

EDUCATION: PROGRAMS

Policy 512.14.1-G (previously 602.14.1-G)

Grounds Greening Guidelines

The Richmond Board of Education encourages and supports the development of school and community food gardens and greening projects. Through stewardship efforts of ecosystem restoration and local food production the school communities can support the biodiversity and cycles of life that depend on the environmental features of our school grounds. Most school grounds today have a limited use and are covered with grass that requires maintenance activities for their continued existence. The development of an ecosystem approach that includes multiple species and habitats will result in more resilient spaces that provide enriched learning opportunities.

For Community Gardens on District lands, the Board of Education and the City have entered into an agreement, which provides for the City or their designate to manage community use of designated plots for the community. An integrated school and community food garden model helps to maximize the potential of and increase usage of school grounds as a valuable community green space. There is an increasing demand for community food garden plots and existing community gardens are reaching maximum capacity. School grounds are often an underutilized community land resource that can alleviate pressures on community food gardens, by offering access to organic food gardens at the neighbourhood level. Schools stand to benefit through hands on education, improved health and nutrition through healthy food choices, environmental awareness of 100-mile diet and issues of food security, active children and intergenerational learning. Communities may become healthier and more neighbourly, better integrated with neighbourhood schools while students may become more informed, caring, responsible adult citizens as they grow up. This innovative and integrated approach will build a stronger and healthier community centered around our fundamental "need to eat".

Effective Grounds Greening Practices at the District Level

- Develop a Five Year Action Plan to transform the monoculture into an educational tool of green learning spaces for all ages
- Ensure the Five Year Action Plan for grounds greening is coordinated with and integrated in to the district Five Year Sustainability Action Plan. Include the development of district standards and specifications, funding, target setting, roles and responsibilities and reporting in the plan. Set annual performance reviews, and adjust/revise the plan to ensure goals are met.
- Coordinate the Five Year Action Plan with the planning and requirements of other organizations including the City of Richmond (i.e. irrigation, fertilization, grass cutting, etc.)
- For School/Community Grounds Greening Projects, liaise with the City, local community groups and the School to collaboratively develop a Grounds Greening Plan (vision/goals, roles and responsibilities, curriculum links, assessment, resources, etc)
- For School Grounds Greening Projects, ensure that there is collaboration between the school Greening Team and the Grounds Department throughout the planning, designing, constructing and maintaining of the project
- Encourage the use of environmental 'best practices' for organic gardening (pesticide and herbicide free, no treated lumber), water use, soil building, harvesting and seed saving

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- Ensure that the needs of other species of animals and plants are considered in the development of the project
- Coordinate the integration of the green space projects to curriculum learning outcomes
- Create, support and sustain the necessary structures and systems to establish an effective Green Team and its activities
- Ensure that the projects reflect current district standards for soil, mulch, and landscaping materials, irrigation systems, greenhouses, donated materials, and wood types
- Provide opportunities for staff and students to share their experiences throughout the seasons, beyond Pro-D days and Sustainability Cafes

Effective Grounds Greening Practices in Schools/Sites

Collaboration

- Collaborate with the Grounds Department to design and implement Grounds Greening Projects
- Involve students, stakeholders, and local community in the ongoing maintenance of the green space, weeding, watering, and compost care
- Collaborate with the community groups and the City's Parks Department for community-school garden projects

Continuous Improvement

- Identify short term and long term actions for the Grounds Greening Project
- Review the project to determine successes and challenges and identify next steps
- Establish plans to ensure that garden project is sustainable through ongoing maintenance throughout the school year and is continued through subsequent year
- Ensure that the project meets applicable regulatory codes and district standards and align to Environmental Stewardship Policy and Action Plan

Commitment to the Triple Bottom Line Assessment

- Assess your plan and implementation strategies for Educational/Social impact:
 - How does the project give students opportunities to plant, harvest, prepare and eat food they have grown?
 - How does the project affect the social well-being of the students
- Assess your plan and implementation strategies for Environmental impact:
 - Have you encouraged the use of environmental 'best practices' for organic gardening (pesticide and herbicide free, no treated lumber), water use, soil building, harvesting and seed saving?
- Assess your plan and implementation strategies for Economic impact:
 - How is the project cost effective and within the available budget?

