trees that could be illuminated. There is also an inset picture of what the illumination of the tree would look like.



-  Subject Tree
-  Tree

0 5 10 20 Meters
Coordinate System: NAD 1983 UTM Zone 18N
Projection: Transverse Mercator
Datum: North American 1983
1:600

Veteran's Plaza Tree Lighting



FINANCIAL CONSIDERATIONS:

The table below details the estimated costs of the tree illumination project in Veteran's Plaza at City Hall for ten (10) trees. There is flexibility with respect to the number of light fixtures per tree (a minimum of 2 would be needed) and the number of trees that could be illuminated.

Budget Item	Per Light	20 Lights (2 per tree)	30 Lights (3 per tree)
Light Fixtures	\$ 3,000.00	\$ 60,000.00	\$ 90,000.00
Labour	\$ 200.00	\$ 4,000.00	\$ 6,000.00
Material	\$ 200.00	\$ 4,000.00	\$ 6,000.00
GST - 5%	\$ 160.00	\$ 3,200.00	\$ 4,800.00
PST -7%	\$ 224.00	\$ 4,480.00	\$ 6,720.00
Contingency fund 20%	\$ 644.80	\$ 12,896.00	\$ 19,344.00
Total	\$ 4,428.80	\$ 88,576.00	\$ 132,864.00

SUMMARY AND CONCLUSION:

That Council receives this report for information.

Respectfully submitted:



Dave Dyer, General Manager of Engineering and Public Works

Report written by: Gina Layte Liston, Director of Public Works

To: Mayor and Council

