

PARK DEVELOPMENT

MANUAL

2nd EDITION



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1.0 INTRODUCTION

1.1 EXECUTIVE SUMMARY

An initiative of the City of Ottawa in 2012, the Park Development Manual was developed primarily to define, standardize and improve the park development process for both City-built and Developer-front-ended projects in the City of Ottawa. While continuing to serve as a reference tool to guide City Staff, external stakeholders, the development community and their consultants in the development of parks, this edition also serves to launch the details of the new park delivery process.

Objectives for the new edition include the following:

- To ensure the timely delivery of parks in the City of Ottawa;
- To clearly define the process for park design, construction and acceptance, for both City-built and Developer-built park assets;
- To ensure that the size, layout, location and characteristics of dedicated parkland adequately support the active and passive recreation needs of City of Ottawa residents;
- To refine the guidelines for the selection and acquisition of park blocks;
- To summarize Developer responsibilities with respect to the preparation of park blocks:
- To reaffirm the City's Classification of parks and of pathways within parks, which are to be used as a reference tool to guide City of Ottawa staff and Developers in the development of new parks;
- To clarify new and existing drawing standards and submission requirements to streamline the park design and construction processes and to facilitate communication;
- To incorporate Building Better and Smarter Suburbs' (BBSS) objectives related to parkland acquisition.

The 2nd edition of the Park Development Manual defines a new scenario for the design and development of parks in the City of Ottawa. Following the adoption of the Development Charges By-law in June 2014, and its coming into force in October 2014, changes have been made to the funding model for the construction of parks in suburban and rural areas.

In this new Developer-Built scenario, a Developer conveys parkland to the city as part of a subdivision agreement, and undertakes the design and construction of the park on behalf of the city in lieu of paying development charges for the Park construction.

The processes for development of City-built parks, whereby a Developer conveys parkland to the City as part of a subdivision agreement, and completes requirements related to park blocks still apply in some cases.

The Front-Ended scenario provides another means by which the development community may build park assets as part of the subdivision development process. The park types that are eligible for front-ending are: Neighbourhood Parks and Parkettes. Front-ending is optional, and is subject to the terms and conditions of the City of Ottawa Park and Trail Front-Ending Policy (2011) and Council approval. City and Developer must enter a front-ending agreement. As part of the front-ending process, the Developer is still required to complete the requirements in association with park block conveyance.

All three scenarios, including the roles and responsibilities of all parties, are outlined in the following chapters of this manual.

1.0 INTRODUCTION

The Park Development Manual 2nd edition also enhances the City's Park Classification System by adding two new typologies as required by BBSS principles: Urban Parkettes/Plazas and Woodland Parks. The City of Ottawa has created a classification system to define park typologies designed to meet the social, recreational and environmental needs of its residents. The Park Classification establishes park typologies and outlines standards related to parkland size, location, service area radius, configuration, and amenities in order to inform the selection and subsequent design of park blocks. Parks should be of a shape and size that provide appropriate access and visibility, suit the scale and fabric of the surrounding community and offer flexibility in the design of sports fields and other recreational amenities. Implementation of the Park Classification allows those responsible for design, development, construction and maintenance of parks to best meet the needs of communities, and ensures that a consistent level of quality for all parks is maintained regardless of which scenario applies for park development.

Pathways found within parks are intended to provide for the recreational and transportation needs of residents. They provide pedestrian linkages that facilitate connections to City and community-wide pathway networks, enhance the continuity of the open space system and provide access to recreational opportunities within each neighbourhood. With respect to pathways, the existing classification establishes parameters for use and location within parks, and path and corridor width. Pathway standards vary according use, park-type and anticipated volume of usage. The Pathway Classification describes two (2) pathway typologies found within parks: Recreational Paths, and Nature Trails. For direction related to city-wide multi-use pathways, users should consult the Transportation Master Plan.

The 2nd edition of the Park Development Manual also outlines the City's new drawing standards and submission requirements, with regard to the new Developer-built Park process, including several new submission milestones to ensure coordination between development partners and city staff within the subdivision approvals process.

The City of Ottawa remains committed to the production of this manual as a 'living document', and asserts that the processes it outlines will be continually examined and evolved in order to ensure the efficient and effective delivery of parks to the residents of the city of Ottawa.

1.2 BACKGROUND AND STRUCTURE

In the City of Ottawa, parks play a key role in enhancing the quality of life of residents. They contribute to their physical and psychological health, civic pride, and strengthen local identity. Parks also support the greenspace network, enhance the City's natural beauty, and promote active recreation. In order to achieve customer service excellence, the City of Ottawa strives to provide new and growing communities with excellent parks that meet the active and passive recreational needs of residents, and with this, the second edition of the manual, the intent is to further improve on the delivery of these services.

The success of new parks begins in the early stages of community planning, during the pre-application consultation stage and throughout the entire development review process, when park blocks are selected and acquired. The size and shape of a park block defines which facilities can be accommodated within the park.

The City continues to experience rapid growth which has resulted in a greater demand for the rapid delivery of parks. In order to ensure a timely delivery of parks, the City now has three scenarios for developing parks which includes the new developer-built park process.

In the first scenario, 'City-built', the city will fund and manage the development of parks directly through the city's annual capital budgeting exercise.

In the second and third scenarios, 'Front-ended' and 'Developer-built', park development will be funded, managed and constructed by development-partners with the final approval resting with the city. In these scenarios, the scheduling of park development rests with the development partner and can be aligned with their community building process. A 'Front-ended' park construction scenario may still be an option, in certain limited situations.

In the new Developer-built process, the developer is responsible for funding the design and construction of the park. The developer will submit park conceptual plans and detail design drawings required for park construction. The city will undertake public consultation, review the design and provide approval for these submissions and has authority over the final acceptance.

There is no difference in the total budget allocated to parks in any of these scenarios, and the city retains oversight over the design and construction process through a series of formal submissions and inspections which are detailed in this manual. The manual is structured as follows:

Chapter 2.0 presents guidelines for the selection and acquisition of park blocks, and summarizes park block preparation requirements. It describes the City's Park and Pathway Classification, which includes two new Park classifications, promoted by the BBSS. This is intended to serve as a reference tool to guide the City of Ottawa, consultants and Developers in the development of new parks. Implementation of the various park classifications allows those responsible for design, development, construction and maintenance of parks and pathways to more efficiently meet the needs of communities.

Chapter 3.0 outlines the processes for park design, construction and acceptance that will streamline the City's activities and improve lines of communication with Developers, consultants and City staff. Three scenarios are described: City-built, Front-Ended and the new Developer-built.

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Chapter 4.0 outlines the City's drawing standards and submission requirements, provides information regarding the circulation of drawings and documents to City staff and other agencies, and presents new submission requirements for the early planning of parks in new communities. Sample plans and documents are provided to illustrate both drawing standards and submission requirements. They convey information related to required drawing content for all stages of design development, submissions and approvals. These plans and documents are intended as guidelines to facilitate communication and streamline approvals and must be prepared or coordinated by a Landscape Architect, with full membership in the Ontario Association of Landscape Architects. This chapter also includes park demonstration plans that provide a snapshot of typical park typologies in the City of Ottawa and illustrate the types of amenities that may be provided given the established park budget.

Chapter 5.0 defines terms commonly used in the text of the manual, outlines several principles and policies, and presents a list of the organizations who have contributed to the manual's development.

1.3 How to Use this Manual

This manual is intended to serve as a reference tool to guide City staff, the development community, and their consultants in the development of parks in the City of Ottawa. It is also intended to assist park planners and other City staff in guiding applicants through the review and approvals process for park development. This edition of the manual will fully outline new park development procedures, and new submission requirements for the new park-construction scenario. The process for developing parks is detailed in Section 3.0, Park Development Process.

While each section of the manual has been designed to serve as a stand-alone reference, all the most recent versions of each of the relevant documents mentioned in this manual, and all City of Ottawa by-laws pertaining to parks should be appropriately referenced to ensure that requirements are met. Examples of relevant documents include:

- Amendment to the Conditions for Draft Approval of Plan of Subdivision Parks (2016) *
- Amendment to the Development Charges By-Law 2014-229 with Respect to the Parks Development Service Component (2009)*
- By-Law No. 2004-276: to Regulate and to Promote Responsible Enjoyment and Use of Parks and Facilities (2004)*
- By-Law No. 2006-279: Respecting the Protection and Maintenance of Trees and Natural Areas on Municipal Property (2006)*
- Cash-in Lieu of Parkland Funds Policy (2011)*
- City of Ottawa Community Design Plans (Various)*
- City of Ottawa Environmental Strategy (2003)*
- City of Ottawa Greenspace Master Plan (2006)*
- City of Ottawa Infrastructure Master Plan (2013)*
- City of Ottawa Official Plan*
- City of Ottawa Secondary Plans (Various)*
- City of Ottawa Transportation Master Plan (2013)*
- Design Guidelines for the Development of Rural Villages (2009)*
- List of Provincially Endangered or Threatened Species in Ottawa (updated regularly)
- The Species at Risk Handbook for Ottawa (Ottawa Stewardship Council) (2014)
- Maintenance Quality Standards Parks and Sports Fields (2005)*
- Ottawa Cycling Plan (2013)*
- Ottawa Pedestrian Plan (January 2013)*
- Parkland Dedication By-Law (2015)*
- Park and Pathway Lighting Policy (2003)*
- Park and Trail Front-Ending Policy (2011)*
- Urban Design: A Reference Guide to Creating Great Places and Great Spaces (2007)*
- Council Approved Front-Ending Policy (June 25, 2009)
- By-Law 2009-200: Urban Tree Conservation By-Law*
- By-Law 2006-279: Municipal Trees and Natural Areas Protection (2006)
- CAN / CSA-Z614-14: Children's Playspaces and Equipment (2014)*

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- · City of Ottawa Rink Lighting Policy
- Standard Tender Documents for Unit Price Contracts (Infrastructure Services Department, updated yearly)
- Accessibility for Ontarians with Disabilities Act (2005)*
- City of Ottawa Accessibility Design Standards (2015)*
- CSA B651-12 (R2017) Accessible Design for the Built Environment
- By-Law 203-530: Parking and Traffic By-Law*
- City of Ottawa Older Adult Action Plan, 2015-2018
- Building Better and Smarter Suburbs: Strategic Directions and Action Plan (2015)
- * Available on the City of Ottawa website (www.ottawa.ca)

Other federal and provincial departments and agencies may have authority over aspects related to park development, including the Department of Fisheries and Oceans, the Ontario Ministry of Natural Resources, the Ontario Ministry of Transportation, the National Capital Commission and Parks Canada. In addition, conservation authorities with jurisdiction within parts of the City of Ottawa include: the Rideau Valley Conservation Authority, South Nation Conservation, and the Mississippi Valley Conservation Authority. All organizations having authority should be consulted to obtain guidance and approvals as necessary.

The City of Ottawa is committed to providing facilities that are accessible to all its citizens. Therefore, it is imperative that universal accessibility principles be considered in the development of parks. All new, planned public spaces in Ontario must be designed in compliance with the Accessibility Standards for the Built Environment, as per Ontario Regulation 191/11 of the Accessibility for Ontarians with Disabilities Act (2005), and with the City of Ottawa's Accessibility Design Standards. Universal Accessibility was a strong focus of the first edition of this manual, and this second edition will continue to emphasize accessibility for parks in the City of Ottawa.

2.1 Introduction

In the City of Ottawa, parks are strategically acquired and located based on a diversity of park typologies to satisfy recreational needs, to take advantage of existing natural features where possible, and respond to the context where they are located.

The objective of the Park and Pathway Classifications is to identify and serve a range of individual, social, recreational and environmental needs, and provide a tool to assist in decision-making, managing park assets, delivering recreational services, and building a high-quality park network.

This chapter presents guidelines for the selection of park blocks, summarizes developer responsibilities related to the hand-over of park blocks, and describes the City's classifications of Parks and Pathway within parks.

2.2 PARK BLOCK SELECTION

Parkland selection decisions set the stage for the design of parks that meet the needs of communities, create memorable experiences, and provide valuable social, recreational and environmental benefits.

Park block selection is determined by the City of Ottawa's Official Plan, as well as the City's Parkland Dedication By-Law (No. 2015-40). The City retains the right not to accept the conveyance of land as parkland that is considered unsuitable, including:

- hazardous or flood prone lands;
- wetlands and woodlots retained for conservation purposes;
- steep or unstable slopes;
- any land having unsuitable or unstable soil conditions;
- hydro rights-of-way or easements;
- any land containing an easement, encumbrance, or right-of-use that limits or restricts the City's use of the land;
- any land to be conveyed for stormwater management facilities, for flood plain or conservation purposes, for roadways, walkways or any other non-parkland purpose.
- In addition to the lands mentioned in the above-noted Official Plan, the City, at its discretion, reserves the right not to accept the conveyance of the following lands as parkland:
- · valley lands;
- watercourse corridors;
- environmental constraint lands, setbacks, or conservation buffers; and
- transportation corridors.

2.3 DEVELOPER REQUIREMENTS FOR PARK BLOCKS

While parks may be designed and built under different scenarios, parkland dedicated to the City must satisfy basic requirements, which are outlined in the City of Ottawa's Conditions for Draft Approval of Subdivision — Parks, as amended from time to time. In any scenario, the Developer shall not remove or disturb any of the existing vegetation or topsoil on dedicated parkland unless such removal or disturbance forms a part of the remedial work approved by the City. The following summarizes the requirements that Developers must satisfy when providing a park block to the City. To the satisfaction of the General Manager, Recreation, Cultural and Facility Services department, the Developer is to provide or perform the following:

- An analysis of parkland soils as part of the geotechnical report, including bore holes, as well as digital topographic data for the park block (tied to a geodetic benchmark) and certain criteria for contaminant testing;
- Temporary bilingual signage indicating: Future Parkland, No Dumping, No Unauthorized Removal of Soil or Vegetation, and No Storage of Materials;
- Temporary fencing surrounding the park block, maintained in good repair;
- Grade areas of parkland where necessary to provide positive surface drainage, in accordance with the approved subdivision Grading Plan;
- A 1.5m chain link fence, without gates, adjacent to residential lots, ravine lands and other land uses as required. The
 location of fencing adjacent to hazard lands is to be determined by the City in consultation with the Conservation Authority
 / Partners;
- In public service areas, the Developer is to provide, at the time of site servicing, sanitary, stormwater, 50mm (minimum) water service and hydro stubbed two (2) metres inside the property line, in a location approved by the Park Planner;
- In privately serviced areas, the developer must include: an open ditch, culvert and driveway in the road allowance; a well, constructed as per Ontario Regulation 903; and hydro service stubbed two (2) metres inside the property line.

Where natural areas and/ or stands of trees are to be preserved in park blocks, the Developer is responsible for:

- Removing any hazardous vegetation that create liabilities to adjacent land/lots or proposed park amenities identified through a concept plan prior to subdivision registration, as directed by the City;
- Removing any debris from the park block present until such time as the park is developed;
- Providing a detailed Park Tree Preservation Plan, as detailed in Section 4.2 Drawing Descriptions.

The Developer is responsible for all pathway connections to park blocks, and stormwater pond blocks within the subdivision that link neighbourhoods and / or allow subdivisions to be connected by pedestrian routes. These connections do not comprise part of parkland dedication.

For further details, refer to the City of Ottawa's Conditions for Draft Approval of Subdivision – Parks, as amended from time to time.

2.4 PARK CLASSIFICATION

The City of Ottawa has created a classification system to define park typologies designed to meet the social, recreational and environmental needs of its residents. The Park Classification described in the following pages is intended to serve as a reference tool to guide the City of Ottawa in the acquisition and development of new parks. Implementation of the Park Classifications allows those responsible for parkland selection, design, construction and maintenance of parks to best meet the needs of communities.

The location and programming of parks is determined by the City according to population and recreational service level requirements. Parks are distributed throughout a community, and across the City, to enable residents to have easily accessible parkland that satisfies a wide range of municipal recreational needs, while enhancing the public realm. All park locations shall take into consideration specific Community Design Plans (CDPs), Secondary Plans, Village Plans and site-specific policies in the Official Plan for the area. Communities will benefit when parks are varied in their typologies and are distinctive in their design.

The Park Classification establishes park typologies and outlines standards related to parkland size, location, service area radius, configuration, and amenities in order to inform the selection and subsequent design of park blocks in specific areas. Parklands should be of a shape and size that provide appropriate access and visibility, and offer park planners flexibility in the placement of sports fields and other recreational amenities, with consideration given to the natural features of the lands and the site context, whether it be urban, suburban or rural.

Six (6) park typologies are described, reflecting the City's parkland structure and service radii: District Parks, Community Parks, Neighbourhood Parks, Parkettes, Woodland Parks and Urban Parkettes/ Plazas. Park descriptions begin on the following page.

2.4.1 DISTRICT PARK

District Parks are destination parks with a very large service radius, that service groups of communities, entire districts, and can be used for citywide functions. They are designed as major destinations for residents and visitors, and may have a tourism focus. The size and location of each park may vary, as determined by the park's particular focus and facilities. District Parks may have a competitive recreational focus, and similar facilities may be combined for tournament capabilities.



DESIGN CRITERIA

Service Area Radius: City and district wide

Uses: Multi-use, passive and active recreation, major sports facilities and / or tournament level fields

Size: 10ha minimum

Location: Located to serve multiple communities and, where possible, situated along an arterial street with a major transit route. Should be linked to the greenspace network and may be located in association with other open space areas.

Amenities: Variety of active and passive recreation opportunities which may include a community centre, pool / arena complex, indoor / outdoor rinks, active sports fields, tennis courts, multi-purpose courts, skateboard parks, splash pads, children's play areas, pedestrian walkways, seating areas, and shelters, as determined by the City.

Implementation: Generally City built (Recreation, Cultural and Facility Services department.)

Frontage: Preferred minimum 75% continuous frontage on abutting streets

Parking: Parking shall be accommodated on site

Lighting: Walkway, parking lot, sports field and security lighting requirements shall be determined by the City.

Vegetation Criteria: Planting (trees, shrubs, grasses) shall comprise diverse species tolerant of urban conditions, with an emphasis on native species. Buffer and naturalization planting areas shall be provided where necessary.

Canopy Target: 30%

Naturalization Target: 20%

GUIDELINES

District Parks shall be:

- · Centrally located;
- A district focal-point;
- Programmed such that community centres and significant built form shall address and respond to adjacent urban form, where applicable;
- Located within the greenspace network;
- · Visible and accessible from arterial roads;
- Connected via transit;
- Safely connected to pedestrian and cycling facilities;
- Near and connected to schools, institutions and natural areas;
- Designed with Safety in mind, and adhering to CPTED principles;
- Programmed and lit to minimize disturbance to nearby residents;
- Located and programmed to protect natural features and existing ecological corridors and functions; and
- Universally Accessible and conforming to the principles and policies of the Accessibility for Ontarians with Disabilities Act.

District Parks shall have:

- A mix of passive and active recreational opportunities;
- Multiple Entry points located for convenient access;
- Visually attractive edges and clear views into the park;
- Mature and existing trees and existing natural features, preserved in the park where appropriate;
- Deciduous trees planted in groups for shade and continuous canopy cover, particularly near children's play areas;
- Naturalized plantings at the interface with existing natural features to be protected;
- Public Art or architectural landscape features that enhance the character of the site, where possible; and
- Parking facilities to support the site;
- Sidewalks along their street frontages;
- Multi-faceted uses and where appropriate, they can abut other open space uses such as stormwater ponds and woodlots.

