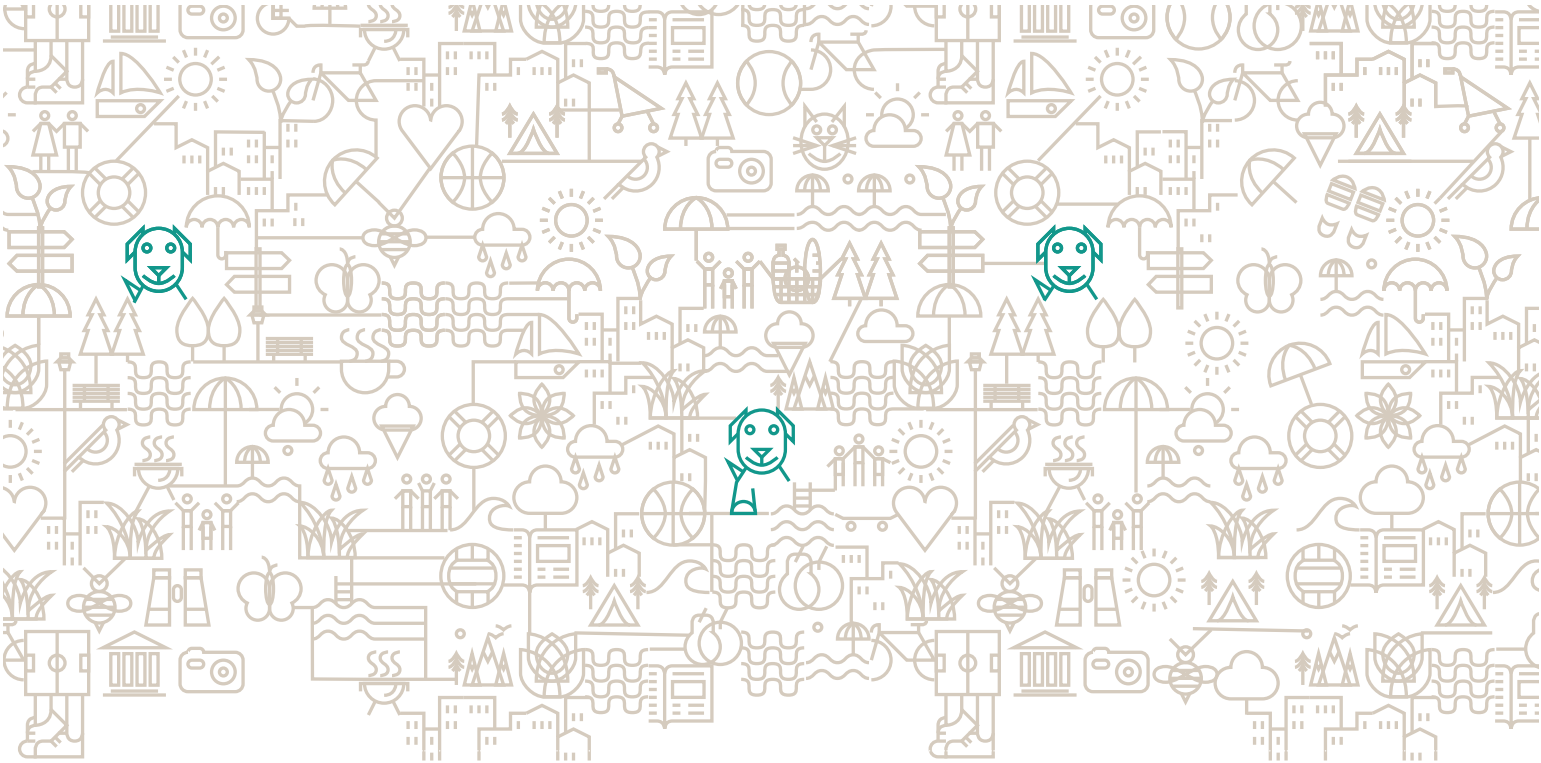
