URBAN
AGRICULTURE
GARDEN GUIDE

MANUAL FOR STARTING
AND DESIGNING URBAN
AGRICULTURE PROJECTS

GREENEST CITY SCHOLAR PROJECT FOR THE CITY OF VANCOUVER AND VANCOUVER BOARD OF PARKS AND RECREATION

URBAN AGRICULTURE
GARDEN GUIDE

MANUAL FOR STARTING AND DESIGNING URBAN AGRICULTURE PROJECTS

This urban agriculture manual is intended to provide the necessary information to successfully apply for, design and construct an Urban Agriculture Project on City of Vancouver publicly owned land.

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WHAT IS
URBAN AGRICULTURE?

Urban Agriculture refers to the growing plants for food and other related uses (pollinator encouragement, etc.), within or surrounding cities and towns.

This may include:

LOCAL FOOD

edible landscaping

shared growing

pollinator gardens

permaculture projects

community gardens

community orchards
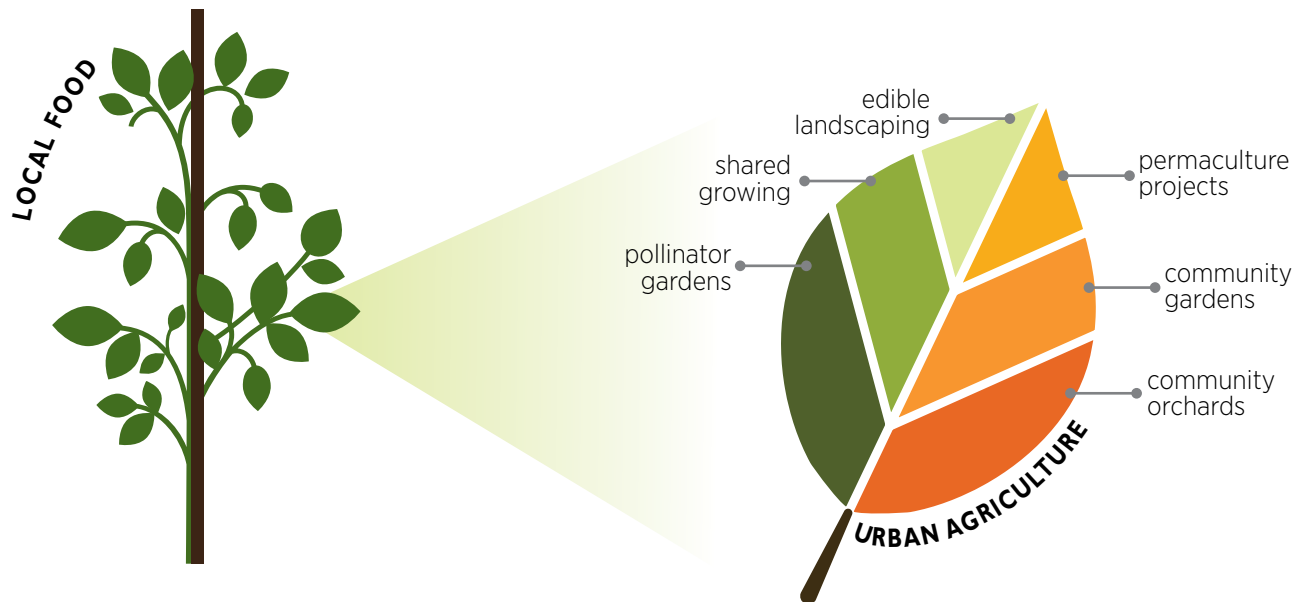
URBAN AGRICULTURE

Urban Agriculture promotes community development and education, and increases self-reliance, community health, wildlife habitat, environmental awareness and social interaction among residencts. It plays a crucial role in achieving food sovereignty and strengthening the local food network of a city.

The City of Vancouver recognizes that **Urban Agriculture** makes an extremely valuable contribution to the well-being of its citizens and the resiliency and sustainability of the city as a whole. In fact, "Growing more food in the city" was identified as one of the highest priority actions in the *Greenest City 2020 Action Plan*. The city has embraced this action by setting a goal of increasing food assets by 50% by 2020 (from 2010 numbers). In order to achieve this, various steps have been taken to better support and work with residents and community groups that are interested in establishing food growing spaces in order to promote healthy urban systems and active living and wellness.

"Grow more food in the city"

This guide is intended to aid the collaboration between residents and City staff in starting, designing and carrying out an Urban Agriculture project in the City of Vancouver.

HOW TO
GET STARTED
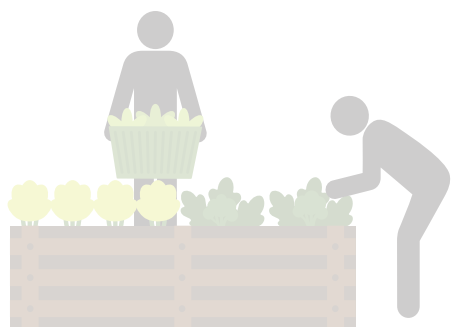
WHY START AN URBAN AGRICULTURE PROJECT?

An Urban Agriculture Project can help improve **food security** for participants by increasing physical and economic **access to adequate amounts of healthy food**. These projects provide health, economic, educational, social, and environmental benefits to participants and the community at large.

WHERE AND HOW TO START AN URBAN AGRICULTURE PROJECT?

The City of Vancouver is dedicated to helping citizens to establish Urban Agriculture projects. Projects can be built on city and non-city owned land with the process, level of support and engagement differing based on site location and nature of project. See next page for tips on choosing a site.

IDENTIFY SITE

NON-CITY LAND:

If you would like to start a project on Non-City land, you can apply for assistance from the city by filling out an Application for Assistance for Small Urban Agriculture Projects form: **vancouver.ca/files/cov/urban-agriculture-projects-application-for-assistance.docx**

CITY-OWNED LAND:

If you choose to start your project on City-owned see **page 7** of this document for a step-by-step guide to the process.

WHAT TYPES OF PROJECTS CAN YOU START?
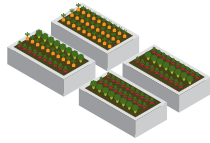
Community gardens:
One piece of land with multiple garden plots for individual gardening.

Permaculture projects:
Planting food and plants from a natural and ecological systems perspective.

Community or urban orchards:
Collective management of a group of fruit or nut trees.

Shared growing:
Growing food together with others for a variety of educational, cultural, and other purposes.

Pollinator gardens:
Providing natural habitat for pollinator bees and insects.

Or a combination of any of these!

WHO DO YOU NEED TO START?

Whether you are on city-owned land or not, in order to start a project you will require a group of engaged and motivated community members and volunteers, and support from the community. Think about approaching people in your community that might have experience or expertise that will come in handy.

ADDITIONAL RESOURCES:

- Check out the Victory Gardens: **www.youtube.com/channel/UCg24PurfDGUkD-CxtBIt1iRw**

ORGANIZE A GATHERING OF INTERESTED PARTIES.

Questions to ask at first meeting:

- Is there enough support in the community? Who will benefit from this project?
- What is the purpose? What are the objectives (ex. access to healthy food, education, biodiversity improvement) of the urban agriculture project? The answer to this question will influence the design of the site later on.
- Is there a potential site? Will it meet the needs of the community?
- What is the timeline? What is your short-term and long-term plan.
- Is there interest and demonstrated support for an urban agriculture project in the community?

At the end of the meeting make sure you have:

- Clarified the intent
- Developed a vision
- Identified objectives
- Found an interested non-for profit society (for projects on city-owned land)

ADDITIONAL RESOURCES ON MOBILIZING COMMUNITY:

- Community Garden Best Practices Toolkit: A Guide for Community Organizations in Newfoundland and Labrador: **goo.gl/Hnr9OV**
- Getting Started in Community Gardening: A Guide to Planning, Design and Implementation of Community Garden Projects: **goo.gl/iAxqUq**

CHOOSING
A SITE

WHAT DOES AN IDEAL SITE LOOK LIKE?

Depending on the type of urban agriculture project you hope to initiate, conditions and requirements will be different. However, following are some general standards.

A site should:

☐ Receive full sun exposure for at least 7 hours a day, and optimally 11 hours

(This usually means good southern exposure, so if there are tall trees or large buildings along the south end of the site you may want to look elsewhere. However, some crops can be grown in as little as 3 or 4 hours of sun. If you can, observe the site in the morning and afternoon to determine whether or not it receives adequate sunlight. Remember, deciduous trees viewed in the winter will create more shade come spring when their leaves emerge.)

☐ Be on underutilised land (ex: empty paved areas, areas taken over by invasive plants).

☐ Be on land clear of utility and sewer lines. This can be researched using the VanMap Tool **vancouver.ca/vanmap** and verified with City staff by emailing **communitygardens@vancouver.ca**

☐ If located on Park land: Be situated so it does not block desirable views within the park and from neighbouring homes.
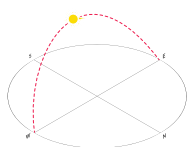
Other important considerations:

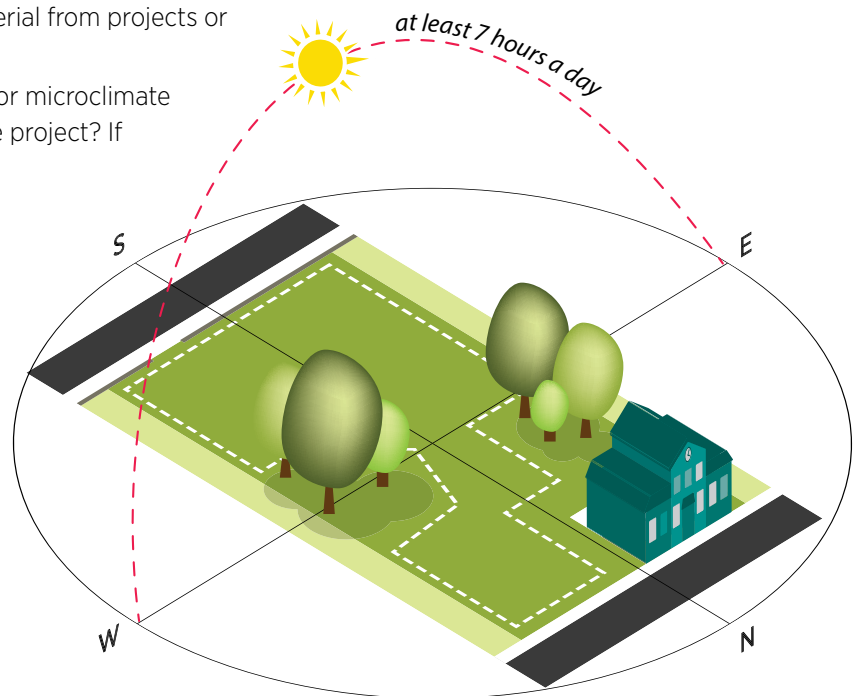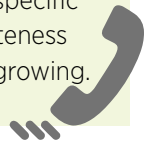- **Existing conditions:** What are the site characteristics? The slope, existing trees and vegetation, shading, and accessibility to the site should match the project needs.

- **Water source:** Is the proposed site close to a potable water source? Sites nearby water fountains & washroom facilities can make it more feasible to install a garden's water access.

- **Buffer:** Is there enough of a buffer between adjacent uses? Distance from sports fields and dog parks can reduce the possibility of conflict.

- **Size:** Is the site the appropriate size for the needs of the project? Storage and composting structures will require space and appropriate siting in the proposed area.

- **Soil quality**: What is the history of the site? Is the site located on previously contaminated land? (salt, lead, car exhaust, industrial and other waste)

- **Geographic distribution**: Are there other urban agriculture projects nearby? Where are the areas of the city that do not have access to food or other garden projects?

- **Site context and connections**: Are there possibilities to connect to a community kitchen, food serving organization, or an educational facility? How does the garden relate to the context of the site (What's around it)? How can the garden design and programing include and address issues of access, inclusion and diversity of underrepresented groups?

- **Materials:** Are there possibilities to reuse material from projects or operations nearby?

- **Microclimate:** Are there any prevailing winds or microclimate that might interfere with the urban agriculture project? If so, is there a way to mitigate it?

Contact City staff at **foodpolicy@vancouver. ca** to discuss a specific site's appropriateness for urban food growing.

at least 7 hours a day

CITY-OWNED LAND

CITY OWNED LAND

REJECTED

*See **page 13** for possible reasons.*

ACCEPTED

INITIAL REVIEW

3.
DEVELOP AND REFINE THE CONCEPTUAL PLAN

1.
DECIDE TO START AN URBAN AGRICULTURE PROJECT

2.
SUBMIT AN EXPRESSION OF INTERESTS

4.
SUBMIT A FORMAL GARDEN APPLICATION

REVISION REQUESTED

SECONDARY REVIEW

Depending on reasons for rejection it might be possible to revise and resubmit the project.

ACCEPTED

LACK OF PUBLIC SUPPORT

5.
PUBLIC CONSULTATION

PUBLIC SU
Site in Non-
Lan

PUBLIC SUPPORT
Site in Park

REVISION REQUESTED

PARK BOARD REVIEW

6. SECURE FUNDS FOR START-UP

7. PURCHASE INSURANCE

8. ENTER INTO A LICENSING AGREEMENT

SITE PREP.

