



Report Date: July 16, 2025

VanRIMS No.: 08-3000-20

[Submit comments to the Board](#)

TO: Park Board Chair and Commissioners
FROM: Director, Park Operations
SUBJECT: Stanley Park Hemlock Looper Response and Mitigation Plan - Phase 3

RECOMMENDATIONS

- A. THAT the Vancouver Board of Parks and Recreation ("Park Board") approve and authorize Park Board staff to advance treatment Option 3 for Phase-3 hemlock looper response, as detailed in this report, and enter into negotiations to execute a contract with Blackwell Consulting Ltd. for the continued forest mitigation and restoration works in Stanley Park to address risks associated with the hemlock looper outbreak, to the satisfaction of the Park Board's General Manager, the City of Vancouver's (the "City") Director of Legal Services and the City's Chief Procurement Officer, for a term lasting until services are complete, and funded through previously approved budgets.
- B. THAT the City's Director of Legal Services, the City's Chief Procurement Officer, and the Park Board's General Manager be authorized and delegated authority to execute the contract described in Recommendation A on behalf of the Park Board.
- C. THAT no legal rights or obligations will be created by the Park Board's adoption of Recommendations A and B unless and until the Park Board's authorized signatories execute the contracts set out in the Recommendations.

PURPOSE AND SUMMARY

This report provides an update and seeks Park Board direction to advance Phase-3 of the Stanley Park Hemlock Looper mitigation and restoration work planned to start in fall 2025. This phase of the project entered a competitive procurement process, beginning with a Request for Expressions of Interest (RFEOI) in June 2025, to determine qualified vendors for the delivery of remaining works across approximately 111 hectares of internal forest areas in Stanley Park (see map, Appendix A).

The public RFEOI process was open for four weeks and closed on July 3, 2025. There were 23 registered suppliers, however only one submission was received and subsequently reviewed by the evaluation team. The evaluation team was comprised of staff from Urban Forestry and Supply Chain Management. The submission was evaluated against criteria including professional and technical qualifications, experience with related work, demonstrated cultural and ecological sensitivity, and proposed methodologies.

Based on the evaluation, the submission met the established evaluation criteria, and staff recommend proceeding to contract negotiations with the qualified proponent Blackwell Consulting Ltd., to define the final scope, timeline and costing.

BOARD AUTHORITY / PREVIOUS DECISIONS

As per the [Vancouver Charter](#), the Park Board has exclusive jurisdiction over the maintenance, operations and “closing to the free use of the public the whole or any part of any of the parks...at such times and for such periods as may be deemed advisable”.

As per the Park Board [Procurement Policy](#) approved in July 2022, all contracts with values of \$2,000,000 and greater require both Council and Vancouver Park Board approval.

On [October 9, 2024](#) and [December 4, 2024](#), the Park Board approved staff advancing a competitive procurement process for contracted services to support Phase 3 of the hemlock looper response, including risk mitigation and restoration. Due to imminent risks in high-use areas of Phase 3, staff were directed at the December 4, 2024, meeting to advance a change order for completion of Phase 3A in Q1 2025 to address the highest risk areas within the western and southern extent of Phase 3. Staff were also directed to report back to the Board to share the outcome of the competitive procurement process for the remainder of Phase 3 and for approval of the extent of treatments prior to implementation of Phase 3 (Q4 2025 – Q1 2027).

CONTEXT AND BACKGROUND

Stanley Park is a 418-hectare (ha) park located in the City of Vancouver. The park has been a culturally significant place since time immemorial for the local First Nations, the Musqueam, Squamish and Tsleil-Waututh (MST). Approximately 263 ha (63%) of the park is forested with species associated with the Coastal Western Hemlock bio-geoclimatic zone including a mix of western hemlock, Douglas-fir, western red cedar, red alder, and big leaf maple.

The park has been leased from the Federal Government since 1908 with care and stewardship obligations falling under the jurisdiction of the Park Board. This includes authority to undertake on a regular basis and as may be required, all work necessary in the maintenance, planting, and the removal of dead or diseased trees and such other trees which may constitute a danger to the public or which might cause damage to property.

Stanley Park has approximately 18 million visitors annually and according to Ministry of Transportation and Infrastructure data, approximately 50,000 vehicles pass along the Stanley Park Causeway and over the Lion's Gate Bridge daily, not including various modes of transportation that utilize internal park roads and trails.

Urban Forestry identified the hemlock looper infestation in Stanley Park in 2020 and monitored tree and forest conditions for tree-related risks associated with public safety and wildfire. In 2022, when the hemlock looper outbreak had not ceased and significant tree mortality was observed, professional forestry consultant B.A. Blackwell & Associates were engaged through a competitive procurement process. This project and treatments have been planned and implemented through ongoing consultation with several qualified professionals including but not limited to Registered Professional Foresters; Ecologists; Registered Professional Biologists; Landscape Architects; Archaeologists; and ISA Certified Arborists with Tree Risk Assessor Qualification (TRAQ).

Mitigation work since fall 2023 has been delivered between October and April each year in respect of bird nesting season, wildlife habitat considerations and peak tourism season.

Implementation Timeline Update:

- Phase 1 – Completed (Q4 2023 – Q1 2024): mitigation and restoration of 25% of the forest area (7201 total trees removed: 3543 trees under 20 cm diameter and 3658 trees over 20 cm diameter)
- Phase 2 – Completed (Q4 2024 - Q1 2025): mitigation and restoration of 12.2% of the forest area (1329 total trees removed: 636 trees under 20 cm diameter and 693 trees over 20 cm diameter);
- Advanced Phase 3 – Completed (Q1 2025 - Q2 2025): mitigation and restoration of 20% of the forest area (2486 total trees removed: 1284 trees under 20 cm diameter and 1202 trees over 20 cm diameter); and
- Phase 3 – Proposed in this report - estimated to be completed between Q4 2025 – Q1 2027 for the remaining 42% of forest area.

DISCUSSION

Earlier phases of work prioritized forest areas with higher levels of use and greater exposure to public activity, critical infrastructure, and vehicular access, such as the seawall, Stanley Park Drive, and North Lagoon Drive. These areas posed elevated risks associated with dead and declining trees in proximity to high traffic areas. Park Board is now advancing the final phase to address ongoing forest health concerns, wildfire risks, and public safety risks in the remaining forested area.

The final phase of hemlock looper mitigation and restoration work in Stanley Park will focus on the remaining interior forested areas that were not included in earlier phases. These areas, totaling approximately 111 hectares, include Lees Trail, Lovers Walk, Tatlow Walk and perimeter trails around Beaver Lake. Although these trails experience less daily foot traffic compared to the seawall, primary trails and arterial park roads, they remain part of the active trail network and are subject to recreational and operational use throughout the year. Therefore, from a public safety perspective, these trails are considered the primary target to mitigate risk from declining trees for this final phase. Secondary would be environmental, archaeological and cultural assets, with wildfire risk reduction being a highly beneficial by-product of the treatments.