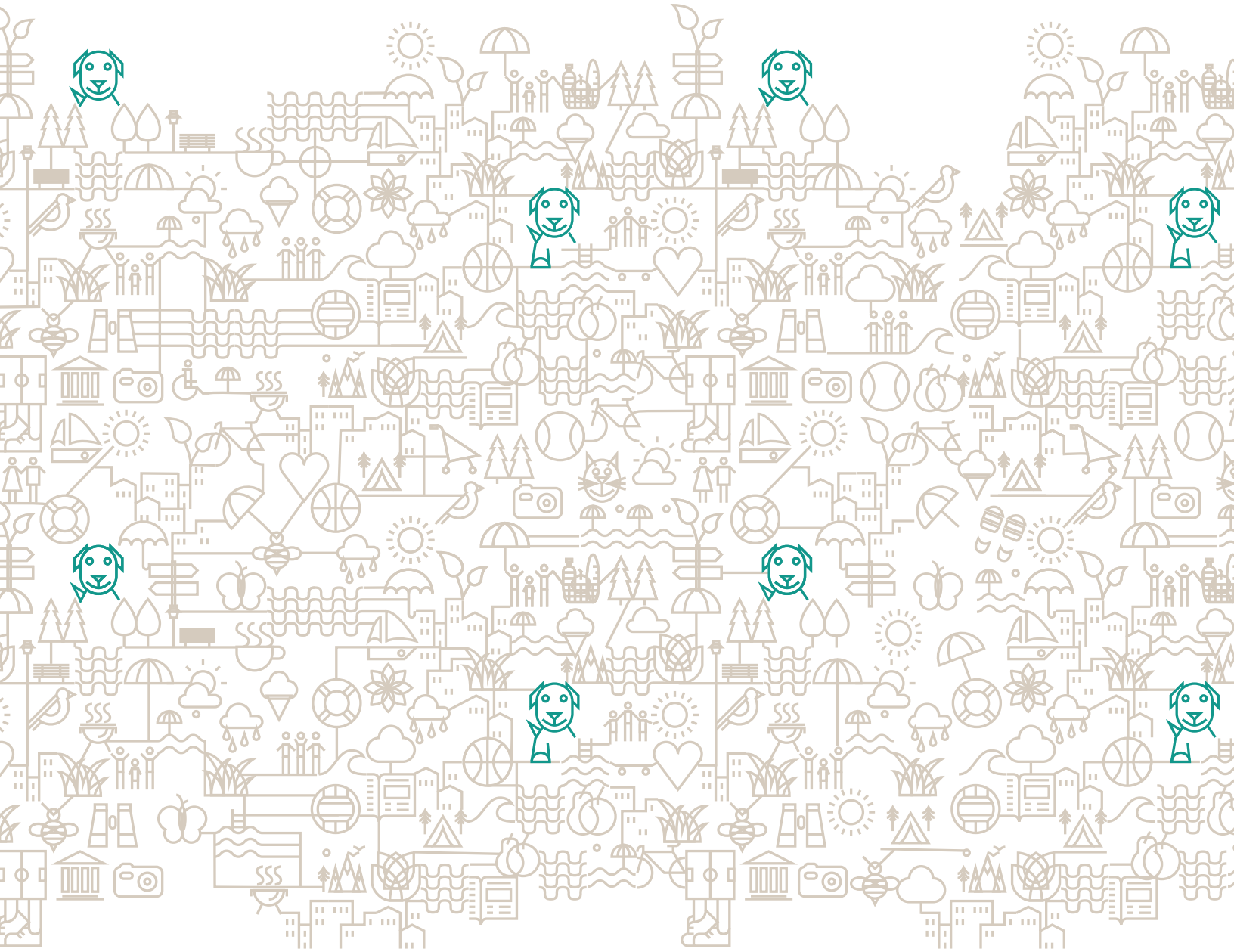
PEOPLE PARKS & DOGS