ACCEPTED

FINAL APPROVAL

REVISION REQUESTED

9. CONSTRUCTION

10. ONGOING OPERATIONS

UPPORT
-Park City
d

ACCEPTED

Natural Organic Fair Trade

1.
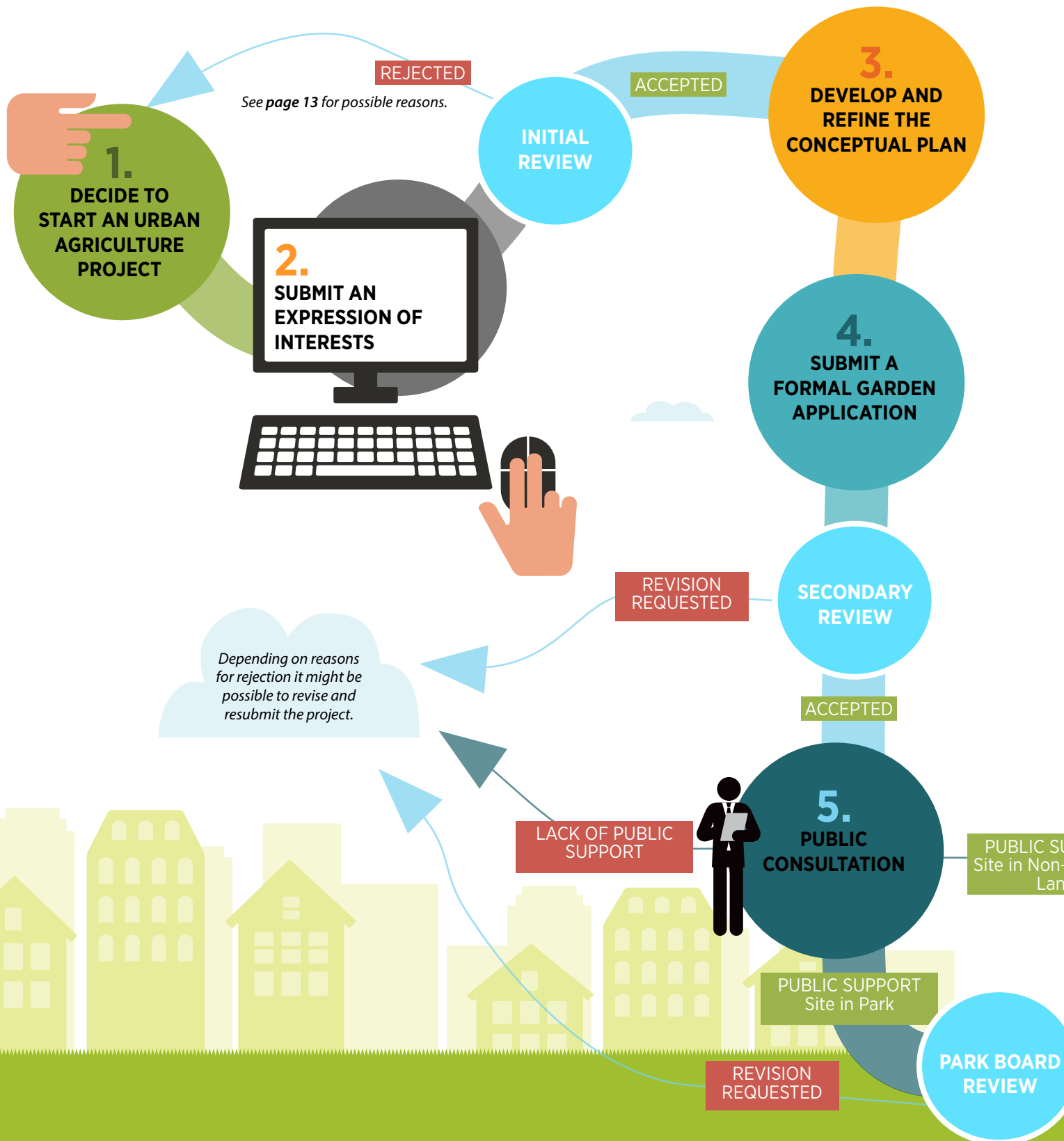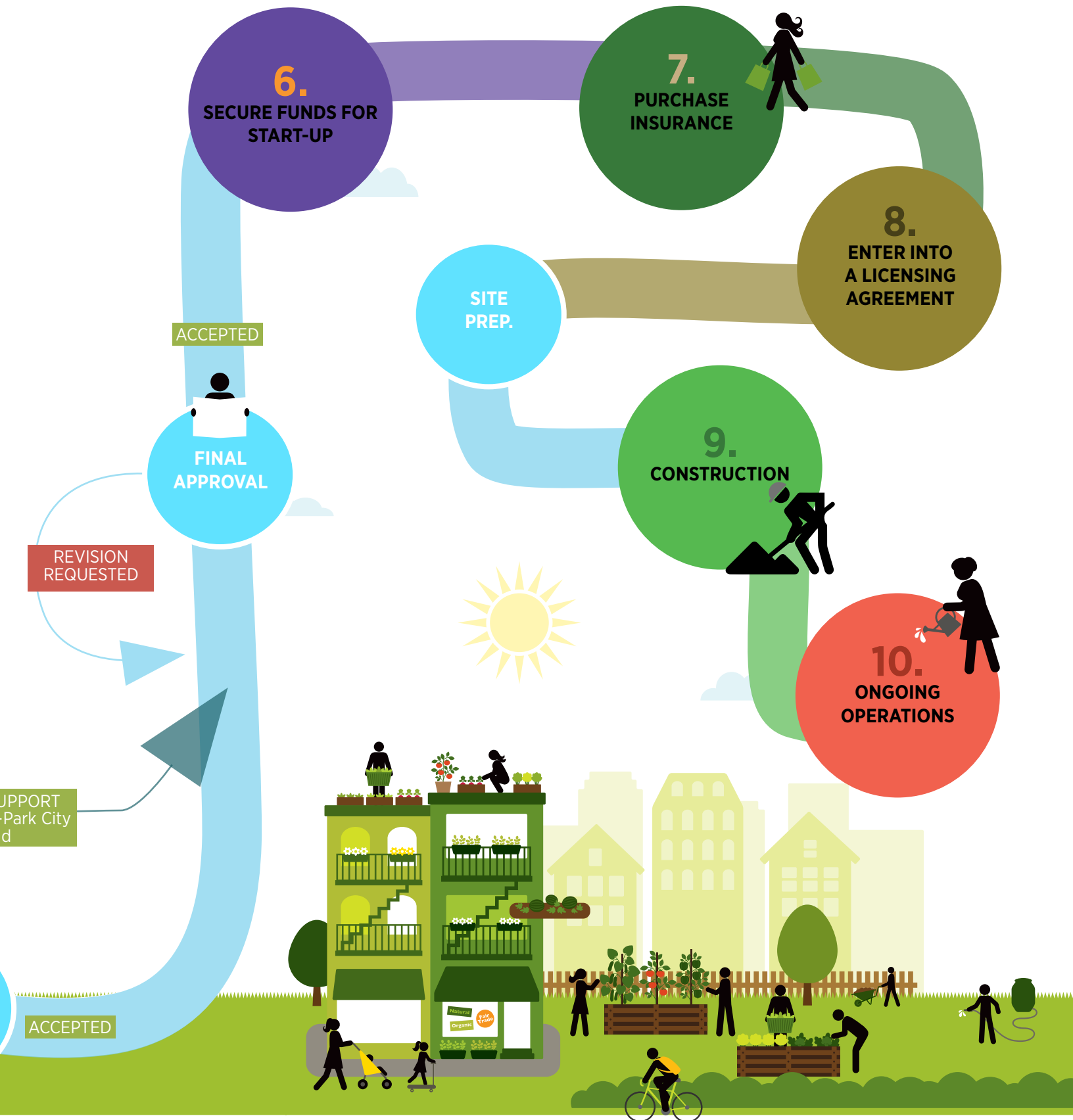
DECIDE TO START AN URBAN AGRICULTURE PROJECT

☐ Identify site

☐ Organize a group of engaged and motivated community members

☐ Form a committee

☐ Gather community Support

☐ Contact the City

☐ Obtain non-for profit status (team up with a not-for-profit agency)

☐ Review guidelines

☐ Research funding options

So you found a site on city-owned land

WHAT YOU WILL NEED:

☐ **Group of engaged and motivated community members**
Projects like these require a lot of hard work and commitment. If you would like to start an urban agriculture project in your area, engage other interested parties. You can try posting fliers in your local community center, contacting a non-for profit organization in the area or chatting up neighbours on the street. Once enough interest is shown, organize a gathering of interested parties to discuss the intent, vision and objectives of the project (see page 3 for tips).

☐ **Broad community support and benefits**
Urban agriculture can provide opportunities to build community, promote health and well-being, and other benefits beyond the growing of food. Proposals that articulate the community benefits and demonstrate efforts to engage community support are much more likely to be considered.
All proposals must demonstrate the garden will be accessible to the public at all times, and should benefit the surrounding community by:

- Growing edible and ornamental plants for the personal and shared enjoyment of garden members;
- Growing food for the members' benefit through skill and capacity development, education, arts and culture programming;
- Enhancing the local ecosystem with native and pollinator plants that support the local food system and wildlife habitat
- Growing food to donate to charitable causes

☐ **Non-profit status**
The City of Vancouver and the Park Board require that urban agriculture initiatives be administered by a non-profit society according to a licensing agreement which will specify the terms of use, management responsibilities, physical consider-ations, among other provisions.

☐ **Site (appropriate location)**
When identifying locations for urban agriculture projects, applicants must consider all potential publicly and privately owned sites. With more people moving into the city, it is important for new urban agriculture initiatives be considered in balance with ensuring residential access to open park spaces.

Applicants must adequately articulate why the specified park site is more suitable relative to other sites and demonstrate how the proposed project will be integrated into the existing surrounding.
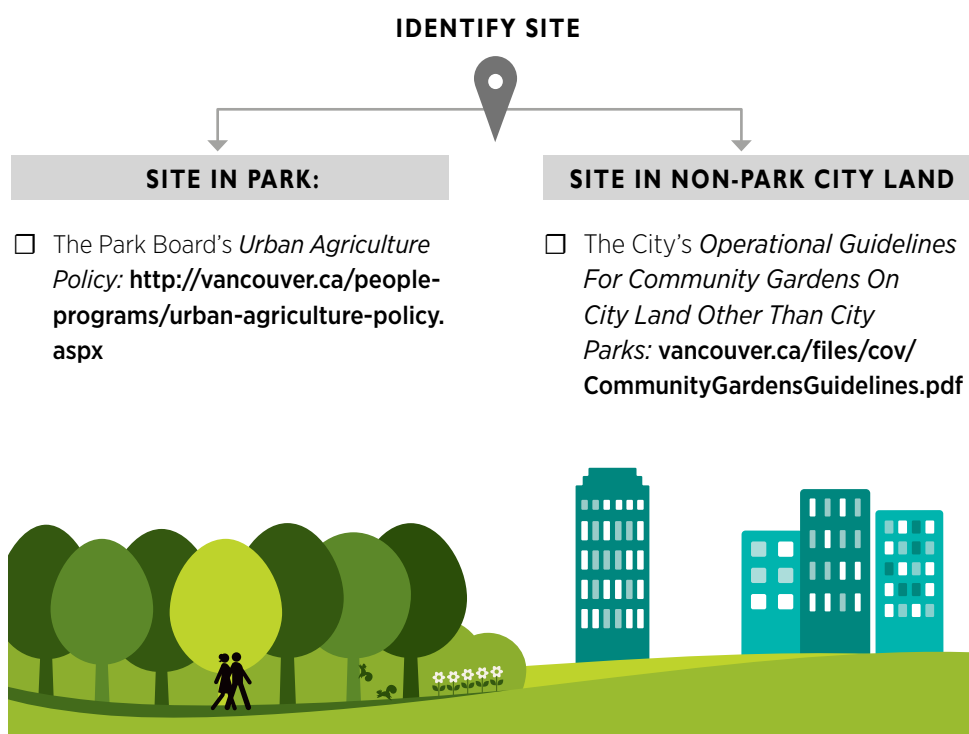
2.
SUBMIT AN EXPRESSION OF INTEREST (E.O.I.)

Complete Application Form:

☐ Select an appropriate location

☐ Describe your organization and your interest in developing a new urban agriculture project.

☐ Outline how the local community will be involved.

☐ Create a Project Construction Plan

☐ Create a Governance and Maintenance Plan

☐ Design the programming of the space (consider engaging a designer)

BEFORE STARTING AN EXPRESSION OF INTEREST (E.O.I.)