2.4.2 COMMUNITY PARK



Community Parks service a specific community or group of neighbourhoods, providing a range of recreational opportunities, and should be well connected to the larger community. They may range in size and types of facilities offered, and serve as a focal point within the community. Active and passive recreational opportunities shall be provided.

Design Criteria

Service Area Radius: Community-wide (as determined by planning area)

Uses: Range of passive and active recreational uses, which may include a community building or a field house

Size: 3.2ha minimum to 10ha maximum

Location: Located along collector roads, generally at major intersections. Community Parks shall be accessible by transit and located in proximity to a transit stop. Should be linked to the greenspace network and may be located adjacent to other open space lands, such as conservation lands, valleys and stormwater management facilities, to the satisfaction of the City.

Amenities: Variety of active and passive recreation opportunities which may include sports fields, tennis courts, multi-purpose courts, ice rinks, skateboard parks, splash pads, children's play areas, open play spaces, pedestrian walkways, seating areas, and shelters, as determined by the City.

Implementation: City built (Recreation, Cultural and Facility Services department), Front-Ended or Developer-Built

Frontage: Preferred minimum 50% continuous frontage on abutting streets

Parking: Parking shall be accommodated on site or in a lay-by within the right-of-way, as determined by the City.

Lighting: Walkway, parking lot, sports field and security lighting shall be provided as appropriate.

Vegetation Criteria: Planting (trees, shrubs, grasses) shall comprise diverse species tolerant of urban conditions, with an emphasis on native species. Buffer and naturalization planting areas shall be provided where necessary.

Canopy Target: 30%

Naturalization Target: 20%

GUIDELINES

Community Parks shall be:

- A focal-point, unique to the communities in which they are located;
- Sited with a preferred minimum of 50% continuous frontages;
- Located within the greenspace network;
- Connected via transit;
- Safely connected to pedestrian and cycling facilities;
- Near and connected to schools, institutions and natural areas;
- Designed with Safety in mind, and adhering to CPTED principles;
- Programmed and lit to minimize disturbance to nearby residents;
- Universally Accessible and conforming to the principles and policies of the Accessibility for Ontarians with Disabilities Act.

Community Parks shall have:

- A mix of passive and active recreational opportunities;
- Multiple Entry points located for convenient access;
- Visually attractive edges and clear views into the park;
- Mature and existing trees and existing natural features, preserved in the park where appropriate;
- Deciduous trees planted in groups for shade and continuous canopy cover, particularly near children's play areas;
- Naturalized plantings at the interface with existing natural features to be protected;
- Public Art or architectural landscape features that enhance the character of the site, where possible; and
- Parking facilities to support the site and/ or in a lay-by within the right-of-way that may also serve adjacent uses such as schools or community centres;
- Sidewalks along their street frontages.

2.4.3 Neighbourhood Park

Neighbourhood Parks serve as the focal point of a neighbourhood, provide active and passive recreation opportunities, and offer a local gathering space within walking distance of local residents.



Design Criteria

Service Area Radius: Approximately 10-minute (or 800m) walking distance

Uses: Range of passive and active recreational uses (defined in glossary)

Size: 1.2ha minimum to 3.2ha maximum

Location: Generally located along local roads (or collector roads in rural or village areas). Should be linked to the greenspace network and may be located adjacent to other open space lands, such as conservation lands, valleys and stormwater management facilities. In neighbourhoods designed with an offset grid street and block pattern, integrate Neighbourhood Parks into pattern as a complete block or part of a block.

Amenities: Range of active and passive recreation opportunities which may include shade structures, seating, play equipment, a multi-purpose court, a splash pad, an outdoor rink, mini sports fields, or other facilities as determined by the City.

Implementation: City built (Recreation, Cultural and Facility Services department) or developer front-ended

Frontage: Preferred minimum of 50% frontage on abutting streets

Parking: On street parking preferred, as these parks are intended as walk-to destinations.

Lighting: Sports fields are not typically lit. Walkway and security lighting may be provided as appropriate.

Vegetation Criteria: Planting (trees, shrubs, grasses) shall comprise of diverse species tolerant of urban conditions, with an emphasis on native species.

Canopy Target: 30%

Naturalization Target: Site specific

GUIDELINES

Neighbourhood Parks shall be:

- A neighbourhood focal-point, with a central green space allowing for a range of passive and active recreation uses
- Sited with a preferred minimum of 50% continuous frontages;
- Used to address greenspace network gaps and provide connections to facilities not in the network;
- Safely connected to pedestrian and cycling facilities;
- Near and connected to schools, institutions and natural areas;
- Designed with Safety in mind, and adhering to CPTED principles;
- Designed with consideration to near neighbours;
- Universally Accessible and conforming to the principles and policies of the Accessibility for Ontarians with Disabilities Act.

Neighbourhood Parks shall have:

- A mix of passive and active recreational opportunities;
- Multiple Entry points located for convenient access;
- Visually attractive edges and clear views into the park;
- Mature and existing trees and existing natural features, preserved in the park where appropriate;
- Deciduous trees planted in groups for shade and continuous canopy cover, particularly near children's play areas;
- Naturalized plantings at the interface with existing natural features to be protected; and
- Public Art or architectural landscape features that enhance the character of the site, where possible;
- Sidewalks along street frontages.

2.4.4 PARKETTE

Parkettes are small parks that are located within walking distance of residents. They provide central green space and social gathering places within neighbourhoods, and offer predominantly passive recreation and minor active recreation opportunities within a local residential or mixed-use neighbourhood. Parkettes can improve connectivity within neighbourhoods, provide interesting focal points, enhance built form and contribute to community character, providing a place for residents to interact, children to play and social events to occur.

Note: Parkettes shall supplement a neighbourhood's park network; they will not be considered as the sole classification of parkland in a community.



DESIGN CRITERIA

Service Area Radius: Approximately 2 to 5-minute (or 200 to 450m) walking distance

Uses: Active and passive recreational uses

Size: 0.4ha minimum to 1.2ha maximum

Location: Located along local roads and linked to the greenspace network. In neighbourhoods designed with an offset grid street and block pattern, integrate Parkettes into pattern as a complete block or part of a block.

Amenities: Range of active and passive recreation opportunities may include: shade structures, seating, play equipment, and an unstructured play area, as determined by the City.

Implementation: City-built (Recreation, Cultural and Facility Services department) or developer front-ended

Frontage: Preferred minimum of 50% frontage on abutting streets

Parking: No parking required

Lighting: Walkway and security lighting may be provided as appropriate.

Vegetation Criteria: Planting (trees, shrubs, grasses) shall comprise diverse species tolerant of urban conditions, with an emphasis on native species.

Canopy Target: 30%

Naturalization Target: Site specific

GUIDELINES

Parkettes shall be:

- Varied and distinguishable from other parks;
- A contributor to a community's park network, and shall not be considered the sole classification of parks in a neighbourhood, or sub-neighbourhood;
- Used to address greenspace network gaps and provide connections to facilities not in the network;
- Near and connected to schools, institutions and natural areas;
- Safely connected to surrounding pedestrian and cycling facilities;
- Rectangular in shape, to maximize recreational opportunities and promote good urban form;
- Designed with Safety in mind, and adhering to CPTED principles;
- Designed with consideration to near neighbours; and
- Universally Accessible and conforming to the principles and policies of the Accessibility for Ontarians with Disabilities Act.

Parkettes shall have:

- A mix of passive and active recreational opportunities;
- Visually attractive edges and clear views into the park;
- Mature and existing trees and existing natural features, preserved in the park where appropriate;
- Deciduous trees planted in groups for shade and continuous canopy cover, particularly near children's play areas;
- Public Art or architectural landscape features that enhance the character of the site, where possible; and
- Hard and soft landscape elements that identify points of entry, areas of activity, circulation and seating and gathering areas;
- Sidewalks along their street frontages, in new neighbourhoods.

2.4.5 URBAN PARKETTE/ PLAZA

These are small parks associated with the urban fabric. Re-development of Urban Parkettes and Plazas can be triggered by intensification of an established neighbourhood, or they may be developed in mixed-use areas, town centres and along main streets. They must serve the existing and new demographic, providing context-sensitive outdoor amenity space that is often multi-functional, all within a confined area. The Urban Plaza may also attract visitors from the extended region, depending on location.



In highly intensified inner-urban areas, the Plaza is often characterized by small size, predominantly hard surface with shade trees and other vegetation. There may be seating areas, a water feature or art work, lighting, games tables, shade structure, performance space and interactive recreational components, all suitable for the context and demographic. The plaza may be the focus of a residential area or pathway node, or associated with adjacent businesses such as cafés, food trucks or tourist attractions.

In moderately intensified outer-urban areas, the size may be larger due to more available space and there may be room for additional plantings, grassy areas and specific recreational components such as basketball, water play, tennis court, adult fitness and feature playground components.

With hard surfacing, upgraded features and multi-functional amenities, Urban Parkettes and Plazas have a relatively higher cost per area than other Park types, which should be considered in the early planning stages.

DESIGN CRITERIA

Service Area Radius: Varies with context. For Residential areas: 2 to 5-minute (or 200 to 450m) walking distance

Uses: Varies with Context

Size:

Urban Plazas: Minimum 400 sq.m. Urban Parkettes: 0.2 to 0.4 ha

Location: Inner-Urban core, Mixed-use or town centres, along main streets. In neighbourhoods designed with an offset grid street and block pattern, integrate Urban Parkettes into pattern as a complete block, or part of a block.

Amenities/ Features: May include decorative paving, shade structures, water feature or water play, seating, games tables, play components, fitness structures, performance areas, basketball.

Implementation: Case-by-case basis

Frontage: Preferred minimum of 50% frontage on abutting streets

Parking: No parking required

Design Criteria Continued

Lighting: Shall be provided as appropriate for the context, as determined by the City.

Vegetation Criteria: Planting (trees, shrubs, grasses) shall comprise diverse species tolerant of urban conditions, with an emphasis on native species.

Canopy Target: 20-50%

Naturalization Target: Site specific

GUIDELINES

Urban Parkettes shall be:

- Varied and distinguishable from other parks;
- Aesthetically appropriate to the surrounding Urban Fabric;
- Programmed to reflect the needs of the local demographic;
- Safely connected to surrounding pedestrian and cycling facilities;
- Rectangular in shape, to maximize recreational opportunities and promote good urban form;
- Designed with Safety in mind, and adhering to CPTED principles;
- Designed with consideration to near neighbours; and
- Universally Accessible and conforming to the principles and policies of the Accessibility for Ontarians with Disabilities Act.

Urban Parkettes shall have:

- Active recreation amenities that are suitable to the demographic and in scale with the area available;
- Visually attractive edges and clear views into the park;
- Mature and existing trees and existing natural features, preserved in the park where appropriate;
- Deciduous trees planted in groups for shade and continuous canopy cover, particularly near children's play areas;
- Public Art or architectural landscape features that enhance the character of the site, where possible; and
- An emphasis on hard landscape elements that identify points of entry, areas of activity, circulation and seating and gathering areas;
- A continuous sidewalk along all street frontages, where those streets already have sidewalks.

2.4.6 WOODLAND PARK

Woodland Parks are a unique classification where an established woodland is preserved within a development area and integrated into the park network as a recreational amenity. Although other park types may include smaller groups of existing trees, this park type is predominantly treed. The development of a woodland park involves more protection than intervention, but may include providing pathways or nature trails, small seating areas with fitness stations, signage, rehabilitation planting and fencing where appropriate. Woodland parks will only be considered as a dedicated parkland where the community is already adequately served with other recreational amenities such as sportsfields and playgrounds.



Park design drawings and documents must include a Park Woodlot Management Plan prepared by a registered Professional Forester and the recommendations must be implemented during park development. The Park Woodlot Management Plan must include a long-term maintenance plan to support public safety and a sustained vibrant woodland ecosystem. Refer to Section 4.2, Drawing Descriptions for more details.

DESIGN CRITERIA

Service Area Radius: Approximately 10-minute (or 800m) walking distance, where needed.

Uses: Recreation facilities such as trails and seating

Size: 1.2ha minimum to 3.2ha maximum

Location: Woodland parks may only be constructed where existing woodlands are established. Woodland selection for Park development to be approved by the Park Planner.

Amenities: Compatible amenities which enhance recreational use of the woodland, without compromising the integrity of the natural ecosystem. Depending on the context, these may include pathways or nature trails, small seating areas, small fitness stations, signage, rehabilitation planting and fencing where appropriate.

Implementation: Case-by-case basis

Frontage: Minimum 25% street frontage

Parking: Not required.

Lighting: Walkway and security lighting shall be provided as appropriate near road frontages.

Vegetation Criteria: Planting to be determined based on the recommendations of the Park Woodlot Management Plan; removal of invasive species may require removal at the discretion of City of Ottawa staff.

Design Criteria Continued

Canopy Target: Pre-development canopy to be maintained. Canopy to be enhanced with additional planting as per the recommendations of the Park Woodlot Management Plan.

Naturalization Target: Site specific

GUIDELINES

Woodland Parks shall be:

- Primarily forested;
- Developed under the supervisions of a Registered Professional Forester;
- Free of hazards, with dead and dangerous trees removed from any area where they may impact pathways or other amenities, or affect public safety in any way;
- Developed with limited, site specific recreational elements which minimize impact to the existing forest;
- Safely connected to pedestrian and cycling facilities;
- Designed with Safety in mind, and adhering to CPTED principles where possible;
- Designed with consideration to near neighbours;
- Located and programmed to protect natural features and existing ecological corridors and functions; and
- Universally Accessible where possible and conforming to the principles and policies of the Accessibility for Ontarians with Disabilities Act.

Woodland Parks shall have:

- Only limited recreational amenities;
- Multiple Entry points located for convenient access;
- Visually attractive edges;
- Mature and existing trees and existing natural features, preserved in the park;
- Snags, or 'Wildlife trees' that are allowed to remain to support a vibrant ecosystem, if available;
- New planting where recommended by a Registered Professional Forester;
- Naturalized plantings at the interface with existing natural features to be protected, as per the recommendations of a Registered Professional Forester; and
- Public Art or architectural landscape features that enhance the character of the site, if appropriate.

2.5 Pathway Classification in Parks

The City of Ottawa Transportation Planning group directs the planning of and connections to all new pedestrian and cycling facilities to ensure connectivity within and between communities. The pathways located within park blocks are considered a park amenity, and should connect to and between City facilities whenever possible. During the park development process, coordination with the Transportation Planning group at the earliest stages and consultation of the Transportation Master Plan, the Cycling Plan and the Pedestrian Plan will assist in connecting new pathway and cycling facilities to parks throughout the city.

Designing pathways within parks means applying different standards, according to location, uses and anticipated volume of usage. Variations in the design and location of paths will also occur, subject to site specific conditions. Detailed design may require input from the City of Ottawa, conservation authorities and stakeholder agencies such as the National Capital Commission. Mitigating potential impacts to natural areas and meeting accessibility requirements are primary criteria for selecting proposed pathway locations.

The City of Ottawa Accessibility Design Standards contain a section specifying standards for 'Exterior Paths of Travel'. These standards must be implemented for new and 'redeveloped' pathways constructed in the City of Ottawa, in consultation with the City staff and the Accessibility Committee.

The standards for accessibility can vary based on the type of path or trail in question. Each of the following sections will indicate accessibility standards for each pathway typology that are current at the time of the publication of this document, however the most recent standards should be consulted in their entirety in all design exercises. This document does not include any information on stairs, ramps, gateways or other items which may be required along a path of travel, and the current standards should be consulted for their design.

The Pathway Classification describes two pathway typologies within Parks: Recreational paths, and Nature trails. Pathway descriptions begin on the following page.

2.5.2 Recreational Path

Recreational paths are primarily intended for recreational purposes and provide opportunities for safe, off-street movement throughout the City of Ottawa. They are designed to accommodate the needs of a wide range of users and provide links to the City's wider pathway system as well as the on-street sidewalk system.



USE AND LOCATION

Use: Recreational paths address the needs of walkers, joggers, hikers, strollers, wheelchairs and cyclists (recreational).

Location: Off-road

DESIGN CRITERIA

Pathway Width:

Standard use: 2.0m to 3.0m

Maintenance Vehicular Access use: Minimum 2.4m

Pathway Clearance: 4.0m to 5.0m (1.0m on either side of path)

Pathway Corridor: Varies

Pathway Context: Varies

Vertical Clearing: Standard use: 3.0m

Maintenance Vehicular Access use: 3.5m

Desirable Grades: 0-5%

Additional Maintenance: Snow clearing may occur on main Recreational Paths in parks when required.

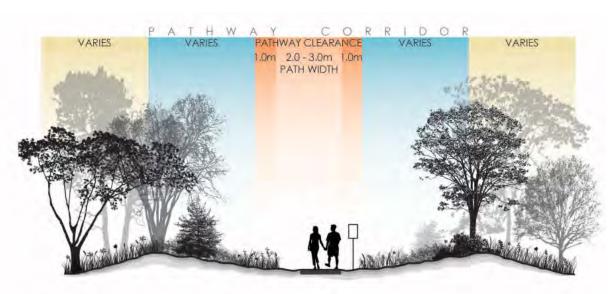
Illumination: Site specific (based on the City of Ottawa Park and Pathway Lighting Policy)

Implementation: City built or Developer built as required through the subdivision agreement. The Developer is responsible for connections to park blocks, pathways within stormwater management pond areas and other paths within the subdivision that connect neighbourhoods and/or allow subdivisions to be connected by pedestrian routes.

Material: Surfaces are either asphalt, concrete or stone dust, depending on context, volume of use and slope.

GUIDELINES

- Recreational paths must meet the requirements from the most recent Accessibility Design Standards from the City of Ottawa.
- Bridges or boardwalks may be required in certain conditions.
- Bilingual signage or markings indicating pedestrian and cycling use shall be provided in high-use situations.
- Regulatory signage (such as no motor vehicles) shall be used where necessary.
- Curb cuts, TWSI's and intersection warning signs/ bollards may be provided at road intersections. On accessible
 routes, and where the path interfaces with an accessible sidewalk, all curb cuts and bollard installation must meet the
 requirements from the most recent Accessibility Design Standards from the City of Ottawa.
- Safe pedestrian and cyclist connections shall be provided between the path, street and sidewalk systems.
- The intersections of Recreational paths with street rights-of-way shall be designed as path entrances and may include site furniture and features consistent with the streetscape design.
- Entry markers shall be provided at path entrance locations to make points of entry more identifiable.
- Within each park, one main pathway must be designed for Maintenance Vehicular Access, with an asphalt surface at least 2.4m wide. These paths must have a minimum vertical clearance of 3.5m. In larger parks (such as Community or District Parks), a wider heavy-duty maintenance pathway may be required.
- Pedestrian lighting shall be considered within park paths and at path entrances on a site-specific basis.
- Waste receptacles shall be located at accessible key points along pathways designed to accommodate maintenance vehicles
- Asphalt or concrete paths shall be used in high-use areas within parks and for walkway blocks.
- Stonedust paths shall be used in secondary areas and in more natural areas within parks and open spaces.
- Where possible, locate recreational paths outside of the critical root zone (see glossary for definition) of mature trees to prevent root-zone compaction.
- Vista locations may be incorporated at points of interest along the path.



