

Appendix 5: Statement of Work (SOW) for LDD Aerial Spray Advisory Services

1.0 Background

The City of Mississauga's Parks, Forestry & Environment Division has recently completed data collection on LDD infestation levels throughout the City. Based on data gathered, there is a need for the services of an urban residential aerial spray advisor, a very specific and highly technical service, to ensure the timing and implementation of the aerial spray is in keeping with best practices and standards and to review and assess the efficacy of the aerial spray. The City requires that the vendor have extensive experience in this field to ensure effective project management to complete this project.

Policy

The City's Strategic Plan identifies "Living Green" as one of the five pillars making up the vision for the City. This plan identifies measures to help protect the natural environment despite the growth and development of the City over time. A key component to achieving this will be to mitigate the impact of these insects on the tree canopy and resulting defoliation if left unchecked.

2.0 Project Purpose

The purpose of this project is to provide advisory services to the City before, during and after an urban residential aerial spray is undertaken. Services should include:

- Support for aerial spray area delineation;
- Monitoring for spray timing (weather and host tree development);
- Spray effectiveness assessment (chemical deposition measurements), and
- Post-spray defoliation survey assessments.

In order to meet this objective, Parks and Forestry is seeking a qualified consultant to advise on its aerial spray program.

3.0 Project Scope

The following anticipated scope of work breakdown is required, but not limited to:

- The Contractor shall review all background information and data, in particular egg mass monitoring data collected in September and October 2021 to assist the City in determining specific areas for an aerial spray.
- The Contractor shall monitor winds, humidity, temperatures and precipitation at multiple locations within the city on anticipated and actual spray days to ensure the spray can occur within acceptable parameters.
- The Contractor shall monitor the leaf development and LDD egg emergence at predetermined locations representative of the aerial spray areas to advise on the predicted best timing for the aerial spray.

- The Contractor shall conduct an assessment at multiple locations within the aerial spray zone to determine of the deposition rate of the chemical on target foliage.
- The Contractor shall conduct post-spray defoliation surveys in targeted areas within the aerial spray zone in the summer of 2022 at the height of defoliation to assess the level of defoliation.
- The Contractor shall be available to provide these services in early between Fall 2021 and summer 2022, with particular availability immediately before and during the aerial spray which would be spring 2022, weather dependent.

4.0 Timeline

Due to seasonal requirements the urban residential aerial spray would take place in the spring of 2022.

Contractor services would be required commencing in fall 2021 to begin preparing for the spray service and are anticipated to be completed by July 2022.