

Tree Management Strategy Rodgers Creek Area 6

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Submitted to:

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1 Introduction

British Pacific Properties (BPP) is undertaking development planning for the Area 6 subdivision, the next phase of the Rodgers Creek neighbourhood. BPP has engaged Diamond Head Consulting to prepare a Tree Management Strategy for the land. This document provides an overview of the planned tree removal and retention within Area 6 and guides tree protection and removal before, during and after land development. This Plan is consistent with the District of West Vancouver’s newly adopted Interim Tree Bylaw.

Totalling 53 ha (131 acres), Area 6 will include a mix of residential unit types with dedicated natural park and protected riparian areas (Figure 1). For the Phase 1 development permit application for road clearing and earthworks, approximately 87% of the land will be maintained in a natural, forested state (Figure 2). The final development concept envisions approximately 56% of the land will be maintained in a natural, forested condition, including any disturbed areas that are reinstated and enhanced with native species (Figure 3).

1.1 Limitations

- Areas were calculated using GIS and no areas have been surveyed.
- Calculations for number and density of trees are based on field sample plots.

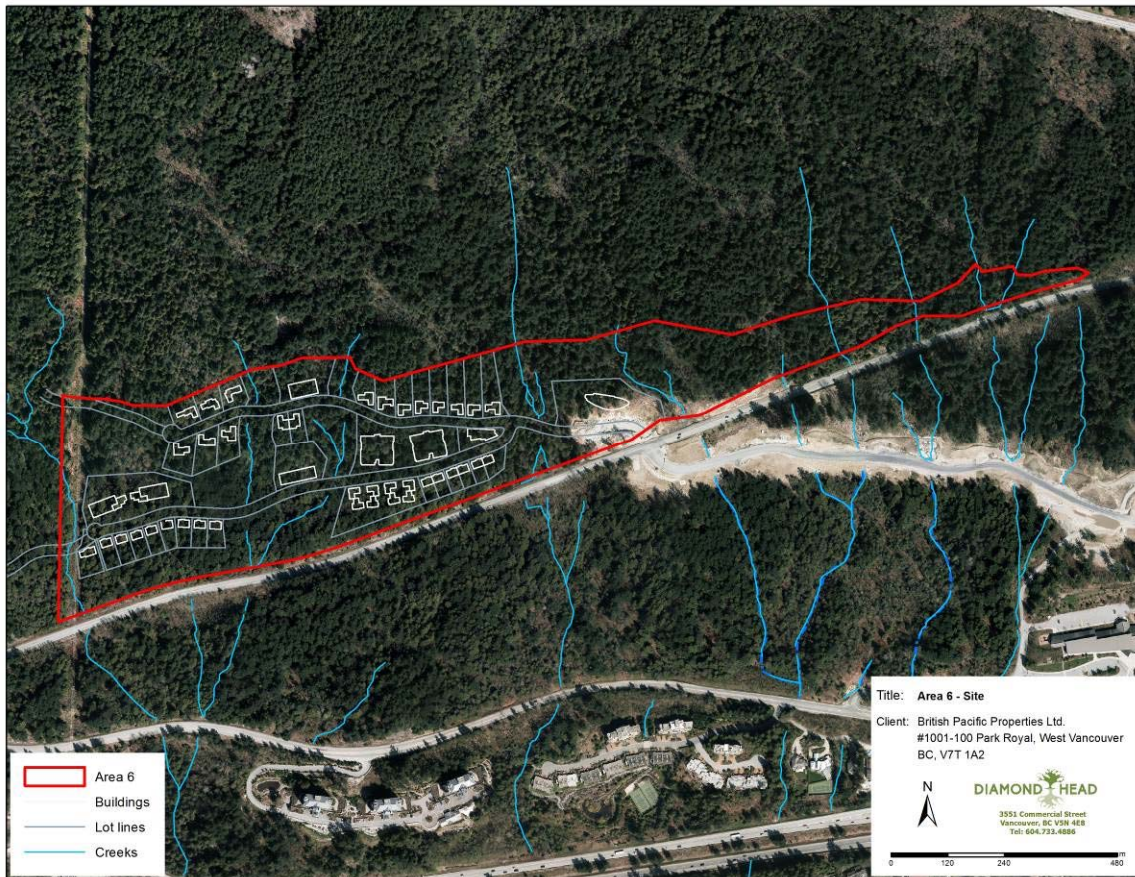


Figure 1. Site location of Area 6

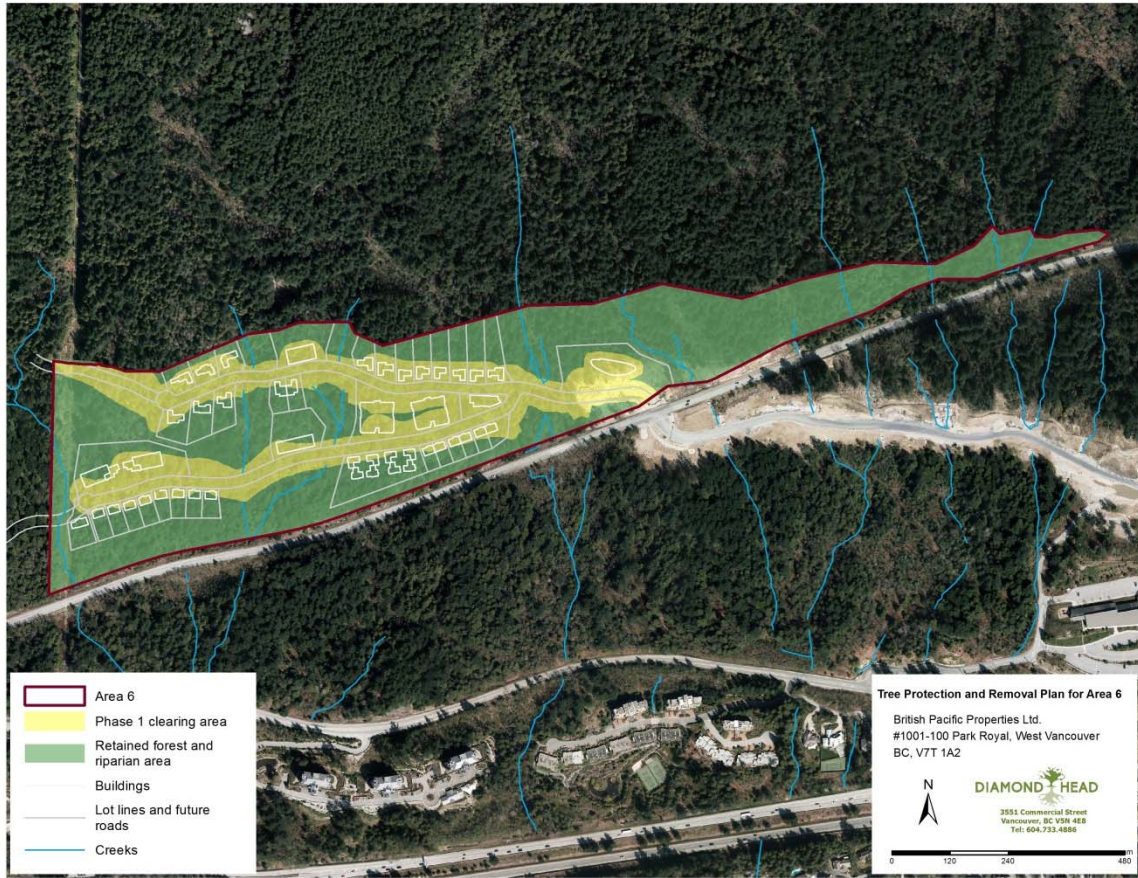


Figure 2. Phase 1 clearing area

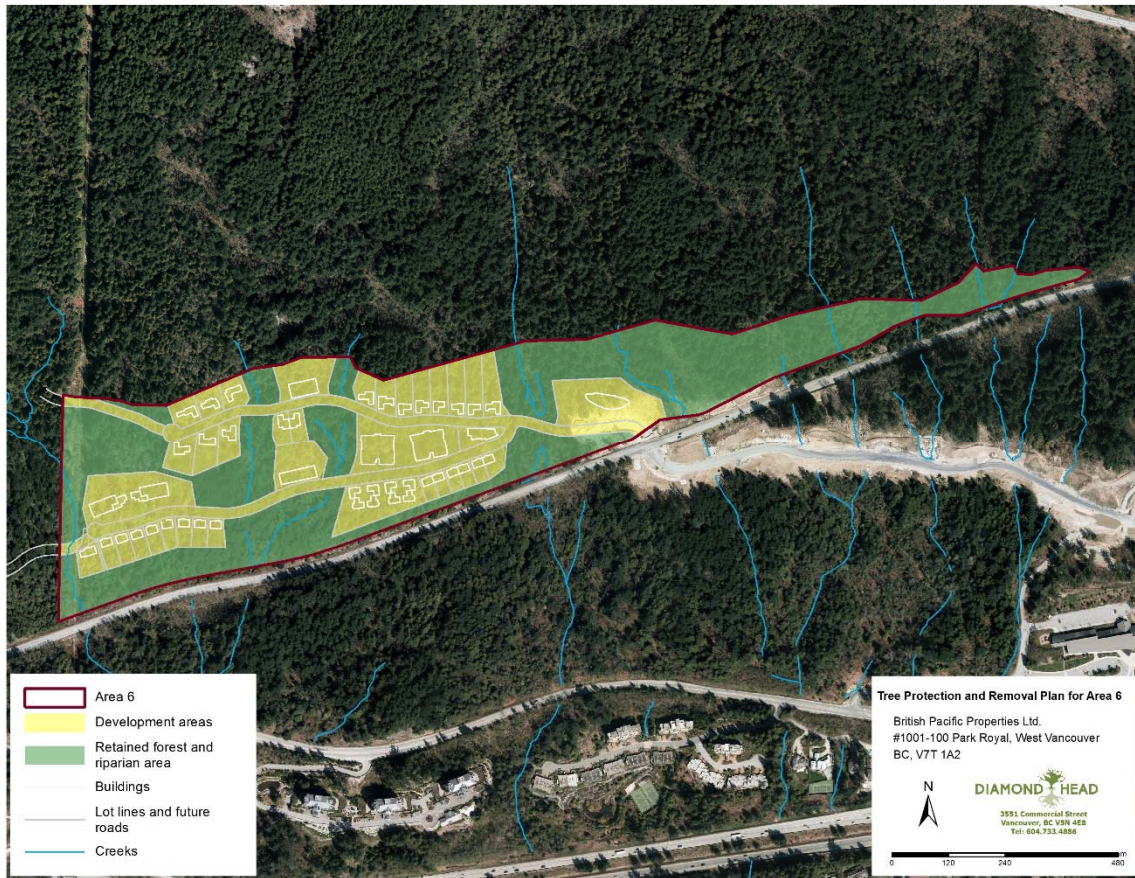


Figure 3. Proposed final development concept plan for Area 6

2 Summary of Existing Forest Resource

Area 6 is currently forested with moderately dense mature stands of native species that regenerated naturally following logging operations about 80 years ago. A summary of broad stand types as well as the estimated number of main canopy trees growing in each stand is provided in Table 1.