2.5.2 RECREATIONAL PATH

2.5.3 Nature Trail

Nature trails are paths that serve various forms of non-vehicular movement and connect to points of interest. They are low-impact paths located in sensitive environmental areas such as forests, and adjacent to wetlands or watercourses. They accommodate the needs of a wide variety of users.

Nature Trails are not exempt from the necessity to provide independent access for persons with disabilities, through adherence to the standards outlined in the City of Ottawa Accessibility Design Standards. However, where Nature Trails exist, or are proposed



near sensitive land features which may be adversely impacted by the construction of accessible facilities, some requirements may be waived provided justification is given.

In Parks where the standards can not be universally applied due to steeper slopes, uneven surfaces or other site characteristics that cannot be reasonably altered, they should be applied in part wherever possible. In any case where an element of accessibility cannot be achieved, additional signage will be required to notify users of the degree of accessibility available. Exemption from the Accessibility Design Standards, must be approved by the City of Ottawa on a case-by-case basis.

USE AND LOCATION

Use: Nature trails are designed to address the more passive recreation needs of pedestrians and cross-country skiers, among others.

Location: Off-road

DESIGN CRITERIA

Trail Width: Minimum 1.5m to 2.0m

Trail Clearance: Not applicable

Trail Corridor: Varies

Trail Context: Natural areas

Vertical Clearing: Varies

Desirable Grades: Varies; consideration shall be given to accessibility wherever possible.

Additional Maintenance: Periodic trail resurfacing, removal of fallen trees, inspection and removal of unstable trees, pruning of adjacent trees

DESIGN CRITERIA CONTINUED

Illumination: None

Implementation: City built or Developer built as required through the subdivision agreement.

Material: Surfaces are stone dust, or woodchip in sensitive forested areas.

GUIDELINES

- Trails should be designed to promote pedestrian access while protecting the surrounding natural context in which the path
 is located and should follow the "path of least resistance".
- Bridges or boardwalks may be required where soils are waterlogged or susceptible to compaction or erosion.
- Bilingual signage may include trail head, directional, regulatory, interpretive, descriptive and intersection warning signs.
- Safe pedestrian and cyclist connections shall be provided between the trail, and street and sidewalk systems.
- Keep trails narrow within forest areas to minimize impact and forest fragmentation.
- Trails should not be located on erodible slopes.
- Vista locations provide a variety of areas where trail users can access and experience natural areas while minimizing interference with natural functions.
- Nature trails must meet the requirements from the most recent Accessibility Design Standards from the City of Ottawa.
 Nature trails are not typically exempt from Accessibility Requirements associated with 'Wildemess Trails', etc.
- To provide access to points of interest within natural areas, such as vista points or watercourses (i.e., for swimming or canoe launching), the City may, at its discretion, allow paths and access points within mandated conservation setbacks or buffers. However, any such provision of access within constraint lands is subject to the issuance of permits under the Conservation Authorities Act.



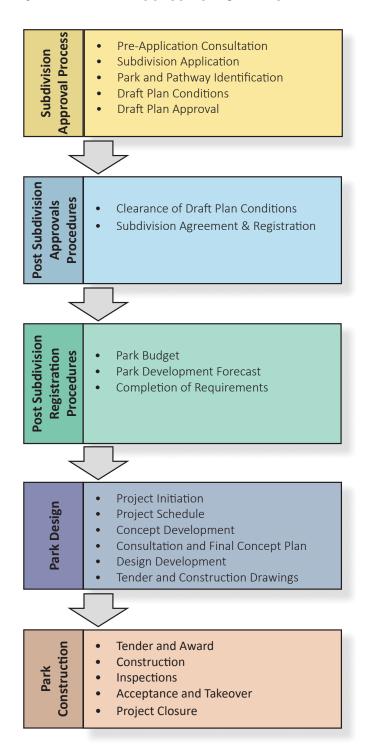
2.5.3 NATURE TRAIL

3.0 PARK DEVELOPMENT PROCESS

3.1 Introduction

Three scenarios are now possible for the development of parks in the City of Ottawa: City-Built, Developer Front-Ended, and Developer-Built. The development process for City-Built and Front-ended parks can be broken into five components: 1) Subdivision Approvals Process; 2) Post Subdivision Approvals Procedures; 3) Post Subdivision Registration Procedures; 4) Park Design; and 5) Park Construction. Developer-Built parks have a slightly different process. The following sections will outline the steps in each process in detail. The process for City-Built Park Development is outlined in Section 3.2. The process for Developer Front-Ended Park Development is outlined in Section 3.3 and the process for Developer-Built Parks, which is a new process as of 2014, is outlined in Section 3.4.

3.2 Process for City-Built Park Development



DESCRIPTION

This section describes the process for development of City-built parks, whereby a Developer conveys parkland to the City as part of a subdivision agreement, and completes requirements for park block preparation.

All requirements outlined in the draft plan conditions are approved by the General Manager, Recreation, Cultural and Facility Services department. The Developer is responsible for compliance with all of the approved draft plan of subdivision conditions.

Once the Developer has satisfied all requirements, the subdivision is registered and the parkland is conveyed, it will be the City's responsibility to undertake the design and construction of the park asset.

Roles and responsibilities for each step of the process related to City-built parks are further defined in the following pages.

Note: A Project Charter is prepared for each Park development project. The Charter is prepared by the City, and its preparation is initiated upon Draft Plan Approval, and completed and signed by all stakeholders.

A SUBDIVISION APPROVAL PROCESS

STEP 1: PRE-APPLICATION CONSULTATION

- The Planning, Infrastructure and Economic Development (PIED) lead planner organizes a pre-application consultation meeting with the Developer and City staff to discuss requirements for a complete application prior to formal submission.
- The City Park Planner researches relevant policy documentation including: the Official Plan, Secondary Plans, Community Development Plans, the Park Classification, and relevant master plans.
- At this stage, the City Park Planner identifies Developer responsibilities related to parkland, determining whether parkland
 or cash-in-lieu of parkland will be required. Pathway requirements are also identified at this time.

STEP 2: SUBDIVISION APPLICATION

- The Developer is responsible for submitting a complete subdivision application to the City.
- The PIED lead planner, together with the development review team, reviews the application to ensure completeness.
- The PIED lead planner circulates the subdivision application to internal and external stakeholders, including technical
 agencies and community organizations, as necessary.
- The PIED lead planner sends a notice of application to the public and posts a development sign on the property.
- The PIED lead planner holds a public meeting, as required by the Planning Act, to present the subdivision application to the public.

STEP 3: PARK IDENTIFICATION

- The City Park Planner reviews the draft plan of subdivision to determine how parkland requirements of the development are to be met. If land is to be conveyed, the City Park Planner comments on park block size, shape, and location. Park base information including aerial photos, geotechnical reports, tree conservation reports and / or environmental impact statements and topographic surveys are reviewed. Site visits are performed as required.
- The City Park Planner meets with the lead planner, urban designer and City forester and, if required, the environmental planner, to discuss park locations, as necessary.
- Servicing and lighting requirements are reviewed by the Infrastructure Project Manager.

STEP 4: DRAFT PLAN CONDITIONS

- The City Park Planner prepares draft conditions related to parks and pathways for inclusion in the draft plan of subdivision conditions.
- Once any issues identified in Step 3 have been resolved, the PIED lead planner prepares a Delegated Authority Report (DAR) and draft plan of subdivision conditions.
- The DAR and draft plan of subdivision conditions are reviewed by the Program Manager.
- The PIED lead planner forwards the DAR and draft plan of subdivision conditions to the Developer and Ward Councillor for concurrence.

STEP 5: DRAFT PLAN APPROVAL

 Following concurrence by the Ward Councillor and the Developer, the DAR is signed by the PIED Development Review Manager.

- The PIED lead planner issues a Notice of Decision, and a 20-day appeal period begins.
- If there are no appeals, the PIED lead planner issues a 'No Appeals Received' letter with a copy of the Final Draft Plan Conditions and approved Draft Subdivision Plan attached.

B Post Subdivision Approvals Procedures

STEP 1: CLEARANCE OF DRAFT PLAN CONDITIONS

- Following draft plan of subdivision approval, the Developer submits a request for preparation of a subdivision agreement.
- Developer submits engineering studies and drawings, as well as subdivision landscape plans, to the PIED lead planner for review and approval.
- The City Park Planner reviews the landscape plans to verify park perimeter fencing locations and materials.
- The City Park Planner reviews and approves park block sizes and locations on the 4M-plan, park servicing and composite utility plans to ensure park requirements are met.
- The Developer submits a park facility fit plan, if required as a subdivision condition. A facility fit / concept plan can also be submitted prior to draft approval, if necessary.
- The park grading is reviewed on the subdivision grading plan to ensure positive drainage of water, uniform surface, conformity to surrounding subdivision grading and preservation of trees and / or natural features, if required.

STEP 2: SUBDIVISION AGREEMENT AND REGISTRATION

- The PIED lead planner coordinates with Legal Services to have the subdivision agreement prepared.
 A subdivision agreement can include park and pathway conveyance, additional subdivision conditions (i.e. phased developments), an estimate of the cost of works, the land valuation for cash-in-lieu of parkland, tracking of parkland dedication for phased registrations, the 4M plan, the 4R plans, and other subdivision matters.
- The subdivision is registered.
- Title transfer occurs, and the park and pathway blocks are conveyed to the City.

C Post Subdivision Registration Procedures

STEP 1: PARK BUDGET

The City Park Planner identifies the park budget based on the development charges by-law and determines where the
asset falls within the short- and long-term budget forecasts.

STEP 2: PARK DEVELOPMENT FORECAST

- The City Park Planner determines the timing of the park's development through a review of the annual budget envelopes
 and area needs. Other factors involved in the timing of park development include subdivision phasing, number of parks in
 the subdivision, yearly budget allocation, economic downturns and negotiation with developers. All park development is
 subject to Council budgetary approval.
- The City Park Planner communicates the timing of park development to the Developer.

STEP 3: COMPLETION OF REQUIREMENTS

- The Developer completes requirements for park and pathway block preparation in accordance with the registered subdivision agreement.
- The City subdivision inspector inspects the park and pathway blocks to ensure that the Developer has satisfied all requirements and reports back to the City Park Planner.

D PARK DESIGN FOR CITY-BUILT PROJECTS

Step 1: Project Initiation

- The Financial Services Unit creates a park account in accordance with the approved park budget.
- The City Park Planner prepares a Project Initiation Form (PIF), which includes: project name, address, timeline, budget, account number and description of park.
- The City Park Planner issues the PIF to Infrastructure Services (IS), Asset Management Group and the Financial Services Unit.
- A project manager from IS is assigned to the park project.
- The IS project manager, in consultation with the City Park Planner, hires a consultant to design the park.

 The consultant must be a landscape architect who is a full member in good standing of the OALA with certificate and seal.

STEP 2: PROJECT SCHEDULE

The City Park Planner, in consultation with the IS project manager and consultant, creates a park development schedule.

STEP 3: CONCEPT DEVELOPMENT

- The City Park Planner leads concept development and becomes the main contact for the consultant.
- The City Park Planner meets regularly with the IS project manager and consultant to discuss the park concept design.
- The consultant submits a concept plan and cost estimate to the City Park Planner and copies the IS project manager for comment.
- The City Park Planner circulates the plan to the Parks, Forestry and Surface Water Services (PFSWS) for review (as
 necessary). Special circumstances may require the circulation to other stakeholders, such as the Parks, Recreation and
 Cultural Services Department, Natural Systems Unit, external agencies and relevant conservation authorities.
- The City Park Planner reviews the concept with the Ward Councillor.
- Comments are coordinated through the City Park Planner and sent to the consultant, who revises the concept plan accordingly.
- The consultant revises the concept plan per the City Park Planner and Ward Councillor's comments.
- The park name is established with concurrence from the Ward Councillor.

Note: For details related to the submission of concept plans and cost estimates, refer to Section 4.0, Park Document Submission Standards.

STEP 4: CONSULTATION AND FINAL CONCEPT PLAN

- The consultant submits coloured, bilingual presentation drawings for public consultations (the City is to provide translation of all drawing labels into French).
- The City Park Planner may hold a public open house to present the park concept to the community. The City Park Planner compiles feedback received from the community.
- The City Park Planner identifies any changes required to address comments from the public open house, and communicates them to the IS project Manager, consultant and Ward Councillor.
- The consultant makes revisions as necessary and submits a final concept plan and cost estimate.
- The City Park Planner approves the final concept plan and forwards a copy to the IS project manager for design and construction.

Note: For details related to the submission of presentation drawings, refer to Section 4.0, Park Document Submission Standards.

Step 5: Design Development

- The IS project manager leads design development and becomes the primary contact for the consultant.
- Based on the final concept plan, the consultant prepares working drawings and a cost estimate for first submission to City staff at 60% completion.
- The IS project manager circulates the first submission to PIED and PFSWS (as necessary) for comment.
- The IS project manager, in consultation with the City Park Planner, reviews the drawings, cost estimate and schedule, and provides comments.

Note: For details related to the first submission, refer to Section 4.0, Park Document Submission Standards.

STEP 6: CONSTRUCTION DRAWINGS

- The IS project manager leads construction drawing development and remains the primary contact for the consultant.
- The consultant revises the drawings based on received comments and submits an updated drawing set, complete with a
 cost estimate, to the IS project manager at 90% completion (second submission) for review and comment.
- The IS project manager, in consultation with the City Park Planner, reviews the drawings, cost estimate and schedule, and provides final comments.

Note: For details related to the second submission, refer to Section 4.0, Park Document Submission Standards.

STEP 7: TENDER DOCUMENTS

- The consultant revises the drawings based on City comments and submits a final drawing set to the IS project manager, complete with a final cost estimate and specifications, at 100% completion (third submission).
- The IS project manager compiles the tender documents and submits them to the Purchasing Department.

Note: For details related to the third submission, refer to Section 4.0, Park Document Submission Standards.

E PARK CONSTRUCTION FOR CITY-BUILT PROJECTS

STEP 1: TENDER AND AWARD

- The tender is issued by the Purchasing Department, and the IS project manager coordinates a pre-bid meeting.
- If the bids come in within budget, the project is awarded.
- If a project comes in over budget, the project is reviewed by the IS project manager and the City Park Planner with respect to scope.

STEP 2: CONSTRUCTION

- The IS project manager notifies the City Park Planner of the start of construction, and holds a start-up meeting with the landscape contractor.
- Construction begins; the IS project manager provides the City Park Planner with regular progress updates.
- The City Park Planner is responsible for internal and external communication related to park design, while the IS project manager responds to inquiries regarding internal and park construction.

STEP 3: INSPECTIONS

- Once any play structure construction is complete, it is inspected for CSA compliance, and an inspection report is submitted to the IS project manager.
- The IS project manager and consultant inspect the park works and identify deficiencies.
- The landscape contractor corrects any identified deficiencies, to the satisfaction of the IS project manager and the consultant.
- The IS project manager holds an inspection meeting to review general park construction, general turf construction, and sports turf construction with the consultant and landscape contractor.

STEP 4: ACCEPTANCE AND TAKEOVER

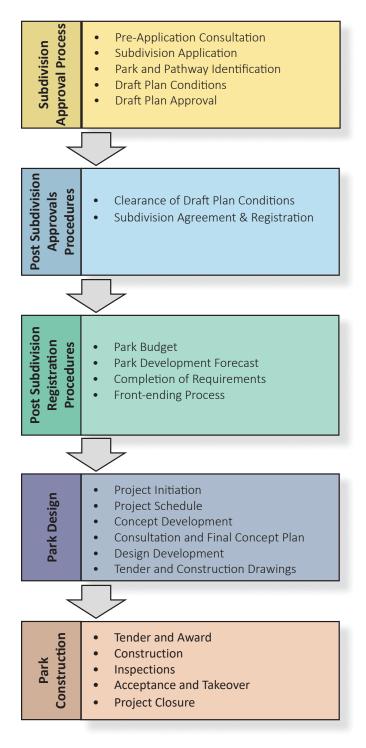
- The contractor submits the play equipment maintenance kit and all other relevant documents (such as the installation and operating manuals) to the IS project manager.
- The consultant submits final deficiency reports, deficiency plans and all inspection certificates to the IS project manager.
- The consultant also submits a letter of compliance to the IS project manager stating that the park has been constructed according to the working drawings and specifications.
- The IS project manager, City Park Planner and consultant attend a park acceptance and takeover meeting with PFSWS. PFSWS evaluates the park for maintenance and takeover. The park may be taken over on a component basis.
- The landscape contractor corrects any identified outstanding deficiencies. If necessary, an additional takeover meeting is held to evaluate the park asset for takeover by the City.

STEP 5: PROJECT CLOSURE

The consultant prepares and stamps as-built drawings for submission to the IS project manager, who circulates the
drawings to internal stakeholders and submits a copy to the CAD specialist in the Public Works Department to serve as an
official corporate record.

- The IS project manager adds the park to the City's inventory in Asset Management and turns it over to PFSWS. PFSWS turns the park over to the Parks, Recreation and Cultural Services Department for programming.
- The IS project manager monitors plant material warranties and notifies the landscape contractor of any required replacements.

3.3 PROCESS FOR DEVELOPER-FRONT-ENDED PARK DEVELOPMENT



DESCRIPTION

The City of Ottawa provides the development community with the opportunity to build park assets as part of the subdivision development process. The park types that are eligible for front-ending are:

Neighbourhood Parks and Parkettes.

The front-ending of park development is optional, and is subject to the City and Developer executing a front-ending agreement. As part of the front-ending process, the Developer is still required to complete the requirements related to the dedication of park blocks.

Roles and responsibilities for each step of the process related to Developer front-ended parks are further defined in the following pages.

Note: A Project Charter is prepared for each Park development project. The Charter is prepared by the City, and its preparation is initiated upon Draft Plan Approval, and completed and signed by all stakeholders upon approval of the Front-Ending Agreement.

A SUBDIVISION APPROVAL PROCESS

STEP 1: PRE-APPLICATION CONSULTATION

- The Planning, Infrastructure and Economic Development (PIED) file lead planner organizes a pre-consultation meeting with the Developer and City staff to discuss requirements for a complete application prior to formal submission.
- The City Park Planner researches relevant policy documentation including: the Official Plan, Secondary Plans, Community Development Plans, the Park Classification, and relevant master plans.
- At this stage, the City Park Planner identifies Developer responsibilities related to parkland, determining whether parkland
 or cash-in-lieu of parkland will be required.

STEP 2: SUBDIVISION APPLICATION

- The Developer is responsible for submitting a complete subdivision application to the City.
- The PIED lead planner, together with the development review team, reviews the application to ensure completeness.
- The PIED lead planner circulates the subdivision application to internal and external stakeholders, including technical
 agencies and community organizations, as necessary.
- The PIED lead planner sends a notice of application to the public and posts a development sign on the property.
- The PIED lead planner holds a public meeting, as required by the Planning Act, to present the subdivision application to the public.