Before Starting an Expression of Interest, identify a potential site in your preferred neighbourhood. The online *VanMap Tool* vancouver.ca/vanmap can help identify property lines and exact addresses. Once you've identified a site, review the following documents:

IDENTIFY SITE

SITE IN PARK:	SITE IN NON-PARK CITY LAND
☐ The Park Board's *Urban Agriculture Policy:* http://vancouver.ca/people-programs/urban-agriculture-policy.aspx	☐ The City's *Operational Guidelines For Community Gardens On City Land Other Than City Parks:* vancouver.ca/files/cov/CommunityGardensGuidelines.pdf

☐ Other relevant policies and guidelines:
   - *Hobby Beekeeping* vancouver.ca/people-programs/beekeeping.aspx
   - *Design Guidelines And Planning Resources* vancouver.ca/people-programs/community-garden-resources.aspx

Before continuing, ensure that you have approached a non-profit society that is willing to sponsor the project.

If you have questions or are unsure if your initiative qualifies, direct your inquiries to: communitygardens@vancouver.ca.

COMPLETE AND SUBMIT AN EXPRESSION OF INTEREST (EOI)

Once you've reviewed the documentation, selected a site and indentified a willing non-profit organization, fill out an Expression of Interest (EOI) application. The *Online Form* can be accessed at **vancouver.ca/people-programs/start-a-new-communi-ty-garden.aspx**

If you have any questions while completing the Expression of interest, please contact foodpolicy@vancouver.ca, 604.873.7764.
Once completed, submit to: **communitygardens@vancouver.ca**

CHOOSING A SITE
Provide a description of the proposed location. Consult page 4 and 5 for tips. Where is your project located? Is the proposed project for the entire site or a portion of it? Include a street address or a nearby address for reference as well as an air photo with the site marked. (You can use GoogleMaps and VanMaps to do this). Feel free to include photos of the site itself. This can sometimes be a very frustrating process especially if your proposal gets rejected based on site selection. Make sure to consult with City and Park Board staff and current caretakers of the site, they will likely have great insight into which sites are most suitable.

DESCRIBE YOUR ORGANIZATION
This is your chance to brag about the organization you're partnering with, make sure to include things like organizational capacity and any relevant experience you may have with urban agriculture and community development process. Also include the motivation behind your interest in developing a new Urban Agriculture Project.

OUTLINE HOW THE LOCAL COMMUNITY WILL BE INVOLVED
Please describe how the project will address access, inclusion and diversity of un-der-represented groups. Include any partnerships or support from other organizations or businesses and/or funding in place.
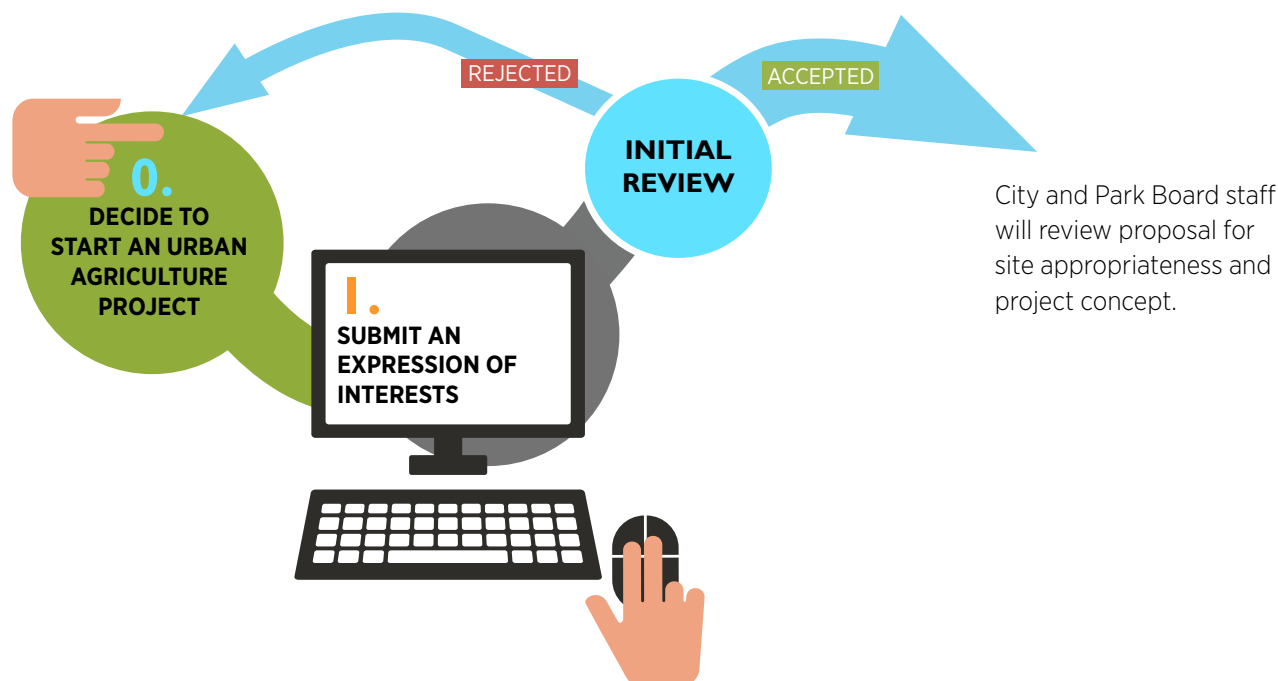
CREATE A GOVERNANCE AND MAINTENANCE PLAN
Think about the project timeline. Will everything be built at once or will it be built in stages? Who will be constructing the project? How much labour will be required? What materials are needed? Will materials be donated or purchased? What is your estimated budget?

CREATE A PROJECT CONSTRUCTION PLAN
What is your plan for long-term management and maintenance of the project? How will the project provide opportunities for education and/or skill-building? How will the project be used and maintained in the winter months?

DESIGN THE PROGRAMMING OF THE SPACE
The EOI requires that you attach a rough sketch indicating how the project relates to surrounding property lines, streets, sidewalks, etc. It should also show the locations and the different elements of the project. See section X for what to include in your siteplan as well as a guide of things to consider when designing your site.

0. DECIDE TO START AN URBAN AGRICULTURE PROJECT

I. SUBMIT AN EXPRESSION OF INTERESTS

INITIAL REVIEW

REJECTED

ACCEPTED

City and Park Board staff will review proposal for site appropriateness and project concept.

POTENTIAL REASONS WHY A PROPOSAL MAY NOT BE APPROVED

LIMITED CAPACITY OF GARDEN GROUP – Establishing and operating a community garden requires a great deal of commitment, time, and resources. Proposals that inadequately demonstrate the organizational capacity of the garden group, or have no sponsoring non-profit society in place, will be at a disadvantage.

LACK OF DEMONSTRATED NEED – Food growing proposals that do not seem to address a particular need or express a community desire are unlikely to be prioritized. Unclear project objectives and lack of connections with other neighbourhood groups and organizations (e.g. ties to schools) can hinder a proposal's prospects. The project may be considered in future rounds if applicants resolve these gaps.

LACK OF COMMUNITY SUPPORT – If the consultation process (Step 5) indicates inadequate support from community members, neighbours or park users, the project will not be approved. We encourage garden supporters to connect with neighbours and address concerns that are brought forth.

LIMITED RESOURCES – The City and the Park Board have a limited budget allocated to develop urban agriculture sites and often must choose between a number of proposals. Although the proposal may be an excellent candidate, other sites may be prioritized ahead especially in areas lacking community gardening space. In these cases, proposals will be considered in future rounds.

ANTICIPATED CHANGES – From time to time, Park and City owned land undergo planning or redesign processes, which can take several years to complete. The space might already be slated for another use. In these cases, applicants are encouraged to look for other more suitable sites.

If in Park lands:
NEARBY PARK USES – Park spaces serve a number of different functions, and are valued by residents for both active recreation (sports fields, etc.) and passive recreation (open green space). Proposals inappropriately sited on or near these spaces may not be approved for a variety of reasons

3.
DEVELOP AND REFINE THE CONCEPTUAL PLAN

☐ Work with City and Park Board staff to determine the exact location of the garden site

☐ Develop the conceptual design

☐ Incorporate any requirements from City and Park Board staff

So you've been approved!

Successful candidates will enter the next stage of project development and work with City and Park Board staff to determine the exact location of the garden site, develop the conceptual design, and acquire necessary internal approvals. This is a continuous process, be open and flexible with your design ideas; making changes based on feedback from the City and Park staff is a part of the process.

See **Designer's Manual** on page 21 for great information on how to develop a site plan as well as best accessibility, safety and ecology standards, guidelines and practices.
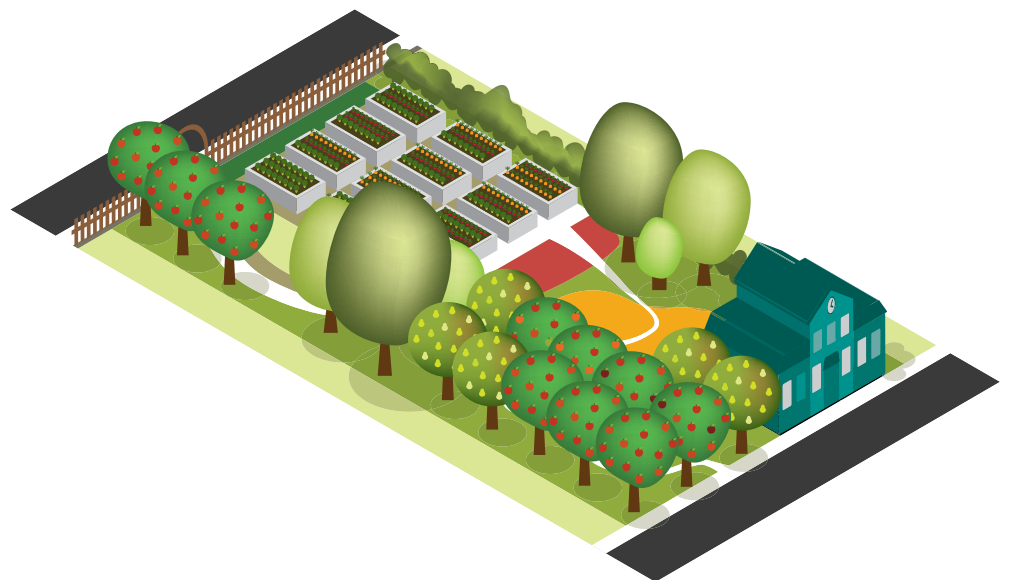
4.
SUBMIT A FORMAL GARDEN APPLICATION

Complete Application Form:

☐ Project Description

☐ Financial Plan

☐ Project Plan

☐ Garden Design

☐ Documentation from the Non-Profit Society & letters of support from residents and organi-zations

Resubmit Application form if needed:

☐ Submit final garden design incorporating changes based on the consultation and staff and Board input.

City or Park Board staff will contact successful applicants and work with them to complete a formal garden application.

The Garden group will be asked to submit a formal proposal to City or Park Board staff, which includes:

☐ **Project Description** that identifies and articulates: the sponsoring organization, its mandate, the main project leads, experience in community organizing and/or urban agriculture, project goals, community involvement, and the how the garden will function.

☐ **Financial Plans** outlining how the project will be funded and continue to function in the upcoming years. What funding is available? Are there any grants or sponsorships? How much revenue is coming from membership fees?

☐ **Project Plan** which outlines how the project will be constructed and maintained. How are volunteers co-ordinated? Who carries out construction? Who will purchase and deliver materials? Do you have expertise available?

☐ **Garden Design** done with technical support of City or Park Board staff that clearly identifies the site, the layout and sizes of plots, and location of structures, fences, furnishings, and composters. (Refine conceptual plan from EOI with the input from the staff)

☐ **Documentation** from the Non-Profit Society of its incorporation, as well as any other letters of support from residents and organizations that demonstrate commitment and support for the garden proposal.

The proposals will be assessed based on: i) their ability to meet urban agriculture project objectives; and ii) level of community support.

5.
PUBLIC CONSULTATION

☐ Circulate notice to residents and organizations within a two block radius of the site

☐ Post signage in the proposed location

Depending on the size and type/ context of your project, a public consultation may be required. The City or Park Board staff will conduct a public consultation in conjunction with the non-profit to gauge community support.

The organisation is responsible for helping with the public consultation and submitting a final garden design incorporating changes based on the consultation.

6.
SECURE FUNDS FOR START-UP

☐ Secure sufficient funding for garden construction and materials

Before City or Park Board staff can begin work at the garden site, the society must demonstrate that it has secured sufficient funding for garden construction materials.

ⓘ **ADDITIONAL TIPS ON SECURING FUNDING AND ESTIMATING COSTS:**

✎ Growing Gardens: A Resource Package on How to Start Your Own Community Garden: **issuu. com/anjuli.solanki/docs/growing-gardens-manual**

7.
PURCHASE INSURANCE

☐ Provide proof of insurance on an annual basis ($2 million in commercial general liability)

The garden is required to be covered with $2 million in commercial general liability insurance at all times, and will be asked to provide proof of insurance on an annual basis.

8.
ENTER INTO A LICENSING AGREEMENT

☐ Enter into a license agreement with the City or Park Board

Upon approval, the non-profit organisation will enter into a license agreement with the City or Park Board, which specifies the timeframe for the agreement (usually 5 years), terms of use, management responsibilities, and procedures for the garden's operation. License fee of $1 per year will be invoiced to society.