IMPLEMENTATION GUIDE
considerations for delivery



VANCOUVER BOARD OF PARKS AND RECREATION

This document is a companion reference for the 'People Parks and Dogs' Strategy Report, prepared for the City of Vancouver Park Board October 2017, by space2place design inc.



CONTENTS

IMPLEMENTATION GUIDE

① AMENITIES

Recommended for Vancouver's Dog Off-Leash Areas

	Destination Park dog off-leash area	Destination Trail dog off-leash area	Neighbourhood Park dog off-leash area	Neighbourhood Urban dog off-leash area	Neighbourhood Dog Run dog off-leash area
Intent	Large off-leash area. Used by residents and visitors on a daily or weekly basis.	Linear and trail-oriented off-leash area. Used by residents and visitors on a daily or weekly basis.	Medium sized off-leash area. Used by local residents on a daily basis.	Smaller off-leash area in high density setting. Used by local residents on a daily basis. Higher quality amenities to attract and support higher intensity of use.	Smaller off-leash area, in medium to high density settings. Used by local residents on a daily basis.
Service level	Accessible to the majority of residents within a ~35 minute walk (3 km radius) or short drive		Accessible to the majority of residents within a ~15 minute walk (1.0 km radius)		
Hours of use	Typical hours 6am to 10pm				
Target size	Greater than 1.2 ha (3 acres)	Determined on site-by-site basis	From 0.4 to 1.2 ha (1 to 3 acres)	From 0.04 to 0.4 ha (0.1 to 1 acre)	
Boundary	Fencing (secure / permeable), bollards and vegetation depending on adjacent park uses, land uses and existing site features.			Entirely enclosed with high quality secure fencing (e.g. decorative steel)	Entirely enclosed with standard secure fencing (e.g. chain link)
Surfacing	Mix of surfaces, including fine crushed gravel and grass	Gravel or wood chip trail surfacing. Consider options for increasing accessibility.	Mix of surfaces, including fine crushed gravel and grass	Mix of durable surfacing types, with specialty surfacing (e.g. synthetic turf)	Standard durable surfacing type (e.g. fine crushed gravel)
Amenities (1)	Standard and special amenities considered on a site-by-site basis such as washrooms, drinking water for people and dogs, parking, and separated small / shy dog areas.	Standard amenities.	Standard amenities. Special amenities to be considered on a site-by-site basis.	Standard and special amenities, such as drinking water for people and dogs, agility features, and climbing elements. 'Pooch Patch' to help manage dog waste.	Standard amenities. Special amenities to be considered on site-by-site basis.

(1) SEE 'TABLE IG-2'

Table IG-1. Overview of the five types of dog off-leash areas, and their recommended attributes.

Standard Amenity	Description	
Waste bins	Provide separated, highly visible red dog waste bins to keep dog waste out of landfills.	
Open space	Dog off-leash areas should be sufficiently sized and thoughtfully designed to maximize the available open space for dogs to get a good amount of exercise through running and play.	
Shade	People and dogs need shade. Dog off-leash areas should be located and designed to take advantage of sites with a mix of sunny and shaded conditions. Plant new trees if feasible, where shade is inadequate. Note that existing shade trees and any new plantings may need protection from dog activity. Consider simple shade structures where trees are not feasible.	
Dog Waste Bag Dispensers	Provide durable dog waste bag dispensers at all dog off-leash areas to encourage dog owners to pick up dog waste. Dispensers can be stocked by volunteers or through private partnership agreements.	
Seating	Provide seating at dog off-leash areas to make sites more comfortable for people. At least one bench per site should be wheelchair accessible (including the access route to it).	
Special Amenity	**Description**	
Looping paths	Looping paths with durable surfacing can encourage dog owners to walk with their dogs, thereby reducing congregation of dogs at entries and reducing wear on turf areas. Consider options for increasing accessibility.	
Drinking water (dogs and people)	Provide drinking fountains for people and dogs (i.e. separate dog fountain) at higher-use sites. Fountain designs should consider the needs of those using wheelchairs or canes, and be located centrally where they are accessible to all park users.	
Water for dog play	Providing water for play is recommended for high-use sites. If the site has no access to water for dogs to swim, consider adding in-ground water jets to stimulate play, hydrate dogs, and cool the site. Reduce the volume of water used and extend its play value, for example by using channels or rills where shallow water can flow before it drains away. Install drainage (e.g. catch basin) to accommodate run-off.	
Separated small / shy dog areas	Separated areas for small or shy dogs, or dogs with other special needs, can allow these dogs to benefit from dog off-leash activity while keeping them safe from large, rambunctious dogs. Having separated small / shy dog areas may be most appropriate at fenced dog off-leash areas such as Neighbourhood Urban dog off-leash areas and Neighbourhood Dog Run dog off-leash areas.	
Dog wash station	Consider dog wash stations for Destination Park dog off-leash areas, particularly those with water access where dogs can get muddy.	
Agility Features	Incorporate agility or play features to attract greater use and support more intense use. This may be most beneficial at smaller, high use sites such as Neighbourhood Urban and Neighbourhood Dog Run off-leash areas, and could also be a popular amenity at Destination Park dog off-leash areas. Engage a professional to evaluate the safety of the agility feature prior to installation.	
Washrooms	Consider washrooms (including porta potties) for Destination Park dog off-leash areas and Destination Trail dog off-leash areas, as well as some high-use Neighbourhood dog off-leash areas where there are no public washrooms in proximity. Washrooms should have universal access, be open during park hours, and be centrally located within shared-use parks to facilitate access by all park users. Porta potties may be suitable on a temporary basis if regularly maintained, and replaced with a wheelchair accessible facility in the near future if one is not located within a reasonable distance.	
Mix of park conditions	Provide a mix of park conditions, including open fields, forest, and/or water access (where possible) at Destination park dog off-leash areas.	
Lighting	Consider lighting for selected dog off-leash areas, such as Neighbourhood Urban dog off-leash areas, to increase their usability during winter months and improve accessibility. Lighting can be set on timers and can be turned off outside of dog off-leash area hours.	
Parking (cars and bicycles)	Provide parking with wheelchair accessible stalls and bicycle racks at Destination Parks. Conduct site-level assessments to identify existing parking capacity and anticipated requirements.	

