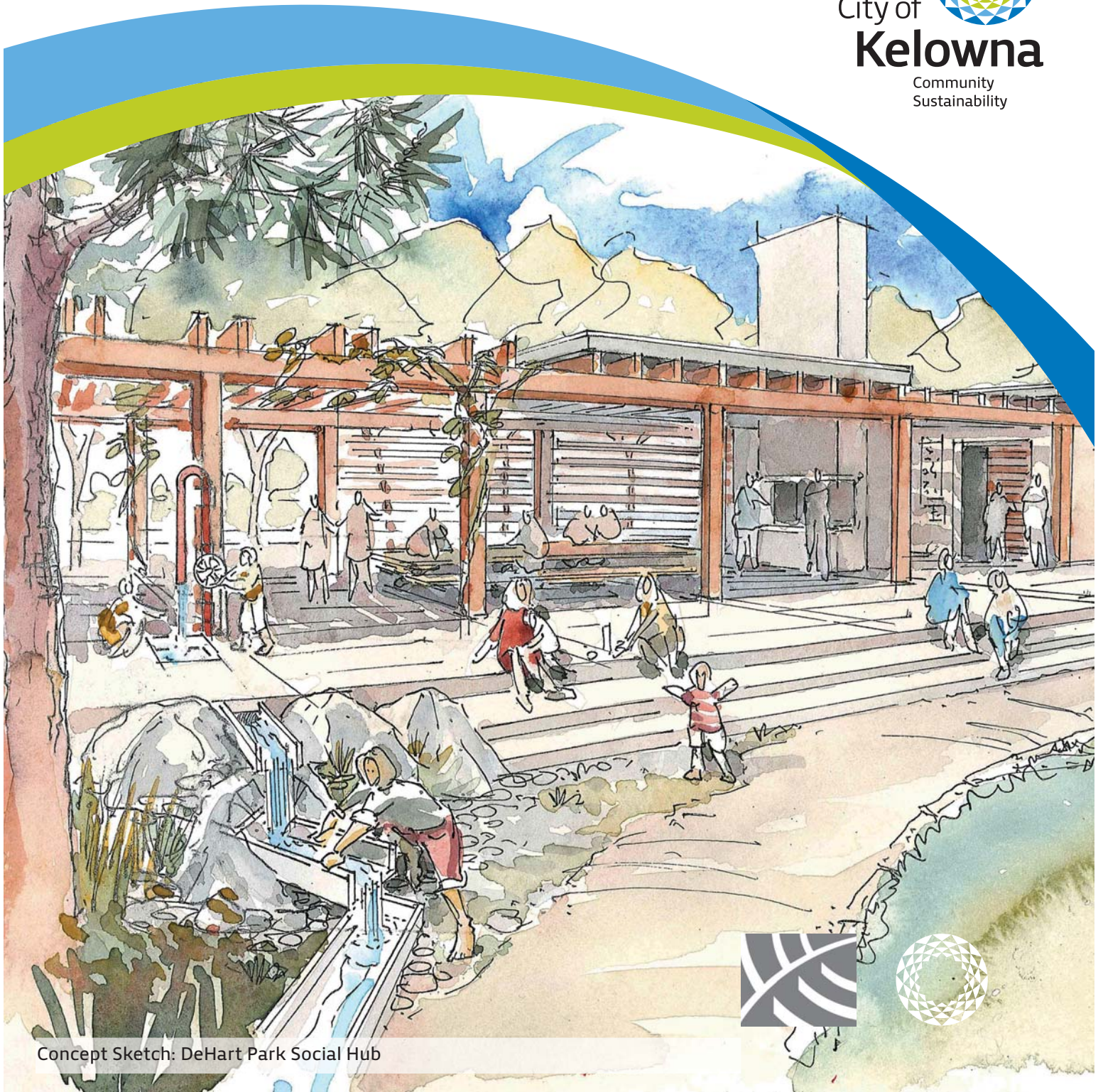


# DeHart Community Park Concept Plan

Design Report

October 5, 2010



Concept Sketch: DeHart Park Social Hub

# DeHart Community Park Concept Plan

Design Report

October 5, 2010



**Prepared for:**  
City of Kelowna  
Infrastructure Planning  
1435 Water Street  
Kelowna BC

**Prepared by:**  
Phillips Farevaag Smallerberg  
2327 Yew Street  
Vancouver BC



**In collaboration with:**  
InterCAD Engineers  
Canadian Institute for the Blind  
BTY Group



Mr. Terry Barton  
Project Manager  
City of Kelowna  
1435 Water Street  
Kelowna, BC V1Y 1J4

October 5, 2010

Dear Terry,

Phillips Farevaag Smallenberg is pleased to submit the Design Report and Final Recommended Concept Plan for the future DeHart Community Park in Kelowna, BC.

The Design Report summarizes the five month process undertaken by the consultant team, City of Kelowna staff, and over 300 community members and stakeholders for developing the Final Recommended Concept for the 3.6ha community level park located in the heart of the North Mission Neighbourhood. We are confident that the design solution reflects the desires and needs of the surrounding community while also achieving a unique and special focal point that captures the special character of the North Mission Neighbourhood. The proposed program is diverse and yet flexible ensuring that all age groups and abilities can be served while also allowing for spontaneous gathering and socializing as well as larger organized community events. The report also outlines strategies and operational procedures that may be incorporated into the park to help the City of Kelowna achieve their goals for a carbon neutral and sustainable site.

PFS believes that the success of the Final Recommended Concept is due in large part to the commitment shown by community members and stakeholder groups throughout the process. We believe that the design is the result of community involvement, a collaborative process, and a solution that reflects and enhances a sense of place. The public consultation process allowed for continuous input and insight from the community ensuring a solution that is diverse, creative, flexible, sensitive, and inclusive.