9.
CONSTRUCTION

☐ Begin construction of the garden in accordance with the approved plan

With the license agreement in place, Park Board or City staff will prepare the site. This typically includes: removal of grass and unwanted vegetation; first year of soil and compost; and installation of a water source.

Once the staff has completed site preparation, the non-profit organization will be given permission in writing to occupy the site and begin construction of the garden in accordance with the approved plan.

ⓘ **ADDITIONAL RESOURCES:**

- How to Build a Raised Planting Bed: **thisoldhouse.com/toh/how-to/overview/0,,1615067,00.html**

10.
ONGOING OPERATIONS

☐ Maintain at no ongoing cost to the City or Park Board, with the exception of providing an ongoing water supply.

Gardens will be maintained at no ongoing cost to the City or Park Board, with the exception of providing an ongoing water supply.

The City or Park Board can choose to renew the license agreement for another five-year term, pending a review that considers the garden in good standing. Any changes made to the initial, approved garden design or user fees would require prior approval from Park Board staff.

- No chemical or synthetic fertilizers or pesticides are to be used in Park gardens (COV's Pesticide Use Restriction By-Law)
- It is expected that all urban agriculture projects will be a positive asset to the neighbourhood, and be good neighbours.

"Food plays a really important role in making our communities more **livable**, **sustainable**, **vibrant** and **dynamic** places."

Sadhu Johnston
Deputy City manager

DESIGNER'S MANUAL

DESIGNING
A SITE

HOW TO DESIGN

Your vision and objectives will greatly influence the physical design of your Urban Agriculture Project. Keep your goals in mind while you go through the design process and periodically re-read your objectives to make sure that the design adheres to your original vision.

Designing the project requires looking at it from different levels of detail. Start with the most broad and slowly work your way to more detail. Be patient, great designs take time; the time you put in at the beginning creating a logical and beautiful layout can save a lot of headache down the road. Keep an open mind, while you might be struck with a brilliant idea at the very beginning, don't be afraid to experiment and incorporate feedback from the City staff.

Consider:
When designing gardens consider the context of the site and how it can relate to its surroundings, the overall layout and how elements relate together and details that make the whole design come together.

1 .CONTEXT   2. LAYOUT   3. DETAIL
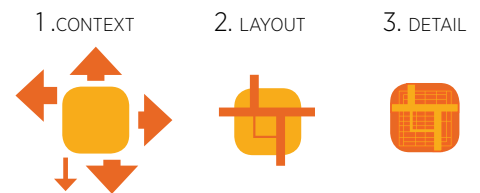
NEED HELP WITH THE DESIGN?

Consult with the City and Park Board staff, call 604.873.7764 or email foodpolicy@vancouver.ca.

You might also want to contact:

- City Studio Vancouver, an innovation hub where staff, university students and community members co-create, design and launch projects on the ground. citystudiovancouver.com
- Community Studio which brings together landscape architects, planners, architects, and engineers to provide design and planning services for non-profit community-based projects. communitystudio.org
- Projects in Place which brings design and construction professionals together with the general public, using a collaborative model to create and implement innovative projects that benefit the community and demonstrate sustainability. projectsinplace.org

The following organizations train students and might be interested in getting involved.

- SALA: School of Architecture and Landscape Architecture, sala.ubc.ca/about/contact
- UBC Garden Design Certificate: cstudies.ubc.ca/programs/garden-design-certificate
- BCIT: School of Construction and the Environment: bcit.ca/construction
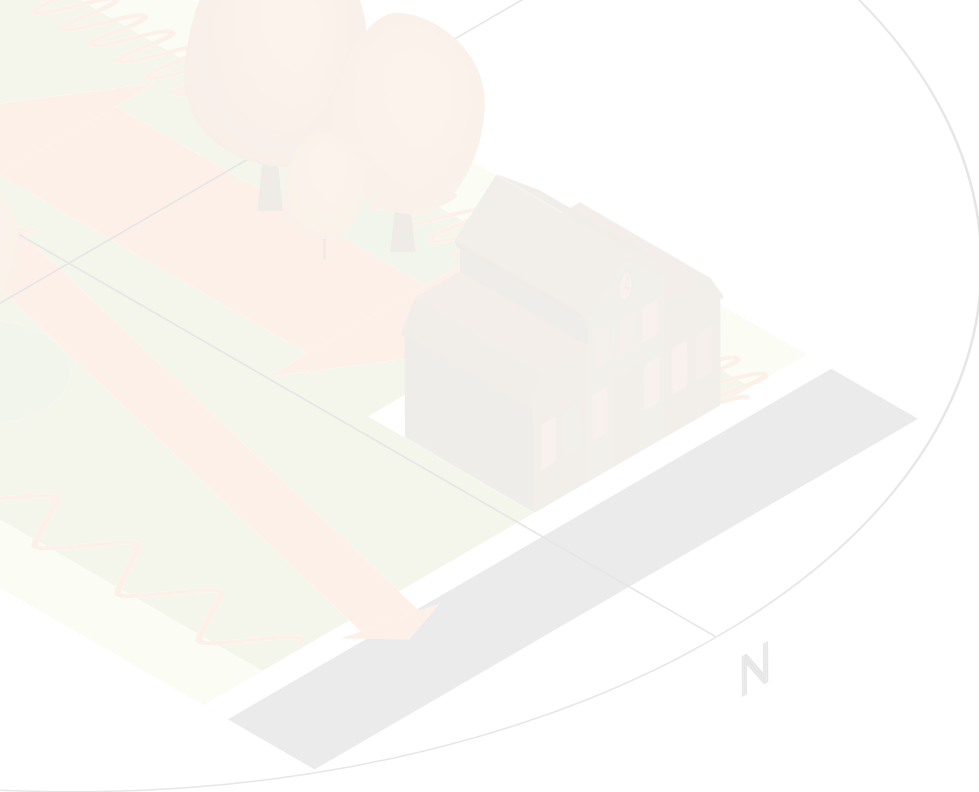
"It is these efforts – to bring healthy food back into the city, to connect people with the land, to restore dignity of those in need – that offer us models for **reinventing** our urban communities."
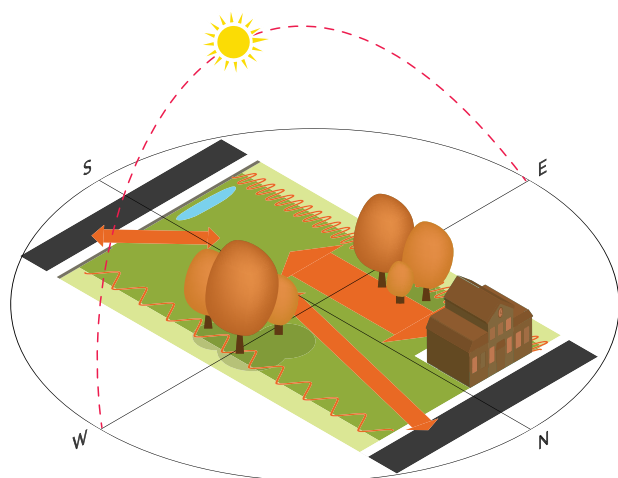
Emily MacNair
Seeds of Success, 2002

1.
CONTEXT AND CONNECTIONS

The first step, once a site has been selected, is to survey it more closely. Think about its constraints and opportunities. Make lists of possible social and physical connections and possible programming (dependent on your mission).

QUESTIONS TO ASK YOURSELF

- How will the site connect to the adjacent community?
- Are there possible physical or social connections that can be made?
- Where are the entrances? How will the pathways in the garden connect to the pathways around it?
- Are there any restrictions due to the location of the site?
- Does the location of the site create restrictions on the programming? If so what are they?
- Pathways, possible connections, restrictions, accessibility, drop-off & short-term storage
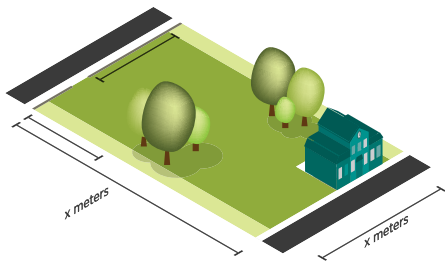
MEASURE YOUR SITE

- Think about what can and will fit. (See **page 29** for typical plot sizes)
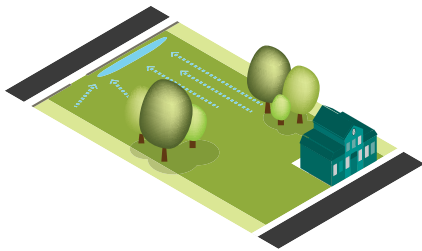- Do a general area calculation to gain understanding of the size of your site and to gauge the types of programming it could include.
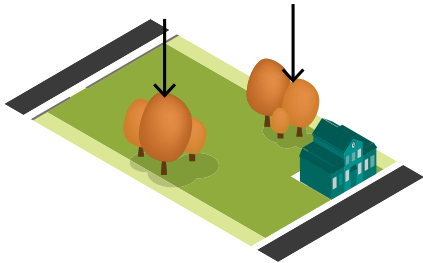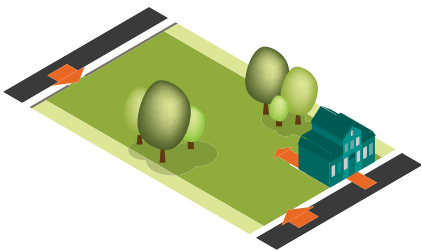
EXISTING TREES

- Try to design around healthy, existing trees. Note their location, they could be extremely useful in providing much needed shade in the garden.

SLOPE AND DRAINAGE

- Examine the topography of your site. Identify areas of poor drainage (ie. where does all the water pool?)
- Consider different ways you could deal with the drainage. Is there a lot of flooding in one area? Could you plant it with water tolerant plants. Could you solve the problem with minimal changes to the topography?

IDENTIFY ENTRANCES, EXITS AND POSSIBLE PEDESTRIAN FLOWS

Locate potential or existing access points to your project from the street or other public paths. Think about how they connect to transit stops and community amenities. How accessible are the entrances to the general public? Consider possible pedestrian flows and how people could move through the site.
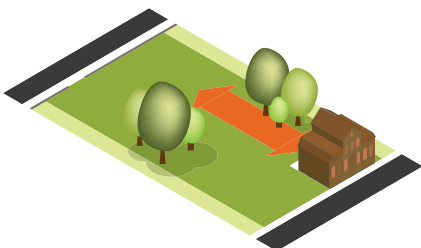
CO-LOCATING WITH OTHER AMENITIES

The design of garden plot areas should encourage social interaction by balancing a variety of different uses in the common outdoor amenity space. Consideration should be given to co-locating with:

☐ a covered outdoor space for shelter

☐ an outdoor children's play area

☐ an indoor amenity room with kitchen, washroom and an eating area

☐ outdoor seating areas for rest and social interaction

☐ non-profit organization

COMMUNITY GATHERING

Urban agriculture projects should be inviting spaces for the enjoyment of garden and park users alike. Harvest tables for gardeners to eat and celebrate food can also serve to facilitate other community activities. Shaded seating in resting areas and play areas for children can also be beneficial for garden users.

In the case of gardens built on city-owned, non-park land, two (2) plots of average size are to be designated for one of the following:

a) a local non-profit,
b) a neighbouring childcare center, or
c) a common area for food grown for charitable purposes.

POSSIBLE PROGRAMMING

- ☐ children's garden
- ☐ wheelchair accessible garden
- ☐ sensory garden
- ☐ communal herb beds
- ☐ seating space
- ☐ shaded area for rest
- ☐ educational area
- ☐ rain barrels
- ☐ rain garden

- ☐ pollinator garden
- ☐ beehive
- ☐ edible shrubs
- ☐ art space
- ☐ community bulletin board
- ☐ water fountain
- ☐ bike parking
- ☐ other

ⓘ **ADDITIONAL TIPS ON INTEGRATING COMMUNITY ACTIVITIES:**

- Inclusive Community Gardens: Planning for Inclusive and Welcoming Spaces in Vancouver: **goo.gl/q3EvJs**
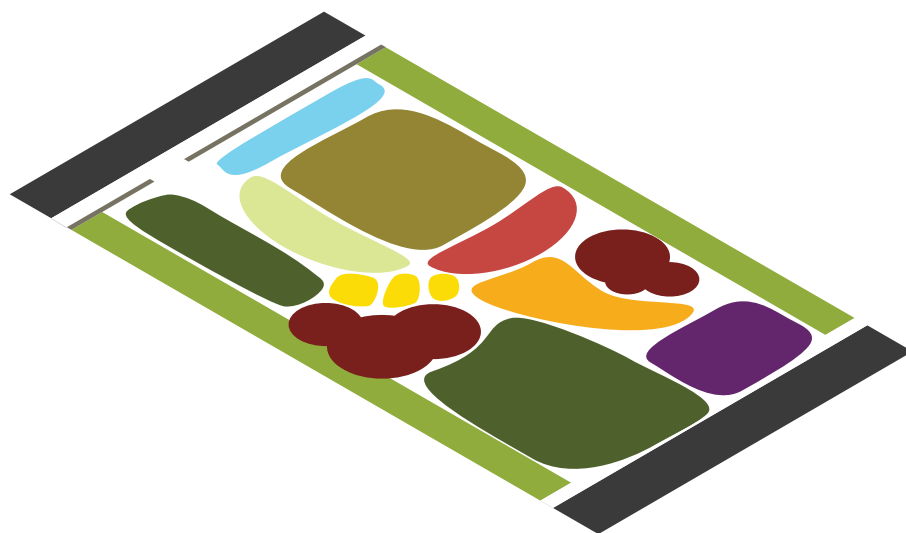
PROVIDING A TRANSITION ZONE

A buffer or transition zone between the urban agriculture project and surrounding uses will help integrate the project into the community and offer some protection from noise, through traffic and theft. In the case of projects on city-owned land, an ornamental perimeter garden must be provided between the community garden and the adjacent lands and street to create an attractive buffer with the neighbourhood. Fences are permitted around larger community gardens and may not be more than one meter high.
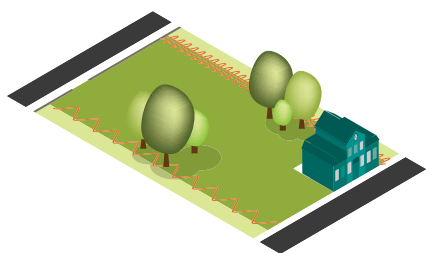
> " A sustainable food systems is essential to **nourishing a healthy city**."