Leadership

- Create a subcommittee to your Green Team to plan, coordinate, and implement the Grounds Greening Project
- Celebrate regularly and share the produce of your efforts
- Appreciate the members of your Gardening Team
- Communicate regularly your targets, successes, and challenges

Learning for All

- Create a Grounds Greening Stewardship Handbook
- Provide workshops for school community

Administrative Guidelines

- Integrate eating experiences, food gardens, food preparation and nutritional education into the school curriculum for all grades
- Encourage the growing of culturally appropriate foods
- Educate the community about poisonous and invasive plants

Project Plan for Developing Grounds Greening Initiatives

These steps support successful development of Grounds Greening projects:

Step 1: Determine your Grounds Greening Project

Step 2: Collaborate with students, stakeholders, the City, community partner groups, and Grounds Department

Step 3: Develop the project plan (vision, roles and responsibilities, resources, education, funding, assessment, etc.)

Step 4: Collectively endorse the project plan

Step 5: Implement the project plan, assess progress regularly, identify next steps, and report findings

Step 6: Celebrate

Appendix 1 – Practical Actions for Grounds and Greening

Step 1. Project Idea – Determine your Grounds Greening Project

A school greening project that engages the broad school and neighbourhood community is more likely to be successful. During the project idea step, begin to discuss the greening idea with parents, school administration, teachers, students, support staff and external partners or groups.

For Community Gardens on School Grounds, here are some ideas:

- Shared gardens between community members and school staff can provide a source of benefits for summer maintenance, regular upkeep, and watering
- The City of Richmond and other community partners should be contacted to attend school garden planning sessions
- The City and the school district have entered into an agreement for the management of community garden plots on school district land. The City will manage the use of the identified plots on behalf of the district.

Creating a successful garden or greening project will take some work, but the result will be worth it. Form a school grounds greening subcommittee.

Things to discuss at this step:

- Your vision and goal for the project
- Refer to Environmental Stewardship policy, regulations, guidelines as a key resource
- The location, size and type of garden or green space (e.g. do you want pots with herbs, raised garden beds, fruit trees, etc.)
- Who will be the contact person for the project be?
- Where will you seek funding, material donations and volunteer services?
- Plans for summer maintenance
- Identify curriculum connections
- Who are the possible community partners
- Review the Grounds Greening Guidelines

Step 2. Collaboration with the Grounds Department

Once you've talked about the idea and concept within the school community and have some initial ideas about the greening project, you're ready to meet with the administrator responsible for the Grounds Department, or Designate. The Grounds Representative will collaborate with your group, learn about your vision, discuss the ideas, answer questions and make suggestions. By the end of this meeting you will have consensus for your project along with an estimated cost.

Step 3. Develop the Project plan with Grounds Department

- a) Develop your garden or greening scope
- b) Develop your garden or greening design
- c) Develop your project timeline
- d) Identify your possible funding source(s)
- e) Identify additional source(s) if you intend to use donated materials
- f) Create your maintenance and succession plans

a) Develop your garden or greening scope

The first step to a successful project is to define the project scope. This is different from the more conceptual idea discussed in Step 2. The scope should include all of the details of the project. Grounds staff cannot design the project for you, but can help you define the scope and suggest resources to help you. Ultimately, a successful project will promote broad-based ownership of the project design, implementation and maintenance. These questions may help you outline the project scope:

- What are the goals for this greening project? Education? Community building? Food Security? Food production?
- Who will be using this green space? Is it a learning garden for students and parents during the school year only? Is it a community garden intended for year-round use? Will another organization be sharing use of the green space?
- What is the location and size of the green space?
- Who will be participating in the design of the project? Is one of your volunteers a landscape designer already or will you be looking for someone to assist you with the design?
- How will you be including community input into the design of the project? How often will you schedule meetings to get that input?
- Who will be installing the garden or trees? Make sure the support staff union is consulted as to the installation and overall project scope. (The school administrator is responsible for consulting with the support staff union.)
- Make sure the materials under consideration follow Grounds Department best practices and standards. The Grounds Representative will help with this.
- How will the garden be watered? The Grounds Department does not provide irrigation to garden projects. Without an irrigation system, what is the water source and how will water be transported to the garden? Can plants be used to minimize the need for watering?
- How will the garden or green space be maintained long-term?
- How will it be maintained over the summer? The Grounds Department requires a long-term maintenance agreement with the school greening committee and administrator.
- If garden projects are abandoned, the area may be put back to its original state at the school's expense.

b) Develop your garden or greening design

By this point you have already determined the location of the project and discussed it with the Grounds representative. For the project design phase, you will need to identify where specific elements of the project will be located and what materials will be used for plants, walkways, edges, fencing, etc.

Remember to start small. A larger project can be developed in phases over a few years. Phasing also allows the committee to evaluate how the green space is working and make corrections in future phases and assists in the ability of the volunteer group to establish long-term maintenance. Also, this gives future volunteers the chance to become engaged and give input in later phases, which may help to keep enthusiasm high.

The project design is critical to the success of the project. A successful project will use materials that are safe for the school, rugged, drought- and rain-tolerant, and low maintenance. Consider these important design issues regarding the location and physical layout:

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- Ensure the project is well located. Consider the following:
 - Project area is near the school building
 - Short distance to a water supply for plant watering and hand washing
 - Accessibility to parking or a driveway for delivery
 - Availability to ample sunlight (at least 6 hrs per day) and is manageable in size
 - Distant from dumpsters/ garbage bins
 - Safety First! Do not cover any underground services
- Fencing may or may not be required and will be decided based on site circumstances by the school administrator and Grounds Representative.
- Make garden beds accessible to all students. At least part of the garden must be accessible for children with limited mobility (height, surface material and width of pathway).
- Include a secured place to store tools/hoses and materials nearby with a strategy for access to these tools over the summer months. A simple wooden chest / bench that can be locked with a combination lock can work. It is useful for teachers or older students to be able to access simple tools to do garden work without having to find the staff each time to unlock tools.
- Drip irrigation using soaker hoses are acceptable. Timers are encouraged (in lock boxes) so as to encourage watering in the early morning.
- Safety first! Avoid trip or slip hazards.
- Avoid vandalism opportunities (including rocks that could be tossed, skateboarding edges, easily broken sculptures, elements that give access to school building roofs)
- Plants and Trees
- Consider how plants and trees grow over time, which may inhibit pedestrian flow when identifying locations.
- Consider how plant and tree debris will be disposed of
- Engage "experts" to flesh out the design if you have one in your community or consult with a District Grounds staff. When working with a master gardener, landscape architect or designer; the architect can help with designing "hardscape" areas such as constructed paths or courtyards; and the master gardener is particularly knowledgeable about plant selection and placement. You may have garden designers or architects in your school community, who may be willing to volunteer, ask around.
- Give careful consideration to contamination issues when growing edible plants.

c) Develop your project timeline

The timeline should include:

- Time to design the project and complete the drawings.
- Time to review the design with members of the community, students and the school staff. This will require setting up meetings and giving attendees sufficient notice before meetings.
- Time for Grounds Department to review the project design to ensure that standards and codes are met and the availability of staff.
- Time for construction, including ordering supplies, soil, etc.
- Time for planting, including determining what to plant and when it could be ready.
- It is helpful to think about when you hope to have the project *finished* and then work backwards. A landscape designer can assist you in planning your schedule if needed.
- It is important to note that completion of the application does not guarantee approval of the project, as there are other factors such as availability of Grounds Department staff.

