то:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING FEBRUARY 4, 2020
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR OF ENVIRONMENTAL AND ENGINEERING SERVICES & CITY ENGINEER
SUBJECT:	TREE IMPACTS FOR 2020 INFRASTRUCTURE RENEWAL PROGRAM

RECOMMENDATION

That, on the recommendation of the Managing Director of Environmental and Engineering Services & City Engineer, the following information concerning tree removal, mitigation, and communication as part of the 2020 Infrastructure Renewal Program **BE RECEIVED** for information.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

None.

2019-2023 STRATEGIC PLAN

This report supports the Strategic Plan in the following areas:

- Building a Sustainable City:
 - Infrastructure is built, maintained and operated to meet the long-term needs of our community.
 - Leading in Public Service:
 - Trusted, open, and accountable in service of our community;
 - Exceptional and valued customer service; and
 - Leader in public service as an employer, a steward of public funds, and an innovator of service.

BACKGROUND

Purpose

The purpose of this report is to provide an overview of the tree removal identification and mitigation approach as part of the 2020 Infrastructure Renewal Program. The Infrastructure Renewal Program is generally funded by a combination of Sewer, Water, and Transportation Capital Budgets.

DISCUSSION

The City is committed to maintaining strong and healthy infrastructure above and below ground. There are a number of large construction projects currently planned for 2020. The Infrastructure Renewal Program is an annual program intended to replace municipal infrastructure that has reached the end of its service life.

These projects generally include sanitary and storm sewer reconstruction, watermain reconstruction, road restoration, replacement of curb and gutter and sidewalk, as well as restoration of areas disturbed by construction. The scope of each project varies in length, excavation depth and extent of infrastructure replacement.

Generally, Infrastructure Renewal Program projects are situated in older areas of the City. Each of the projects have work plans that include the required engineering design plan to complete the project. In addition, all projects require the design consultant to

retain an arborist to analyze all trees on City Right-Of-Way within the project limits, support tree decisions for that project, prepare a Tree Inspection Report, and assist in the creation of tree protection plans. The City has adopted standards for tree protection during construction.

To ensure consistency within the Infrastructure Renewal Program, City staff work closely with Forestry Operations to manage tree impacts within the construction projects. It is noted that an arborist is hired for each individual Infrastructure Renewal Program contract to assess each tree in the City Right-Of-Way within the project limits. This assessment includes the determination of the health and the impact of construction activities for each tree. A Tree Inspection Report is prepared for each project which provides recommendations for tree removal/retention.

Evaluated trees are reviewed for health risk status based on the International Society of Arboriculture standards. Generally, most are deemed suitable for retention, pending decisions regarding the construction footprint. However, some can be deemed unhealthy, high risk, or have a limited life span and are not suitable to keep.

The addition of concrete sidewalk, curb and gutter on residential streets where they did not previously exist also contributes to the need for tree removals to accommodate the alignment of these features, and due to unavoidable root impact which would affect the long term health of impacted trees.

For 2020, in addition to identification of trees required for removal, staff have also identified trees which may have to be removed following post construction assessment. These trees will be retained during construction but could be at risk of requiring removal due to the unknown extent and location of major roots, noting that the intent is to keep these trees. All required and potential tree removals are being communicated to property owners within the project limits through homeowner letters and invitation to Project Update Meetings.

Following construction, Forestry Operations will review the tree inventory on those streets. At that time, a determination will be made on the number and species of trees that will be replanted based on available space and planting guidelines. Generally, the City plants trees after construction in every viable planting location. About 300 to 400 trees are planted on reconstructed streets each year.

The following table provides a listing of the 2020 Infrastructure Renewal Program projects which have proposed tree removals. It is noted that large trees have been defined as trees with a trunk diameter of 30cm (12 inches) or more. Small trees have a trunk diameter of less than 30cm.