Vancouver's Food Strategy
City of Vancouver

2.
LAYOUT

Once you've identified the constraints and opportunities of your site and chosen how it will relate to its context (socially and physically) it's time to start designing! Start by drawing bubbles of where your programming could go. Consider the pros and cons of different iterations and spatial organizations.

Once you have a brief outline of the general layout, you can start putting in some of the details.

QUESTIONS TO ASK YOURSELF

- How do people move about the garden? How do they enter and exit? Where are the high and low traffic paths?
- Where are the rest areas? Are they shaded?
- Is the site visible from outside?
- Who does the site cater to? Are there any special considerations for accessibility?
- How many and what type of plots will be in the garden?
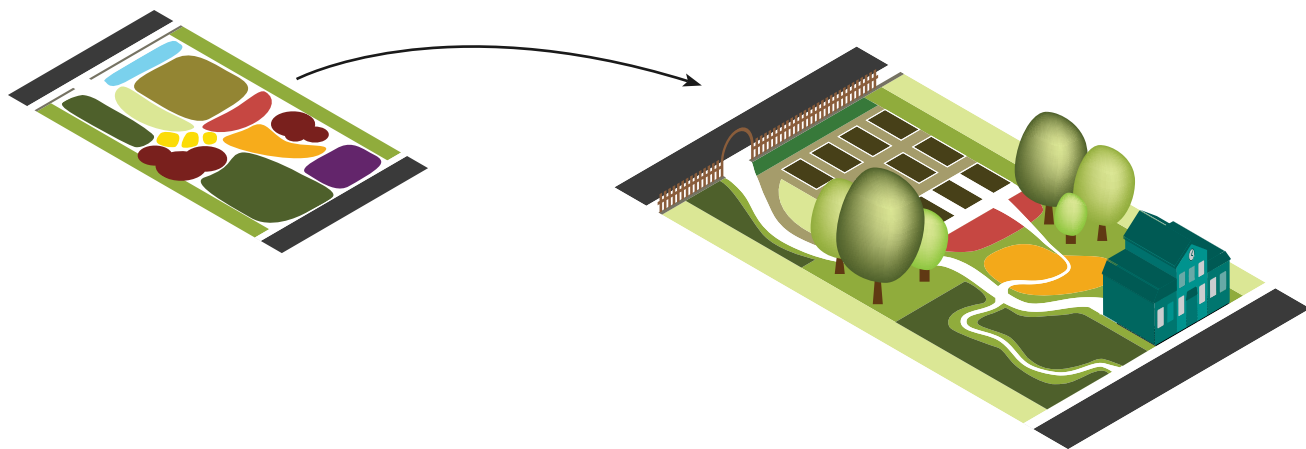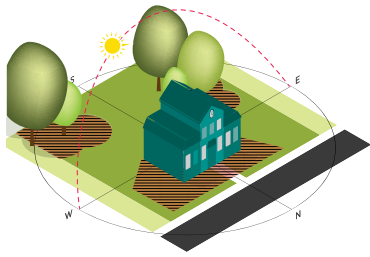
ORIENTATION TOWARD THE SUN

Avoid planting in areas north of tall buildings or trees, these areas will be in the shade most of the day.
Planting tip: Orient rows of planting in the N/S direction to maximize sun exposure.
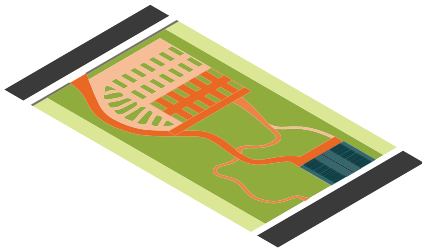
HOW DO PEOPLE MOVE THROUGH THE SPACE?

Another important factor to keep in mind when designing spaces is the circulation of the space: how people move through it. Think of your circulation as something that eases movement in the project. Some paths are high traffic while others are less used. This will influence the width of the paths and the type of material used. Generally, main paths need to be accessible (152 cm: 5'), so the use of compacted crushed concrete is encouraged, secondary paths (91 cm: 3') can use less invasive material such as mulch.
In your site plan make sure you differentiate between main paths, secondary paths and in some cases tertiary paths using a different thickness or colour.

*Toxic materials, such as pressure treated wood, should not be used where they will come into contact with soils that are growing food.*

RAISED GARDEN PLOTS

Raised garden plots should be integrated into the overall landscape design and could be accommodated in flexible, non-rectilinear forms. When designing complex garden beds, ensure that you have the expertise to construct them on your team. Large, undivided planting areas equal in square footage to individually separated plots may be provided in cases where individual plots are not desired or suitable.

For maximum growing potential garden plots should be a minimum of 2.2 m^2 (24ft^2), ideally 92 cm (3') by 244 cm (8'), not including plot dividers. There should be a maximum reach of 46 cm (18") from the perimeter to the middle of the plot. Soil depth should be a minimum of 46 cm (18") and should be made up of soil appropriate for growing a variety of food plants.
Planters should be a maximum of 61 cm (2') high for easy reaching, however, this can differ (see page 35 and 36) based on who the planters are intended for. The path between plots can vary from 61 cm (2') between regular plots to 152 cm (5') between accessible plots.

Types of garden plot layouts
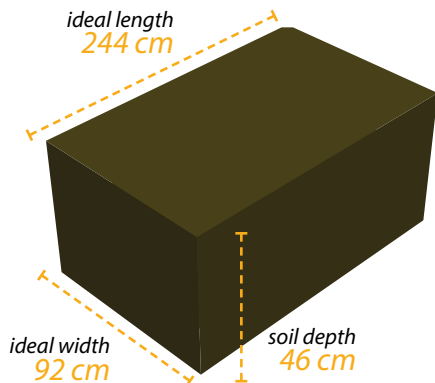

Conventional
• easier to build
• higher definition between plots

Expert
• more efficient use of space and materials

ideal length
244 cm

ideal width
92 cm

soil depth
46 cm

optimal area	2.2 m^2 (24ft^2)
ideal dimensions	92 cm x 244cm (3' x 8')
maximum reach into plot	46 cm (18")
soil depth	46 cm (18")

Maximum reach 46 cm
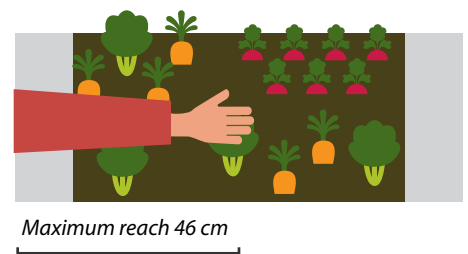
MATERIALS DROP-OFF AND SHORT-TERM STORAGE

From time to time, the project may require large volumes of inputs, like soil and bark mulch. Ensure an area is designed to be accessible for these materials to be dropped off and stored when needed. Consider growing plants in pots that can be temporarily moved to make room for shipments.

SUPPORTING FACILITIES

In order to function smoothly, projects require supporting facilities.

☐ Provide hose bibs within 6 meters (20 ft) of any garden plot.

☐ Provide a storage room or shed for tools; consideration should be given to providing smaller, personal storage for individual gardening tools.

☐ Provide a composting facility that is rodent-resistant, provides the ability to turn compost, and is of sufficient size to match garden capacity.

Consider providing:

☐ a potting bench,

☐ an electrical outlet,

☐ area lighting,

☐ a greenhouse, of minimum 9 x 12 feet, (not allowed on city-owned non-park land)

COMPOST BINS

Sheds and compost bins are very useful in garden operations. Locate these structures within the garden site where they will not interfere with the adjacent uses.

Locate the compost on an accessible path, wide enough for wheelbarrows. In a large garden, have a couple of different spots for compost to minimize travel time for gardeners. This will make the garden more tidy and ultimately help in preventing pests.

A large 3 bins system is often used in community gardens. For a great display of all the different composter options, visit the City Farmer Demonstration Garden at 2150 Maple St. in Vancouver or give them a call (604) 736-2250

VANCOUVER CITY HALL GARDEN

SMITH ST.

community house with community kitchen

orchard

children's garden

secondary path: at least 91 cm

social and art space

existing trees

water access

compost

tools storage

potting bench

accessible central path: at least 152 cm

accessible plots

private property

buffer

communal herb beds and pollinator garden

regular plots

mulch

accessible central path: at least 152 cm

existing trees

temporary storage space

tertiary path: at least 61 cm

rain garden

N

JOHN AVE.

# of meters or feet

# of meters or feet

# of meters or feet

CREATING A PLAN

When Submitting a Plan for Approval Label:

- North Arrow and Scale
- General context of the site (street names)- feel free to overlay map over satellite image.
- Label adjacent uses

Mark Location of:

- tool storage
- compost
- existing water access or possible locations

Outline:

- rough number and size of beds

Differentiate Between:

- main paths
- secondary paths
- tertiary paths (optional)

Scale: 1 square = 1 meter

fence
groundcover deterrent
thick shrub
semi-permeable tree boundary
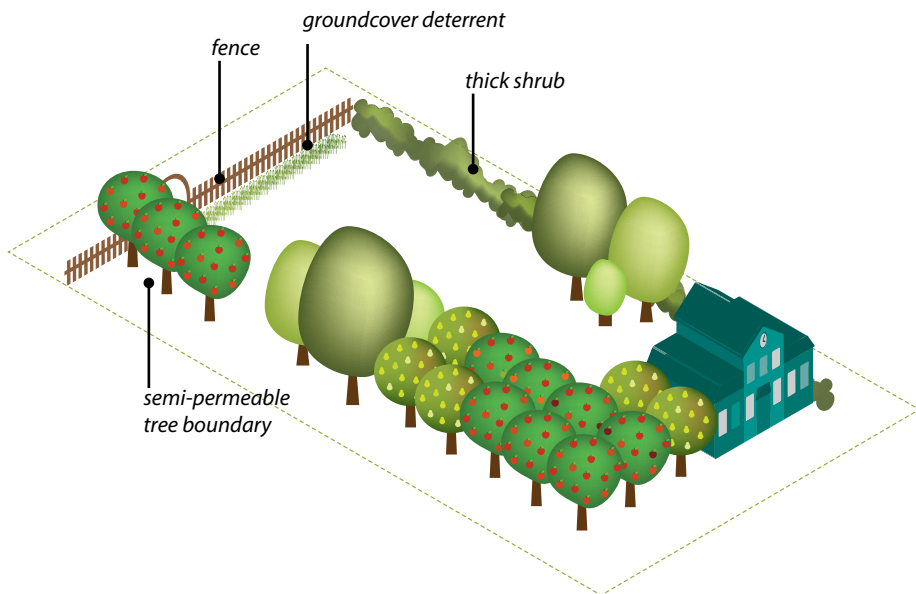
DEFINING BOUNDARIES WITH VEGETATION AND FENCES

In order to prevent theft and create a feeling of safety and enclosure it is important to define the space. There are many different tools that can be employed to do this from short permeable fences to hardy shrubs and extensive groundcover or flowerbeds.