Table 1. Summary of Forest Types and Stems of Trees within Area 6

Forest Type	Area of Coverage (ha)	% of Area 6	Estimated Number of Trees
Coniferous	35.9	68%	11,910
Deciduous	1.6	3%	680
Mixed	12.4	23%	5,119
Shrub	2.7	5%	
Non forested	0.4	1%	
TOTAL	53.0		17,709

3 Summary of Development Areas and Planned Tree Removal

The planned development consists of 23 single family lots, 8 duplex lots, 8 cluster housing units, and 4 apartment sites, distributed over 18.4 ha (45 acres). Table 2 below provides a summary of the planned land use within Area 6. This report assumes the eventual development of the proposed District-owned site and restoration of any riparian areas disturbed during road clearing; these assumptions are reflected in calculations of development areas.

Table 2. Summary of Land Use

Land Use	Area (ha)	% of Area 6
Residential parcels	18.4	35%
Roads	5.0	9%
Retained Forest Area	29.6	56%
TOTAL	53.0	

Development within Area 6 is clustered in areas of lower environmental sensitivity; as a result of development density and associated infrastructure requirements, few mature trees can be retained within the development clusters. The area to be cleared for roads and development is summarised by forest type as well as the estimated number of trees to be removed in Table 3.

Table 3. Summary of Trees to be removed from within the Development Areas

Forest Type	Area of Coverage (ha)	Estimated Number of Trees
Coniferous	16.1	5,233
Deciduous	0.4	153
Mixed	5.7	2,532
Shrub	0.9	0
Unclassified	0.3	0
TOTAL	23.4	7,918

4 Summary of Retained Forest Area and Planned Tree Retention

29.6 hectares of land within Area 6 will remain natural, including any riparian areas disturbed by road crossings and replanted with native species. With the exception of hazard trees, mature trees will be protected within creek corridors and associated environmental setbacks, as well as within the natural park areas proposed to be dedicated to the District of West Vancouver. Table 4 below provides a summary of trees to be protected within park land and riparian areas.