PROJECT	TOTAL # OF TREES ASSESSED	REMOVAL REQUIRED	REMOVAL MAY BE REQUIRED
Richmond Street (York Street – Dundas Street	5	0 Large 5 Small	0 Large 0 Small
Britannia Street (Riverside Drive to Edinburgh Street) Tozer Avenue (Woodward Avenue – Upper Street)	148	7 Large 5 Small	0 Large 0 Small
Egerton Street (Ormsby Street – Cameron Street) Trafalgar Street (Egerton Street –Price Street) Hamilton Street (Egerton Street – Hydro Street)	27	7 Large 0 Small	0 Large 0 Small
Devonshire Avenue (Wortley Road – Cathcart Street) Murray Street (Dunkirk Place – Iroquois Avenue)	118	7 Large 2 Small	0 Large 0 Small
Euclid Street (Wharncliffe Road – Wortley Road) Birch Street(all)	70	8 Large 2 Small	2 Large 1 Small
Hyla Street(Trafalgar Street – Hamilton Road) Elm Street (Trafalgar Street – Hamilton Road)	68	2 Large 5 Small	0 Large 1 Small
Churchill Avenue (Winnipeg Boulevard - Edmonton Street) Winnipeg Boulevard (Churchill Avenue – Wavell Street) Wavell Street (Vancouver Street – Winnipeg Boulevard)	141	7 Large 1 Small	10 Large 10 Small
Spruce Street (Haig Street – Wavell Street) Haig Street (all)	72	5 Large 0 Small	1 Large 2 Small
Chippendale Crescent (all)	93	39 Large 8 Small	0 Large 0 Small
Dundas Street (Adelaide Street to Ontario Street)	38	4 Large 34 Small	0 Large 0 Small
Watson Street (all) *does not include tree impacts in Watson Park	2	1 Large 0 Small	0 Large 0 Small
Maitland Street/Regent Street – watermain chamber	8	1 Large 0 Small	1 Large 0 Small
Renny Crescent (all)	88	15 Large 10 Small	0 Large 0 Small

At this time, 175 trees are scheduled to be removed in 2020 alongside streets. This includes trees of various sizes and removal is required due to either their high risk nature, construction conflict, poor health, or short life expectancy. These tree removals are spread across thirteen (13) construction projects.

Forestry Operations will be completing all required tree removals over the winter months to ensure all trees are removed prior to the start of construction.

Communications Plan

The social impact is being mitigated through design team coordination and public communication. In an effort to ensure continuity within the program, the specific communication strategies for the various projects include:

- Homeowner Letter Pre Construction Notice, which is sent approximately two weeks prior to the Project Update Meeting, describes the tree impact which is anticipated, with further information to be available at the Project Update Meeting on tree conditions and removals.
- Tree removals will be shown on plans and discussed at the Project Update Meeting. The difference between construction removals and health and safety trees or end of life is highlighted. The arborist is typically present at the Project Update Meeting, especially for projects with a high number of tree removals.

CONCLUSIONS

Trees are an important asset to the City of London and best efforts are being made to protect them during construction. The final number of trees slated for removal may change, recognizing that tree location may conflict with the installation of water services and private drain connections. Considerable effort will be made to minimize impact of construction on any tree.

All design assignments within the 2020 Infrastructure Renewal Program include Tree Inspection Reports, meaning that all trees within the Right-Of-Way are visually evaluated by an arborist to assess health and structural integrity against international standards. Homeowners are kept informed of the extent and impact of tree removals through multiple communication efforts. Forestry Operations will assess all streets with tree removals and initiate replanting efforts in subsequent years.

SUBMITTED BY:	SUBMITTED BY:	
ASHLEY RAMMELOO, MMSC, P. ENG. DIVISION MANAGER SEWER ENGINEERING DIVISION	AARON ROZENTALS, P.ENG. DIVISION MANAGER WATER ENGINEERING DIVISION	
REVIEWED AND CONCURRED BY:	RECOMMENDED BY:	
REVIEWED AND CONCURRED BY:	RECOMMENDED BY:	
REVIEWED AND CONCURRED BY: SCOTT MATHERS, MPA, P.ENG.	RECOMMENDED BY: KELLY SCHERR, P.ENG., MBA, FEC	

January 24, 2020 KJC/kjc

cc. Doug McRae Ugo DeCandido