Table IG-2. Standard and Special amenities for dog off-leash areas.

② SURFACING

Recommended for Vancouver's Dog Off-Leash Areas

Type of surfacing	Advantages	Disadvantages	Suitability[1]	Image
Fine-crushed gravel (2) (also known as decomposed granite, gravel screenings, crusher dust)	• Suitable for high-intensity use • Can be designed to be accessible for mobility aids / strollers • Can be designed to have good drainage	• May require irrigation for dust control, or surfactant • Requires moderate maintenance (raking) • May get muddy and compacted if overly saturated • Hard on paws	Smaller areas of intensive use, such as paths or bench pads.	
Synthetic turf (with 'zeofill' infill product to absorb ammonia)	• Suitable for high-intensity use • Good drainage • Easy to clean and can be sanitized • Accessible for mobility aids / strollers	• Higher cost • Requires edging material • Requires weekly hosing down in summer with a commercial ionic enzyme solution to remove the buildup of ammonia from "zeofill"	Areas of intensive use.	
Grass (natural turf)	• Inexpensive • Natural • Aesthetically pleasing and desirable by dog owners and non dog owners • Somewhat accessible for "all-terrain" mobility aids / strollers • Soft on paws	• Not suitable for smaller sites, high-use areas, or areas with poor drainage • Performs best if constructed similar to a high performance sport fields, with subsurface drainage and a high sand root zone and min. 3% surface slope • Requires frequent overseeding, and may require periodic park closures to rehabilitate grass • Requires irrigation	Larger areas with low intensity of use. Recommend pilot projects to identify more durable grass species / mixes.	
Sand	• Low cost • Easy to install • Excellent drainage • Malleable material, allows for digging(3) • Soft on paws	• Not wheelchair accessible • Tracks onto adjacent surfaces • Requires regular raking to remove surface debris • May require irrigation for dust control, or surfactant (Magnesium sulfite)	"pooch patch" dog waste areas, or designated digging areas	
Pea gravel	• Excellent drainage • Easy to install • Malleable material, allows for digging(3)	• Not wheelchair accessible • Messy; can be slippery if tracked onto paved surfaces and requires regular raking to remove surface debris • Difficult to clean / sanitize • Can get dusty • Hard on paws	Consider in select applications where drainage is a significant challenge.	
Wood chips	• Low cost • Can be locally sourced • Easy to install • Malleable material, allows for digging(3) • Soft on paws	• Not wheelchair accessible • Compacts / degrades / crusts over time, causing drainage problems • Requires regular topping up, causing mounding • Difficult to clean / sanitize • Mold / odour problems are common	Select areas with good existing drainage.	

