

# Parkdale Community Garden

---

## Risk Assessment for Development Permit

There are three main areas of risk to be mitigated in this project. They are:

- Soil contamination
- Construction activities
- Gardening and Community social activities in the garden

General discussion of each area will be accompanied by relevant risk/mitigation tables offered in Appendices attached.

## Soil Contamination

A City of Calgary Environmental Assessment identifies two areas of potential soil contamination on our site. One originates from a spill that occurred on the Foothills Hospital site some years ago. This spill was remediated with soil removal and declared safe onsite. The concern expressed by the assessment is that seepage from the site may have brought contaminants into our site.

The second source of potential contamination is a service station that was located on 16<sup>th</sup> avenue. Again, seepage from that site onto ours below would be the concern.

Our approach to containing the risk of potential contamination from these sources is to delay any in-ground planting of food crops, including Food Forest plantings, until we can have our soil tested and remediated if necessary. Plantings in areas that are planned for perennial food crops will revert to naturalization plantings rather than food bearing plants until reputable soil testing can assure us of safety.

The planting of naturalized plant communities will benefit the garden with habitat for pollinators and predator species as well as being a platform for education. Additionally, there are many plant species that function as soil repair and conditioning agents along with being attractive and providing habitat. This plant approach to soil remediation would be an adjunct to professional remediation.

There are several potential avenues to secure the soil testing we need. Suggestions are: City of Calgary partnership using 'in-house' resources. Because we will function as stewards of the land on behalf of the community and the city, and we don't profit from it, the case can be made that we should form a partnership to remediate it. The beneficiaries will be our community members but also Calgary citizens in many other communities that are facing similar barriers to complete functioning of their soil for local food production.

- Partnership with research faculties at U of C and SAIT to create pilot project. Our city houses many educational and research communities who work in this area

and may appreciate an opportunity to do site research with students as well as contribute to the community in this way

- 'In kind' donations from corporate sector. Our project offers a unique opportunity to be involved in a project that is innovative and can be a model for community responsibility for local food production in a new way.

## Construction Activities

There are many standard construction protocols that will apply to the activities undertaken in the primary build of Phase I. They are listed in Appendix I.

It should be noted that all individuals engaged in construction activities, whether they are non-professional volunteers or professional construction workers volunteering on our project, will be supervised by a professional construction manager who will ensure that industry standard safety applies throughout.

This will be done by instructional sessions before any activity and onsite supervision by a professional. Additionally, all equipment in use will be checked by a construction professional and operated by that professional or under their supervision.



## Gardening Activities

Risks associated with the garden apply to people in the garden, whether gardening or gathering for other activities and events, as well as risks to the garden itself.

Risks to the garden itself are primarily related to vandalism and unsanctioned harvesting. Mitigation of these two risks will be ongoing, as they are for any of the 150 community gardens in our city, and will include solution planning in the areas of :

- ensuring that all aspects of the garden are very well built and designed so that in their quality they invite respect
- lighting for safety and that suggests occupation at all times
- security oversight by neighbors and gardeners including random visits at 'off hours' as well as culturing a protective relationship with the adjacent neighbors as well as routine garden checking by community members onsite for other purposes
- signage that expresses owners' pride in their work and product in the garden as well as information about the work

- occupation at different times of day for different purposes such as social events in the evenings, weekend events and early morning activities
- engagement of community groups such as the adolescents at Woods in a gardening partnership to promote a sense of ownership
- the designation of a 'tasting garden' that is open to browsers and the clear designation of owners plots as private produce
- making clear the invitation to garden to all who wish to be involved
- maintaining good site organization so that no equipment, tools or harvested produce are left out
- site design that ensures sightlines from all points of view into the garden
- engagement activities for all community members in the garden so that ownership feelings extend throughout the community rather than just with active gardeners

Risks to individuals working or gathering in the garden fall into the areas of:

- negotiating the site through pathways and around objects such as raised beds and furniture
- interaction with the built environment such as the toolshed, benches and other garden furniture as well as raised beds
- tool and equipment use
- weather
- plants or other material such as compost which might be allergens on contact or ingestion
- insects – stings and bites
- safety of children who are playing or gardening in the area including interaction with other adults as well as with the environment
- vehicle movement in the garden for deliveries and maintenance
- animals in the garden including dogs, cats and rabbits
- safe and responsible conduct of guests in the garden who may not be regular users and need orientation to safety and etiquette in this unique space

These considerations with the suggested mitigation of risk are discussed in the table found in Appendix I.

## Appendix 1

IDENTIFIED RISK	CONSEQUENCES	LIKELIHOOD/OVER ALL RISK LEVEL	MITIGATION/CONTROL MEASURES
Sharp cutting equipment eg whippersnipper shovels power tools	Cuts, wounds, broken bones	Possible/high	Safety check activity incorporated into sign on sheet, First Aid kit available at site – checked regularly, under 18 not to use power cutting tools, members using tools must wear enclosed shoes/long sleeve shirt/long trousers and eye protection., Safety goggles provided in shed, annual maintenance schedule for power tools to ensure good working order
Pointed gardening tools, eg. Pitchforks, crowbars	Deep wounds	Possible/high	Safety check activity incorporated into sign on sheet, age-appropriate training provided for all users of gardening tools, first aid kit available on site, active children encouraged to play away from tool use area, annual maintenance of garden tools for safety
Trip hazards	Sprains, broken bones	Possible/high	Safety check activity incorporated into sign on sheet, First Aid kit available on site. Members encouraged to store tools so that they cannot be tripped over, active children encouraged to play away from tool use area, all gardening members must wear enclosed shoes when working on site. Tools restricted to active gardening areas – not permitted on paths or gathering space areas
Sun- heat	Moderate, Sunstroke. dehydration	Possible/high	Encourage wearing of hats, provide 30+ sunscreen protection in garden shed for adults and children, water available on site, shaded seating area installed onsite, posted reminders to hydrate while working in sun

IDENTIFIED RISK	CONSEQUENCES	LIKELIHOOD/OVER ALL RISK LEVEL	MITIGATION/CONTROL MEASURES
Uneven ground, holes	Moderate, sprains, broken bones	Unlikely/medium	Safe pathways provided to all work sites and gathering sites, members encouraged to use garden paths when working in larger beds, regular maintenance of paths
Stings and bites	Major, swelling, pain, itching, allergic reaction	Possible/high	Members acknowledge hazard to themselves and their families/guests and take responsibility for onsite medication for allergic reactions, first aid kit available for minor reactions
Inhalation of potting mediums/compost	Major, Legionnaires disease	Rare/medium	Masks available in shed
Vehicles	Major, collision, injury to pedestrians from slow moving vehicle in garden	Rare/medium	Vehicular access padlocked and entry of vehicles to garden area minimized, area cleared during vehicle delivery except for specific volunteers
Inappropriate conduct towards children and young people by garden members	Major. Safety and wellbeing of children compromised/child abuse	Rare/high	Parents/accompanying adult required to supervise children at regular garden area activities, garden members to seek permission from supervising adult before engaging children in activities or moving out of sight of parents/other members, protective behaviors e.g., staying in sight, going to toilet in pairs/groups, checking with parents before leaving line of sight area, activities/events offered specifically for children and young people to have additional risk assessment conducted and risk management strategy incorporated into event planning, warning parents that this is an area with public access