personal plots
berry shrubs
children's garden
public orchard
community herb garden
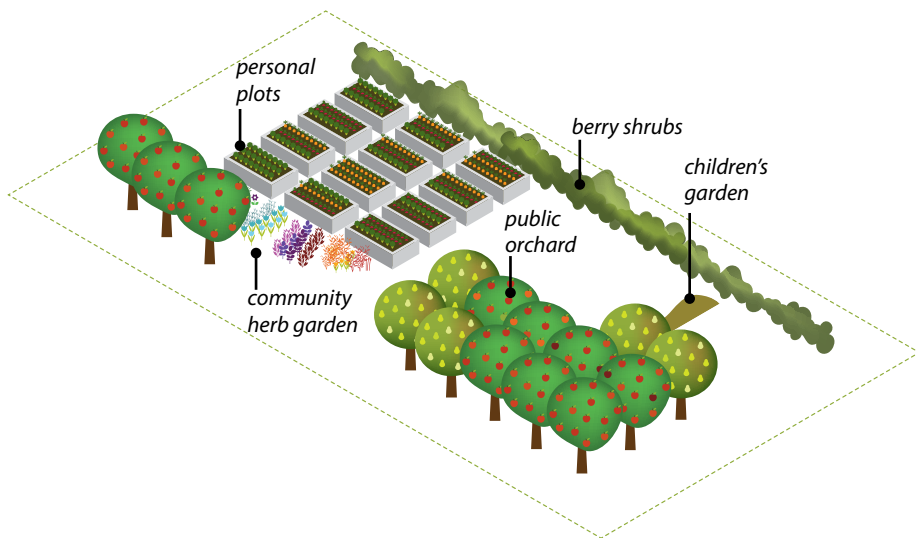
VARIOUS TYPES OF FOOD GROWING

Offering a wide variety of edible plants and various ownership/ caretaker models will help diversify the garden and make it more inclusive to the general public, as well as more resilient and productive.

rain garden

pollinator plants   public orchard

children's garden

social and
art space

community house
with kitchen
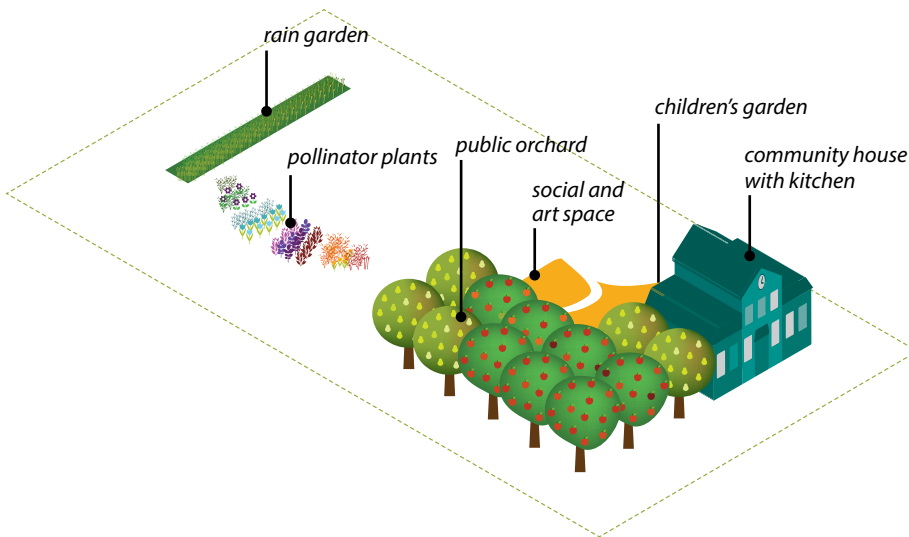
PUBLIC AND COMMUNITY ENGAGEMENT

An extremely important aspect of an urban agriculture projects is community involvement and engagement. Encourage more public interaction by including many forms of social programming in your project.

rainwater
retention swale

water access   compost

tool storage

potting bench

washrooms

materials drop-off and
short term storage
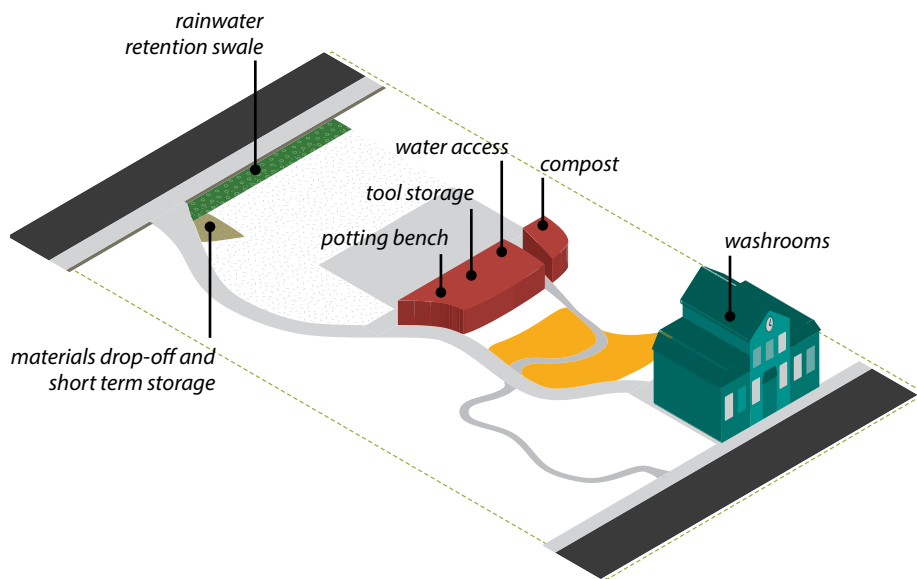
SUPPORTING INFRASTRUCTURE

Don't forget to think about all the amenities needed to make your project successful!
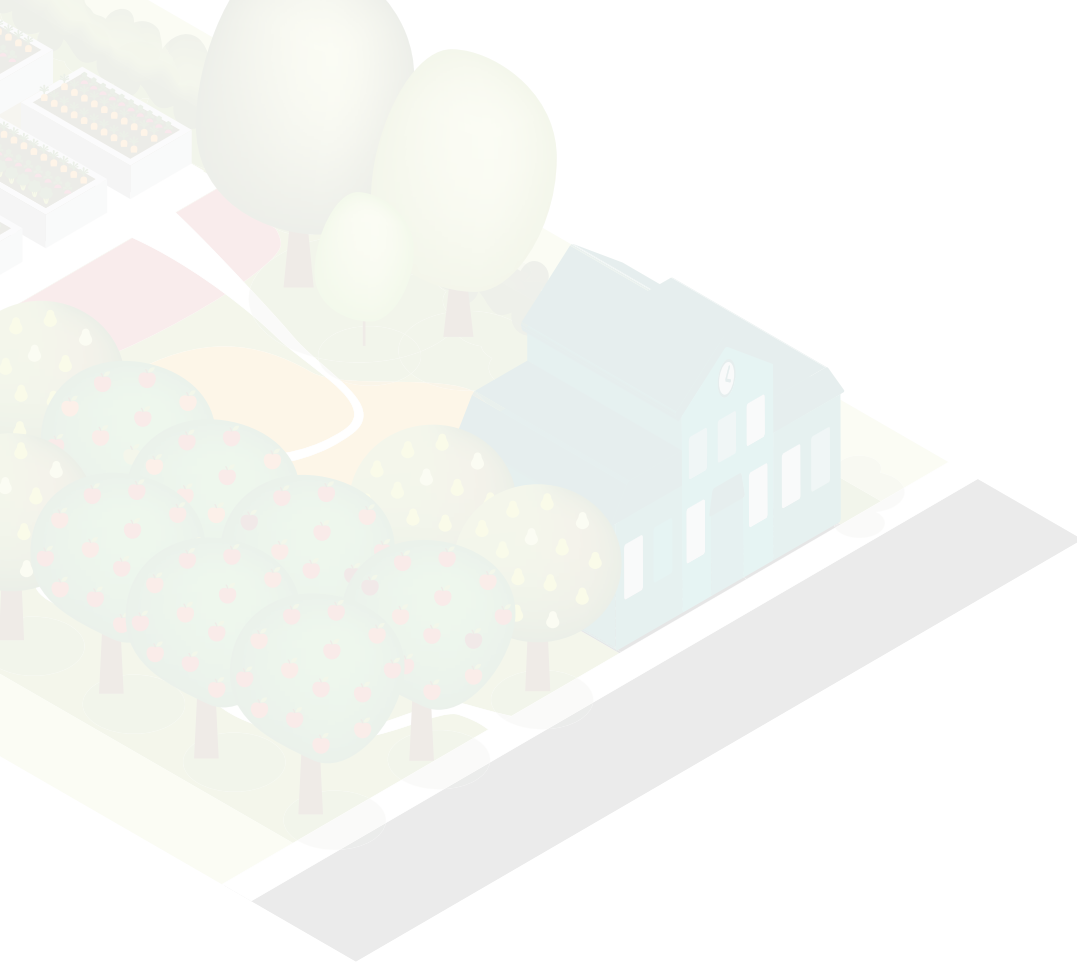
3.

PLANTING DESIGN AND MATERIALS

You've outlined the programming of the space and layed out your plan, now its time to fill in the details. Think about the ecology of your site, how your site caters to different people and what you can do to make it a pleasant, interesting and safe space to be in.

QUESTIONS TO ASK YOURSELF

- Where will the materials come from? Is there possibility to recycle materials from nearby sources?
- Which materials are safe to be used in conjunction with growing?
- Does the garden offer habitat for pollinators, native birds, other important species?
- Does the garden conserve water?
- Who is the garden accessible for?
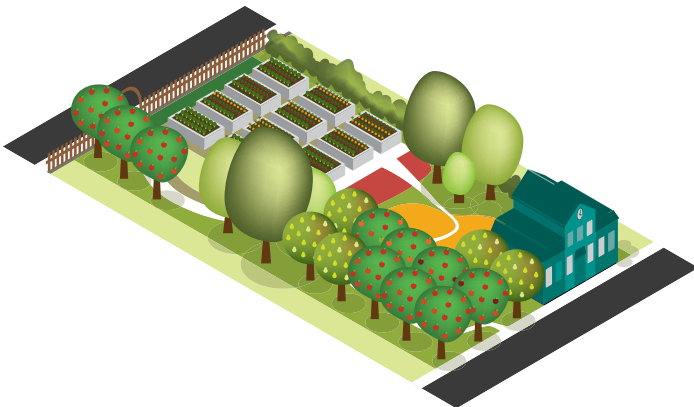
ACCESSIBILITY AND INCLUSION

Urban agriculture projects on city land should be inclusive, inviting spaces that foster community. Designing some of the pathways, garden beds, and activity areas to wheelchair accessible standards but also considering other types of physical limitations will encourage broader community involvement and create an inclusive space for all.

Before starting, think about who you are designing for:

- Are there members of the community that require special design considerations?
- How can you make the space inclusive to all members of your community?
- Who will be able to use this space?
- How will people get to the garden from a bus stop or adjacent buildings?

pathway
152 cm

typical max. slope
over long distance
2.5%

gate or entrance
90 cm - 180 cm

max. slope over
short distance
8%

PATHWAYS: All primary pathways should be level, firm, slip-free with traction and wide enough to turn a wheelchair around (min 152 cm: 5').

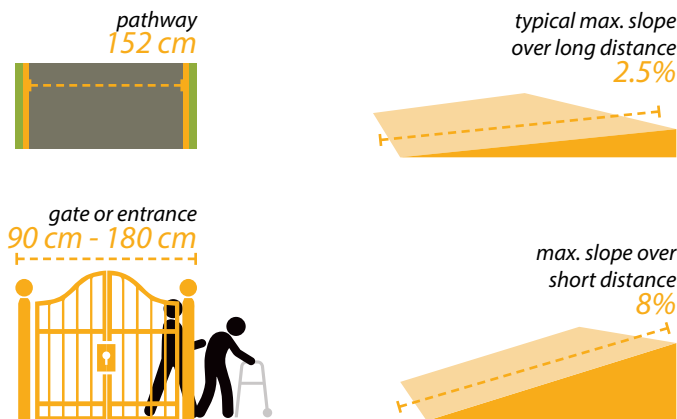POSSIBLE MATERIALS: paved or decomposed granite, packed crushed stone/gravel

width	152 cm (60")
slope	2.5 %
slope over short distance	8 %
gates and entrance width	90 cm (35") two-way passage: 180 cm

ledge width
20 - 46 cm

wheel chair height
89 - 94cm
bending height
75cm

soil depth
46 cm
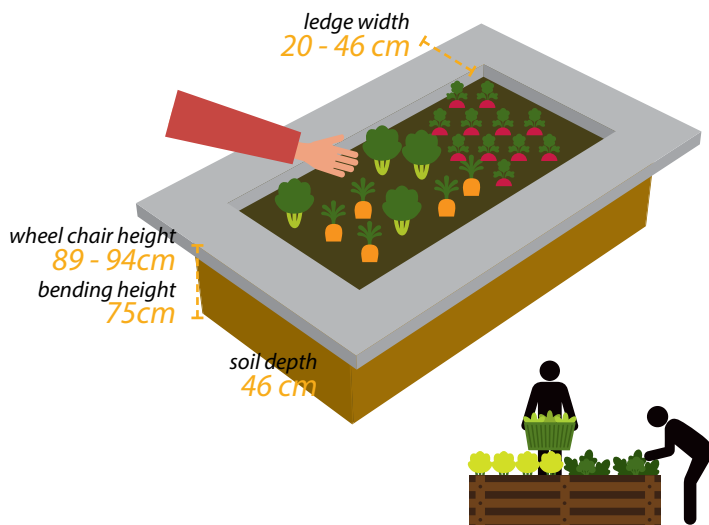
RAISED BEDS: Beds can be different heights depending on who they are accommodating,

POSSIBLE MATERIAL: a variety of material like cement blocks, wood or stone, or can be purchased prefabricated.

wheel chair height	61 cm (24")
gardeners unable to bend height	75 cm (30")
maximum reach into plot	46 cm (18")
ledge width *(possible at different heights to accommodate for sitting, kneeling or leaning)*	20 - 46 cm (8" - 18")
soil depth	46 cm (18")

TABLE/ RAISED CONTAINER PLANTERS: Table planters are high enough to use as raised beds and accessible for use with a wheelchair.

width
92 cm

box depth
21 -26 cm

knee clearance
69 -76 cm
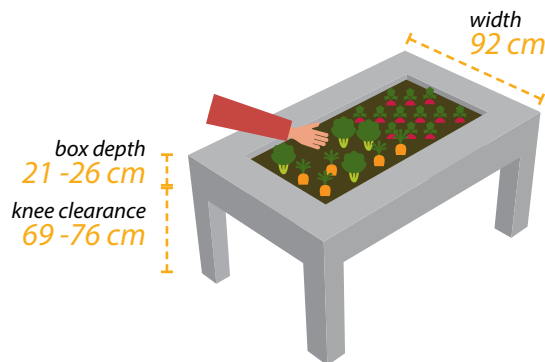
height	89 - 94 cm (35" - 37")
maximum reach into plot	46 cm (18")
knee clearance	69 - 76 cm (27" - 30")
soil depth	21 - 26 cm (8" - 10")

SEATING

Ample shaded seating is also a great way to make a garden more accessible. It is recommended that seating is located in a shaded area, that provides protection from the sun in the hottest parts of the day between 11am- 4pm.