(1) SUITABLE FOR USE IN VANCOUVER'S DOG-OFF LEASH AREAS.

(2) FINE-CRUSHED GRAVEL RECOMMENDATIONS:

HIGH-INTENSITY APPLICATION:

225mm depth decomposed granite screenings installed in three lifts over 300mm depth drain rock, as used with reported success at Tompkins Square Dog Run, New York (Source: personal communication, January 2017)

STANDARD APPLICATION:

150mm depth 9mm crusher dust (available from mainland soil and gravel) over 100mm depth 20mm minus aggregate, as per City of Surrey Dog Park Construction Standard

(3) DIGGING IS ONLY CONSIDERED AN ADVANTAGE IN SELECT LOCATIONS.

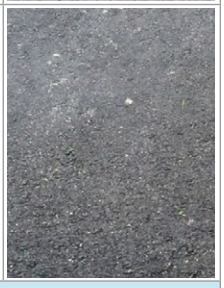
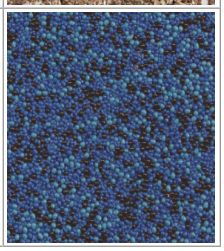
Type of surfacing	Advantages	Disadvantages	Suitability[1]	Image
Concrete	• Suitable for high intensity use • Wheelchair accessible • Easy to clean and can be sanitized • Durable	• Higher cost • Requires drainage • Surface gets hot, especially in summer • Surface may get slippery in freezing conditions • Requires drainage • No cushioning	Smaller areas of intensive use, such as paths or bench pads.	
Asphalt	• Suitable for high intensity use • Easy to clean and can be sanitized • Wheelchair accessible	• Limited durability • Surface gets hot, especially in summer (surface coating may be applied to reduce heat) • Surface may get slippery in freezing conditions • Requires drainage • No cushioning	Consider for paths where concrete or fine-crushed gravel is unsuitable, or for temporary applications.	
RECOMMENDED AS PILOT PROJECT:				
Grass-gravel 'schotterrasen'	• Combines the benefits of grass with the structure of gravel • Excellent drainage • Aesthetically pleasing	• Limited information on local applications; European applications include parking lots and RV campgrounds • May require periodic park closures to rehabilitate grass • May require irrigation	Pilot project	
Alternate Grass Species Mixes (natural turf)	• see “Grass”	• see “Grass”	Pilot projects to identify more durable grass species / mixes. Consider fescue-based mixes.	
RECOMMENDED FOR FURTHER MONITORING:				
Cypress wood shavings	• Cushioned surface • Permeable (requires underdrainage) • More rot resistant than regular wood chips • Malleable material allows for digging(3) • Soft on paws	• Compacts / degrades over time, causing drainage problems • Requires regular top-up / replacement • Product can be inconsistent in size • Not wheelchair accessible • Some animals may demonstrate a sensitivity or allergic reaction to the material.	Monitor results in other dog park applications (e.g. Surrey, B.C.).	
Pour-in-place rubber	• Cushioned surface • Good traction • Available in a variety of colours and patterns	• Higher cost • Requires surface sealant (porous surface may become unsanitary) • Requires drainage • Unknown durability in dog park setting	Monitor results in other dog park applications.	

Table IG-3 Recommended types of surfacing for dog off-leash areas with advantages and disadvantages.

③ BOUNDARIES

Recommended for Vancouver's Dog Off-Leash Areas

SECURE BOUNDARIES

Secure fencing is recommended where dog off-leash areas are located next to less compatible adjacencies (see 'Mitigation Tools', Table IG-6). Recommended standard fence height for dog off-leash areas is 1.2 meters, and should be flush to the ground. Planting can be established along the base to reduce the visual prominence of the fencing, or gravel strips can be provided along the base of the fence to facilitate lawn mowing.