Following Board direction provided in October 2024 and reaffirmed in December 2024, a competitive public procurement process was initiated with the release of an RFEI with detailed scope of work (see Appendix B). The intent was to identify qualified consultant teams with demonstrated expertise in forestry, wildfire risk reduction, ecological restoration, and sensitivity to cultural resources when delivering this type of work. Proponents were required to submit a minimum of two implementation strategies, which were reviewed to consider a series of criteria, including public safety, wildfire risk reduction, environmental considerations, archaeological and cultural values, operational considerations, recreational and tourism values as well as economic considerations and cost estimates.

Although 23 suppliers registered, only one bidder chose to submit a proposal that was received and subsequently reviewed by the evaluation team comprised of staff from Urban Forestry and Supply Chain Management.

The qualified proponent, Blackwell Consulting Ltd., submitted three implementation options with differing extents of treatment – the width of the assessment buffer from each trail is the primary differentiating factor that influences the extent of treatment, and the quantity of hazard trees removed. The assessment buffer refers to the distance into the forest from each trail or road where

trees are assessed for risk and potential treatment. In simple terms, the wider the buffer, the more forested area will be treated, and more risk mitigation provided; the trade-off being increased costs and increased potential impact to ecological assets and natural environment due to the expanded treatment area.

In general, the methodology proposed across all three treatment options remains the same; the underlying professional standards, ecological principles, and restoration protocols do not change. In all cases, the assessments are completed by qualified ISA certified staff guided by risk-based (TRAQ) criteria, cultural and environmental constraints, and requirements for mitigating risks to public safety. None of the options require permanent closure of trails, and the same temporary trail closures impacting operations and visitor experience would be required during implementation of treatments. Similarly, the timelines remain consistent across all three options, with the preparatory planning in 2025, removals prioritized outside of bird nesting windows into 2026, and ecological restoration work extending through two winter seasons completed in 2026 and 2027.

Table 1: Park Board Overview of Phase 3 Options

Comparative Criteria (Relative to each option)	Option 1 75m Assessment/ Treatment Buffer from Trails	Option 2 60m Assessment/ Treatment Buffer from Trails	Recommended Option 3 40m Assessment/ Treatment Buffer from Trails
Treatment Area (ha)	~90 of 111ha	~79 of 111ha	~57 of 111ha
Public Safety <ul style="list-style-type: none"> Number of hazardous trees removed 	Largest number of trees removed	Medium number of trees removed	Least number of trees removed
Wildfire Risk Reduction: <ul style="list-style-type: none"> Reduction in fuel-loading across interior forest 	Highest amount of fuel reduction	Moderate amount of fuel reduction	Least amount of fuel reduction
Environmental Considerations: <ul style="list-style-type: none"> Area of potential ground-disturbance and forest impact 	Largest area of potential for ground and forest disturbance	Moderate area of potential for ground and forest disturbance	Smallest area of potential for ground and forest disturbance
Archaeological and Cultural Values: <ul style="list-style-type: none"> Potential impact of above-ground and below-ground cultural assets 	Higher potential due to larger treatment area	Moderate potential due to less treatment area	Lowest potential due to smallest treatment area
Operational Considerations: <ul style="list-style-type: none"> Complexity of implementation (access, staging, 	Moderate complexity	Moderate complexity	Moderate complexity

debris removal)			
Economic Considerations: <ul style="list-style-type: none"> Relative implementation cost 	Higher cost	Moderate cost	Lowest cost
Recreational and Tourism Values: <ul style="list-style-type: none"> User experience impacts 	Moderate	Moderate	Moderate

This assessment reflects Park Board staff's analysis of the proponent's submission, based on relative merits and impacts of each proposed option.

All three options will adequately address the public safety risks from hazardous trees targeting Stanley Park trails. Where the options differ is that Option 1 delivers a more comprehensive wildfire risk reduction of interior forest stands, and covers a larger area that improves forest resiliency. However, fiscal responsibility and reducing the environmental footprint within the interior forest stands is also a priority. The 40m buffer recommended in Option 3 reflects the potentially taller forest structure in remaining treatment areas, compared to the younger and shorter stands treated in Phase 3A. Option 3 is considered appropriate to provide effective risk mitigation and optimize a balance with other decision criteria.

Although a 30m assessment boundary was selected to treat internal trails in Phase 3A, this smaller buffer was possible because the forested stands in those areas were younger and composed of trees of a smaller height than those in the current areas of Phase 3. The remaining interior forested areas proposed for treatment under the remainder of Phase 3 consist of larger more mature trees, which requires a wider assessment buffer than in Phase 3A (i.e. taller trees pose a risk to larger impact zone).

As a result, staff recommend advancing Option 3 to the negotiation phase, with consideration that some trees assessed as an imminent hazard to trail-users and that are beyond the 40m buffer may also be addressed through this work. This aims to balance key public safety risks resulting from the hemlock looper outbreak while leaving a moderate extent of internal forest areas to undergo natural forest stand regeneration. These areas may require ongoing monitoring for changes over time, including but not limited to future treatment of hazardous trees and/or replanting.

As one submission was received, staff can negotiate directly with the successful qualified proponent to confirm: the extent of treatment approved by Park Board; project schedule; and final cost before executing a contract, in compliance with the procurement policy.

Following execution of a contract, the proposed timeline for planning and implementation associated with this phase extends from Q3-2025 to Q1-2027. The work is expected to begin with preparatory investigative works including archaeological assessments in consultation with the local First Nations, and targeted tree removal to be completed by Q2 2026 outside of the bird nesting period. Phased ecological restoration is expected to extend over two winter seasons (2025/26 and

2026/27). The extended duration accounts for the remaining two years of seedling donation from Western Forest Products.

FINANCIAL CONSIDERATIONS

The following represents approved project funding for remediation and restoration of Stanley Park forest-areas impacted by the hemlock looper:

Table 2: Budget Summary

<u>Q4 2023</u>	<u>Jan 2024</u>	<u>May 2024</u>	<u>TOTAL</u>
<u>Operating Budget Surplus</u>	<u>Council Decision one-time operating increase</u>	<u>Council Decision one-time operating increase</u>	
<u>\$1.9M</u>	<u>\$4.9M</u>	<u>\$11.1M</u>	<u>\$17.9M</u>

As outlined in the Vancouver Charter, the Park Board has jurisdiction over the decisions impacting management of Stanley Park. However, funding approvals and budget reallocations of this size require additional approvals that are within Council's jurisdiction.

All contracts with consultants and contractors related to this work have been and will continue to be in accordance with the City of Vancouver's Procurement Policy ADMIN-008 which is led by Finance, Risk and Supply Chain Management and Legal Services and applies to Park Board.

The expectation is that this contract value will exceed \$3,000,000, therefore a report back to Park Board and City Council is required. In keeping with the Park Board's independent service mandate to deliver best value for park users and citizens, staff are not seeking additional funding to advance Option 3 as the cost estimate provided in the submission is in line with available funding.