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d) Identify your possible funding source(s)

A number of grants are available to encourage school greening projects. The criteria for applications vary between providers.

A good source of information regarding the availability of funding is the City of Richmond's Community Garden Project, the Ministry of Education and the Richmond Sustainability Action Team.

e) Identify additional source(s) if you intend to use donated materials

At this time, you may find that someone within your school community has the opportunity to procure donated materials. Should this opportunity arise, please consult the Grounds Representative for their suitability for this project.

f) Create your maintenance and succession plans

The Grounds Department requires a long-term maintenance plan and agreement. The following are considerations to include in your maintenance plan:

Irrigation:

1. Develop watering plan: who will water the garden and the trees and when? A water source needs to be identified as well as the method to transport water to the garden.
2. If you plan to plant fruit trees then a 3-year watering plan needs to be established.

Regular up-keep:

1. Have students participate in the seed sowing, planting, weeding, composting, and watering during the school year on a regular basis. If a number of classes are using the garden, it might be helpful to create a schedule for caring for the garden.
2. Establish a summer site management schedule in consultation with the Grounds Department for school community volunteers with names and contact information of volunteers and ensure it is distributed to each participant. Procedures, location of keys to access tools, and days attended are important. It's beneficial to keep a gardening journal so volunteers can see what has been done i.e.) fertilizing, weeding, planting etc.
3. Plan for specialty maintenance such as tree replacement, large tree installation or tree pruning. (Site preparation is the responsibility of the Grounds Department.)
4. Outline your plan for winter maintenance (i.e. cover crops) and spring soil preparation.
5. Describe your plan for compost maintenance to discourage rodents (e.g. using a rodent proof composter, ensuring cooked foods and/or foods of animal origin are not added).
6. Include a statement acknowledging and adhering to RSB policies including avoiding the use of pesticides, fungicides and herbicides on school grounds.
7. Include a statement that the group will respond in a timely manner to correct any safety issues created by the garden or any violations to RSB policies.

Long-term planning:

1. Develop a long-term plan for weeding, composting, path maintenance, plant pruning or removing over-grown plants and replacing them, and removing debris from the area.
2. Develop a long-term strategy to keep enthusiasm high among volunteers and to recruit new volunteers.
3. Outline the maintenance schedule for all seasons, including consultation with the maintenance department regarding facility maintenance during the summer months.

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4. Identify the number of years each committee member commits to maintaining the garden and outline a succession plan. There should be a minimum 3-5 year commitment and plan. The agreement should be reviewed and renewed each year.

Step 4. Collective Endorsement of the Project

Meet with all the partners involved and endorse the final plan.

Step 5. Implement the project plan, assess progress regularly, identify next steps, and report findings

Once the project is approved for construction, funds are raised and available, and all agreements signed and submitted, you are ready for installation. At this point, close coordination between the Grounds Department and the greening committee is critical. The committee should have an approved construction schedule and a detailed work plan.

Implementation:

1. The Grounds Department staff will prepare the site for greening or teachers and students may prepare the site with permission from the Grounds Representative (e.g. pull up lawn, delineate plot boundaries)
2. The Grounds Department staff will prepare garden beds (e.g. add soil amendments or build boxes). Raised beds will be built by and to RSB standards and installed by RSB
Grounds Department staff.
3. Final inspection. The Grounds Representative will complete the final inspection.
4. Students must participate in the planting of the garden for each new growing season.
5. Food must be washed and prepared in a food safe manner prior to eating.

Step 6. Celebration

Congratulations – you’ve done it. You now have a beautiful greening project - now it’s time to **celebrate!** Consider holding a community event for the opening. Neighbours and other community members who have not been directly participating in the project may be excited to get involved once they see the final project. Share the celebration details with the District staff for promotion and documentation of the shared success