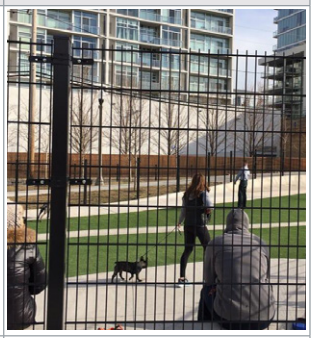
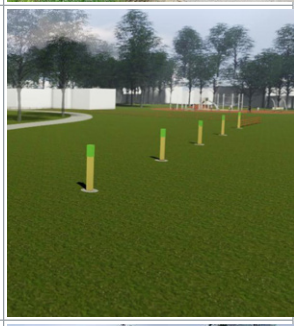
Type of Boundary	Advantages	Disadvantages	Suitability	Image
Decorative Steel Fencing	• Durable, high quality • Considered aesthetically pleasing • Available in a variety of styles and colours • Can be combined with planting to reduce visual prominence of fencing	• Relatively expensive	Neighbourhood Urban dog off-leash areas	
Chain Link Fencing	• Relatively Inexpensive • Durable • Available in galvanized finish or vinyl coated (black coating is less visually prominent) • Can be combined with planting to reduce visual prominence of fencing	• Not considered aesthetically pleasing	Neighbourhood Dog Run off-leash areas	
Post and Rail Fencing, with Wire Mesh Infill	• Relatively inexpensive • Considered aesthetically pleasing • Can be combined with planting to reduce visual prominence of fencing	• Less durable • Wire mesh may restrict the movement of wildlife (mesh sizing to be reviewed on a site basis, if the fence is intended to provide habitat protection).	Neighbourhood Park dog off-leash areas Destination Park dog off-leash areas	

Table IG-4. Overview of Secure Boundary Tools

PERMEABLE BOUNDARIES				
Permeable boundaries such as bollards, vegetation, and non-secure fencing (fencing that delineates the boundary but does not keep dogs securely contained inside) are recommended for dog off-leash areas located next to more compatible park uses and where a visually and physically permeable boundary is desired.				
Type of Boundary	**Advantages**	**Disadvantages**	**Suitability**	**Image**
Post and Rail Fencing	• Allows for wildlife movement • Relatively inexpensive • Considered aesthetically pleasing • Can be combined with planting to reduce visual prominence of fencing	• Creates a barrier for people but not for dogs • Consider including narrow breaks in fencing to allow people to retrieve their dogs, where foot traffic beyond the fence is permissible • Less durable	Recommended next to ecologically-sensitive areas (see additional notes on 'Post and Rail Fencing, with Wire Mesh Infill')	
Bollards [1] (steel or pressure treated wood)	• Allows for the dog off-leash area to be more visually integrated with its surroundings • Relatively inexpensive	• Less visible; people and dogs might bump into bollard	Recommend where full permeability between the dog off-leash area and on-leash area is desired	
Vegetation [2]	• Aesthetically pleasing • Can be formal (e.g. hedge) or naturalistic • Can be combined with landforms (e.g. berms) to help delineate a boundary	• Requires density to be a physical barrier • Requires maintenance • May require irrigation	Recommend as a tool to help visually integrate dog off-leash area with its surroundings	

(1) IT IS RECOMMENDED THAT BOLLARDS BE SPACES APPROXIMATELY 8 METERS APART, WITH GRAVEL OR CONCRETE APRONS AT THE BASE TO FACILITATE LAWN MOWING.
(2) SEE STRATEGY REPORT SECTION 2.2.6 FOR ADDITIONAL RECOMMENDATIONS ON VEGETATION.