RISK & LEGAL CONSIDERATIONS

Per the Vancouver Board of Parks and Recreation *Tree Inspection Policy* (1993):

Park trees in high usage areas (e.g. facilities, trails, roads) are inspected annually for signs of defects which could result in their failure. Trees that are evaluated as hazardous are prioritized and scheduled for corrective action.

Per the British Columbia Professional Governance Act, the [Forest Professionals Regulation \(gov.bc.ca\)](https://www2.gov.bc.ca/gov/content/soc/industry/forestry/forest_professionals_regulation) defines the practice and jurisdiction of professional forestry in the Province of British Columbia.

Per the International Society of Arboriculture [Ethics-Code-of-Ethics.pdf \(isa-arbor.com\)](https://isa-arbor.com/ethics-code-of-ethics.pdf), Certified Arborists have a responsibility to public safety.

The Park Board has an obligation to comply with existing policy and professional ethics to address tree risks to minimize impacts to public safety.

Not advancing ongoing risk mitigation efforts in Stanley Park will result in potential closures of untreated areas of Stanley Park. Not removing dead trees in Stanley Park will increase public safety risks over time, exceeding the City of Vancouver and Park Board's risk tolerance as well as operational capacity to respond to risks.

Closing off access roads and forest to public access presents key considerations/risks:

- **Public Concern:** The closure of trails and interior forested areas due to elevated tree risk will significantly restrict public access to valued park spaces, diminishing opportunities for recreation, cultural engagement and environmental education.
- **Economic Impact:** Long-term closures would negatively impact tourism revenue, event permitting, and ongoing park operations. This would also increase operational costs and limit emergency services.
- **Higher Maintenance Costs:** Limited staff access will delay infrastructure upkeep to fire hydrant infrastructure, service roads, increasing costs and risks of vandalism or deterioration.
- **Environmental Issues:** Restricted access could lead to ecosystems overtaken by invasive species, increased fire risk, or unauthorized use, damaging habitats.
- **Negative Public Perception:** Community may have concerns if the closure is not managed or communicated effectively and inaction in the face of documented tree risk may undermine public confidence in the Park Board.

COMMUNICATION CONSIDERATIONS

Staff will continue to provide regular progress updates to the public at key milestones of the ongoing risk mitigation work using a variety of channels including web, social media, and other media. Staff will use the Park Board's social channels and signage on-site to alert users of Stanley Park of closures related to the work.

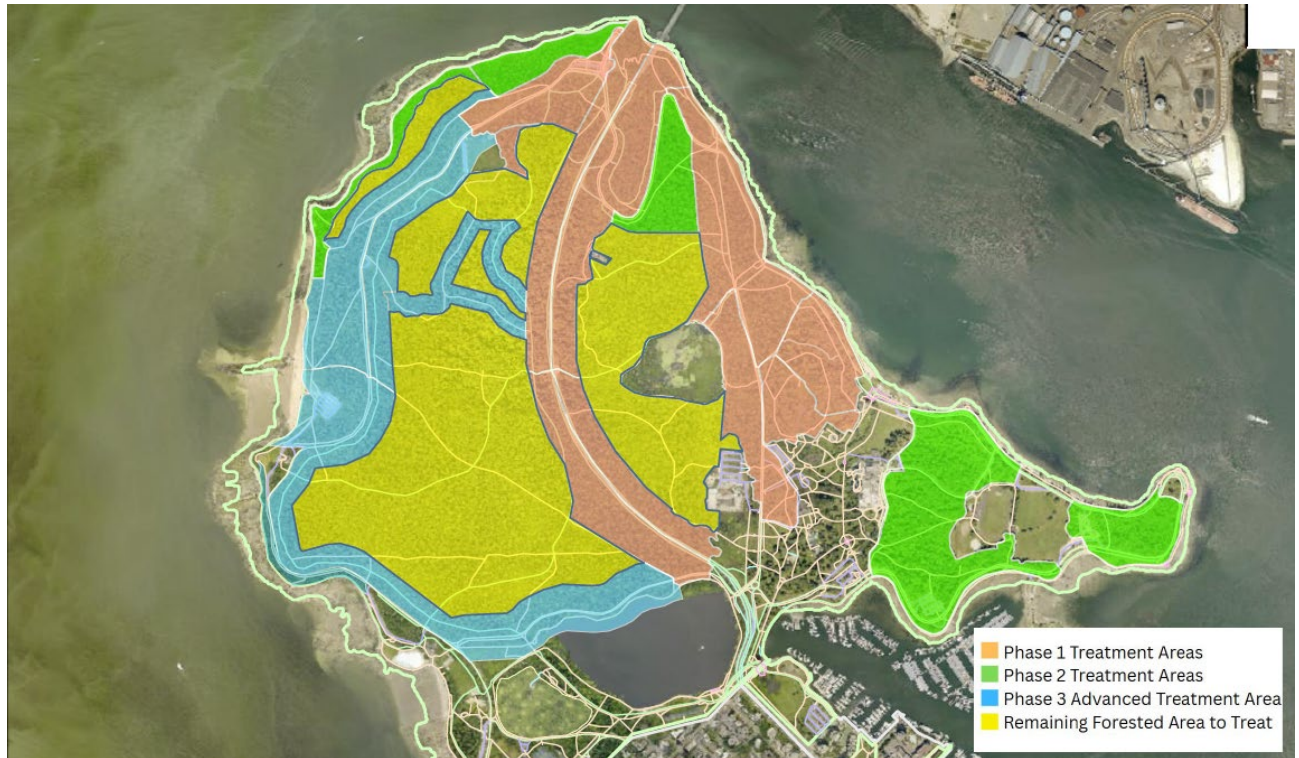
CONCLUSION AND NEXT STEPS

Upon Board approval, staff will proceed to negotiate final contract terms to advance Option 3 with the recommended proponent, with contract execution anticipated in late Q3 2025. To enter into any agreements and in accordance with procurement policies, staff are required to report back to Bid Committee and City Council for approval. Following agreement to execute the contract, mobilization is expected to commence in the fall of 2025, with mitigation work scheduled through the end of March 2026 and restoration anticipated in early 2027.

Staff will continue to provide updates to the Board and the public as this final phase progresses, including milestones related to risk mitigation, replanting, restoration, and monitoring. Should changes arise during implementation, staff will return to the Board with updates or additional recommendations as needed.