OTHER ACCESSIBILITY CONSIDERATIONS

spigot height
61 - 92 cm
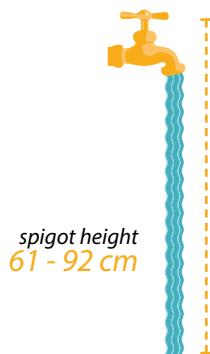
WATER SPIGOT: Install brightly coloured, highly visible hand levers and snap connectors at an accessible height of 61-92 cm. Locate taps frequently throughout the garden (within 20' of each plot) so gardener's don't need to carry heavy and long hoses. The Park Board staff will install the bibs on projects located on park land.

SENSORY GARDEN: Sensory gardens cater to providing an enjoyable experience for all the senses. They are especially important for people with sensory, cognitive or developmental disabilities (impairments) but they greatly enhance the experience of every visitor. Read more on page 38.

- Barrier-Free Community Gardening in Waterloo Region: **goo.gl/14bSws**
- Background and Details, Accessible Community Garden Guidelines 2011: **vancouver.ca/files/cov/Community-Gardens-Accessibility-Guidelines-2011.pdf**

TOOLS: There are commercially available tools that make gardening easier for persons with limited mobility.

SIGNS: Consider people with visual impairments when designing signs to go in the garden.

SAFETY AND VISIBILITY

Unfortunately, vandalism and theft is sometimes inevitable; there are however, some ways to deter it through good environmental (physical) design and through community engagement.

Consider:

- Is the project visible by passerby's?
- Are there any windows directly overlooking the site?
- Have you hosted public events to encourage community participation and ownership of the project?

SIGHTLINES

Where possible, ensure that the garden is visible from the street and surrounding community, and overlooked by housing with active frontage.

ENTRANCES

Make the area around the main entranceway clearly distinguishable from public walkways leading to it so that users feel that they are entering an area controlled by the users. Orient entry to provide natural surveillance.

LIGHTING

Using motion activated lights is a good way to light the area at night and alert surrounding neighbours (capable guardians) when there is motion in the garden at night.

SIGNANGE

Provide signage that is visible, concise and easily maintained.

Make sure to keep the area tidy, a well-managed site is harder to steal from because the crime is obvious.

FENCING

Low and permeable fencing maintains high visibility while signaling that the garden is a special place with separate rules. Fences are permitted around larger community gardens however, they may not be more than one meter high.

LANDSCAPING

Use spatial boundaries/borders to reinforce the perimeters of defined areas and direct flow through your garden. These can take shape in various different ways from perennial ground covers to tough or prickly shrubs to prevent short-cuts across. Carefully balance the advantages of thorny shrubs as access deterrents against the disadvantages or poor appearance of litter trapped in shrubbery.

AVOIDING VANDALISM

Greenscreens and wall planting reduce opportunities for graffiti and vandalism, and contribute to aesthetics. Directly involving youth in urban agriculture projects also helps reduce instances of vandalism and theft.

ⓘ **ADDITIONAL RESOURCES:**

- The Community Garden Handbook for Newfoundland and Labrador, Appendix R: Theft and Vandalism: goo.gl/hhlV6G

ENGAGING ALL THE SENSES

Sensory gardens are spaces for healing, learning and enjoying. They are instrumental in engaging and involving all members of the community. They provide opportunities for learning and skill development for children and adults alike, and offer much needed refuge from the harsh and often dull, concrete city environment.
While they are especially important for people with sensory, cognitive or developmental disabilities, they greatly enhance the experience of every visitor.

Following are some tips to enhance the sensory experience of your urban agriculture project.

What we perceive with our eyes greatly influences our experience of a place.

energetic   *calming*

TIP: Invite a local artists, or school to contribute to your project.

VISUAL

We are more consciously dependent on our sense of sight, than any of the other senses, to explore and experience the world around us. What we see, the visual quality of a space, greatly influences our experience of a place, our emotional reaction and in turn our behavioural response. Making a visual appealing space therefore, is of utmost importance when creating public space such as a community garden.

COLOUR

Colour adds delight to any scene. Experimenting with colour using plants adds another dimension to space as most plants change colours depending on season. You can add colour using flowers, leaves, bark, berries, lichens, mosses as well as the non-organic elements such as path and wall surfaces.

Play with:

- CREATING CONTRAST: Visual contrast is valuable for people with visual impairments, not only for enjoyment but also for wayfinding. Create contrast between paths and edging. Make the furniture, rest places, signange and obstacles more visible by painting them a contrasting colour from their surroundings.
  Example: bright yellow edge of a path, dark leaved shrub behind delicate white flowers

- SPLASH OF COLOUR: Add dramatic effect using swathes of colour
  Example: bright orange marigolds in a border (Marigolds are also a natural pest repellent and used as a part of integrated pest management in countries all over the world!)

- COLOUR SCHEMES: Create ambiance through coordinating colour; warm colours are associated with energy, while cooler colours are more calming.

- MATERIALS: Consider adding colour through the materials you use.

PATTERN AND SHAPE

Including different patterns and shapes in gardens can aid in early child development. Interesting patterns can be achieved through things like paving, fencing, brick work, trees with different shaped leaves and bark; the possibilities are endless.

MOVEMENT

Movement can spark and sustain a visitor's attention; it can be calming or stimulating and its effect is greatly enhanced when combined with sound. There are many ways to create movement: trees that move with the wind (trembling aspen, willow, white poplar), tall grasses, chimes (careful that they're not too over-powering), water, interactive or moving sculptures. Locate them in spots where they are likely to get some breeze or where they are easily activated by visitors.

spark and sustain interest & cultivate creativity

TOUCH AND PLAY

TOUCH

Tactile learning and exploring helps cultivate creativity, both short term and through development over time. In addition, the ability to explore through touch will make the environment much more engaging to those with visual impairments. Provide ample opportunities for visitors to engage by including:

Provide a safe haven from busy and alarming city noise

- ❧ PLANTS WITH INTERESTING TEXTURES: Any botanist will tell you that in order to really get to know a plant you must touch and feel it. Introducing textures into your project through plants is easy because plants are inherently extremely interesting and differ in texture in their flowers, leaves, berries, seeds, bark and new twigs.
  Create a common space where children (and adults) can touch plants and learn about the purpose behind each texture, for example: waxy leaves prevent water loss.

- ❧ TEXTURES IN THE FABRIC OF THE GARDEN AND THROUGH TEMPORARY MATERIALS - Further add interest through varying the texture of wall surfaces, path surfaces, sculptures, seats and tables. (To add variety to materials to sit, walk and lie on try using bark mulch, leaves, straw).

- ❧ WATER: Water satisfies all the senses, especially touch and sound. Give garden explorers the chance to dip their hands (and toes?). Stagnant water is breeding ground for mosquitoes, make sure that the water in your garden moves or, in the case of ponds, add fish which will eat insect eggs. Moving water is also more interesting and enables water play, e.g. floating objects.
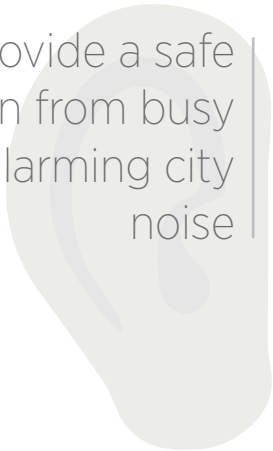
ORIENTATION, GRAVITY AND BALANCE

Make your garden an experience! Provide space for developing motor skills. Create interest and mystery by changing the width, direction, branching and slope of pathways. Provide "landmarks" that visitors can remember and orient themselves by, as well as logs and platforms that would aid in surveying the area and develop orientation and balancing skills.

INTERACTION AND PLAY

Sensory gardens should include landscape features that can be manipulated and rearranged. For example, interactive sculptures, gear wheels, pulleys, balances and pools or channels of water. These features are also a valuable tool for teaching cause-and-effect.

POSSIBLE TEXTURE IDEAS	POSSIBLE MEDIUMS THAT ADD TEXTURE
rough	twigs
smooth	stones
ridged	bark
hairy	pedals
bumpy	slate
soft	leaves
squidgy	grass flowers
fluffy	seed heads
prickly	acrons
waxy	mulch
papery	water
coarse	grasses
others...	others...

Brainstorm a list of textures and ways to achieve them. This is a great opportunity to get children involved in the design and planning process of the project.

Provide a safe haven from busy and alarming city noise

SOUND

Providing a safe haven from the busy and alarming city noise is a much needed therapeutic function of any urban greenspace. When considering the sound in your garden, first think about how to dull and drown out the stressful or unpleasant noises from the surroundings; thick vegetative buffers and cascading water always help.
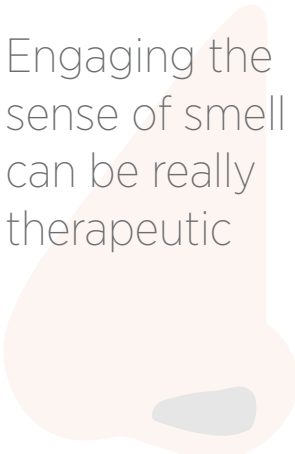
Secondly, create opportunities for:

- NATURAL SOUNDS: While ambient sounds are difficult to replicate, simply providing space for visitors to slow down and observe the sounds of leaves rustling in the wind, birds singing, rain drops on metal roofs, etc. can go a long way.

- ACTIVATED SOUNDS: Kinetic sound sculptures and art pieces (such as deer chaser fountains, musical fences, wind chimes) that are activated by visitors provide both interaction and auditory stimulus.

SMELL

Engaging the sense of smell can be really therapeutic in an urban agriculture project. There are different types of scents when it comes to plants:
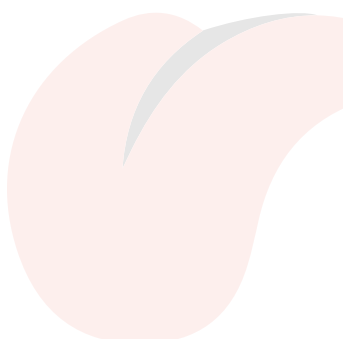
- RELEASED WITHOUT TOUCH: These can be strong and fill the air, or weak and require you to smell the flowers directly.

- RELEASED WHEN PLANTS ARE CRUSHED: Place plants with mildly scented leaves along the edges of paths; passerby's will activate the smells every time they brush past. Be careful when deciding where to place plants, some scents can be overpowering and should be avoided or placed far away from direct access and heavily occupied areas.

EXAMPLES OF FRAGRANT PLANTS:

Wild ginger | *Asarum caudatum*

Christmas box | *Sarcococca hookeriana var. humilis*

Anise hyssop | *Agastache foeniculum*

Mock orange | *Philadelphus lewisii*

Nootka Rose | *Rosa nutkana*

Engaging the sense of smell can be really therapeutic

However, plants are not the only way to create distinctive and interesting smells; wood shavings, autumn leaves, fresh rain on hot soil and cut grass are other distinctive smells in a garden.

TASTE

This one should be a given in an urban agriculture project! While much of the produce of your garden may be for private consumption, include some plants, shrubs or trees for the community and visitors. Berries are great because they can be grown on the edges and in buffer zones (they usually grown on hardy shrubs) and the fruit is small enough to satisfy any craving. This might even aid in preventing theft from private plots.

SENSORY GARDEN INFORMATION ADAPTED FROM:

- SensoryTrust.org: **sensorytrust.org.uk/information/factsheets/sensory-garden-4.html**

ECOLOGICAL HEALTH

The City of Vancouver and the Park Board is committed to enhancing biodiversity and wildlife habitat. Urban agriculture initiatives are opportunities to incorporate habitat for song birds, bees, and other beneficial bugs. Consider installing mason bee lodges, planting native shrubs and pollinator gardens as opportunities to educate and enhance the natural infrastructure for our tiny residents.