Table IG-5. Overview of Permeable Boundary Tools

④ MITIGATION TOOLS

for Dog Off-Leash Areas with Less Compatible Adjacencies

Type of adjacency	Concern	Potential mitigation measures
Residential	Dog noise.	• Setback distance • Mounds • Dense vegetation • Solid fencing panels (to be balanced with safety concerns) • Signage to respect local residents and discourage persistent barking
Ecologically-sensitive area (e.g. biodiversity hotspot, wildlife corridor, water bodies)	Impacts on wildlife from physical disturbance, scent, and/or noise.	• Completely restrict dogs from designated ecologically-sensitive areas • Minimum setback distance of 50 to 75 m and/or use of secure fencing • Wildlife-friendly fencing (described in 'Boundary Recommendations' section) • Use educational signage to raise awareness about potential impacts of dogs on wildlife
Busy road	Dogs being injured or causing car accidents.	• Minimum setback distance of 50 to 75 m and/or use of secure fencing
Multi-use trail	Dogs being injured or causing injuries to trail users.	• Minimum setback distance of 50 to 75 m and/or use of secure fencing
Playground, wading pool, splash pad	Conflict between dogs and children.	• Minimum setback distance of 50 to 75 m and/or use of secure fencing with a 5 m buffer zone where no dogs are allowed (even on-leash). • Buffer planting or other barriers to prevent children from putting fingers through fencing • Dogs completely restricted from playgrounds, wading pools and splash pads, either on-leash or dog off-leash
Designated sports field	Conflict between dogs and sport field users, causing injuries. Dogs digging holes in sports fields. Uncollected dog waste.	• Minimum setback distance of 50 to 75 m and/or use of secure fencing
Community Gardens	Impacts to vegetation and conflict between garden users and dogs.	• Minimum setback distance of 50 to 75 m and/or use of secure fencing
Designated picnic area	Conflict between off-leash dogs and open food.	• Minimum setback distance of 50 to 75 m and/or use of secure fencing

Table IG-6. Potential mitigation measures between dog off-leash areas and less compatible adjacencies.

5 PILOT PROJECTS

Recommended for Vancouver's Dog Off-Leash Areas

PILOT PROJECTS

The following Pilot Projects are recommended to test improvements related to the access, design and stewardship of dog off-leash areas. Refer to Stewardship Recommendations on pages 33 - 38 of the Strategy Report for further considerations on community engagement, evaluation, and implementation.

Name	Description	Implementation
George Wainborn Park	• Introduce morning-only hours of dog off-leash use (duration: one year)	• Work with Park Board staff to finalize proposed boundaries and hours (6 am - 9 am or 10 am) • Clearly delineate off-leash area boundaries (consider bollards, see Signage Plan) • Include dog off-leash area 'etiquette' signage • Include pilot project signage.
Pooch Patch	• A patch of sand where dogs can be encouraged to relieve themselves upon arrival to the park or dog off-leash area (duration: one year)	• For smaller sites with high use, such as Neighbourhood Urban dog off-leash areas, and/or new dog off-leash areas where training new habits may be more successful. • Host an in-park event to introduce the pilot project, and to gather contact information for those that would like to keep informed. • Locate near the entry of the dog off-leash area. • Provide a dog waste bin and bag dispenser immediately adjacent to the pooch patch. • Provide an area approx 5 m^2 of well-draining sand (500mm depth, underlain by 300mm depth of clear crush aggregate), with a post installed in the sand area to encourage dogs to urinate. • Include pilot project signage.
Turf Species	• Testing grass species and / or mixes to identify those most suitable for use in dog off-leash areas. (duration: 2 years)	• Conduct field tests in larger dog off-leash areas, min. 1.2 ha in size (i.e. Destination Park Dog Off-Leash Areas) • Consult with professionals in turf management (e.g. professionals from UBC Botanical Gardens, and / or Kwantlen Polytechnic Horticulture programme) to identify recommended grass species for testing • Park Board staff, in consultation with turf experts, identify parameters for field-testing, including a 'control' area to compare results against Park Board's current turf mix. • Include pilot project signage.
Grass Gravel "Schotterrasen"	• Test the suitability of Grass Gravel in smaller dog off-leash areas where regular turf is not feasible	• For smaller sites with high use, such as Neighbourhood Urban dog off-leash areas (min. 0.4 hectares). • Install minimum 20 m^2 area • Install during spring, when nights are frost-free • Provide 300mm Gravel (max 20% by vol.) / Soil / Compost mixture over a base of 200mm depth gravel. • Hand seed at a rate of 10 g seeds per m^2 watering the soil before and after seeding to ensure optimal contact between seeds and substrate. Consult with Turf Management professionals (see 'Turf Species' pilot project description) for selection of grass seed. Recommend testing various seed mixes and slight variations on construction methods. • Cordon off the area to prevent foot traffic for 3 months, and regularly irrigate during establishment. Fertilize if recommended by test results. • Once open to public use, plan an appropriate mowing schedule, e.g. 3x / year (and adjust as required). • Include pilot project signage.