STEP 3: PARK IDENTIFICATION

- The City Park Planner reviews the draft plan of subdivision application and comments on park block size, shape, and location. Park base information including aerial photos, geotechnical reports, tree conservation reports and/or environmental impact statements and topographic surveys are reviewed. Site visits are performed as required.
- The City Park Planner meets with the lead planner, urban designer, City forester and, if required, the environmental planner, to discuss park location, as necessary.
- Servicing and lighting requirements are reviewed by the Infrastructure Project Manager.

STEP 4: DRAFT PLAN CONDITIONS

- The City Park Planner prepares draft conditions related to parks for inclusion in the subdivision draft plan of subdivision conditions.
- Once any issues identified in Step 3 have been resolved, the PIED lead planner prepares a Delegated Authority Report (DAR) and draft plan of subdivision conditions.
- The DAR and draft plan of subdivision conditions are reviewed by the Program Manager.
- The PIED lead planner forwards the DAR and draft plan of subdivision conditions to the Developer and Ward Councillor for concurrence.

STEP 5: DRAFT PLAN APPROVAL

- Following concurrence by the Ward Councillor and the Developer, the DAR is signed by the Development Review Manager.
- The PIED lead planner issues a Notice of Decision, and the 20-day appeal period begins.

PARK DEVELOPMENT MANUAL - 2ND EDITION

- If there are no appeals, the PIED lead planner issues a 'No Appeals Received' letter with Final Draft Plan Conditions and date of draft plan approval.
- City staff commence the Project Charter.

B Post Subdivision Approvals Procedures

STEP 1: CLEARANCE OF DRAFT PLAN CONDITIONS

- Following draft plan of subdivision approval, the Developer submits a request for preparation of a subdivision agreement.
- Developer submits engineering studies and drawings, as well as subdivision landscape plans, to the PIED lead planner for review and approval.
- The City Park Planner reviews the landscape plans to verify park perimeter fencing locations and materials.
- The City Park Planner reviews and approves park block sizes and locations on the 4M-plan, park servicing plans and composite utility plans.
- The Developer submits a park facility fit / concept plan, if required as a subdivision condition. A facility fit / concept plan can also be submitted prior to draft approval, if necessary.
- The park grading is reviewed on the subdivision grading plan to ensure positive drainage of water, uniform surface, conformity to surrounding subdivision grading and preservation of trees and / or natural features, if required.

STEP 2: SUBDIVISION AGREEMENT AND REGISTRATION

- The PIED lead planner coordinates with Legal Services to have the subdivision agreement prepared.
 A subdivision agreement can include: park and pathway conveyance, an estimate of cost of works, additional subdivision conditions (i.e. phased developments), the land valuation for cash-in-lieu of parkland, tracking of parkland dedication for phased registrations, the 4M plan, the 4R plans and other subdivision matters.
- The subdivision is registered.
- Title transfer occurs and the park and pathway blocks are conveyed to the City.

C Post Subdivision Registration Procedures

STEP 1: PARK BUDGET

- The City Park Planner identifies the park budget based on the per hectare Park Construction rate (indexed yearly).
- The City Park Planner determines the timing of the park's development through a review of the annual budget and Council
 approval.

STEP 2: PARK DEVELOPMENT FORECAST

- The City Park Planner determines the timing of the park's development through a review of the annual budget envelopes
 and area needs. Other factors involved in the timing of park development include subdivision phasing, number of parks in
 the subdivision, yearly budget allocation, economic downturns and negotiation with developers. All park development is
 subject to Council budgetary approval.
- The City Park Planner communicates the timing of park development to the Developer.
- 3.3 Process for Developer-Front-Ended Park Development

STEP 3: COMPLETION OF REQUIREMENTS

- The Developer completes requirements for park and pathway block preparation in accordance with the registered subdivision agreement.
- The City subdivision inspector inspects the park and pathway block to ensure that the Developer has satisfied all requirements and reports back to the City Park Planner.

Step 4: Front-Ending Process

- The Developer submits a letter signaling their intent to front-end the park with complete details on park proposal.
- The City Park Planner prepares a report to the Planning Committee and Council describing the park to be front-ended and identifying the date of reimbursement of the Developer (based on the park development forecast).
- The report to Planning Committee and agreement can be brought forward prior to registration but must be post draft approval.
- Once Council approval is received, the legal agreement is prepared by Legal Services, and reviewed by the City Park Planner and the Developer. The agreement is then executed by the Developer and the City.
- The City Park Planner notifies the Infrastructure Services Department, Design and Construction (Buildings and Parks Branch) of the scope and timing of the park project.

Note: Refer to the Council Approved Front-Ending Policy (June 25, 2009). For front-ended parks, the design and construction of the park project may begin as soon as the front-ending agreement is executed by all parties, but reimbursement will only occur in the year specified in the front-ending agreement.

D PARK DESIGN FOR DEVELOPER FRONT-ENDED PROJECTS

STEP 1: PROJECT SCHEDULE

• The Developer prepares a park development schedule for submission to the City Park Planner and IS project manager.

Step 2: Project Initiation

- The Project Charter is finalized and signed by all stakeholders.
- The City Park Planner prepares a Project Initiation Form (PIF), which includes: project name, address, timeline, budget, account number and description of the front-ended park.
- The City Park Planner issues the PIF to Infrastructure Services (IS), Asset Management Group and the Financial Services
 Unit.
- A project manager from IS is assigned to the park project.

STEP 3: CONCEPT DEVELOPMENT

- The City Park Planner leads concept development and becomes the main contact for the consultant.
- The Developer hires a consultant to design and manage the construction of the park. The consultant must be a landscape architect who is a full member in good standing of the OALA with stamp and certificate.
- The Developer and their consultant meet with the City Park Planner and IS project manager to discuss the park design.

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- The consultant submits a concept plan and cost estimate to the City Park Planner and copies the IS project manager for comment.
- The City Park Planner circulates the plan to the IS project manager, the Parks, Forestry and Surface Water Services (PFSWS) for review (as necessary). Special circumstances may require the circulation to other stakeholders, such as the Parks, Recreation and Cultural Services Department, the Natural Systems Unit, external agencies and relevant conservation authorities.
- The City Park Planner reviews the concept with the Ward Councillor.
- Comments are coordinated through the City Park Planner and sent to the consultant who revises the concept plan accordingly.
- The consultant revises the concept plan per the City Park Planner and Ward Councillor's comments.
- The park name is established with concurrence from the Ward Councillor.

Note: For details related to the submission of concept plans and cost estimates, refer to Section 4.0, Park Document Submission Standards.

STEP 4: CONSULTATION AND FINAL CONCEPT PLAN

- The consultant submits coloured, bilingual presentation drawings for public consultations (the City is to provide translation of all drawing labels into French).
- The City Park Planner may hold a public open house to present the park concept to the community. The park planner compiles feedback received from the community.
- The City Park Planner identifies any changes required to address comments from the public open house and communicates revisions to the consultant, Developer and Ward Councillor.
- The consultant makes revisions as necessary and submits a final concept plan and cost estimate.
- The City Park Planner approves the final concept plan and forwards it to the IS project manager for design and / or construction.

Note: For details related to the submission of presentation drawings, refer to Section 4.0, Park Document Submission Standards.

Step 5: Design Development

- Based on the final concept plan, the consultant prepares working drawings and a cost estimate for first submission at 60% completion. The consultant submits the plans and cost estimates to the IS project manager and City Park Planner.
- The IS project manager circulates the first submission to PIED, and PFSWS (as necessary) for comment.
- The IS project manager, in consultation with the City Park Planner, reviews the drawings, cost estimate and schedule, and provides comments.

Note: For details related to the first submission, refer to Section 4.0, Park Document Submission Standards.

STEP 6: CONSTRUCTION DRAWINGS

- The consultant revises the drawings based on received comments and submits an updated drawing set, complete with a cost estimate, to the IS project manager, at 90% completion (second submission) for City review and comment.
- The IS project manager, in consultation with the City Park Planner, reviews the drawings, cost estimate and schedule, and provides final comments.

Note: For details related to the second submission, refer to Section 4.0, Park Document Submission Standards.

3.3 Process for Developer-Front-Ended Park Development

STEP 7: TENDER DOCUMENTS

 The consultant revises the drawings based on received comments and submits a final drawing set to the IS project manager complete with a final cost estimate, specifications, and tender documents at 100% completion (third submission).

Note: For details related to the third submission, refer to Section 4.0, Park Document Submission Standards.

E PARK CONSTRUCTION FOR DEVELOPER FRONT-ENDED PROJECTS

STEP 1: TENDER AND AWARD

- Note: Refer to Council Approved Front-Ending Policy (June 25, 2009) for rules for tendering.
- Once the tender documents are approved by the City, the consultant tenders the project and awards the contract.
- The tender process is to be approved by City Staff. For construction, the contract is between the Developer and the contractor.

STEP 2: CONSTRUCTION

- The consultant submits a construction schedule and notifies the City Park Planner and IS project manager of the start of construction.
- The consultant holds a start-up meeting with the landscape contractor and IS project manager.
- Construction begins; the consultant provides the City Park Planner and IS project manager with regular updates on construction progress and communicates any schedule delays.
- The City Park Planner is responsible for external communication related to park design. The Developer and consultant are to provide the City Park Planner and IS project manager with regular updates regarding construction status.

STEP 3: INSPECTIONS

- Once any play structure construction is complete, it is inspected for CSA compliance, and an inspection report is submitted to the IS project manager.
- The IS project manager and consultant inspect the park works and identify deficiencies.
- The landscape contractor corrects any identified deficiencies, to the satisfaction of the IS project manager and the consultant.
- The IS project manager holds an inspection meeting to review general park construction, general turf construction, and sports turf construction with the consultant and landscape contractor.

STEP 4: ACCEPTANCE AND TAKEOVER

- The contractor submits the play equipment maintenance kit and all other relevant documents (such as the installation and operating manuals) to the IS project manager.
- The consultant submits final deficiency reports, deficiency plans and all inspection certificates to the IS project manager.
- The consultant also submits a letter of compliance to the IS project manager stating that the park has been constructed as per the working drawings and specifications.
- The IS project manager, City Park Planner and consultant attend a park acceptance and takeover meeting with PFSWS.

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PFSWS evaluates the park asset for maintenance takeover. The park may be taken over on a component basis.

• The landscape contractor corrects any identified outstanding deficiencies. If necessary, an additional takeover meeting is held to evaluate the park asset for maintenance takeover by the City.

STEP 5: PROJECT CLOSURE

- The consultant prepares and stamps as-built drawings for submission to the IS project manager, who circulates the
 drawings to internal stakeholders and submits a copy to the CAD specialist in the Public Works Department to serve as an
 official corporate record.
- The park is added to the City's inventory in Asset Management and is turned over to the PFSWS. PFSWS turns the park over to Parks, Recreation and Cultural Services Department.
- In addition to certification by the consultant related to warranties, the IS project manager monitors plant material warranties (1- and 2-year) and notifies the consultant of any required replacements.
- The consultant prepares, signs and stamps a letter to the City (IS project manager) stating that the park has been constructed in accordance with the approved drawings.
- The Developer submits payment certificates and copies of invoices showing the amounts spent on park development to the City Park Planner. Refer to the Front-Ending Policy for requirements.
- In accordance with the terms set out in the front-ending agreement, the Developer is reimbursed by the City for the amount spent on park development, up to the established budget at the agreed upon time of repayment.

3.4 Process for Developer-Built Park Development

Preconsultation Process

- Pre-Application Consultation
- Park and Pathway Identification
- Park Budget Identified
- Developer instructed to provide APP, or Fit Plan and Cost Estimate (where applicable)



- APP and/ or Fit Plan with Cost Estimate submitted and reviewed
- Comments issued to Consultant
- Draft Conditions created/ selected
- Draft Approval

• Faci

Pre-registration Process

- Facility Fit Plans coordinated with Community Engineering Drawings for servicing and grading of park
- Fit Plans Circulated to Councillor's Office
- Final APP/ Facility Fit Plans and Cost Estimate submitted for approval by staff
- Final Registration Conditions and schedule information for securities and fees
- Securities and Park Review Fee collected as part of Registration Agreement
- Registration Completed



Post Registration & Park Design

- Preliminary Concept Development from Facility Fit
 Plan by consultant, reviewed by staff and Councillor
- Public Consultation
- Preliminary Concept Circulation to Councillor and City Staff for final comments
- Final Concept Plan and Cost Estimate
- 60%, 90%, 100% Documents and Cost Estimates submitted and circulated for comments by City
- Development Team submits Park Development Schedule to City for approval
- Proof of liability insurance on park block needed prior to Park construction



Park Construction

- The Developer awards the contract
- Construction
- Inspections
- Acceptance and Takeover
- Project Closure

DESCRIPTION

The City of Ottawa provides the development community with the opportunity to build park assets as part of the subdivision development process. The park types that are eligible are Community Parks, Neighbourhood Parks and Parkettes.

In this process, in lieu of collecting development fees, the Developer invests the equivalent amount into the development of the park and builds the park on behalf of the city.

Roles and responsibilities for each step of the process related to Developer-Built Parks will be further described in this section.

Note: A Project Charter is prepared for each Park development project. The Charter is prepared by the City, and its preparation is initiated upon Draft Plan Approval, and completed and signed by all stakeholders after Registration.

A Preconsultation Process

STEP 1: PRE-CONSULTATION

- The Planning, Infrastructure and Economic Development (PIED) file lead planner organizes a pre-consultation meeting
 with the developer and their consultants (the development team) and City staff to discuss requirements for a complete
 application prior to formal submission.
- The City Park Planner researches relevant policy documentation including: the Official Plan, Secondary Plans, Community Development Plans, the Park Classification, and relevant master plans.
- At this stage, the City Park Planner identifies Developer responsibilities related to parkland, determining whether parkland
 or cash-in-lieu of parkland will be required, and whether a Facility Fit Plan, an Area Parks Plan or both are to be submitted.
 Some pathway requirements may also be identified at this time, and consultation with the Transportation Planning group
 will be required for planning of pedestrian and cycling networks.
- Approximate Park Budget to be confirmed at registration.

B Draft Approval Process

STEP 1: SUBDIVISION APPLICATION

- The Development team is responsible for submitting a complete subdivision application to the City.
- The PIED lead planner, together with the review team, reviews the application to ensure completeness.
- At this stage, if parkland is to be dedicated, the size, configuration and location should be shown on the submitted plan.
- The PIED lead planner circulates the subdivision application to internal and external stakeholders, including technical
 agencies and community organizations, as necessary.
- The City Park Planner reviews and approves park block sizes and locations. The PIED lead planner sends a notice of application to the public and posts a development sign on the property.
- A public meeting is held, as required by the Planning Act, to present the subdivision application to the public.

STEP 2: APP (AREA PARKS PLAN) & FACILITY FIT PLAN REVIEW

- The Park Facility Fit Plans, APP documents or both are prepared and submitted, based on the amenity lists provided by the City Park Planner, and based on the per hectare Park Construction rate (indexed yearly).
- Master servicing Study for the subdivision is reviewed in relation to the parks block.
- The City Park Planner reviews the draft plan of subdivision application and the Facility Fit Plans/ APP, circulates submissions to other City departments as required, and provides comments on the Park Fit Plans and budgets. Additional Park base information may be requested for the review, including aerial photos, geotechnical reports, tree conservation reports and/or environmental impact statements and topographic surveys
- Site visits are performed as required.
- The Development Team revises the Fit Plans and Cost Estimates, or APP documents based on the comments provided, and submits a Final Fit Plan and Cost Estimate or APP for approval.

STEP 3: DRAFT PLAN CONDITIONS

 The City Park Planner prepares draft conditions related to parks for inclusion in the subdivision draft plan of subdivision conditions. This may include a commitment on the part of the Developer to contribute financially to parks within the

- subdivision being built by others, in proportion to their development area within the Subdivision (as per Official Plan Amendment 159, 2016).
- Once any issues identified in Step 3 have been resolved, the PIED lead planner prepares a Delegated Authority Report (DAR) and draft plan of subdivision conditions.
- The DAR and draft plan of subdivision conditions are reviewed by the Development Review Manager.
- The PIED lead planner forwards the DAR and draft plan of subdivision conditions to the Developer and Ward Councillor for concurrence.

STEP 4: DRAFT PLAN APPROVAL

- Following concurrence by the Ward Councilor and the Developer, the DAR is signed by the PIED Development Review Manager.
- The PIED lead planner issues a Notice of Decision, and the 20-day appeal period begins.
- If there are no appeals, the PIED lead planner issues a 'No Appeals Received' letter with Final Draft Plan Conditions and date of draft plan approval.
- City staff commence the Project Charter.

C Pre-registration Process

STEP 1: CLEARANCE OF DRAFT PLAN CONDITIONS

- Following draft plan of subdivision approval, the Development Team submits a request for preparation of a subdivision
 agreement including a 4M-plan, engineering studies and drawings, as well as landscape plans, to the PIED lead planner for
 review and approval.
- The Development Team also submits a Preliminary Park Concept for each Park in the area to be registered, prepared by a registered Landscape Architect, and based on the approved Facility Fit Plan or APP.
- The Development Team meets with City Park Planner to discuss the Park Concept and Cost Estimate.
- The City Park Planner circulates the plan to the Councillor's office and other City departments for review, and provides comments to the development team for revisions.
- Note: For details related to the submission of concept plans and cost estimates, refer to Section 4.0, Park Document Submission Standards.
- The Development Team revises the Park Concept and cost estimate based on comments from the City Park Planner and the Councillor's office.
- The subdivision grading plan is reviewed in relation to the park block to ensure positive drainage of water, uniform surface, conformity to surrounding subdivision grading and preservation of trees and / or natural features, if required.

STEP 2: SUBDIVISION AGREEMENT AND REGISTRATION

- The PIED lead planner coordinates with Legal Services to have the subdivision agreement prepared.
 A subdivision agreement can include: park conveyance, an estimate of cost of works, additional subdivision conditions (i.e. phased developments), the land valuation for cash-in-lieu of parkland, tracking of parkland dedication for phased registrations, the 4M plan, the 4R plans and other subdivision matters.
- The PIED lead Planner provides the subdivision registration to the City Park Planner to ensure all appropriate park requirements and conditions are included in the legal Registered Subdivision Agreement.

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- The subdivision is registered.
- Title transfer occurs and the park blocks are conveyed to the City.

D Post Registration and Park Design

STEP 1: CONSULTATION AND FINAL CONCEPT PLAN

- The Project Charter is finalized and signed by all stakeholders.
- The Development team provides a Concept Plan and Cost Estimate for approval by the City Park Planner.
- The park name and address is established with concurrence from the Ward Councilor.
- The Park Concept Plan is rendered and a bilingual (the City is to provide translation of all drawing labels into French), accessible document is created by the development team, and posted on the City of Ottawa website for public viewing.
- The City Park Planner may hold a public meeting to present the park concept to the community.
- The City Park Planner compiles feedback received from the community.
- The City Park Planner identifies any changes required to address comments from the public open house and communicates revisions to the Development Team and Ward Councilor.
- The Development Team makes revisions as necessary and submits a Final Concept Plan and cost estimate.
- The City Park Planner approves the Final Concept Plan.

Note: For details related to the submission of presentation drawings, refer to Section 4.0, Park Document Submission Standards.