APPENDIX A

Remaining Works in Stanley Park



APPENDIX B

PS20251269-VBPR-RFEOI - TREE REMOVAL AND ASSOCIATED SERVICES IN STANLEY PARK

SCOPE OF WORK

1.0 PURPOSE

The City of Vancouver ("City"), as represented by its Board of Parks and Recreation (the "Park Board") is seeking proposals from multi-disciplinary consultant teams ("Consultant") led by an environmental management/consulting firm with expertise in forestry operations, urban forest assessment and project management to plan and deliver critical operational treatment works for trees impacted by the hemlock looper. The project team must be led by a Registered Professional Forester and include staff or sub-consultants with extensive experience in forest health and tree risk assessment, forest operations, arboriculture, planning, landscape architecture, urban ecology, integrated pest management, wildfire risk assessment, silviculture planning and implementation, as well as technical support for administrative, geomatics and mapping deliverables. The successful Consultant will work closely with Park Board staff to plan and execute coordinated delivery of Hemlock Looper Impact and Wildfire Risk Reduction Response and replanting/reforestation efforts in Stanley Park for the following designated priority treatment areas:

- There is approximately 111 ha of forested area that remains untreated (Refer to Attachment A for a map illustrating these areas. It shall be noted the assumption is that only the Net Treatment Areas will be part of the project scope and pricing).

As part of the proposal, Consultants are requested to provide a minimum of two (2) strategic options with a focus on the following:

- **Public Safety:** Mitigating risks posed by standing dead or structurally compromised trees near park trails, high-traffic zones, and visitor areas;
- **Wildfire Risk Reduction:** Minimizing fuel loads through mitigation strategies aligned with best practices in wildland-urban interface (WUI) forest management;
- **Environmental Considerations:** Preserving ecological integrity by maintaining biodiversity, supporting wildlife habitat and minimizing disturbance to the surrounding environment. Inclusion of carbon impacts and regulatory requirement considerations for each option;
- **Archaeological and Cultural Values :** Incorporating MST feedback and safeguarding culturally modified trees, areas of cultural significance , and known archaeological values throughout all stages of planning and implementation;
- **Operational Considerations:** Accounting for access, equipment, logistics, seasonal constraints while minimizing impacts to existing infrastructure, park operations and park users;
- **Economic Considerations:** Evaluating the relative cost-effectiveness, budgetary implications and resource requirements for each proposed scenario, both in the short and long term. Including potential maintenance requirements for all options.;
- **Recreational and Tourism Values:** Considering impacts on public use and visitor experience, including how each option may affect recreation opportunities in the park.

Consultants will be required to complete a decision-making matrix (provided as Attachment B) to compare the merits of each option. Each option should consider varied degrees of treatment intensity, levels of intervention, and implementation timelines. Proposals should include:

- A brief description and rationale for each option;
- Key anticipated outcomes and trade-offs (e.g., canopy loss vs. wildfire risk mitigation);
- Cost, Schedule, and resource implications;
- Options for end use of timber;
- Consideration of ecological restoration and climate resilient species selection;
- Methodology to secure permitting and considerations associated with each approach.

Please note that the budget associated with each proposed option will be further refined in during Phase 2 of the RFEI process. Budget estimates at this initial stage are intended to guide comparative evaluation but will not be the sole determinant for contract award.

2.0 BACKGROUND AND CONTEXT

History and Acknowledgement

The City of Vancouver is situated on the unceded traditional territories of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and səliwətaʔ (Tsleil-Waututh) Nations (henceforth referred to as MST in this RFP). These First Nations have been stewards of these lands, including Stanley Park, since time immemorial, and have used trails and corridors to travel across their territory to bring their communities together and manage resources. The Vancouver Board of Parks and Recreation's reconciliation goal is to decolonize the Park Board and seek truth as a foundation for reconciliation.

The Consultant is expected to integrate reconciliation goals into all aspects of the work by acknowledging and addressing cultural and historical relationships with the land, integrating MST feedback when provided, and supporting respectful and collaborative engagement.

All proposed approaches must demonstrate alignment with the BC First Nations Climate Strategy and Action Plan (BCFNCSAP, 2022). Consultants must reference the Strategy's core pathways and integrate these themes into the forest treatment options and project framework. This project is expected to contribute toward reconciliation objectives and reflect the guiding principles and strategic priorities outlined in the BCFNCSAP.

Project Context

Ideally situated on a peninsula at the northwestern edge of downtown Vancouver, Stanley Park is Vancouver's first park and one of the city's main tourist destinations, attracting approximately 18 million visitors each year. This urban park exceeds 400-hectares and is approximately 75% forested and flanked with lovely beaches and beautiful coastline.

As identified in VanPlay, the Parks and Recreation Services Master Plan, Stanley Park is one of the five destination parks in Vancouver that attracts large volumes of international tourists and local users. This project will continue ongoing efforts and actions required to address the hemlock looper impacts and wildfire risks within Stanley Park and enhance both short- and long-term forest health and visitor experience.

The hemlock looper outbreak from recent years has resulted in the loss of young and mature trees in various parts of Stanley Park. These dead and declining trees present a potential public safety risk in the park. Climate change and increasing frequency of heat waves resulting in increased mortality also contribute to increased fuel loading and subsequent forest fire risk. Combined with other wildfire factors within the park, wildfire risks within Stanley Park are of growing concern and ongoing management is necessary.

Project Governance

The project will be managed by a Park Board Project Manager and Planner I from the Urban Forestry department with input and direction from senior staff, Director and Urban Forestry Associate Director - they will make up the Project Management Team.

Relevant Park Board and City Plans and Policies

1. Urban Forest Strategy (2014, updated 2018)
<https://vancouver.ca/files/cov/urban-forest-strategy.pdf>
2. Stanley Park Forest Management Plan (2009)
<https://vancouver.ca/files/cov/Stanley-Park-Forest-Management-Plan.pdf>
3. Developing a Stanley Park Comprehensive Plan (2018 - In progress)
<https://parkboardmeetings.vancouver.ca/2018/20180416/REPORT-UnderstandingStanleyPark-DevelopingaComprehensivePlan-20180416.pdf>
4. VanPlay - Vancouver's Parks and Recreation Services Masterplan (2019)
<https://vancouver.ca/parks-recreation-culture/vanplay-parks-and-recreation-strategy.aspx>
5. Greenest City Action Plan (2010):
<https://vancouver.ca/green-vancouver/greenest-city-action-plan.aspx>
6. Vancouver Bird Strategy (2015):
<https://vancouver.ca/parks-recreation-culture/vancouver-bird-strategy.aspx>
7. Biodiversity Strategy (2016)
<https://vancouver.ca/parks-recreation-culture/biodiversity.aspx>
8. Park Board's Reconciliation Mission, Vision and Values (2018)
<https://parkboardmeetings.vancouver.ca/2018/20180416/REPORT-PBReconciliationStrategies-TRCUpdate-20180416.pdf>
9. Climate Emergency Response (2019)
<https://council.vancouver.ca/20190424/documents/cfsc1.pdf>
10. Climate Change Adaptation Strategy (2012, updated 2018)
<https://vancouver.ca/files/cov/Vancouver-Climate-Change-Adaptation-Strategy-2012-11-07.pdf>
11. Hemlock Looper Impact and Wildfire Risk Assessment Report (2024)
<https://vancouver.ca/files/cov/stanley-park-hemlock-looper-report.pdf>
12. City of Vancouver Open Data Portal
<https://opendata.vancouver.ca/pages/home/>

3.0 SCOPE OF WORK AND DETAILED REQUIREMENTS

The *Hemlock Looper Impact and Wildfire Risk Assessment* report available to proponents outlines the hemlock looper impacts and wildfire risks in Stanley Park, however each proponent will be responsible for due diligence in assessing the project context, scale and current extent of impacts for each of the prioritized treatment areas to inform their proposal.

