

# TREE PLANTING ON SCHOOL SITES



# Acknowledgements

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The VSB is honoured to be working and learning together on the traditional, ancestral, and unceded territories of the skwxwú7mesh (Squamish), selílwitulh (Tsleil-Waututh), and  $x^wm \partial k^w \partial y \partial m$  (Musqueam) nations.

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### Introduction

As outdoor learning areas and school gardens flourish throughout the District, school communities are seeking ways to further enhance their grounds to provide a safe and inviting environment in which to learn and play. Trees are a logical addition to these areas – providing shade and cooling, blocking street noise and wind, adding visual stimulus, and creating separation from the rest of the school ground. Trees also make our world a special place! They give us something to look up to, literally and metaphorically. They are a living thing that we can watch grow and change throughout the seasons and over the years. Planting a tree is a commitment and a celebration that students can witness throughout their time at school and then as a member of the community.

# **Guiding Principles**

The District's Grounds Department has developed the following standards for all tree related projects on school grounds:

- 1. Tree species must be selected from an approved list. See Appendix A.
- 2. Trees must meet the specified minimum size of 6 cm in diameter and 2.5 m in height to increase the long-term health and survival of the tree.
- 3. Location of the tree will be agreed upon by the VSB Grounds Department and the school administrator.
- 4. Tree planting will be scheduled and conducted by the Grounds Department. Students and the school community can observe the planting.

Unique situations may allow for variances from this guide but must be approved by the Grounds Department prior to installation.



Multiple trees planted in one phase

## **Planning Process**

#### Project Idea

Whether your trees are planned as a part of an <u>outdoor learning area</u>, <u>garden</u>, or as a standalone installation on your school ground, a plan is critical to the long-term success of the project, and to the health and survival of any trees planted.

#### Request

Develop a request that addresses the following:

- A. Scope (number of trees)
- B. Timeline
- C. Budget & Funding
- D. Design & Placement
- E. Care & Maintenance Plan

#### Scope

These questions may help you outline the project scope:

- What purpose will the trees serve on your school ground? (i.e., shade and cooling, physical separation of garden or outdoor learning area)
- Is there a special reason for the tree planting (i.e., a memorial, a legacy project for kindergarten students, a celebration for graduating students)? How many trees do you want to plant? Will they be planted all at once, or over several years? Will you take a phased approach to planning and planting?
- How much space on the school ground is available and suitable for planting trees?
- How much money is available for the project? Are all the required components funded, or will a phased approach be used to gradually make additions? How will money be raised?
- How much care and maintenance will the tree(s) require? Who will be responsible for this care and maintenance?

#### Timeline

The timeline should include the time required to:

- Complete the request and review with the Grounds Department. Have a site visit with Grounds staff and allow them time to procure the tree(s)
- Fundraise

It is helpful to think about when the tree(s) will be planted and work backwards. **There are optimal times to plant a tree (i.e., late September to early December, and February to April). No plantings outside of these windows will be approved by Grounds.** You can expect a turnaround time of approximately 2 months between proposal approval and tree planting.

#### **Budget & Fundraising**

The VSB does not fund new trees. Each school will need to identify potential funding sources to cover the costs. You should have at least some funding secured and a funding plan in place before submitting your proposal, as the tree(s) cannot be planted until funding is secured. Please note that all prices are estimates only and are subject to change based on the cost of labour and materials.

Expenses	Estimate	Funding Options
Tree	\$200 - \$450	<ul> <li>Apply for grants</li> </ul>
Installation (labour,	\$400	<ul> <li>PAC funds</li> </ul>
machinery, transportation)		<ul> <li>Other school</li> </ul>
Watering bag	Donated by Grounds Dept.	fundraising initiatives
Hose, watering equipment	\$20 - \$100	

#### Design & Placement

Design matters. And in the case of a tree, the species and placement are a significant investment that will play out over its lifespan. What role will the tree(s) play on your school ground? Trees planted for shade and cooling now will provide the added benefits of stormwater management, improved air quality, and carbon sequestration over their lifetime.

Consider these important design and installation concerns:

#### Tree Species

- Is the tree the right one in the right place?
- Will the tree survive a changing climate over its lifespan?
- Coniferous or deciduous? What additional maintenance concerns will need to be considered?
- Is the tree a common allergen that will impact the health of students/staff?

#### Location

- Direction of shade will the tree provide shade to the right area?
- Is there enough room for the tree to grow for its whole lifespan? Don't plant too close to buildings, fences, sidewalks, playground equipment, etc.
- Is there enough soil for the tree? Will it be planted in a container to be placed on asphalt; will pavement need to be cut out? Will the tree get enough water naturally or will water be required even after the tree has established itself?