STEP 2: COMPLETION OF REQUIREMENTS

 The Developer completes requirements for park block preparation in accordance with the registered subdivision agreement, such as servicing to the Park block, perimeter fencing, basic grading, tree removal as per Tree removal permit.

STEP 3: DESIGN DEVELOPMENT (60% SUBMISSION)

- Based on the final concept plan, the Development Team prepares working drawings and a cost estimate for first submission at 60% completion. The Development Team submits the plans and a Class 'C' cost estimates to City Park Planner.
- The City Park Planner checks the 60% submission for compliance to concept plan.
- The City Park Planner circulates the first submission to Parks, Forestry and Surface Water Services (PFSWS) and other staff for comment.
- The City Park Planner, reviews the drawings, cost estimate and schedule, and provides comments.

Note: For details related to the first submission, refer to Section 4.0, Park Document Submission Standards.

STEP 4: 90% SUBMISSION

- The Development Team revises the drawings based on received comments and submits an updated drawing set, complete with a Class 'B' cost estimate, to City Park Planner, at 90% completion (second submission) for City review and comment.
- 3.4 Process for Developer-Built Park Development

• The City Park Planner reviews the drawings, cost estimate and schedule, and provides final comments.

Note: For details related to the third submission, refer to Section 4.0, Park Document Submission Standards..

STEP 5: 100% SUBMISSION

• The Development Team revises the drawings based on received comments and submits a final drawing set to the City Park Planner complete with a final Class 'A' cost estimate, and specifications at 100% completion (third submission).

Note: For details related to the third submission, refer to Section 4.0, Park Document Submission Standards...

STEP 6: PROJECT SCHEDULE

The Development team prepares a park development schedule for submission to City Park Planner. This will include Construction start-up and project completion.

E PARK CONSTRUCTION FOR DEVELOPER-BUILT PROJECTS

STEP 1: CONTRACT AWARD

- Once the final drawings, specifications and cost estimate are approved by the City, the Development Team prepare the
 contract documents and awards the contract.
- The Developer may choose to award the park construction contract as they see fit, without a formal, competitive tender process.
- For construction, the contract is between the Developer and the contractor.

STEP 2: CONSTRUCTION

- The Development Team submits a construction schedule and notifies the City Park Planner and their representatives of the start of construction.
- The Development Team holds a start-up meeting with the landscape contractor, City Park Planner, Infrastructure Services (IS) representative and representatives from PFSWS.
- Construction begins; the Development Team provides the City Park Planner and their representatives with a construction schedule, and regular updates on construction progress and communicates any schedule delays. City staff is entitled to inspect the works at each milestone.
- If inquiries come forward from the public and/ or councillor's office regarding the project, City Park Planner will be responsible for responses.

STEP 3: INSPECTIONS

- Once any play structure construction is complete, it is inspected for CSA compliance, and an inspection report is submitted
 to the City Park Planner or their representative.
- The Development Team inspects the park works and reports deficiencies to the City Park Planner or their representative.
- The landscape contractor corrects any identified deficiencies, to the satisfaction of the Development Team, who will declare substantial completion.

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 The City Park Planner, along with other city departments inspects general park construction, general turf construction, and sports turf construction with the Development Team and landscape contractor, prior to city takeover.

STEP 4: ACCEPTANCE AND TAKEOVER

- The contractor submits the play equipment maintenance kit and all other relevant documents (such as the installation and operating manuals) to City Park Planner.
- The Development Team submits final deficiency reports; deficiency plans and all inspection certificates to City Park Planner.
- The Development Team also submits a letter of compliance to the City Park Planner stating that the park has been constructed as per the working drawings and specifications.
- The City Park Planner and Development Team attend a park acceptance and takeover meeting with PFSWS. PFSWS evaluates the park asset for maintenance takeover. The park may be taken over on a component basis.
- The landscape contractor corrects any identified outstanding deficiencies. If necessary, an additional takeover meeting is held to evaluate the park asset for maintenance takeover by the City.

STEP 5: PROJECT CLOSURE

- The Development Team prepares and stamps as-built drawings for submission to the City Park Planner, who circulates the
 drawings to internal stakeholders and submits a copy to the CAD specialist in the Public Works Department to serve as an
 official corporate record.
- The park is added to the City's inventory in Asset Management and is turned over to the PFSWS. PFSWS turns the park over to Parks, Recreation and Cultural Services Department.
- In addition to certification by the Development Team related to warranties, IS staff monitors plant material warranties (up to 2-years) and notifies the Development Team of any required replacements.
- The Development Team prepares, signs and stamps a letter to the City stating that the park has been constructed in accordance with the approved drawings.

4.0

PARK DOCUMENT SUBMISSION PROCEDURES

4.1 DOCUMENT SUBMISSION STANDARDS

This chapter outlines design document standards and submission requirements for all stages of park development. This may include design drawings, cost estimates and in some cases Area Parks Plans (APP).

Document submissions will always be prepared by a Landscape Architect, registered as a full member with the Ontario Association of Landscape Architects. The Landscape Architect will serve as a consultant to the City for City-Built parks, or to the developer for Front-Ended or Developer-Built Parks. In all cases, city staff will still be reviewing and approving the documents.

With respect to document submissions, sample plans are included to illustrate both drawing standards and submission requirements. They convey information related to required drawing content for all stages of planning and design development. These plans are intended to serve as guidelines to facilitate the approvals process. There are new document submissions included in the new edition of this manual, which correspond to the new Developer-Built Park process.

This chapter also provides park demonstration plans that provide a snapshot of typical parks in the City of Ottawa. Demonstration plans are provided as examples for four hypothetical parks: a typical Urban Parkette/ Plaza (0.04 ha/ 400 m²) suburban Parkette (0.8 ha), a Neighbourhood Park (1.2ha) and a Community Park (3.2 ha). Also included in this chapter are select sample cost estimates, which illustrate the level of precision required for each submission stage.

The earlier edition of this Manual included Standard Details and Specifications for Parks. These have been removed and the most current versions of these details and specifications are available through the City of Ottawa Standards for Unit Price Contracts. This is administered and updated yearly by the Quality Assurance and Standards Unit of Infrastructure Services in the Planning, Infrastructure and Economic Development Department (PIED). The most recent versions of the Standard Details and Park Specifications should be consulted and read in conjunction with this Manual.

4.1.1 FACILITY FIT PLAN

The Facility Fit Plan is a planning exercise that is a requirement of the subdivision approval process to ensure the size and configuration of the park block is acceptable. The Facility Fit Plan demonstrates that the proposed park amenities as requested by the City Park Planner, including buffers and setbacks, can be satisfactorily achieved within the park block being proposed. It identifies any existing vegetation or special features within the park which may be preserved. The cost estimates provided as part of this submission verify that the funding available is appropriate for the proposed park program.

Facility Fit Plan submissions shall be subject to the following:

- Facility Fit Plans may be hand-drawn or computer generated;
- Facility Fit Plans must be overlaid over an aerial photo if requested;
- The drawing shall contain a north arrow, legend, scale bar, date, key plan (showing location with respect to the street network), address and a concept plan title block;
- The Facility Fit Plan must include critical dimensions of all park amenities;
- The Facility Fit Plan shall be accompanied by a Class 'D' cost estimate. Refer to section 4.1.7 Cost Estimates;
- The drawing shall be presented using an appropriate metric scale. The scales identified below represent the minimum amount of detail required:
 - Urban Parkettes/ Plazas, Parkettes and Neighbourhood Parks: 1:300
 - Community Parks and District Parks: 1:500
 - Woodland Parks: Varies with size
- Page size will vary depending on the size and shape of the park.



4.1.1 FACILITY FIT PLAN

4.1.2 Community Overview Plan

The Community Overview Plan is usually based on the CDP land use plan and is a component of the APP, and serves to identify the locations and relationships between parks and the greenspace connections within a community, The Community Overview Plan should have the following characteristics:

- Drawing sheet size shall be A3, minimum.
- The drawing shall be presented using an appropriate metric scale (1:500 max).
- The drawing shall contain a north arrow (oriented to top of page), legend, scale bar, revision date, key plan (showing the community location with respect to the its larger context), and a title block.
- The legend shall indicate any graphic symbol used on the plan.

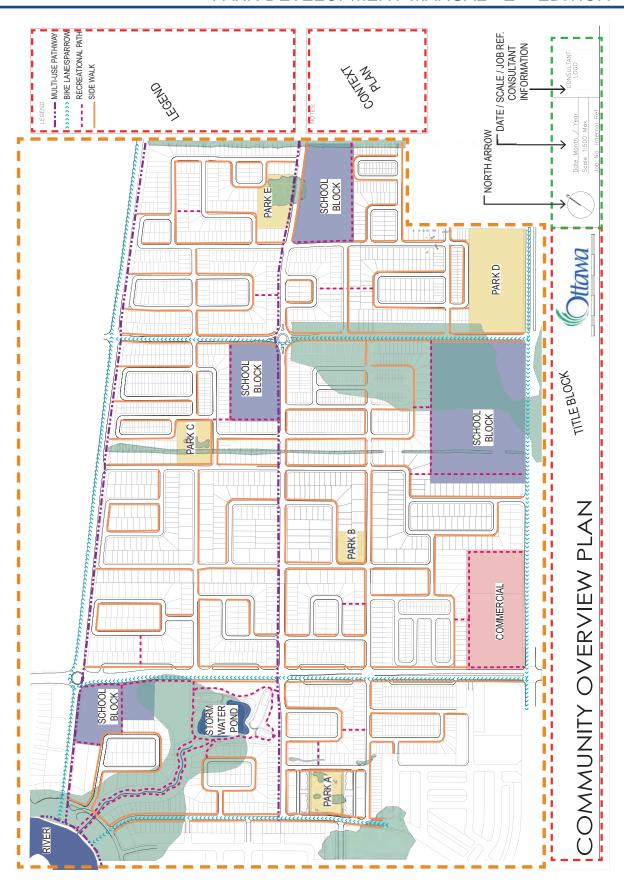
The drawing should show the larger context of the area where the proposed parks will be built, with each park shown in its proposed size, configuration and location.

The different housing densities and all land uses and school blocks should be indicated on the plan. All forms of open space should be shown and differentiated, including Parks, stormwater management areas and facility lands, woodlots, creek and valley lands, etc.

All pedestrian and multi-use connections to and from the Parks and other Open Space areas should be clearly indicated on the plan. Different types of connections (sidewalks, multi-use pathway, recreational pathways, etc) should be differentiated graphically and identified in the legend.

Cycling facilities, should be shown as indicated on the Transportation Master Plan.

Each park should be identified by number, and its size indicated on the drawing.



4.1.2 COMMUNITY OVERVIEW PLAN

4.1.3 AREA PARKS PLAN (APP)

The Area Parks Plan is a document which will be required in new communities where Developer-Built parks are anticipated.

The purpose of the Area Parks Plan is to provide an overview of all the park amenities planned for a community and distributed over the various parks identified. This document includes:

- A cover page, showing:
 - the Community Name,
 - o the Consultant Name
 - The title of the document
 - The date
- Table of Contents
- A Community Overview Plan
- A Table summarizing budgets and amenities for each park
- A Table summarizing individual land-owner contributions for parkland dedication and park construction cost, as per the cost-sharing agreement*
- A Final Fit Plan for each Park
- · A description page for each park
- A Class 'D' Cost Estimate for each park

^{*}As per the Official Plan Amendment #150 (2016) a cost-sharing agreement may be required to accompany the Area Parks Plan at the time of submission.

	Park Type	Area (ha)	Budget/ Status
Park A	Community Park	3.10	\$1,537,407.80
Park B	Neighbourhood Park	0.91	\$451,303.58
Park C	Parkette 1	0.56	Under Construction
Park D	Parkette 2	0.40	Design Approved

Amenities	Park A	Park B	Park C	Park D	Vicinity
Senior Play Structure					
Junior Play Structure					
Custom Play Structure					
Sand Play Area					
Swingset					
Shade Structure					
Picnic Table					
Puddle Rink					
Community Rink					
Nature Trail					
Sledding Hill					
Open Play area					
Woodlot					
Dog Park					
Basketball Court					
Tennis Court					
Volleyball Court					
Shuffleboa					
Soccer Field - Full					
Soccer Field - Mini					
Ultimat Frisbee					
Football Field					
Bio-swales					
Softbal (senior)					
Softbal (junior)					
Baseball					
T-ball					
Community Building					
Skate Park					
Parking					
Boat launch					
Entrance/ Gateway Feature					
Splashpad					

4.1.4 CONCEPT PLAN

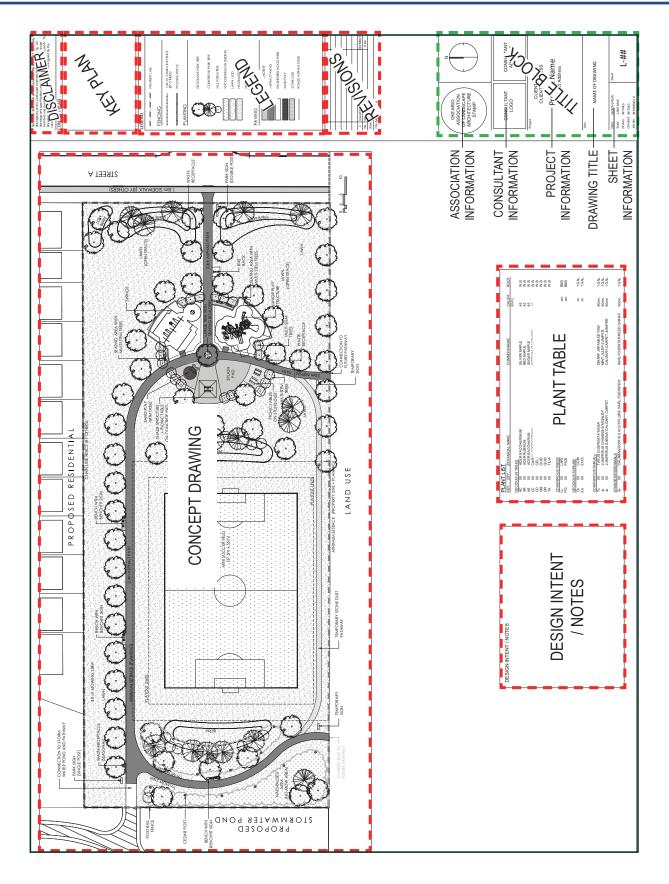
The Concept Plan represents an evolution of the Facility Fit Plan. It more accurately reflects what can be built using the established park budget.

The Concept Plan is submitted to the City Park Planner who then circulates it to the appropriate City staff and stakeholders.

For Developer-Built Parks, the Concept plan is submitted after the approval of the APP or Facility Fit Plan.

Concept Plan submissions shall consist of the following:

- Three (3) hard copies and one electronic copy (PDF format) of the Concept Plan to the City Park Planner.
- A Concept Plan which includes a general indication of facilities, defined play areas, target age (senior/junior play), plant
 material (deciduous, coniferous and multi-stemmed trees, as well as perennials [herbaceous], shrubs and grasses),
 pavement types and widths, active/passive areas, existing and surrounding land uses and utilities, dimensions of proposed
 features, distances between park features, and a general indication of grading and slopes.
- Details of play equipment manufacturer and layout will be determined at this stage.
- Concept Plan drawings shall be hand drawn or computer generated.
- Drawing sheet size shall be A1, minimum.
- The drawing shall be presented using an appropriate metric scale (1:500 max).
- The drawing shall contain a north arrow (oriented to top of page), legend, scale bar, revision date, key plan (showing location with respect to the street network), address and a concept plan title block.
- The Concept Plan shall be accompanied by a cost estimate, and submitted electronically (PDF format).
- The legend shall indicate any graphic symbol used on the plan.
- The Concept Plan should also contain notes or design intent to provide further detail or explanation.
- The drawing shall annotate existing plant material to be retained, removed or relocated on site and within the road allowance
- The drawing shall indicate existing and adjacent buildings, easements, adjacent storm water facilities and public rights-ofway, if applicable.
- At the Concept Plan submission stage the park grading and servicing should align with subdivision engineering drawings
- The drawing shall provide any dimensions and offsets from site features and landscape elements required for technical and zoning compliance.
- The Concept Plan shall indicate turf areas which require seed, sod or other treatments.



4.1.4 CONCEPT PLAN

4.1.5 Presentation Plan

The Presentation Plan is an evolution of the Concept Plan. It is a coloured rendering of the Concept Plan, with City-translated bilingual labels for use during public consultations. The Presentation Plan is submitted to the City Park Planner at the Park Design Phase, Step 4: Consultation and Final Concept Plan.

The presentation must be provided in bilingual, digital, accessible format for posting on the City of Ottawa Website.

Presentation Plan submissions shall consist of the following:

- Coloured rendering (by hand or computer) of the Concept Plan.
- Drawing sheet size shall be A1, minimum.
- The drawing shall be presented using an appropriate metric scale (1:500 max).
- All drawings shall contain a north arrow (oriented to top of page), legend, scale bar, date, key plan (showing location with respect to the street network), address and a concept plan title block.
- The Presentation Plan shall be accompanied by a cost estimate.
- The legend shall indicate any graphic symbol used on the plan.
- The drawings shall annotate existing plant material to be retained, removed or relocated on site and within the road allowance.
- The drawing shall display existing and adjacent buildings, easements, adjacent stormwater facilities, and public rights-ofway.
- The drawing shall provide any dimensions and offsets from site features and landscape elements required for technical and zoning compliance.
- The drawing shall indicate turf areas which require seed, sod or other treatments.
- The drawings shall include renderings of proposed play equipment (including water play) provided by the manufacturer, including proposed colours, and a list of Annex H accessible items.
- The Presentation Plan shall display supporting images of the proposed activities, planting, surface treatment or any graphic representation to aid in the understanding of the proposed design.
- The Presentation Plan should also contain notes or design intent to provide further detail or explanation.
- The Plan shall contain submission contact information so that queries or feedback can be received from the public.



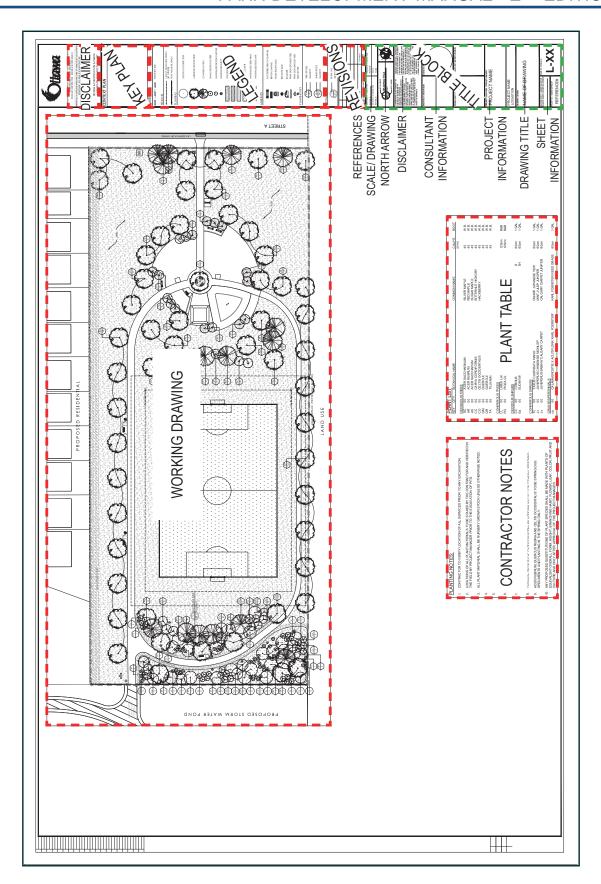
4.1.5 Presentation Plan

4.1.6 FIRST SUBMISSION (60% WORKING DRAWINGS)

The first submission drawings translate the Concept Plan into a set of working drawings. The drawing set shall incorporate the City's comments on the conceptual design. The first submission is issued to the City Park Planner and Infrastructure Services (IS) project manager. The IS project manager circulates the drawing set to Parks, Forestry and Surface Water Services for review of proposed plantings and of maintenance-related issues. The working drawings may also need to be circulated to Natural Systems (if natural features are affected) as well as to the relevant Conservation Authority and/or the Ministry of Natural Resources depending on the type of natural feature.