Park Board staff have been working with representatives from MST First Nation representatives using existing channels to solicit feedback on this project as they shared, inhabited, and cultivated Stanley Park for thousands of years, making the entire park subject to archaeological findings and culturally modified trees. While direct consultation with MST is outside the Consultant's scope of work for this project, the Consultant will be responsible for preparing documentation to support any MST related reviews and permit applications and incorporating MST feedback into the project as it is provided. When required, the Consultant may be asked to attend a site meeting with MST to review ongoing progress – it is recognized that this may impact the scope and pricing during the project.

It shall be noted that the focus of this project remains the removal of dead and declining trees impacted by the hemlock looper to mitigate public safety risks and as a secondary benefit, reduce wildfire risks - this is not a revenue generating project. It is also understood that some trees may require removal for worker safety during operations.

All tree-related decision-making and removal work shall be guided by the principles of tree risk assessment as outlined in the International Society of Arboriculture's Tree Risk Assessment Qualification (TRAQ) methodology.

The Consultant will be responsible for the following scope of work:

3.1 Phase 1: Preparation and on-boarding

3.1.1 Review all relevant Park Board and City of Vancouver background documents and policies not limited to those listed in Section 2. During the onboarding process, the Park Board will provide the Consultant any available and relevant data, documents, methodologies, maps, and processes related to the sites.

Key Objectives:

- Attend a start up meeting with Park Board staff, establish a schedule and attend at least one on-site weekly project meeting.
- Complete a thorough review of all relevant documents.
- Develop and submit a detailed project timeline in the form of a Gantt Chart and budget allocation that outlines the proposed work Plan for the prioritized treatment areas (key milestones such as standing meetings, required permits, reporting deadlines, and potential Senior Leadership and/or Board updates and presentations as directed by Park Board staff). The schedule will be reviewed and updated weekly to reflect project developments and adjustments as required, ensuring alignment with evolving priorities and any additional requests from Park Board staff.
- Submit an invoice template broken down by major tasks and team member to track budget expenditure against progress on the project for Park Board approval. Administrative charges shall only apply to subcontractors, to a maximum of 10% of subcontractor costs.

3.2 Phase 2: Site Assessment and Detailed Prescriptions

3.2.1 The Consultant will be responsible for undertaking site reviews and assessments to collect data to inform a detailed prescription for operational treatments of Hemlock Looper impacts in designated priority treatment areas. The development of the draft detailed prescriptions for operational treatments is a key milestone for the project. Through the draft prescription, the Consultant will consolidate the data and findings from the project-to-date, including integrating collected data with relevant existing Park Board data and stakeholder discussion.

Key Objectives:

- Undertake all required site work to collect data to assess the current level of Hemlock Looper impacts for each priority treatment area prioritized by Park Board staff.
- Record existing conditions of park assets (infrastructure, trails, parking lots, etc.) prior to and post treatment.

- Assess wildfire risk factors, including, but not limited to species mix; forest age; fuel loading; forest density; live canopy ratio (average); ignition sources; environmental and climatic factors; etc.
- Develop a detailed Tree Removal, Ecological Restoration and Reforestation Prescription for each priority treatment area including but not limited to:
 - Extent of mitigation and distance offset from roadways and pathway corridors and park assets based on potential risk-level to the users of the park
 - Commentary on wildlife and habitat impacts and approaches and methodologies to minimize impacts based on timing considerations and other factors, including retaining tree stems as wildlife poles where feasible.
 - Recommendations for areas suitable for monitoring of residual forest health and ongoing wildfire management.
- Outline methodology for handling and disposing of non-merchantable timber, slash, and other debris, including options for chipping, on-site decomposition, provide coarse woody debris metrics, or transport to designated processing or scaling sites.
- Develop planting and maintenance plans including species selections, competing vegetation management; and necessary interventions (this component will necessitate dialogue and input from MST), including follow up requirements for successful establishment.
- Provide recommendations on species selection in advance of donated seedling delivery and management strategies that enhance and improve climate resilience in the Park.
- Assess potential windthrow risks in priority treatment areas by evaluating stand characteristics, edge effects, tree stability, soil conditions, and exposure. Provide recommendations for mitigation measures.
- Develop invasive removal plans regarding containment including timeline for required invasive suppression and follow up maintenance required to ensure survival of planted trees.
- Tag and inventory all affected cedar trees of cultural significance within priority treatment areas to share with MST.
- Identify site trailer location, any required processing areas, access and haul routes for review and approval by Park Board staff.
- Coordinate and secure a Provincially approved scaling yard location for the delivery, sorting, and scaling of any merchantable timber.
- Identify, initiate, and coordinate all logistical matters in advance of operational treatment delivery, including but not limited to:
 - environmental and traffic management approvals or permitting;
 - Documentation to support archaeological permits;
 - Consideration of archeological concerns related to below-ground and above-ground resources (e.g. culturally modified trees);
 - Relevant support documents and permits related to environmental and wildlife acts (Federal and Provincial where applicable);
 - Stakeholder operations within Stanley Park;
 - Securing parking permits for employees;
 - Ministry of Transportation and Highways requirements or permissions; and
 - All WorkSafeBC regulations related to industry standards.
- Develop and share detailed safety plans including Traffic Management Plans (or TMP) in accordance with industry best practices, and relevant Park Board, City and Provincial policies.

- Create polygons of each treatment area in a map layer that will be compatible with Park Board's GIS software.
- Revise detailed Prescriptions as required.

3.3 Phase 3: Execution of Detailed Prescriptions

3.3.1 The Consultant will incorporate Park Board, MST, and stakeholder feedback on draft materials to develop the final detailed prescriptions prior to delivery of operational treatments as approved by Park Board staff and consulted with MST.