Basic Tree Spacing Guide				
Tree Size (mature height)	Space between trees	Min. spacing from wall of building	Min. spacing from corner of building	
Small trees (9 m or less)	1.5 – 4.5 m	2.5 – 3 m	1.5 – 2.5 m	
Medium trees (9 – 22m)	9 – 12 m	4.5 m	3.5 m	
Large trees (22 m or more)	12 – 15 m	6 m	4.5 m	

From: <a href="https://www.arborday.org/trees/righttreeandplace/size.cfm">https://www.arborday.org/trees/righttreeandplace/size.cfm</a>



Mature height of trees. From <a href="https://www.arborday.org/trees/righttreeandplace/size.cfm">https://www.arborday.org/trees/righttreeandplace/size.cfm</a>

#### Safety

- Will the tree(s) impact sight lines on the school ground?
- Will there be an impact to the roots of existing trees or planted areas?
- Will there be an impact on underground infrastructure (i.e., pipes, conduit, etc.)?
- Will the tree encroach onto private or city property and cause potential conflicts?

#### • Phases of Installation

- Do you plan to plant more than one tree over a few years or as a legacy project or graduation celebration? Planting in phases allows time for fundraising.

#### Care & Maintenance Plan

Once the tree has been planted it will be the responsibility of the Grounds Department to do any of the big maintenance required (i.e., pruning), but students can help with things like ensuring that the tree gets enough water, especially over the summer. Grounds will provide a water bag for the summer but it is the responsibility of the school to fill the bag during the hotter months at least 3 times per week for the first 2 years. Add tree watering to your summer garden watering schedule if applicable. Even though Grounds only plants trees during rainy months, young trees need extra water until they are well-established after 2-3 years.

#### Submit the Request

Submit a request by email to the Grounds Supervisor for review – gpearmain@vsb.bc.ca. Requests can be submitted year-round. The Grounds Department will contact you to arrange a site visit and meeting to review the request.

Once your request has been approved by the Grounds department an administrator can make the request for your tree though SchoolDude and trigger the repayable/invoicing process. Administrators should return all the paperwork promptly to reduce the wait time and ensure that the tree(s) can be planted swiftly.



## Tree Planting

Once the project has been approved, the funding secured, and the tree(s) purchased, they are ready to be planted by the Grounds department. Tree planting will be completed between late September to early December, and February to April, and the Grounds department will inform you of when your tree(s) will be planted, and whether students will be able to be involved in the planting.



Machinery required for tree planting



Transportation required for tree planting. Note the size of the root ball of trees being planted.

## Celebration

Congratulations! It's time to celebrate your new tree(s). Consider an annual photo to track growth or a notice sent to classrooms with information about the tree and the benefits it will have on your school ground.



## Frequently Asked Questions

How do we arrange a site visit regarding our plans?

Contact the Grounds Department Supervisor Geoff Pearmain at gpearmain@vsb.bc.ca

What kind of tree should we plant?

• Check out the list in Appendix A for the trees suitable for VSB school grounds.

Can we plant fruit trees?

• No. Fruit trees have been trialed on VSB grounds and they are not suitable. They require constant special care that is beyond the capacity of school communities and Grounds staff. They also attract unwanted wildlife such as rats, raccoons, and coyotes.

Can we plant trees purchased from the local nursery or that have been donated?

• No. The Grounds department is responsible for any trees planted on VSB school grounds, and as such the trees must be procured by the Grounds department – to manage risk, keep an accurate tree registry, and maintain the health of trees over their lifespan.

Will the VSB cover any of the costs of our project?

No.

How much does it cost?

• Trees can cost between \$200 and \$450. The required transportation, machinery, and labour costs are about \$400. (As of December 2021)

When can the trees be planted?

• To ensure tree survival and reduce the need for watering, trees are planted in late September to early December, and February to April.

Can VSB do the work for us?

• Yes. Trees planted by VSB Gardeners are considered a repayable by the school. There is a charge for labour, transportation, and necessary machinery.

Can we plant our own trees?

 No. Any trees planted on a VSB school ground must be planted and managed by the Grounds department.

Who is responsible for caring for the tree over its lifetime?

• Grounds will provide a water bag for the summer, but it is the responsibility of the school to fill the bag during the hotter months at least 3 times per week for the first 2 years. After that, the Grounds department is responsible for any tree planted on a VSB school ground.

# Appendix A – Approved Tree List from Grounds Department

Deciduous Trees	
Common Name	Latin Name
Silk Tree	Albizia julibrissin
Ginko	Ginko biloba
Hornbeam	Carpinus betulus
Red Maple	Acer rubrum
Field Maple	Acer campestre
Full Moon Maple	Acer japonicum
Harlequin Glorybower	Cleodendrum trichotomum
Tulip Tree	Liriodendron tulipifera
Southern Magnolia	Magnolia grandiflora
Pink Flowering Dogwood	Cornus florida 'Rubra'
Windmill Palm	Trachycarpus fortunei

Coniferous Trees		
Common Name	Latin Name	
Excelsa Western Red Cedar	Thuja plicata 'Excelsa'	
Incense Cedar	Calocedrus decurrens	
Ponderosa Pine	Pinus pondersoa	
European Black Pine	Pinus nigra	
Japanese Cedar	Cryptomeria japonica	
Serbia Spruce	Picea omorika	

If your school would like a different tree species, please contact the Grounds Department for consideration.