BIRDS

Over 250 species of resident, migratory and over-wintering birds are regularly observed in Metro Vancouver. Providing habitat for birds in Vancouver is particularly important because the Fraser River delta is a major stop along the Pacific Flyway —a north-south migratory route traversed by at least a billion birds every year.

Birds also provide ecosystem services in the form of pest control, pollination and seed dispersal. Here are some ways to provide habitat in your project:

- Increase vertical vegetation structure complexity by creating layers: ground cover, shrub, understory and canopy layers. Provide native understory
- Provide plants for foraging- mix of coniferous and deciduous vegetation. Providing foraging options: seeds, fruit, nuts, nectar.
- Plants with persistent fruits (hold their fruit into winter), attract insects that birds feed on and include early flowering plants to ensure a reliable supply of nectar when migratory hummingbirds arrive in spring.
- Provide nesting boxes in areas of minimized disturbance by humans and incorporate snags or downed wood.
- Provide water for birds to drink and bathe. Several species are up to three times more likely to be present if a water source is nearby
- Reduce light pollution (use international dark-sky Association Approved lighting fixtures).

EXAMPLES OF BIRD FRIENDLY PLANTS:

PERSISTANT FRUITS:

Pacific Crabapple | *Malus fusca*

Evergreen Huckleberry | *Vaccinium ovatum*

Highbush Cranberry | *Viburnum trilobum*

ATTRACT INSECTS FOR FOOD

Red Alder | *Alnus rubra*

Pacific Willow | *Salix lucida*

Scouler's Willow | *Salix scouleriana*

EARLY FLOWERING:

Salmonberry | *Rubus spectabilis*

Flowering Currant | *Ribes sanguineum*

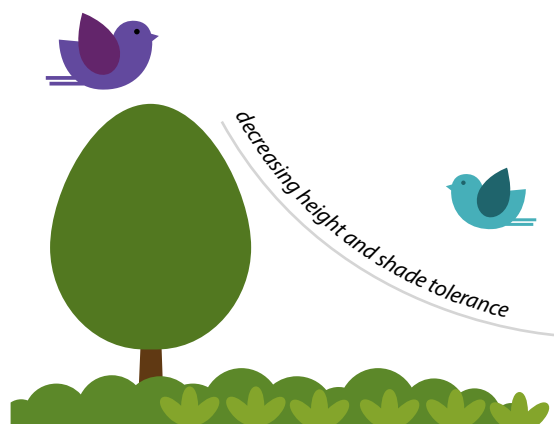Oregon Grape | *Mahonia aquifolium*

HABITAT:

Nootka rose | *Rosa nutkana*

habitat

ⓘ ADDITIONAL RESOURCES:

- Vancouver Bird Strategy: **vancouver.ca/parks-recreation-culture/vancouver-bird-strategy.aspx**

decreasing height and shade tolerance

POLLINATORS

Honeybees, butterflies and native bees such as bumble bees are declining because of urbanisation, intensive agriculture, and pesticides. Gardeners can help reverse this trend by creating flower-rich gardens that help keep pollinator populations healthy.

Here are some tips:

- Include space in your project for an area with pollinator friendly plants. This area can be communal and used as an educational tool for all the visitors. You can also encourage gardeners to include more flowering plants in their individual plots.
- Choose plants that flower throughout the season (and with long bloom times) and remember that some native bees rely on native plants.
- Choose plants with flowers of different shapes, sizes and colour (this attracts a variety of pollinators). Plant large patches of each kind of flowering plant: about a square meter of each, if you have the space (don't forget to be creative with the layout
- Buy or build a mason bee box or create nesting sites for native bees; more than 70% nest in dry soil below ground; so leave open, unmulched areas in your garden (see resources section for more info). Consider nest sites: bee condos, places ground nesters can use and plants with hollow stems.
- Be tolerant of unmowed meadows or shrub thickets in parks which are important for pollinators.
- Do not use pesticides in your garden (It's prohibited and very detrimental to pollinators).

EXAMPLES OF BIRD FRIENDLY PLANTS

Lavender | *Lavendula*	Cranesbill | *Geranium*
Rhododendron | *Rhododendron*	Aster | *Aster*
White Clover | *Trifolium repens*	English Daisy | *Bellis perennis*
Cotoneaster | *Cotoneaster*	Rosemary | *Rosmarinus*
Heather | *Calluna*	Mint | *Mentha*
Purple Toadflax | *Linaria purpurea*	Oregano | *Origanum vulgare*
California Lilac | *Ceanothus*	Borage | *Borago*
Bachelor's Button | *Centaurea*	Calendula | *Calendula*
Bellflower | *Campanula*	Lily Of The Valley | *Peleris*
Thyme | *Thymus*	Shrubby Veronica | *Hebe*
Forget-Me-Not | *Myosotis*	Blackberry/Raspberry | *Rubus*
Yellow Mustard | *Brassica*	
Sage | *Salvia*	(Based on work by Prof. Elizabeth Elle, Tila Haapalainen and Julie Wray, Simon Fraser University)
Escallonia | *Escallonia*	

🔍 **ADDITIONAL RESOURCES:**

- Vancouver Pollinator Project: **vancouver.ca/parks-recreation-culture/pollinator-project.aspx**
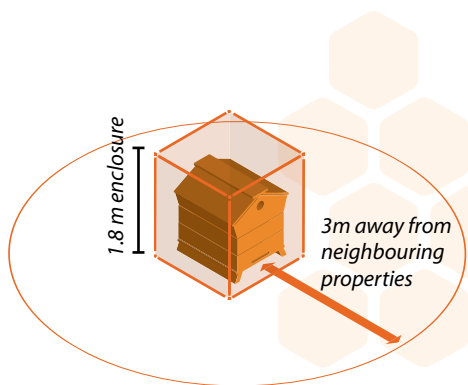
1.8 m enclosure

3m away from neighbouring properties

BEEHIVES LOCATED IN COMMUNITY GARDENS

Integrating beehives into community gardens is a great way to increase crop yields, and support and protect bees — a vital part of our ecosystem. When implementing a beehive in your community garden make sure to adhere to the following guidelines on city-owned land.

💨 A maximum of two beehives per community garden.

💨 In order to ensure the appropriate height of honey bee flight path: (a) the beehive entrance should be directed away from pedestrian pathways; and (b) the beehive should be located a minimum of 3 meters (10 ft) away from neighbouring properties and / or children's play areas.

💨 The beehive should be located within a secure enclosure to prevent vandalism. The enclosure should be a minimum of 1.8 meters (6 ft) in height and made of material that does not create a visual barrier (i.e., fencing material should be permeable).

💨 A sign should be posted near the beehive that provides contact information of the beekeeper and / or community garden representative in case of concerns.

💨 The beekeeper and community gardeners must work with the Park Board or the City to gain permission for the project.

INVASIVE PLANTS

The following are invasive plants, do NOT plant in Vancouver:

Butterfly Bush | *Buddleja davidii*

Common Periwinkle | *Vinca minor*

English Holly | *Ilex aquifolium*

English Ivy | *Hedera helix var. hibernica*

Giant Hogweed | *Heracleum mantegazzianum*

Himalayan Blackberry | *Rubus armeniacus*

Knotweeds: Giant, Japanese, Bohemian | *Fallopia japonica, F. sachalinensis and F. × bohemica*

Policeman's Helmet | *Impatiens glandulifera*

Purple Loosestrife | *Lythrum salicaria*

Scotch Broom | *Cytisus scoparius*

Spurge Laurel or Daphne | *Daphne laureola*

Yellow Flag Iris | *Iris pseudacorus*

Yellow Archangel/ Lamium | *Lamium galeobdolon*

RECOMMENDED EDIBLE PLANTS FOR VANCOUVER

PERENNIALS, CLIMBERS AND GROUNDCOVER

	SPECIES NAME	COMMON NAME	OTHER LANDSCAPE VALUE
PERENNIALS & HERBS	*Cynara scolymus*	Globe artichoke	Dramatic accent plant in perennial borders and containers. Interplant with late-flowering perennials to hide foliage when it dies back
	Mentha spicata	Spearmint	Can be invasive, therefore plant large areas where plants can controlled by mowing in containers or fill in and be controlled by mowing.
	Origanum marjorana	Sweet marjoram	In perennial borders, among annual plantings, along edges, and in containers.
	Origanum vulgare	Oregano	In borders, among annual plantings, along edges, and in containers
CLIMBERS	*Actinidia arguta*	Chinease gooseberry	Climb up trellises, arbours, or fences and cover pergolas or walls
	Actinidia chinensis	Common kiwi	Climb up trellises, arbours, or fences and cover pergolas or walls
	Vitis labrusca	Grape	Climb up trellises, arbours, or fences, and cover pergolas or walls
EVERGREEN GROUND-COVERS	*Arctostaphylos uva-ursi*	Kinnikinnick	Along edges and as barriers
	Cornus canadensis	Bunchberry	Along edges, as barriers, and as understory
	Thymus pracecox articus	Creeping thyme	Along edges and banks, in borders, and between cracks in pathways and walls
DECIDUOUS GROUNDCOVERS	*Fragaria chiloensis*	Coastal strawberry	Along edges and open sites near ocean
	Fragaria vesca	Woodland strawberry	Along edges, in open sites, and as understory
	Rubus chamaemorus	Cloudberry	Along edges, trailing over walls, and as understory
	Rubus ursinus	Trailing blackberry	In borders, along edges, and in open sites and disturbed areas

SHRUBS

	SPECIES NAME	COMMON NAME	OTHER LANDSCAPE VALUE
EVERGREEN SHRUBS	*Mahonia nervosa*	Dull-leaved Oregon grape	In borders and along edges
	Rosmarinus officinalis	Rosemary	In borders, barriers, and container
	Salvia officinalis	Sage	In borders, barriers, and container
	Vaccinium ovatum	Evergreen huckleberry	In borders and as hedges

	SPECIES NAME	COMMON NAME	OTHER LANDSCAPE VALUE
DECIDUOUS SHRUBS	*Amelanchier alnifolia*	Saskatoon berry	In borders and as hedges
	Corylus cornuta var. californica	Hazlenut	In borders and as hedges
	Oemlaria cerasiformis	Indian plum	In parks and borders and as hedges
	Ribes divaricatum	Coastal black gooseberry	In borders and as hedges
	Ribes laxiflorum	White-flowered currant	In borders and as hedges
	Rubus idaeus	Raspberry	In borders and as hedges
	Rubus leucodermis	Black raspberry	In borders and as hedges
	Rubus parviflorus	Thimbleberry	in borders and as barriers
	Rubus spectabilis	Salmonberry	in borders and as barriers
	Sambucus cerulea	Blue elderberry	in borders and as a screen or barrier
	Shepherdia camadensis	Soapberry	In borders and as hedges
	Vaccinium corymbosum	Highbush blueberry	in borders and as a screen or barrier
	Vaccinium membranaceum	Black Huckleberry	In borders and as hedges
	Vaccinium ovalifolium	Oval-leaved blueberry	In borders and as hedges
	Vaccinium parvifolium	Red Huckleberry	in borders and as a screen or barrier
	Viburnum edule	High-bush cranberry	in borders and as barriers

TREES
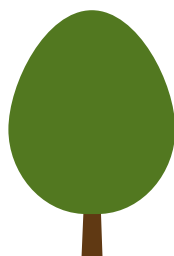
	SPECIES NAME	COMMON NAME	OTHER LANDSCAPE VALUE
EVERGREEN TREES	*Arbutus unedo*	Strawberry tree	Accent plant along edges and near entries, in borders, and as barrier or screen
	Larus nobilis	Sweet Bay	Street tree, barrier or in containers

	SPECIES NAME	COMMON NAME	OTHER LANDSCAPE VALUE
DECIDUOUS TREES	*Castanea sativa*	Sweet chestnut	
	Corylus avellana	European filbert	Accent plant along edges and near entries, in borders, and as barrier or screen
	Cydonia oblonga	Quince	Accent plant along edges and near entries, in borders, and espaliered as barrier or screen
	Ficus carica	Fig	Shade trees in parks and espaliered as barrier or screen; dwarf varieties in containers
	Juglans regina	Persian walnut	Shade trees in parks
	Malus fusca	wild Crab-Apple	Accent plant along edges and near entries, in borders, and espaliered as barrier or screen
	Malus species	Apples	In parks and borders and espaliered as screens and hedges
	Morus nigra	Mulberry	Background tree in borders, as a screen, and weeping varieties as accent trees
	Prunus dulcis var, dulcis	Almond	Small shade trees and along streets; dwarf varieties in containers
	Prunus carasus	Sour cherry	Beautiful accent tree in park, yard, or border; dwarf varieties in containers
	Prunus salicina	Japanese plum	Accent trees in borders; dwarf varieties in containers
	Pyrus communis	Pear	Shade trees in parks and espaliered as barrier or screen; dwarf varieties in containers

"We are witnessing an increasing dominance of urbanization of the Earth with less land and water per-capita. The **return of agriculture** to where we live presents us with a new paradigm."

City of Vancouver