Key Objectives:

- Assemble and administer all work by consulting, contracting and delivery teams, including but not limited to Registered Professional Foresters, ISA Certified Arborists and TRAQ tree assessors on site to oversee ongoing treatment and work of climbers and certified fallers, machine operators, traffic control, general labourers, security, and any others as required.
- Coordinate all mobilization/demobilization, staging, low impact equipment, site preparation and protection appropriate to the sensitive forest and urban high use environment and same required to meet industry best practices and WorkSafeBC standards as well as Park Board and City plans and policies.
- Prepare weekly written updates for Park Board staff to communicate ongoing schedule with relevant stakeholders.
- Coordinate and supervise all field work and logistics and implement tree removal work. This includes removal of hazard trees identified by the proponent and the subsequent dispatch of the hazard trees that contain merchantable timber materials to approved scaling yard, or firewood to MST. Proponent to obtain required permits for transportation and safe disposal of waste from site. Removals must be recorded and logged and shared with Park Board project team staff as part of ongoing and summary reports.
- Conduct tree risk assessments within each priority treatment area following ISA's Tree Risk Assessment Qualification (TRAQ) methodology. All trees within the working zones must be assessed for structural integrity and public safety risk, with findings incorporated into the treatment prescriptions.
- Implement and monitor safety and traffic management plans addressing vehicular and pedestrian movement, safety, and access with specific details of signage and appropriate protections around worksites to the satisfaction of Park Board.
- Monitor and maintain appropriate protections within and around worksites, existing infrastructure in Stanley Park, road, and trail access, including signage, to ensure compliance with relevant Park Board, City and WorkSafeBC policies.
- Implement strategies to minimize forest disturbance during operational treatments by using low-impact equipment, reducing unnecessary ground disturbance, limiting access routes, and ensuring proper mulching and site protection measures. Mitigation measures should align with best practices for sensitive ecological and urban forest environments.
- Notify Park Board project team and Archaeologist upon discovery of archaeological sensitive material, and concerns related to culturally modified trees, working under the direction of the City's Planning and Park Board staff.
- Prepare any required updates to the ecological replanting/reforestation plans and polygons as required, including but not limited to species selections, limits of digital

- polygons, competing vegetation management; and necessary interventions (reflecting feedback from MST) and follow up requirements for successful establishments.
- Any damage incurred as a result of contractor negligence shall be repaired and or replaced to the satisfaction of Park Board at the contractor's sole expense.
- Revise detailed Prescriptions as required.

3.4 Phase 4: Restoration, Invasive Management, Certification, Final Reporting and Close Out

3.4.1 Delivery of replanting/reforestation plan as approved by Park Board staff and consulted with MST, ongoing monitoring and preparation of a final report and certifications for project close out.

Key Objectives:

- Update and finalize invasive removal plan regarding containment including timeline for required invasive suppression and follow up maintenance required to ensure survival of planted trees.
- Prepare silviculture prescriptions that update and finalize replanting/reforestation and maintenance plans that consider soil types, and include species selections, planting density, competing vegetation management, and necessary interventions (this component will necessitate dialogue and input from MST), including follow up requirements for successful establishment.
- Define specific indicators and timelines for monitoring regrowth, invasive species suppression, forest health, to ensure long-term ecosystem resilience.
- Procure plant material that meets the approved replanting/reforestation plans, including seed source native to the appropriate bio geoclimatic zone. Extent of invasive management and removals to prepare treatment areas for planting and coordinate the sub-contractor to deliver the work.
- The Park Board will receive 25,000 seedlings (minimum 615A size) per year (2026 and 2027) as a donation from Western Forest Products, which must be used in these replanting efforts. Final species breakdown and delivery will be coordinated via Park Board staff on a date mutually agreed to prior to March 31st each year.
- Daily check-ins to Park Board staff for coordination of Urban Forestry daily operations.
- Weekly written updates and tracking including but not limited to the following: working days, weather days, area treated (ha), progress of completion, trees removed (<20cm estimated and >20cm confirmed), number of loads and weight of debris and brush removed, number of loads and weight of logs hauled off site, number of loads and tonnes of wood delivered to Host Nations, area replanted (ha), number of trees replanted.
- Monitoring should include updates on progress against timelines, photographs and any written materials required for communications updates and media responses.
- Issue a final certification and written summary report with acceptance by a Registered Professional Forester and Wildfire Risk Assessor that all work has been completed in compliance with prescriptions. Report should also include outlining any evident changes (increase or decrease) of ongoing Hemlock Looper impacts and changes in wildfire risk ratings for each prioritized treatment area by outlining what fuel loading remains and any potential impacts to people, property and infrastructure.

- Prepare and submit digital map layers post treatment including updated mapping of existing forest patches to demonstrate wildfire risk reduction and the potential residual wildfire risk.
- Finalize detailed Prescriptions to address any changes in treatment work and/or impact areas.

3.5 Phase 5: Additional Restoration, Monitoring, Adaptive Management and Final Reporting

- 3.5.1 This sub-phase involves planning and implementing the planting of the final donation of 25,000 seedlings from Western Forest Products to be received in 2027. The Consultant will identify suitable areas for planting based on previous treatments, site conditions, and restoration objectives. The focus will be on previously treated areas and open spaces deemed appropriate for forest restoration. Staff will provide a reference map outlining additional areas under consideration for restoration or re-establishment of forested areas.
- 3.5.2 This sub-phase represents the final quality assurance step to evaluate the success of restoration activities and guide future adaptive management. The Consultant will undertake comprehensive site assessments across all previously treated and replanted areas within Stanley Park to assess the effectiveness of earlier interventions, focusing specifically on the success of ecological restoration and seedling establishment.

Key Objectives:

- The consultant will conduct regeneration surveys, assessing seedling survival and health, evaluate site conditions that may affect establishment success, and identify areas requiring supplemental planting or invasive species follow-up to support restoration objectives.
- Develop and implement a replanting plan for these zones, including species selection, site preparation, and protection measures. All planting plans must be reviewed and approved by Park Board staff and reflect engagement with MST where applicable.
- Evaluate the extent of invasive species re-emergence and recommend a follow-up invasive species management plan, including control methods (as appropriate and permitted), and outline a maintenance schedule.
- Outline brushing or competing vegetation management where necessary to improve light availability and reduce pressure on young trees, with consideration for wildlife habitat retention and biodiversity values.
- Conduct a comprehensive site assessment of all previously treated and replanted forested areas to evaluate the current condition and ecological progress of each treatment unit.
- Assess seedling survival rates and identify rates of mortality. Produce a detailed mortality and success report including photographic documentation and spatial mapping of replanted areas.
- Recommend additional monitoring sites based on observed forest conditions, including early detection of pests, pathogens, or emerging forest health concerns generally across the park.
- Assess the success of wildlife tree retention, snag placement, and coarse woody debris strategies for their ecological benefits and safety compliance.

- Submit a final written summary report that certifies project completion, details replanting and maintenance outcomes, updated map of current wildfire risk in Stanley Park, and outlines future recommendations for adaptive forest management in Stanley Park.