Table 4. Summary of Trees within Tree Retention Area (park and riparian areas)

Forest Type	Area of Coverage (ha)	Number of Trees
Coniferous	19.8	6,681
Deciduous	1.3	527
Mixed	6.7	2,587
Shrub	1.8	0
TOTAL	29.6	9,795

Nearly 60% of trees within Area 6 will be retained, as shown in Table:

Table 5. Summary of Trees Retained and Removed within Area 6

	Area of Coverage	% of Area 6	Number of Stems
Retained	29.6	56%	9,795
Removed	23.4	44%	7,918
TOTAL	53.0	100%	17,713

5 Tree Management Planning

56% of Area 6 will be retained and protected as forested areas. Trees along the edge of these clearing boundaries will be managed to mitigate risk to the development site, and to protect the health of retained trees.

The following sequence of construction activities and the professional assessment steps will be implemented to maximize protection of retained trees:

1. The approved clearing boundary will be identified by ground survey.
2. All edge trees to be retained near the approved clearing boundary will be flagged by the forester.
3. The clearing contractor will fall trees within the approved clearing boundary, and grub stumps and organic material up to 10m from the forested edges.
4. The project forester will assess all forested edges and spray paint the required root protection zones for retained edge trees. The forester will identify trees that are considered hazards to the development site as well as trees that require pruning to retain safely. A separate Hazard Tree Assessment Report will be prepared at a later date for each lot or group of lots within the approved clearing boundary.
5. The clearing contractor will prune and remove trees as recommended by the forester, and install temporary tree protection fencing.
6. The clearing contractor will grub the remaining edge up to the tree protection fencing.
7. Permanent tree protection fencing will be installed by the developer as the development of each group of lots proceeds.