The first submission shall consist of the following:

- Four (4) hard copy sets of the working drawings to the IS project manager, and an electronic set (PDF format). The IS
 project manager shall circulate the drawings to the City Park Planner;
- The first submission shall be accompanied by a Class D cost estimate in electronic format (PDF);
- First submission drawing sets shall be computer generated;
- Drawing sheet size shall be A1, minimum;
- The drawing shall be presented using an appropriate metric scale (1:500 max);
- All drawings shall contain a north arrow (oriented to top of page), legend, key plan (showing location with respect to the street network), and the City standard title block (including name of owner/applicant, name and address of the consultant, name and address of the project, drawing title and number, scale bar, date of submission, revisions, and stamp of consulting landscape architect);
- Drawings shall include: Title Sheet; Park Tree Preservation Plan (if applicable); Layout Plan; Grading, Drainage & Servicing Plan; Planting Plan; Details (for drawing descriptions, refer to section 4.2 Drawing Descriptions);
- The drawings shall annotate existing plant material and features to be retained, removed or relocated on site and within the road allowance;
- The drawings shall include any relevant notes;
- Details which require further information within the working drawings shall be referenced through a clear note or symbol;
- The drawings shall provide a table of the proposed vegetation (trees, shrubs, ground cover) to be planted on site and within the road allowance. The table should include a list of each species, common and botanical names, size and quantity;
- The drawings shall display existing and adjacent buildings and public right-of-ways;
- The drawings shall provide any dimensions and offsets from site features and landscape elements required for technical
 and zoning compliance. Other dimensions should be included: road corridor (ROW), parking areas with defined parking
 spaces, steps, terraces, fences, walkways, driveways, proposed features, seating, aisles and private approaches
 (driveways);
- The drawings shall indicate turf areas which require seed, sod or other treatments;
- The drawings shall display the limit of tender or property lines;
- The drawings shall contain the location of bicycle parking, site furniture, lighting, utility signs (parking, fire, and traffic), recycling and waste management enclosures, and accessible access locations.



4.1.6 FIRST SUBMISSION (60% WORKING DRAWINGS)

4.1.7 Second Submission (90% Working Drawings)

The second submission of working drawings incorporates revisions based on the red-line mark-up of the first submission drawings. The second submission is issued to the Infrastructure Services (IS) project manager and copied to the City Park Planner, at the Park Design Phase, Step 6: Construction Drawings.

The second submission shall consist of the following:

- Four (4) hard copy sets of the working drawings to the IS project manager, including a red-lined markup of the previous submission, and an electronic set (PDF format). The IS project manager shall circulate the drawings to the City Park Planner:
- The second submission shall be accompanied by a Class C cost estimate in electronic format (PDF);
- Drawing sheet size shall be A1, minimum;
- The drawing shall be presented using an appropriate metric scale (1:500 max);
- All drawings shall contain a north arrow (oriented to top of page), legend, key plan (showing location with respect to the street network), and a City standard title block (including name of owner/applicant, name and address of the consultant, address/legal description of the site, project name, drawing title and number, scale bar, date of submission, revisions and stamp of consulting Landscape Architect);
- Drawings shall include: Title Sheet; Park Tree Preservation Plan (if applicable); Layout Plan; Grading, Drainage & Servicing Plan; Planting Plan; Details (for drawing descriptions, refer to section 4.2 Drawing Descriptions);
- The drawings shall annotate existing plant material and features to be retained, removed or relocated on site and within the road allowance;
- The drawings shall include any relevant notes;
- Details which require further information within the working drawings shall be referenced through a clear note or symbol;
- The working drawings shall provide a table of the proposed vegetation (trees, shrubs, ground cover) to be planted on site
 and within the road allowance. The table should include a list of each species, common and botanical names, size and
 quantity;
- The drawings shall display existing and adjacent buildings, easements, adjacent stormwater facilities and public rights-of-way;
- The drawings shall provide any dimensions and offsets from site features and landscape elements required for technical
 and zoning compliance. Other dimensions should be included: road corridor (ROW), parking areas with defined parking
 spaces, steps, terraces, fences, walkways, driveways, proposed features, seating, aisles and private approaches
 (driveways);
- The drawings shall indicate turf areas which require seed, sod or other treatments;
- The drawings shall display the limit of tender or property lines;
- The drawings shall contain the location of bicycle parking, site furniture, lighting, utility signs (parking, fire, and traffic), recycling and waste management enclosures, and accessible access locations.

Note: The City standard title block, if requested, may be obtained by contacting the Infrastructure Services Department.

4.1.8 THIRD SUBMISSION (100% WORKING DRAWINGS)

The third submission of working drawings consists of a final set of construction drawings and specifications for use in the tender package. The third submission is issued to the Infrastructure Services (IS) project manager and the City Park Planner.

The third submission shall consist of the following:

- Six (6) hard copy sets of the working drawings to the IS Project Manager, including an electronic version (PDF format) and the AutoCAD file (.dwg format);
- A memo addressing all second submission comments;
- The third submission shall be accompanied by a Class B cost estimate in electronic format (PDF);
- Drawing sheet size shall be A1, minimum;
- The drawing shall be presented using an appropriate metric scale (1:500 max);
- All drawings shall contain a north arrow (oriented to top of page), legend, key plan (showing location with respect to the
 street network), and the City standard title block (including name of owner/applicant, name and address of the consultant,
 address/legal description of the site, project name, drawing title and number, scale bar, date of submission, revisions and
 stamp of consulting landscape architect);
- Drawings shall include: Title sheet; Park Tree Preservation Plan (if applicable); Layout Plan; Grading, Drainage & Servicing Plan; Planting Plan; Details (for drawing descriptions, refer to section 4.2 Drawing Descriptions);
- The drawings shall annotate existing plant material and features to be retained, removed or relocated on site and within the road allowance;
- The drawings shall include any relevant notes;
- Details which require further information within the working drawings shall be referenced through a clear note or symbol;
- The drawings shall provide a table of the proposed vegetation (trees, shrubs, ground cover) to be planted on site and within the road allowance. The table should include a list of each species, common and botanical names, size and quantity:
- The drawings shall display existing and adjacent buildings, easements, adjacent stormwater facilities, and public rights-ofways:
- The drawings shall provide any dimensions and offsets from site features and landscape elements required for technical
 and zoning compliance. Other dimensions should be included: road corridor (ROW), parking areas with defined parking
 spaces, steps, terraces, fences, walkways, driveways, proposed features, seating, aisles and private approaches
 (driveways);
- The drawings shall indicate turf areas which require seed, sod or other treatments;
- The drawings shall display the limit of tender or property lines:
- The drawings shall contain the location of bicycle parking, site furniture, lighting, utility signs (parking, fire, and traffic), recycling and waste management enclosures, and accessible access locations;
- All of the 100% working drawing sheets are to be stamped and signed by the landscape architect (prime consultant) and any other sub-consultants used. All drawings become the property of the City of Ottawa.

4.1.9 As-Built Drawings

As-built drawings provide an accurate as-built record of park construction for the City's records. As-built drawings and specifications are submitted by the landscape design consultant to the Infrastructure Services (IS) project manager and maintained as Corporate record. As-built drawings shall be submitted as follows:

- The electronic version (.pdf format), the AutoCAD file (.dwg format) on CD and one hard copy of as-built drawings;
- · As-built drawings shall be computer generated;
- Drawing sheet size shall be A1, minimum;
- The drawing shall be submitted using a City of Ottawa title block for working drawings;
- The drawing shall be presented using an appropriate metric scale (1:500 max);
- All drawings shall contain a north arrow (oriented to top of page), legend, key plan (showing location with respect to the street network), and the City Standard title block (including name of owner/applicant, name and address of the consultant, address/legal description of the site, project name, drawing title and number, scale bar, date of submission);
- Drawings shall include: Title Sheet; Park Tree Preservation Plan (if applicable); Layout Plan; Grading, Drainage & Servicing Plan; Planting Plan; Details (for drawing descriptions, refer to section 4.2 Drawing Descriptions);
- The drawings shall annotate existing plant material and features located on site and within the road allowance;
- The drawings shall include any relevant notes;
- Details which require further information within the working drawings shall be referenced through a clear note or symbol;
- The drawings shall provide a table of the planted vegetation (trees, shrubs, ground cover) to be planted on site and within the road allowance. The table should include a list of each species, common and botanical names, size and quantity;
- The drawing shall display existing and adjacent buildings and public right-of-ways;
- The drawings shall provide any dimensions and offsets from site features and landscape elements. Other dimensions should be included: road corridor (ROW), parking areas with defined parking spaces, steps, terraces, fences, walkways, driveways, proposed features, seating, aisles and private approaches (driveways);
- The drawings shall indicate turf areas;
- The drawings shall display the limit of work or property lines;
- The drawings shall contain the location of bicycle parking, utility signs (parking, fire, and traffic), recycling and waste management enclosure, and accessible access locations;
- All of the as-built drawings are to be stamped and signed by the landscape architect (prime consultant) and any other subconsultants used. All drawings become the property of the City of Ottawa.

Note: The City standard title block, if required, may be obtained by contacting the Infrastructure Services Department.

4.1.10 TITLE SHEETS

A title sheet shall be included for all working drawings submissions. Title sheets shall contain the following:

- Name of owner / applicant / developer;
- Name of municipality (City of Ottawa);
- Key plan showing location of the park;
- Name of the development (include Planning Subdivision File Number and 4M-plan number);
- Name and address of park;
- Name and address of consultants (designers, engineers, surveyors);
- · List of drawings;
- Date.

4.2 Drawing Descriptions

PARK TREE PRESERVATION PLAN (NEW REQUIREMENT):

As part of the Subdivision Application, a Tree Conservation Report (TCR) is sometimes required as a part of an Environmental Impact Statement. If park locations are chosen that contain trees to be preserved as indicated by the TCR, a secondary report – a Park Tree Preservation Plan focusing on the park block will be required as part of the park development process

The Park Tree Preservation Plan shows all existing vegetation to be protected and any existing vegetation to be removed. The plan shows the subdivision grades from the Grade Control and Drainage Plan in relation to the existing elevations of the trees to be preserved as well as the details of the tree protection measures to be used. The park tree preservation plan should be included with the Park Concept submission, and must include the proposed elements from the Park Concept Drawing, to demonstrate the spatial relationship between park elements and existing trees.

Trees shown on the Park Tree Preservation Plan that are intended to be preserved should be documented, and the species, dbh and condition of the tree indicated on the drawing. Butternut trees (Juglans cinerea) must be evaluated by a certified Butternut Health Assessor if they are to be removed or disturbed (refer to Ontario Regulation 242/08, 2016). All trees over 50cm dbh are classified as Distinctive Trees (refer to the Urban Tree Conservation By-Law 2009-2010) and must be evaluated by a certified arborist and an Arborist Report filed with the city prior to removal.

The Park Tree Preservation Plan must be stamped by a Landscape Architect possessing full membership in the Ontario Association of Landscape Architects, (OALA), or prepared by an Arborist certified by the International Society of Arboriculture (ISA).

PARK WOODLOT MANAGEMENT PLAN (NEW REQUIREMENT):

If a proposed park block contains a continuously treed area slated for preservation that is greater than 0.25 hectares (2,500 m2), a 'Park Woodlot Management Plan' is a requirement of the park development process. A Park Woodlot Management Plan must be prepared by a Registered Professional Forester, with full membership in the Ontario Professional Foresters Association.

The Park Woodlot Management Plan must include the information from the Park Tree Preservation Plan, and should contain the following information:

- Woodlot size, shape, topography;
- Report Methodology;
- Property History, including any available information on past harvesting operations, planting projects, insect or pest control
 operations;
- Aerial Photos, showing boundaries of the treed area to be preserved, property boundaries, with features identified, such as:
 - Human activity in the woodlot, such as official or unofficial trails, or debris;
 - Slopes, clearings, stone outcroppings or other significant landscape feature;
 - Any surface water or seasonal water courses;

PARK DEVELOPMENT MANUAL - 2ND EDITION

- Woodlot Inventory, including forest type and cover, forest condition, wildlife and other vegetation, and available soils information;
- Objectives for Management, (i.e., invasive species control, increase species diversity, develop a sugar bush or cultivate a specific forest type);
- Schedule and Description of Proposed Interventions.

Special circumstances, such as the presence of rare or 'at-risk' species of plants or animals, or special landscape features must also be addressed in the plan. The plan should propose a management plan covering a minimum 2-year period.

LAYOUT PLAN

The Layout Plan shows the features of the park design, indicating the dimensions of the features and the distances between them. The plan indicates existing features to remain, as well as all existing and future roads, buildings and other important land-scape features. Care should be taken to graphically differentiate existing and proposed features of the site.

GRADING, DRAINAGE & SERVICING PLAN

The Grading, Drainage and Servicing Plan shows the proposed and existing grades of the site and all underground servicing (storm water, sanitary, water and utilities). Slopes and drainage swales shall be indicated on the plan.

PLANTING PLAN

The Planting Plan shows the existing vegetation to remain on site as well as any plantings proposed in the design. The plan also indicates all proposed and existing features of the site and adjacent areas, including roads, buildings, and utilities, and landscape features. Proposed plant material is itemized with corresponding notations on the drawing.

DETAILS

Any details related to the proposed design are to be shown on a detail sheet. All details should meet or exceed the standard set by the City of Ottawa details as issued by the Quality Assurance and Standards Unit of Infrastructure Services, some features may require geotechnical or structural engineering review or design elements. These details should be stamped by the appropriate authority.

4.3 PARK DEMONSTRATION PLANS

The park demonstration plans featured on the following pages provide a snapshot of typical parks in the City of Ottawa. By no means prescriptive or exhaustive, the demonstration plans are intended to show the types of amenities that may be provided across a range of sizes.

Demonstration plans are provided for four of the park categories that are currently eligible for front-ending:

• Urban Parkette/Plaza: 400 sq.m.

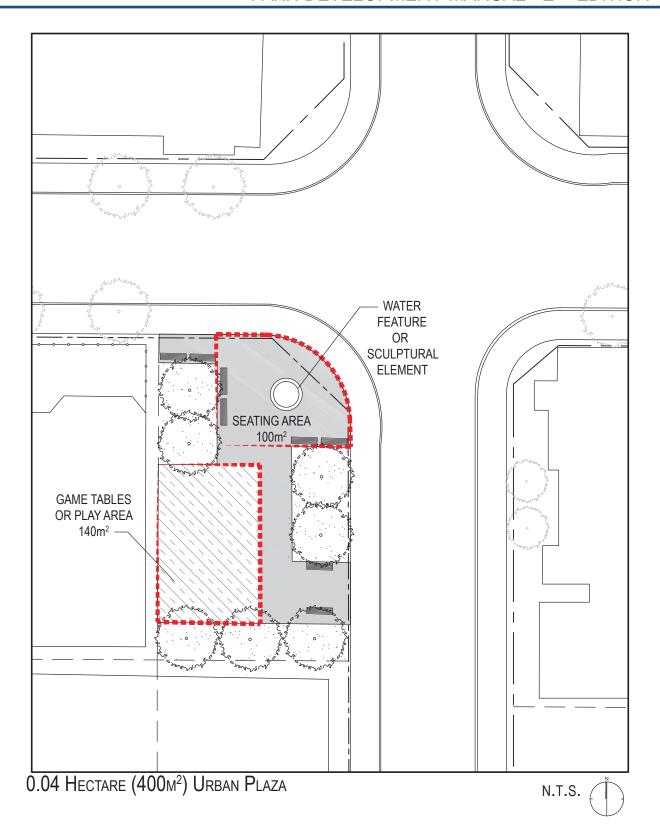
• Parkettes: 0.8 ha

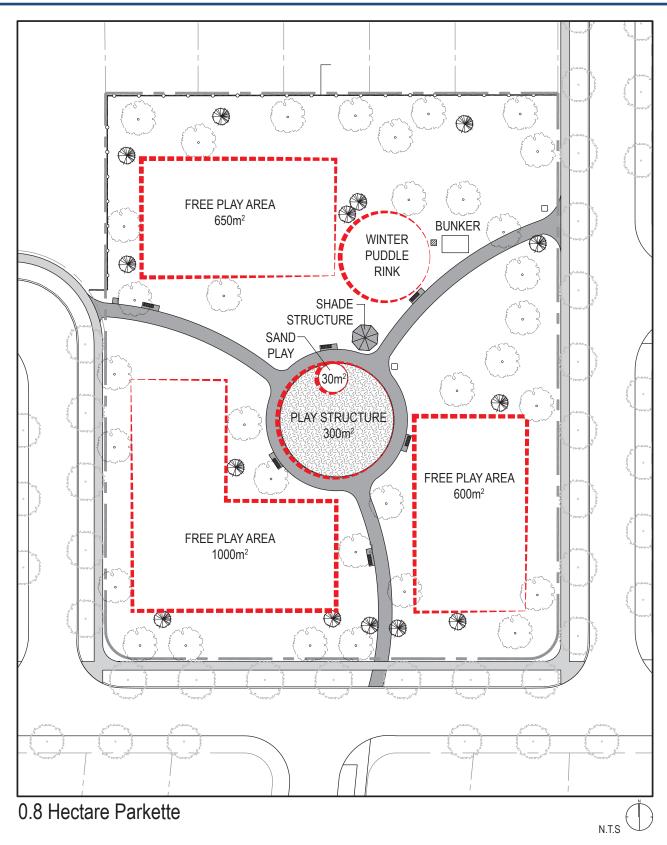
Neighbourhood Park: 1.2ha

Community Park: 3.2 ha

For some of the demonstration plans, the maximum City budget is provided, along with a list of possible amenities and costs. For the Cost Estimates, the Park budget shall be based on the applicable per hectare Park Construction rate (indexed yearly), with the exception of the Urban Parkette/ Plaza, which may have a higher cost per area than other park types.