4.0 CONSULTANT RESPONSIBILITIES

The successful Consultant will be responsible for:

- Acting as the managing contractor for the project, which role will include without limitation, providing overall liaison, control, coordination and communication between all parties for this phase of operational treatment;
- Developing and revising a work plan, Schedule (using Gantt style charts, with clear deliverables, timelines, and responsibilities), budget proforma, and an invoice template broken down by major tasks and team member to track budget expenditure against progress on the project, in consultation with the Project Manager;
- Planning, executing and certifying that all project elements as detailed in the work plan are completed in compliance with prescriptions and industry best practices
- Ensuring all work sites remain in compliance with relevant Park Board, City and WorkSafeBC policies;
- In collaboration with the Project Manager, organize and facilitate meetings with key decision makers; and
- Administer tasks including setting agendas, producing presentations and materials, and recording and distributing progress reports, meeting notes and minutes within 48 hours of each meeting, prepare any site instructions, contemplated change orders, and site clarifications;
- Coordinate and maintain a team of high performing subcontractors. From time to time, and within the allowable budget, the contractor may replace a subcontractor if they are not meeting the requirements of the project.
- Coordinate and administer all field work performed, and will assume full responsibility to the City for all work performed by its employees and sub-contractors;
- Coordinating the work with the Park Board's Project Manager, or their delegate, and ensuring that the performance of the Services does not adversely impact any design or construction schedule for any project or work and/or services provided by any other City and Park Board staff or consultants;
- Forwarding all instructions from the Park Board to the Contractor;
- Taking all steps required in placing, effecting and maintaining insurance and providing evidence of insurance;
- Supporting and coordinating potential planting initiatives between the Park Board and MST, ensuring alignment with project goals and collaborative restoration opportunities;
- Commencing the work promptly and use every reasonable effort to carry out where no date is specified for each component by this Agreement, such completion dates as are reasonably specified from time to time by the Park Board;
- Alerting Park Board when key changes are to be reviewed and approved on site;
- Leading the substantial completion process (in collaboration with VPB Urban Forestry staff as appropriate);

- Responsible for payment and amounts owing to the sub-contractors under the work contract based on the Consultant's observations and evaluation of the Contractor's application(s) for payment;
- Any damage incurred as a result of consultant or delivery team's negligence shall be repaired and or replaced to the satisfaction of Park Board at the consultant or contractor's sole expense; and
- Incidental damage to existing services and infrastructure may occur as a result of this type of work. Whenever possible the consultant will engage with Park Board staff in advance, to undertake a site assessment of potential impacts versus financial impacts to the project budget, and further, to approve and coordinate appropriate next steps for a predetermined scope of repair, restoration and/or replacement.

The Park Board will:

- Provide links, digital files or hard copies of all relevant City and Park Board documents including special events to inform a final project schedule;
- Provide data and mapping, where available (including Park Board available drawings and plans related to existing assets, 2022 ortho imagery, 2022 LiDAR imagery, and known archaeology locations);
- Coordinate with COV Communications team & lead public engagement as needed;
- Engage, inform and update Local First Nations and all stakeholders (Ministry of Transportation & Infrastructure, commercial stakeholders within Stanley Park);
- Share pertinent stakeholder contacts and arrange or invite stakeholders and key decision makers as required;
- Support coordination of the delivery of donated seedlings;
- Conduct regular site visits to ensure compliance with approved prescriptions, City and Park Board policies and industry best practices; and
- Provide guidance and comments on safety and traffic management plans; and
- Review and process payments.

5.0 CONSULTANT EXPERTISE

The Park Board is seeking the services of an experienced multi-disciplinary Consultant team with expertise in urban forestry planning, management, and operations of locations similar in size and complexity to Vancouver. To ensure high-quality delivery and consistency with industry standards, consultants submitting proposals must meet the following minimum qualifications:

- **Professional Experience:** A minimum of 10 years of demonstrated experience in conducting forestry operations in coastal British Columbia, including forest stand assessments, ecological restoration, hazard tree mitigation, and large-scale tree removal and replanting.
- **Coastal Forestry Experience:** Specific operational experience in coastal forest ecosystems is required, with an understanding of site sensitivity, windthrow patterns, native species identification, and other related concerns.
- **Technical Knowledge:** Proven familiarity with forest health indicators, wildlife tree retention, and integration with municipal forest management strategies. Prior work with urban interface forests will be considered an asset.
- A Lead Consultant will be required to outline and retain a multi-disciplinary consultant and contractor team to develop and deliver the items outlined in the scope of services. The

Lead Consultant must identify the members of the core team and other Consultant team members shown in an organization chart. The team should demonstrate:

- Significant project management experience in projects of similar size and scope;
- A proven track record in similar projects for other jurisdictions; and
- References provided by client representatives that are relevant to the scope of work.
- The Consultant team should include representatives with professional accreditation in good standing at a minimum:
 - Registered Professional Forester in good standing with the FPBC
 - Urban Forester
 - Urban Forest Planner
 - ISA Certified Arborist
 - TRAQ endorsement and Wildlife/Danger Tree Assessor
 - Ecologist
 - Biologist
 - Geomatics Professional
 - Integrated Pest Management Specialist
- Operational team with equipment proficiency: Contractors must have experience with relevant forestry equipment with low-impact options for sensitive terrain. Machinery and equipment must be compliant with WorkSafeBC standards and regulations and a list of heavy equipment with specifications must be supplied.
- If the Lead Consultant is not a local firm, they should be supported by a local firm with at least one project team member is a Registered Professional Forester in good standing with Forest Professionals British Columbia, one project team member who is a professional planner registered with the Planning Institute of British Columbia, and one project team member who is International Society of Arboriculture (ISA) certified with Tree Risk Assessment Qualification (TRAQ) endorsement, each with a minimum of ten (10) years of experience.

6.0 PROJECT DELIVERABLES & TIMELINE

Under the direction of the Project Manager, the successful Consultant will be expected to plan, execute and certify all components in the Scope of Work. Project schedule shall build in adequate time and resources and pricing shall account for all labour, equipment, project oversight, delivery and certifications based on net treatment areas.

