8.0 STREET TREE AND BOULEVARD PLANTING

8.1 GENERAL

Trees and landscapes are to be installed and established on all city roads and within new subdivisions.

Design of street tree and boulevard planting shall be prepared by a Landscape Architect, registered with the B.C. Society of Landscape Architects.

8.1.1 Approval

The species, size of tree, general spacing and planting specifications for the proposed street tree planting are to be approved by the Parks Department.

Should the specified trees not be available, the developer shall notify the Engineering & Public Works Department (Inspections) and make a request for substitution. The developer must provide a list of a minimum of ten nurseries that were contacted to verify that the specified trees are not available. If Engineering & Public Works Department is satisfied that a reasonable search has been completed, then Engineering & Public Works Department shall consultant with the Parks Department for the approval of a substitute.

8.2 DESIGN CRITERIA

8.2.1 Landscaping Medians and Boulevards

The area between the back of curb or sidewalk and the property line (boulevard area) and the non-travelled central portions of divided arterial roads (medians) normally shall be finished to a turf grass surface.

8.2.2 Street Tree Spacing

Street trees shall be spaced 6 m to 12 m apart depending on the species used in the design.

8.2.3 Minimum Tree Planting Clearances

- Trees will not be planted within 2.5 m from kiosks and vaults
- No Underground Utilities to pass directly under the rootball except City electrical systems
- For additional clearances, refer to drawing G-6-SD in the Supplementary Specifications and Detail Drawings

8.2.4 Grating Requirements

The following table is a guideline for the grating requirements for various corridors with the minimum widths specified below. For planting strips of concrete or paving stone, grates are required. Steel frames and grates are recommended in the City centre.

Table 8.1 Grating Requirements

MINIMUM CORRIDOR WIDTHS (mm)			GRATING REQUIREMENTS		
Total	**Plant Strip**	**Sidewalk**	**Collar**	**Frame**	**Grate (mm sq.)**
3000	(concrete/paving stone) 1500	1500	concrete	steel	steel 1549
2700	(concrete/paving stone) 1200	1500	concrete	steel	steel 1199
2700	(concrete/paving stone) 1200	1500	concrete	none	concrete 1200
2100	(concrete/paving stone) 600	1500	none	none	concrete 928
2400	(grass/roadside) 900	(houseside) 1500	none	none	none
2700	(grass/houseside) 1200	(roadside) 1500	none	none	none

For tree grate detail refer to drawings G-3-SD to G-5-SD in the Supplementary Specifications and Detail Drawings.

8.2.5 Tree Root Barriers

Approved root barriers shall be installed to provide protection for infrastructure from tree roots, for every street tree planting project. The root barrier will be designed such that the major root structure will be restrained from extending into other utility corridors, but still allow for the normal growth of the tree.

8.2.6 Tree Support

Trees shall be supported with approved stakes, guy wires and ties, to ensure proper vertical alignment of the tree during its growth stages. Any strapping used shall not cause a depression in the bark of the tree. Install approved tree trunk guard.

8.2.7 Growing Medium

A recommended “BC Landscape Standard” growing medium must be provided for trees and landscaping to permit normal growth of the planting.

8.2.8 Irrigation

An underground sprinkler system shall be installed by the Developer for the maintenance of trees, grass or other landscaping located in boulevards or medians in the road right-of-way and for hanging flower baskets on roadway light poles. The system must be capable of providing the necessary irrigation and shall be automatically activated through the City of Richmond's central control irrigation system.

Plans are to be reviewed and approved by the Parks Department prior to installation.

8.2.9 Drawings

The following are required on all drawings:

- Typical Cross-section showing curb and gutter, boulevard, sidewalk, roadway lights, proposed utilities, existing utilities and proposed trees.
- Plan view showing curb/gutter, boulevard, sidewalk, proposed utilities, existing utilities that are to remain, driveway locations including roadway lights and proposed trees with the chainages;
- Planting detail as per City standard drawings pertaining to street tree and boulevard planting;
- Tree Grate Detail; and
- Plant list showing symbol, quantity, botanical name, common name, size, condition and remarks. A sample of this table is shown below:

Sample Table:

PROPOSED TREE SPECIES					
SYM. QTY.	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONDITION**	**REMARKS**
14	Ginkgo Biloba	Maidenhair Tree	8 cm cal.	Wire basket of acceptable size (BCLNA Landscape standard)	Height of 1st Branch – 1.8 m

Species to be reviewed by the City prior to planting.

8.3 REFERENCES

- British Columbia Landscape Standard, jointly prepared by B.C. Society of Landscape Architects and B.C. Nursery Trades Association (current edition).
- City of Richmond and BC Hydro Protocol for Tree Management
- Master municipal specifications and standard details December 1992 prepared by the Consulting Engineers of B.C. Roadbuilders and heavy Construction Association and the Municipal Engineers Division.
- British Columbia – Irrigation Standard.
- Tree Protection Bylaw 8014