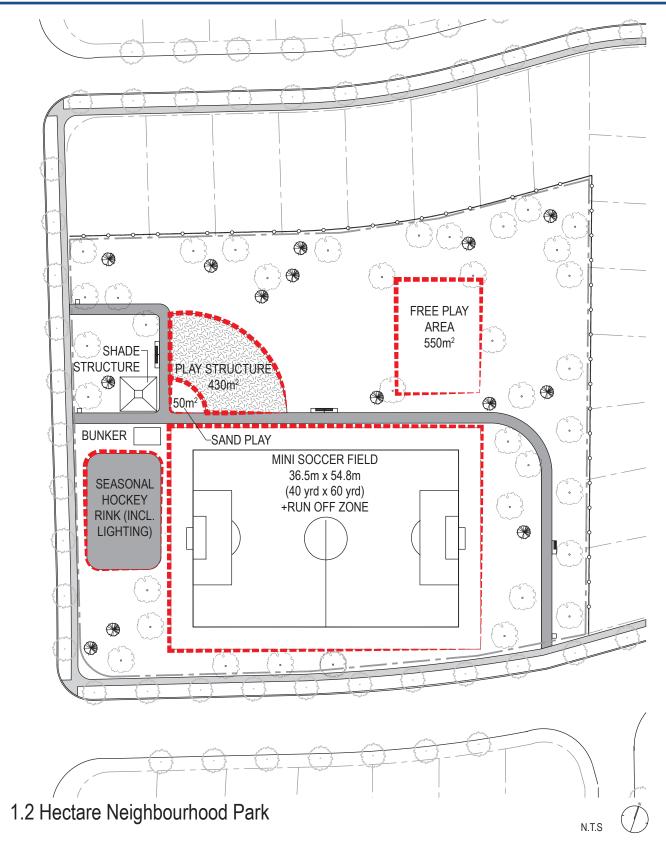
Park demonstration plans begin on the following page.





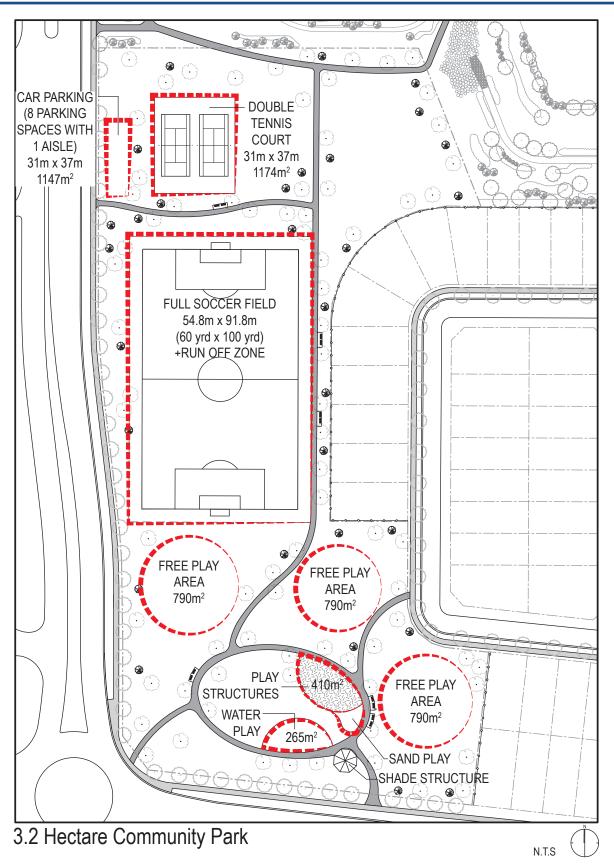
SAMPLE 0.8 HECTARE PARKETTE COST ESTIMATE (CLASS D)

	Revision Date:				
1.0	Site work		Quantity	Units	TOTALS
	Rough Grading to Park Grades		8000	m^2	
	Topsoil and Fine Grading		5500	m^2	
	Boulevard Topsoil & Sod		800	m^2	
	Seed		5500	m^2	
	Sod (1m strip at paths and amenities)		300	m^2	
	Asphalt Path		450	m^2	
	Hydro Kiosk		1	ea	
	Water Chamber		1	ea	
	CIP Concrete Pads (bench, waste receptacle)		15	m ²	
	(,	1.0 Subtotal	-		\$143,176.01
2.0	Site Amenities				. ,
	Junior Play Structure (installed)		1	LS	
	Shade Structure - Small (installed)		1	LS	
	Engineered Wood Fiber		300	m^2	
	Sand Surface		25	m^2	
	Drainage Tile		50	lin.m	
	Concrete Curb		65	lin.m	
	Bench		4	ea	
	Waste Receptacle		2	ea	
	Seat Boulder		5	ea	
	Puddle Rink Light		1	ea	
	Park Sign (double post)		1	ea	
		2.0 Subtotal			\$136,358.10
3.0	Planting				, ,
	Street Trees (70mm Cal)		20	ea	
	Deciduous Trees - Park (60mm Cal)		32	ea	
	Coniferous Trees - Park (200cm ht)		10	ea	
	, ,	3.0 Subtotal			\$34,343.65
4.0	Consultant Fees (varies)				\$27,017.50
		TOTAL			\$340,895.26
PARK E	BUDGET				
Base	\$495,938.00/ha x 0.8ha				\$396,750.40
Minus	Deductions from Park Budget				
	Contingency 10%				\$39,675.04
	City Review Fees: 4%				\$15,870.02
		TOTAL			\$341,205.34
NOTE: THE SAMPLE COST ESTIMATE IS APPROXIMATE					



SAMPLE 1.2 HECTARE NEIGHBOURHOOD PARK COST ESTIMATE (CLASS D)

	Revision Date:				
1.0	Site work		Quantity	Units	TOTALS
	Rough Grading to Park Grades		11650	m^2	
	Topsoil and Fine Grading (6")		6600	m^2	
	Topsoil and Fine Grading for Mini-field (4")		3500	m^2	
	Boulevard Topsoil & Sod		700	m^2	
	Seed		8200	m^2	
	Sod (1m strip at paths and amenities)		680	m^2	
	Hydro Kiosk		1	LS	
	Water Chamber		1	LS	
	Asphalt Path		450	m^2	
	CIP Concrete Pads (bench, waste receptacle)		20	m^2	
		1.0 Subtotal			\$173,706.15
2.0	Site Amenities				
	Jr / Sr Play Structure (installed)		1	LS	
	Shade Structure - Small (installed)		1	LS	
	Engineered Wood Fiber		430	m^2	
	Sand Surface		50	m^2	
	Drainage Tile		200	lin.m	
	Concrete Curb		160	lin.m	
	Bench		4	ea	
	Waste Receptacle		3	ea	
	Seat Boulder		10	ea	
	Park Sign (double post)		1	ea	
	Temporary Rink Boards			LS	
	Skating Rink (bunker, lighting)			LS	
		2.0 Subtotal			\$255,450.23
3.0	Planting				
	Street Trees (70mm Cal)		18	ea	
	Deciduous Trees - Park (60mm Cal)		40	ea	
	Coniferous Trees - Park (200cm ht)		15	ea	
		3.0 Subtotal			\$35,763.03
4.0	Consultant Fees 10%				\$45,981.04
		TOTAL			\$510,900.45
PARK E	BUDGET				
Base	\$495,938/ha x1.2ha				\$595,125.60
Minus	Deductions from Park Budget				. ,
	Contingency 10%				\$59,512.56
	City Review Fees: 4%				\$23,805.02
	•				
		TOTAL			\$511,808.02
NOTE: THE SAMPLE COST ESTIMATE IS APPROXIMATE					



4.3 Park Demonstration Plans

SAMPLE 3.2 HECTARE COMMUNITY PARK COST ESTIMATE (CLASS D)

2.0	Revision Date: Site work Rough Grading to Park Grades Topsoil and Fine Grading Boulevard Topsoil & Sod Seed Sod (1m strip at paths and amenities) Hydro Kiosk Water Chamber Asphalt Car Parking Lot - Heavy Duty Asphalt Path CIP Concrete Pads (bench, waste receptacle)	1.0 Subtotal	Quantity 32000 25000 1500 25000 1300 1 1 210 1080 45	Units m² m² m² m² ts Ls ts ts m² m²	TOTALS \$407,828.33
3.0	Site Amenities Jr / Sr Play Structure (installed) Shade Structure - Large (installed) Soccer Field (drainage, posts) Tennis Courts (fenced, ashpalt) Water Play Area Engineered Wood Fiber Sand Surface Drainage Tile Concrete Curb Bench Waste Receptacle Seat Boulder Park Sign (double post)		1 1 1 1 850 50 200 160 12 8 12	LS LS LS LS m ² m ² lin.m ea ea ea	
•.•	Planting Street Trees (70mm Cal) Deciduous Trees - Park (70mm Cal) Coniferous Trees - Park (200cm ht)	2.0 Subtotal	45 39 14	ea ea ea	\$774,873.83
4.0	Consultant Fees 10%	3.0 Subtotal		•	\$54,377.11 \$122,348.51
		TOTAL			\$1,359,427.78
PARK B Base	\$495,938/ha x 3.2ha				\$1,587,001.60
Minus	Deductions from Park Budget Contingency 10% City Review Fees: 4%				\$158,700.16 \$63,480.06
NOTE: TH	IE SAMPLE COST ESTIMATE IS APPROXIMATE	TOTAL			\$1,364,821.38

5.1 PARK DESIGN CRITERIA

The following park design criteria should be considered when designing parks in the City of Ottawa. For the design of all parks, please refer to the City of Ottawa Standards for Unit Price Contracts, for park standard details and specifications, updated yearly.

ZONING FOR PARK BLOCKS

- Parks in the City of Ottawa are zoned 'O1'
- The minimum front yard setback for park structures is 7.5m
- The maximum height of a structure is 11m
- The maximum lot coverage for the site is 20%
- For use restrictions and subzone information, refer to the City of Ottawa Zoning by-law text.

AMENITIES

- Locate shade structures central to amenities and allow sight lines to play areas.
- Group water-based amenities together and locate them close to the park's water connection.
- Provide both junior and senior play opportunities.
- Use engineered wood fiber surfacing for play structures, to an appropriate depth for the fall-height of the equipment.
- Provide sand play opportunities.
- Provide a variety of open space / free play areas.
- Consider activities and programming for Ottawa's growing Senior population.
- Unstructured open-space within a park that allows for a wide variety of active and passive uses is considered an asset.

SEATING

- Provide informal seating opportunities.
- Locate seating in shaded areas.
- Provide seating both close to and apart from active amenities for different park users.
- Bench spacing should prevent pinch points (150mm minimum).
- Consider the accessibility of seating on all accessible routes. Consult the Accessibility Design Standards from the City of Ottawa for details.
- For parks that incorporate walking circuits aimed at seniors, place seating opportunities within visible distances of one another.

Maintenance

- Place conifers 4.5m and deciduous trees 1.5m away from pathway edges, park benches and access / egress points in order to reduce pruning requirements as trees mature.
- Avoid placing conifers along fence lines to facilitate maintenance access.
- Locate waste and recycle receptacles close to park entrances to facilitate maintenance.
- Maintained pathways should be a minimum of 2.4m wide, unless otherwise required. Refer to section 2.5.2, Recreational Pathways.

- Provide clearance along pathways (waste receptacles, benches, trees, etc.) for maintenance vehicles.
- Include mowable turf strips between elements, considering the width of the equipment that will be used in the area.

SAFETY

- Follow CPTED (Crime Prevention through Environmental Design) principles.
- Locate shade structures as feature elements along significant sight lines.
- Avoid conflicting adjacencies.
- Clear hazard trees from woodlots maintained as parkland, as directed by the City.
- Select equipment and materials that are not easily vandalized.

ACCESSIBILITY

Promote universal accessibility: wheel chair access, engineered wood fiber surfacing, ramps to play structure areas. Refer
to the Accessibility Design Standards from the City of Ottawa for details whenever an element is intended to be accessible.

BUFFERS

- Include buffer space between pathways and adjacent lot lines.
- Include buffer space between high-activity zones and residential lot lines.
- Provide naturalized buffers of locally appropriate native species adjacent to natural features.

ENVIRONMENT

- Where removal of hazard trees is required in natural areas, leave woody debris on site to the extent possible, while still
 providing safe access along pathways.
- Avoid planting non-native, invasive species in parklands adjacent to natural features.
- Consider the source of native plant material. Where possible, specify plant material with origins in an appropriate seed zone. Refer to the Ontario Ministry of Natural Resources for more information.

TREE PROTECTION MEASURES

- The following protection measures must be implemented for retained trees, both on site and on adjacent sites, prior to any tree removal or site works and maintained for the duration of construction on site:
- Under the guidance of an arborist, erect a fence at the critical root zone (CRZ) of trees where the CRZ is established as being 10 centimetres from the trunk of a tree for every centimeter of trunk diameter at breast height. The CRZ is calculated as DBH × 10cm.
- Do not place any material or equipment within the CRZ of the tree.
- Do not attach any signs, notices or posters to any tree.
- Do not raise or lower the existing grade within the CRZ without approval.
- Tunnel or bore when digging within the CRZ of a tree.
- Do not damage the root system, trunk, or branches of any tree.

OUTDOOR RINK GUIDELINES

Water Sources:

- All new parks intended to have an outdoor rink must have a winterized water source and water meter located as close as
 possible to rink surface.
- The water source should be located as close as possible to the flat area of the park.
- Water sources should be fitted with a 1.5 inch "quick connect" male coupling, facing in the direction of the rink (to avoid kinking the hose around corners).

Bunkers and Fieldhouses:

- New parks with boarded rinks should be equipped with a minimum of a winterized bunker for storage of hose and snow blower, located as close as possible to the rink surface.
- If supervision is deemed required, the bunker should be upgraded to a field house.

Rink Lights:

- All boarded rinks should be equipped with adequate rink lighting. The lighting system should be designed and the
 equipment specified by a professional electrical engineer. Where the budget only allows either lights or boards in any
 given operational year, the lights must come first, followed by boards in future years.
- All lights should be on timers and have "push buttons" located in a public place (in a locked enclosure) close to the rink (in order to keep lights off in mild weather or when building up the rink at the start of the season).
- · Rink lights should be permanent, if possible, in order to save on annual installation and removal costs.
- New puddle rinks should have at least 1 light.

Rink Boards:

- Boarded rinks should have safety mesh installed above the boards of the short ends where required (close to parking lots, school yards, pathways, etc.).
- Rink boards should be permanent if possible to save on annual installation and removal costs.
- If temporary boards are used, the City should be responsible for their installation and removal.

Park Amenities:

• All new parks with boarded rinks should be equipped with permanent park benches near rinks.

Rink Location within Park:

- The area intended for the ice surface should not have a drain or be located on a slope. Flat areas are required to build rinks (or as flat as possible).
- Skating surfaces should be designed close to roads to facilitate maintenance (snow plowing) of emergency access routes.

Rink Location within Neighbourhood:

- Minimum 1.2 km radius between boarded rinks (refer to ACS2002-PEO-COM-0014 "Outdoor Rink Operational Model").
- Minimum 0.6 km radius between "double surfaces" (2 un-boarded rinks side by side) (refer to ACS2002-PEO-COM-0014
 "Outdoor Rink Operational Model").
- New rinks and enhancements should be prioritized in wards/areas with the lowest access per capita to outdoor rinks, taking into consideration the physical layout of communities, such as major arteries that need to be crossed or high-density residential areas (high-rise buildings).

SPORTS FIELD STANDARDS

- A north-south orientation along the long axis is preferred. Factors such as space constraints, grading, and prevailing winds
 may also affect field orientation somewhat.
- Sports fields should be set back at least 20 metres from any property lines or adjacent facilities, and at least 10 metres from any plantings.
- Drainage cross-slopes should not exceed 2%.
- Refer to the most recent City of Ottawa Standard Details for sportsfield layouts and dimensions.

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SKATEBOARD PARK GUIDELINES

Source: Timesaver Standards for Landscape Architecture: Design and Construction Data (Second Edition), and Public Skatepark Development Guide (publicskateparkguide.org)

Skateboard park designs vary in size, materials and style. While the traditional notion of skateparks includes concrete bowls and landforms, and is vast in size, many modern skateparks and skate facilities are constructed smaller to provide more informal skating opportunities in smaller facilities. The following skate typologies are identified in the Public Skatepark Development Guide website:

Skate spot:

Size: 140 to 450 m2

Capacity: 4-6 users (simultaneously)

Context: Urban and Suburban parkettes, Neighbourhood Parks

Neighbourhood Skatepark:

Size: 740 to 1100 m2

Capacity: up to 60 users (simultaneously)

Context: Neighbourhood and Community Parks

Regional Skatepark:

Size: minimum 1850 m2

Capacity: up to 100 users (simultaneously)
Context: Community and District Parks

In Skatepark design, consideration should be given to the local context in terms of materials and aesthetics. The design should be distinct and attractive, and should include nearby seating as well as a provision for shade. Professional skatepark designers should be consulted particularly for larger skateparks.

Attempts should be made to accommodate both 'street terrain' and 'transition terrain' styles of skating, with less emphasis on prefabricated elements if budget allows.

Skateboard park features may include:

- Freestyle areas of approximately 24m × 12m, with walls that are slightly banked.
- Slalom runs of approximately 30m in length, dropping to 3 to 4.5m, with walls that are slightly banked.
- Snake runs that consist of a curved channel with walls ranging from 2.4 × 3.5m in height.
- Bowls and pools ranging from 2.1 to 3.5m in depth, with a slight overhanging lip around the edge.
- Half pipes with no flat areas that vary in length, with an approximate diametre of 6.7m and some wall rise beyond vertical.
- Full pipes with no flat areas.

For more information, refer to the publicskateparkguide.org design recommendations.

5.2 GLOSSARY OF TERMS

ACTIVE PARK: An active park is a park containing any features or facilities that encourage use by the public. These parks may include active facilities such as pathways, play structures, water play and sports fields, among others.

AMENITIES: Refers to the facilities within a park, such as pathways, play equipment, splash pads, sportsfields, ball courts, tennis courts, rinks, shade structures, site furniture, etc.

APPLICANT: An applicant is an individual or organization that files a development application with the City.

CANOPY TARGET: Canopy cover is defined as the area of ground covered by the extension of tree foliage. According to the Official Plan, the City will maintain a canopy target for the entire city of 30 per cent. Consistent with this overall objective, a target of 30 per cent is also considered desirable for City parks.

COMMUNITY DESIGN PLAN: The Community Design Plan, or CDP, is a document that guides both the development of private lands and any undertakings of public works (both the City and other government agencies) within a study area. The CDP establishes the vision for a community and a means to implement that vision in ways that will satisfy both community aspirations and the relevant strategic growth management policies of the City's Official Plan.

COMMUNITY PARK: Community Parks service a specific community or group of neighbourhoods, and provide a range of recreational opportunities. They are well connected to the larger community. Community Parks may range in size and types of facilities offered, and serve as a focal point within the community. Active and passive recreational opportunities are provided.

CONCEPT PLAN: The concept plan accurately reflects what can be given on a given site using the established park budget.

CONSERVATION AUTHORITIES: According to Conservation Ontario, Conservation Authorities are "local watershed management agencies that deliver services and programs that protect and manage water and other natural resources in partnership with government, landowners and other organizations." Organized on a watershed basis, Conservation Authorities promote an integrated watershed approach balancing human, environmental and economic needs. Conservation Authorities with jurisdiction in Ottawa include Mississippi Valley Conservation, the Rideau Valley Conservation Authority and South Nation Conservation.