Table 1. Project Phases and Timeline

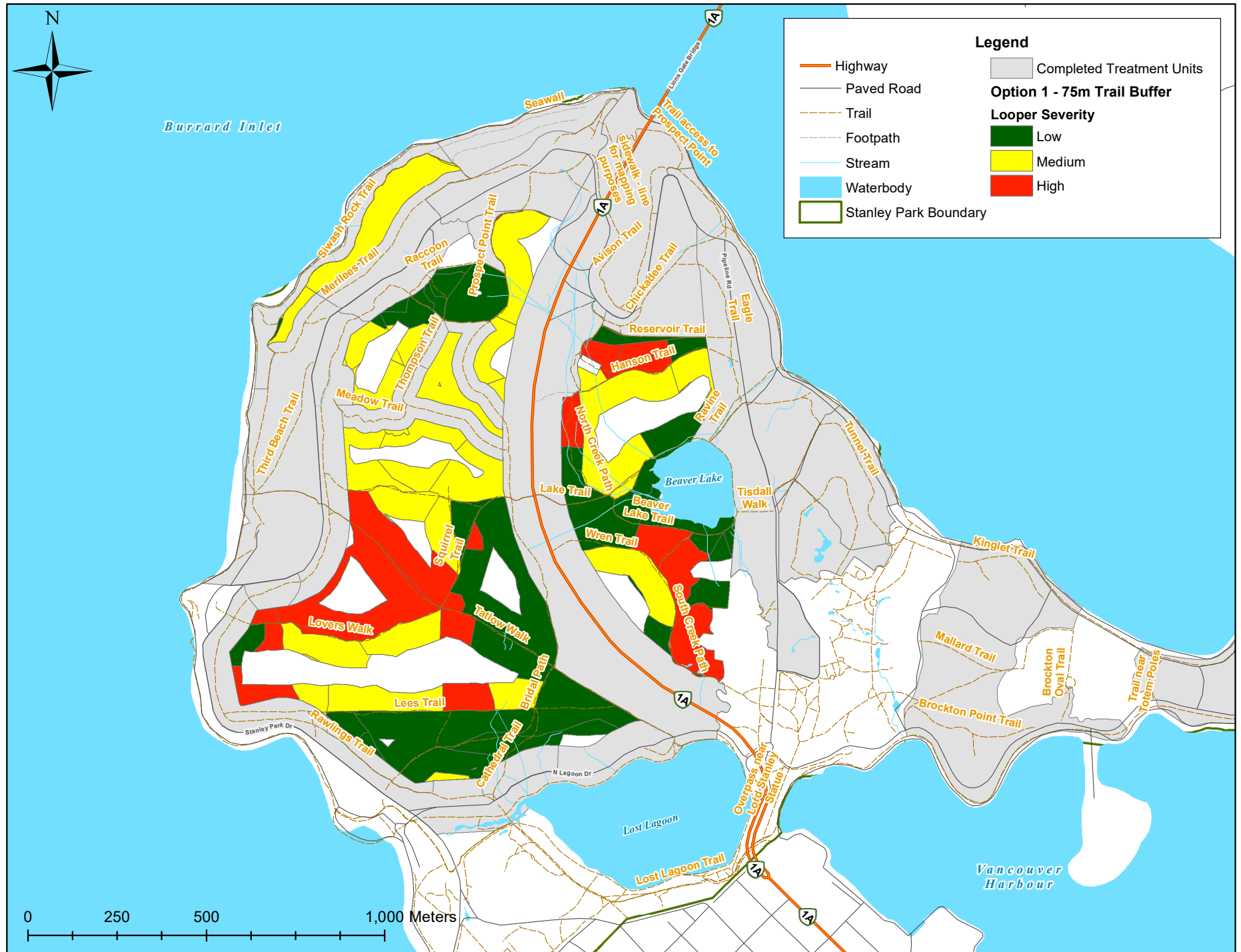
Phase	Target Completion Dates
Phase 1 Preparation and on-boarding	10 business days following signing of contract
Phase 2 Site Assessment and Detailed Prescriptions	First draft submitted 45 business days following signing of contract
Phase 3 Execution of Detailed Prescriptions including Ongoing Reporting	September to December 31, 2025
Phase 4 Restoration, Invasive Management, Final Reporting and Close Out	By or before March 31, 2026
Optional Treatment Period for Phase 3 Execution of Detailed Prescriptions including Ongoing Reporting	September to December 31, 2026

Phase 5: Additional Restoration, Monitoring, Adaptive Management and Final Reporting	January to April 30, 2027
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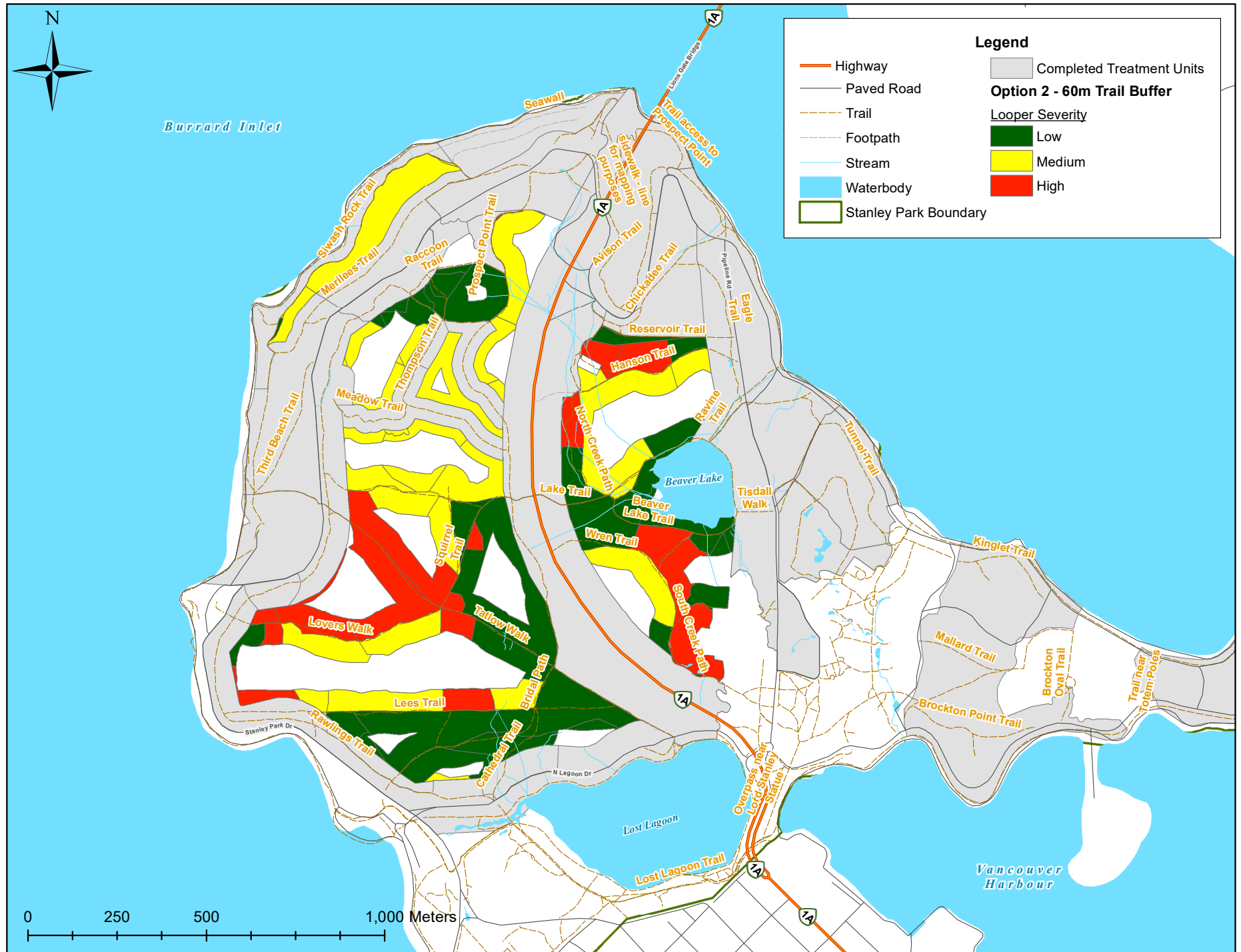
The project milestones prescribed in this RFEOI are high-level and approximate only. It is the Consultant's responsibility to recommend an innovative plan and detailed timeline as part of their RFEOI, which is to be reconfirmed at project start-up following award of contract.

Any changes to the priority treatment areas, project phases and target completion dates may only be amended with prior Park Board approval.

APPENDIX C: Map Options from RFEOI Submission



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