CONTRACT DOCUMENTS: Refers to the documents that are included in a contract. The contract documents comprise: the owner – contractor agreement, conditions of the contract, plans/drawings, specifications, addenda and modifications.

CRITICAL ROOT ZONE: The critical root zone, also called the 'tree protection zone', is usually defined as the area on the ground that corresponds to the dripline of the tree. The critical root zone is established as being 10 centimetres from the trunk of a tree for every centimetre of trunk diameter at breast height. The CRZ is calculated as Diameter at Breast Height × 10 cm.

DEVELOPER: The owner of the subdivision land and agents or contractors or subcontractors carrying the works on behalf of the owner or owners responsible for submitting the subdivision application.

DISTRICT PARK: District Parks are destination parks that service groups of communities, specific districts, and can be used for City wide functions. They are designed as major destinations for residents and visitors, and may have a tourism focus. The size and location of each park may vary, as determined by the park's particular focus and facilities. District Parks may have a competitive focus, and similar facilities may be combined for tournament capabilities.

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DRAFT PLAN OF SUBDIVISION CONDITIONS: Conditions which form the foundation of the Subdivision Agreement and reflect a municipality's requirements as related to the draft plan of subdivision. The Developer must agree to the draft plan conditions in order for the draft plan of subdivision to be granted approval.

FACILITY FIT PLAN: The Facility Fit Plan demonstrates that the proposed park facility program, including buffers and setbacks, can be satisfactorily achieved within the site and allocated park budget. The facility fit plan is prepared when required as a subdivision condition.

FISHERIES AND OCEANS CANADA (DFO): The Department of Fisheries and Oceans deliver programs and services that support sustainable use and development of Canada's waterways and aquatic resources. Local Conservation Authorities act as agents for DFO with regard to the administration of the Fisheries Act.

FORESTER - NATURAL SYSTEMS UNIT (PIED): Forestry Staff responsible for reviewing Tree Conservation Reports, etc.

FORESTER — **FORESTRY MANAGEMENT BRANCH (PWES):** Forestry Staff responsible for the inspection of planting within parks and other public lands.

INFRASTRUCTURE SERVICES (IS) DEPARTMENT - DESIGN AND CONSTRUCTION UNIT: City staff responsible for detail design approval and project management.

MINISTRY OF NATURAL RESOURCES (MNR): The Ministry of Natural Resources promotes healthy, sustainable ecosystems and conserves biodiversity (the variety of life on Earth). The Ministry also manages Ontario's Crown land, promotes economic opportunities in the resource sector and enhances opportunities for outdoor recreation. The MNR administers the Endangered Species Act.

MINISTRY OF TRANSPORTATION (MTO): The Ministry of Transportation is a provincial department with the mandate to create a balanced and effective transportation system that supports strong communities that offer a high quality of life.

MULTI-USE PATH: A pathway system described in the Greenspace Master Plan. Multi-Use Paths are designed to accommodate the needs of pedestrians, cyclists, in-line skaters, cross-country skiers, strollers, wheelchairs, etc., allowing for a wide range of uses and large volume of users.

NATIONAL CAPITAL COMMISSION (NCC): The NCC is a Crown corporation that was created by Parliament in 1959 as the steward of federal lands and buildings in the National Capital Region, with a mandate and mission to build the Capital region into a source of pride and unity for Canadians.

NATIVE SPECIES: Species that are indigenous to the Ottawa area, and are therefore adapted to the local climate and soil conditions. They typically require less maintenance and resources (such as water) than other plants and provide habitat and a source of food for the animal and insect populations with which they have evolved.

NATURAL SYSTEMS: Work unit within the Planning, Infrastructure and Economic Development Department (PIED) responsible for the preservation of the City's natural features and ecological functions through environmental studies, policy development and advice to other city staff.

NATURALIZATION: The process of allowing vegetation to become established through a combination of natural regeneration and deliberate plantings of native species to emulate a natural area.

NATURALIZATION TARGET: The naturalization target refers to the percentage of a park's area that should be subject to naturalization. Naturalization targets are higher for the larger park classifications, as their larger areas generally present more opportunities for to provide vegetation cover.

NATURE TRAIL: Nature Trails are paths that serve various forms of non-vehicular movement and connect to points of interest. They are low-impact paths located in sensitive environmental areas such as forests, and adjacent to wetlands or watercourses. Nature trails are designed to address the more passive recreation needs of pedestrians, and cross-country skiers, among other users.

NEIGHBOURHOOD PARK: Neighbourhood Parks serve as the focal point of a neighbourhood, provide active and passive recreation opportunities, and offer a local gathering space within walking distance of local residents.

PARK BUDGET: The total sum of money allocated to be spent on a park over a set period of time.

PARK TREE PRESERVATION PLAN: Plan illustrating all existing vegetation to be protected and any existing vegetation to be removed as part of a site development. Refer to Section 4.2, Drawing Descriptions, Park Tree Preservation Plan.

PARKETTE: Parkettes are small parks that are located within walking distance of residents. They provide central green space and social gathering places within neighbourhoods, and offer predominantly passive recreation and minor active recreation opportunities within a local residential or mixed-use neighbourhood. Parkettes can improve connectivity within neighbourhoods, provide interesting focal points, enhance built form and contribute to community character, providing a place for residents to interact, children to play and social events to occur.

PARKS & FACILITIES PLANNING SERVICES: City of Ottawa department within Recreation, Cultural & Facility Services that is responsible for the planning and development of recreational and cultural programs within the City of Ottawa

PARKS, FORESTRY & STORMWATER SERVICES: Branch of Public Works and Environmental Services Department responsible for the management of parks, trees and forests on city-owned property in the City of Ottawa

PLAN OF SUBDIVISION: The plan of subdivision clearly outlines all details that are required to develop a parcel of land into a subdivision with individual properties. These lots or blocks can be used for residential, industrial, commercial, institutional (e.g. school) or open space/parks depending on the designation of the land within the Official Plan and Zoning By-law. A registered plan of subdivision is required in order for the lots and blocks to be sold or conveyed separately. Once the subdivision plan is registered, it becomes a legal document that outlines all the details and conditions required to develop a parcel of land.

PIED: PLANNING, INFRASTRUCTURE AND ECONOMIC DEVELOPMENT DEPARTMENT

PRE-APPLICATION CONSULTATION: A two-step pre-application process to help promote the exchange of information and development considerations early in the planning process. A key outcome of this process is a customized list of the studies and plans required in support of a development application. Topics for discussion may include land use policies and guidelines, zoning information, public consultation, engineering requirements, development review, application fees, etc.

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PROJECT CHARTER: A mandatory document that recognizes the existence of a project. It is a statement of the scope, objectives, resources, governance, deliverables and timelines. It provides a definition of responsibilities, outlines the project outcomes, identifies key stakeholders, and states the authority of the project manager. The project charter includes fundamental information used as a reference of authority for the future of the project, including: scoping documentation, a responsibility matrix, a stakeholder matrix, governance, escalation and reporting chart, key milestones and deliverables chart, project schedule, and delegation of authority and approval criteria.

PWES: PUBLIC WORKS AND ENVIRONMENTAL SERVICES DEPARTMENT

RECREATIONAL PATH: Recreational Paths are primarily intended for recreational purposes and provide opportunities for safe, off-street movement throughout the City of Ottawa. They are designed to accommodate the needs of a wide range of users and provide links to the City's wider pathway system as well as the on-street sidewalk system. Recreational Paths address the needs of walkers, joggers, hikers, cyclists, strollers and wheelchairs.

RCFS: RECREATION, CULTURAL AND FACILITY SERVICES DEPARTMENT

SECONDARY PLAN: A secondary plan is a plan for a detailed geographic area that covers the policies that will guide future development. Secondary plans form the basis for amendments to an official plan.

SERVICE AREA RADIUS: The service area radius refers to the general area (expressed as a distance or walking time) from which a park draws the majority of its users.

SITE PLAN: A graphical plan of a proposed development illustrating all the features of the development, including dwellings, commercial establishments, roads and other public infrastructure. The site plan usually accompanies all major development applications.

STORMWATER MANAGEMENT FACILITY: Refers to any structural stormwater management measure, including stormwater management basins, filtration or other treatment systems.

SUBDIVISION AGREEMENT: A legally binding contract that sets out all of the subdivision requirements for the various stages of the proposed draft plan of subdivision. It outlines all documents, conditions and monetary contributions to be paid by an owner for the implementation of the works to be carried out by the Developer.

TENDER DOCUMENTS: Tender documents are prepared in addition to the contract documents in order to manage the bidding process for a project's construction.

TREE CONSERVATION REPORT: A report written to ensure that trees will be retained in development scenarios, where feasible, and that new trees will be planted to contribute to the City's forest cover target and to address a site's tree loss. According to the Official Plan, a Tree Conservation Report (TCR) is required in support of all applications for subdivision and condominiums affecting vegetation cover on site, or site plan approval.

WARRANTY: A legal document that quarantees the quality of work performed or the duration of a product.

WORKING DRAWINGS: Working drawings contain the information necessary to construct a landscape, structure or object. They are intended for use by a contractor, subcontractor or fabricator, and form part of the contract documents.

5.2 Glossary of Terms

5.3 CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

APPLICABILITY AND BACKGROUND

The acronym CPTED denotes Crime Prevention through Environmental Design. An emerging theory in the 1970s, CPTED evolved into a foundational design model that maintains appropriate design and effective use of a built environment can reduce the fear and incidence of crime and improve quality of life.

The efficacy of CPTED can be measured by its global recognition. Within the City of Ottawa, the application CPTED principles for the design of parks is considered desirable.

DESIGN STRATEGIES

Three interrelated design strategies are characteristic of CPTED. These strategies aim to exploit 'natural' forms of surveillance and access control associated with routine use and enjoyment of a property.

Natural Surveillance is a design strategy with the objective of keeping intruders under observation. Spaces must be designed to facilitate this by increasing 'visual permeability.' Personal safety is privileged and limited sightlines and privacy are managed carefully. 'Vulnerable activities' such as child's play, are positioned in well-monitored spaces. Potential for 'eyes on the street' is cultivated by aligning activity generators, such as windows, towards areas of 'vulnerable activities.' Finally, each phase of a project must improve and balance the natural surveillance opportunities established in the design phase. The considered use and placement of street frontage, landscape, lighting and benches are essential examples.

Natural Access Control is a design strategy aimed at minimizing the opportunity for crime by denying access to potential targets and generating a perception of risk in potential offenders. The design must guide and influence movement by giving users a sense of direction as well as a natural indication as to where they are and are not permitted. This is accomplished by directing normal access to observable spaces, preventing entry to spaces not visually accessible and of course, developing potential for 'eyes on the street.' Access routes are limited but allow for some flexibility in circulation. Natural Access Control opportunities must also improve and balance natural surveillance targets. The calculated use of distance and topographical features to direct and/or buffer activities are important examples of how this can be achieved.

Territorial Reinforcement is a design strategy that effectually motivates users of a property to develop a sense of proprietorship over it. A feeling of ownership is strengthened by underscoring existing natural surveillance and natural access control strategies with symbolic or psychological barriers. This is enacted by delineating public, semi-public and private space, usually achieved with signage and bollards, resulting in a protective response from users in the event of an intrusion. Another tactic involves minimizing the creation of ambiguous space by developing 'leftover spaces,' stimulating a feeling of responsibility for them from users. Spaces should be designed for their intended purpose and ongoing use, be resilient and minimize maintenance. The foundational concept guiding this strategy imparts that design should provide behavioural and environmental cues that only particular behaviours will be tolerated.

5.4 ACCESSIBILITY IN PARKS

Under the Accessibility for Ontarians with Disabilities Act, 2005 (AODA), guidelines were developed for the design of public spaces to ensure a minimum degree of access for users. The City of Ottawa also maintains and disseminates their own Accessibility Design Standards, which provide more information on accessible features for a variety of public environments. All new construction in City of Ottawa Parks is required to meet the minimum accessibility requirements outlined in these documents, unless specific exemptions are granted.

ACCESSIBLE PATHWAYS IN PARKS

Recreational Paths as identified in this manual have a more specific meaning than the 'Recreational Trails' identified in the Accessibility Design Standards from the City of Ottawa, however they too are required to conform to those guidelines and standards.

Nature trails as identified in this manual are not necessarily the same as the 'wilderness trails', 'backcountry trails' or 'portage routes' described in the Accessibility Design Standards from the City of Ottawa and may still be required to conform to the guidelines.

Exceptions to the guidelines as defined in the standards, such as for Wilderness Trails or Backcountry Trails will generally not apply to park developments in the City of Ottawa.

Refer to the full document of the Accessibility for Ontarians with Disabilities Act, 2005 and to the City of Ottawa Accessibility Design Standards for detailed requirements.

5.5 PARK AMENITIES FOR OLDER ADULTS

It is anticipated that Older Adults will continue to be a growing demographic in the years to come. Providing additional opportunities for this segment of the population for outdoor recreation in public space will increasingly be a priority for designers and builders of parks.

The following goals are among those identified as target actions in the Older Adult Action Plan, 2015-2018 prepared by the City of Ottawa, for accommodating the needs of older adults in public parks:

- Install additional benches on existing sidewalks and pathways, using a defined strategy;
- Develop and install exercise signs (using existing park amenities) in selected city parks;
- Install age-friendly/accessibility features in existing City facilities highly frequented by older adults.

While these targets may be met in a variety of ways, and should reflect the needs of the populations being served in the park service areas, some guidelines and strategies follow which can aid in the delivery of appropriate amenities for Older Adults.

Walking circuit and Exercise Signs

Walking is frequently identified as an ideal and preferred means of exercise for Older Adults, and the installation of Exercise Signs has been identified in the City of Ottawa's 'Older Adult Action Plan, 2015-2018' as a target action item. Daily walks have been shown to improve cardiovascular health, reduce the severity of chronic illnesses, delay the onset of dementia and have positive impact on mood, amongst other benefits.

800 metres of paved pathway will provide for a 10 minute 'walking circuit' in a park. Ideally, configuring pathways in loops allows for 'laps' that can be walked, and return the user to their point of entry. The inclusion of Exercise signs at intervals, allows for greater variety of activities for a variety of mobility and fitness levels.

Barriers to engaging in walking for fitness for seniors include lack of safe and attractive spaces, as well as a lack of places to sit down. Install 'rest areas', including additional seating at the tops of slopes, at areas with attractive or interesting views and at the intersections of pathways is also recommended.

AGE-FRIENDLY GREENSPACE

While grass can be problematic for many wheelchair users, there are many Older Adults who are users of other types of mobility aids, such as walkers, braces and canes, who might find the prospect of enjoying an open lawn inviting. In a study done on the preferences of mobility-aid users, a significant number found that while paved slopes in excess of 1:14 (7%) were navigable, they were uninviting, and participants said they would be likely to avoid them. As such, for grassy open space intended for informal recreational use by Older Adults, it is recommended that a maximum slope of 7% be maintained where possible.

Tai Chi

Tai Chi is an increasingly popular activity for Older Adults and has been shown to aid in fall prevention conditioning. It builds strength and balance, promotes mindfulness and reduces stress. The only equipment required for many types of practice is a level grade and sufficient space. While there is no specific dimension of space required for each person in a Tai Chi group or classify a designer wishes to accommodate this activity in a park, an area of no less than 15x10 metres of stable surface should be provided. Paved areas should be graded to promote positive drainage, at grades between 1 and 2%.

PICKLEBALL

Many Older Adults who enjoy racquet sports prefer the lower-impact of pickleball over tennis or squash. Pickleball is easily accommodated in an outdoor environment, and the City standard detail for surfaces for tennis courts would work well for this purpose. Courts should be considered for permanent installations in parks.

5.6 PARKS AND PUBLIC HEALTH

Access to parks and outdoor public recreation facilities is considered a primary positive factor in the measure of healthy living in the city of Ottawa.

However, it is also important to understand and mitigate the risks and hazards presented by parks and public recreation facilities. Many of these can be prevented at the design stage.

TICK AND MOSQUITO-BORNE ILLNESSES

Preventing the collection of standing water in parks is the most effective measure to prevent the breeding of mosquitos in public parks.

Since mosquitoes can breed in as little as 250mL of water, when selecting furniture or site amenities for Parks, ensure that there are no forms that will collect water. Fence posts should be firmly capped if hollow. All soft surfaces should be sloped to allow for positive drainage.

With the 'naturalization' target requirement for Ottawa Parks, areas with long grass, shrubs and other natural vegetation will increase. This type of landscape is the preferred habitat for ticks, which are known to carry Lyme disease in the Ottawa Area. Care should be taken to maintain a 3m mown-grass buffer between 'naturalized' areas and adjacent site amenities and property lines. If there are indications that ticks are a particular problem in certain areas, further caution, such as signage and more extensive buffering should be considered.

RECREATION AND INJURY

Certain recreational activities may result in injury. While the physical benefits of exercise and outdoor play far outweigh the burden of injury, there must be consideration given to the additional risks assumed with certain activities.

The following activities are responsible for the majority of recreation-related injuries for children in Ottawa:

- Cycling (falls and being struck by vehicles);
- Hockey;
- · Ice skating;
- Skiing and snowboarding;
- Use of playground equipment (falls).

The following recommendations should be considered in the design and construction of parks to help mitigate risk of injury:

- Construct amenities to the standards identified in the City of Ottawa Standard Detail drawings and specifications;
- All playground area surfaces and sub-bases must be constructed to the depths and areas required in accordance with the
 appropriate impact surfaces for their fall-heights and fall-zones;
- Create turns or rumble strips in cycling pathways where they intersect with sidewalks and roadways, to slow users when
 merging into traffic;

 Locate boarded and puddle rinks in locations where emergency vehicles can see and access, easily in case of emergencies.

While tobogganing is viewed as a risky activity, there were fewer injuries associated with this in Ottawa than with the other activities mentioned above. Most injuries incurred when tobogganing were caused by colliding with another person or an object, therefore the following are recommended:

- Where steep slopes occur, where users may be tempted to ski, snowboard or toboggan, avoid placing trees, pathways and obstacles with which collisions may occur;
- Alternatively, install sufficient trees and shrubs to naturalize the slope and make it unsuitable for these activities;
- Do not orient slopes towards roadways.

Ensuring positive drainage on all pathways with adequate cross slopes to prevent the build-up of ice is also critical. Pathways should also have limited slopes (less than 5%) on adjacent 1 metre verges to reduce injuries for those who stray off-path.

5.7 Manual Development Team

The first edition of the Park and Pathway Development Manual approved in 2012 was developed by the Planning and Growth Management Department and NAK Design Strategies with input from the following internal City departments and external agencies:

- Planning and Growth Management Department (City of Ottawa)
- Infrastructure Services Department (City of Ottawa)
- Parks, Recreation and Cultural Services Department (City of Ottawa)
- Public Works Department (City of Ottawa)
- Greater Ottawa Home Builders Association
- Landscape Architecture Ottawa
- Rideau Valley Conservation Authority (RVCA)
- South Nation Conservation (SNC)
- Mississippi Valley Conservation (MVC)

This second edition of the Park Development Manual included input from staff in the Recreation, Cultural and Facility Services Department; Planning, Infrastructure and Economic Development Department; Public Works and Environmental Services Department and consultation with the Greater Ottawa Home Builders' Association.