We respectfully submit the DeHart Community Park Concept Plan Design Report and Final Recommended Concept to the City of Kelowna Infrastructure Planning Department and ultimately to the City Council. We appreciate the opportunity to contribute to the City of Kelowna's park system and understand the importance of such facilities for enhancing a community and for contributing to a high quality of life.

Yours truly,  
PHILLIPS FAREVAAG SMALLENBERG



Christopher Phillips, FCSLA, BCSLA, ASLA  
Partner

**EXECUTIVE SUMMARY****I. INTRODUCTION 01**

Planning Objectives	02
Site Analysis Summary	02

**II. PUBLIC CONSULTATION PROCESS 07**

Public Consultation Process: Summary	07
Public Consultation Process: Key Findings	08

**III. FINAL RECOMMENDED CONCEPT 11**

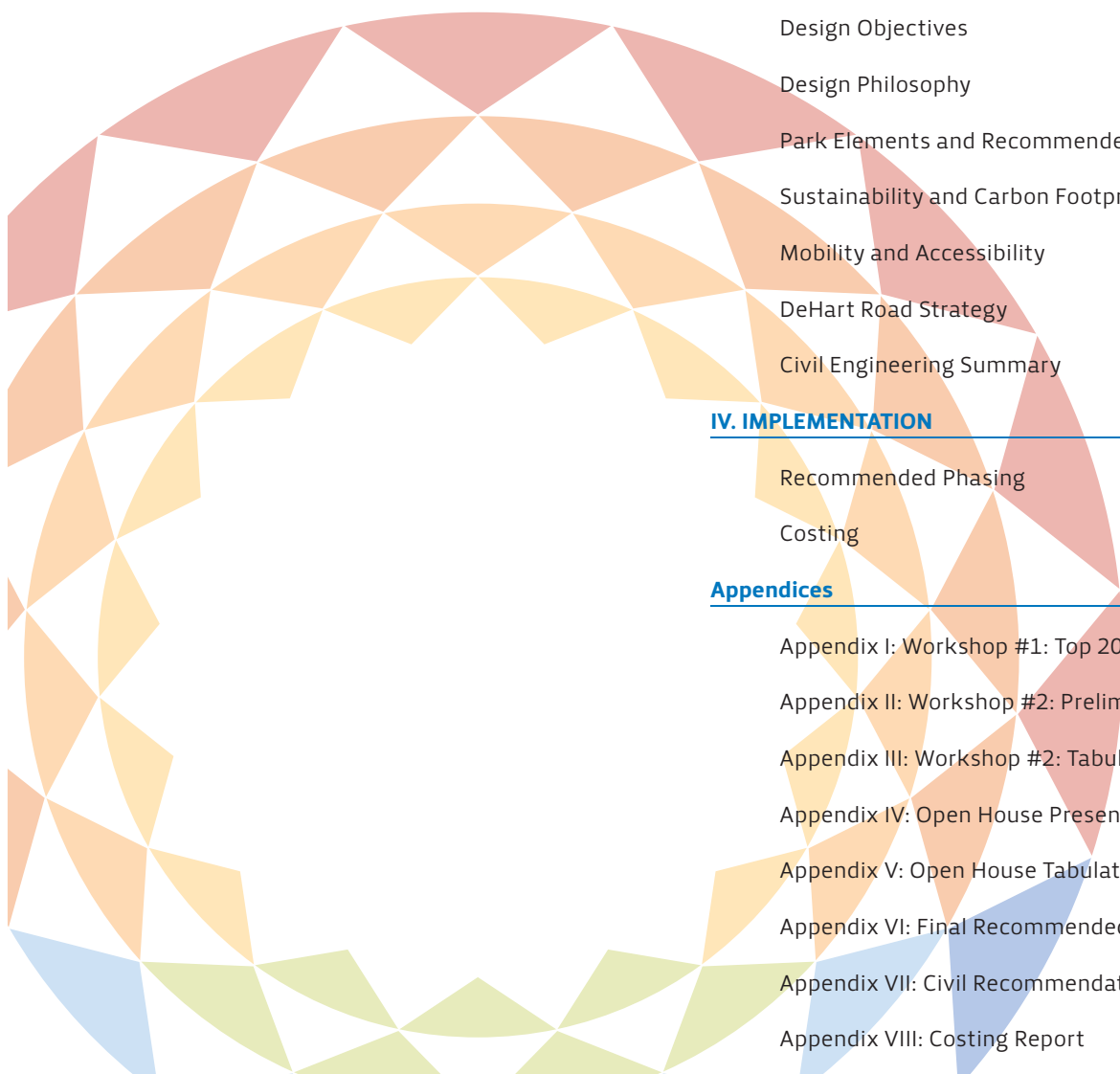
Vision Statement	11
Design Objectives	11
Design Philosophy	12
Park Elements and Recommended Treatments	12
Sustainability and Carbon Footprint	24
Mobility and Accessibility	26
DeHart Road Strategy	27
Civil Engineering Summary	27

**IV. IMPLEMENTATION 29**

Recommended Phasing	29
Costing	29

**Appendices**

Appendix I: Workshop #1: Top 20 Summary
Appendix II: Workshop #2: Preliminary Concepts
Appendix III: Workshop #2: Tabulation
Appendix IV: Open House Presentation
Appendix V: Open House Tabulation
Appendix VI: Final Recommended Concept
Appendix VII: Civil Recommendations
Appendix VIII: Costing Report



## EXECUTIVE SUMMARY

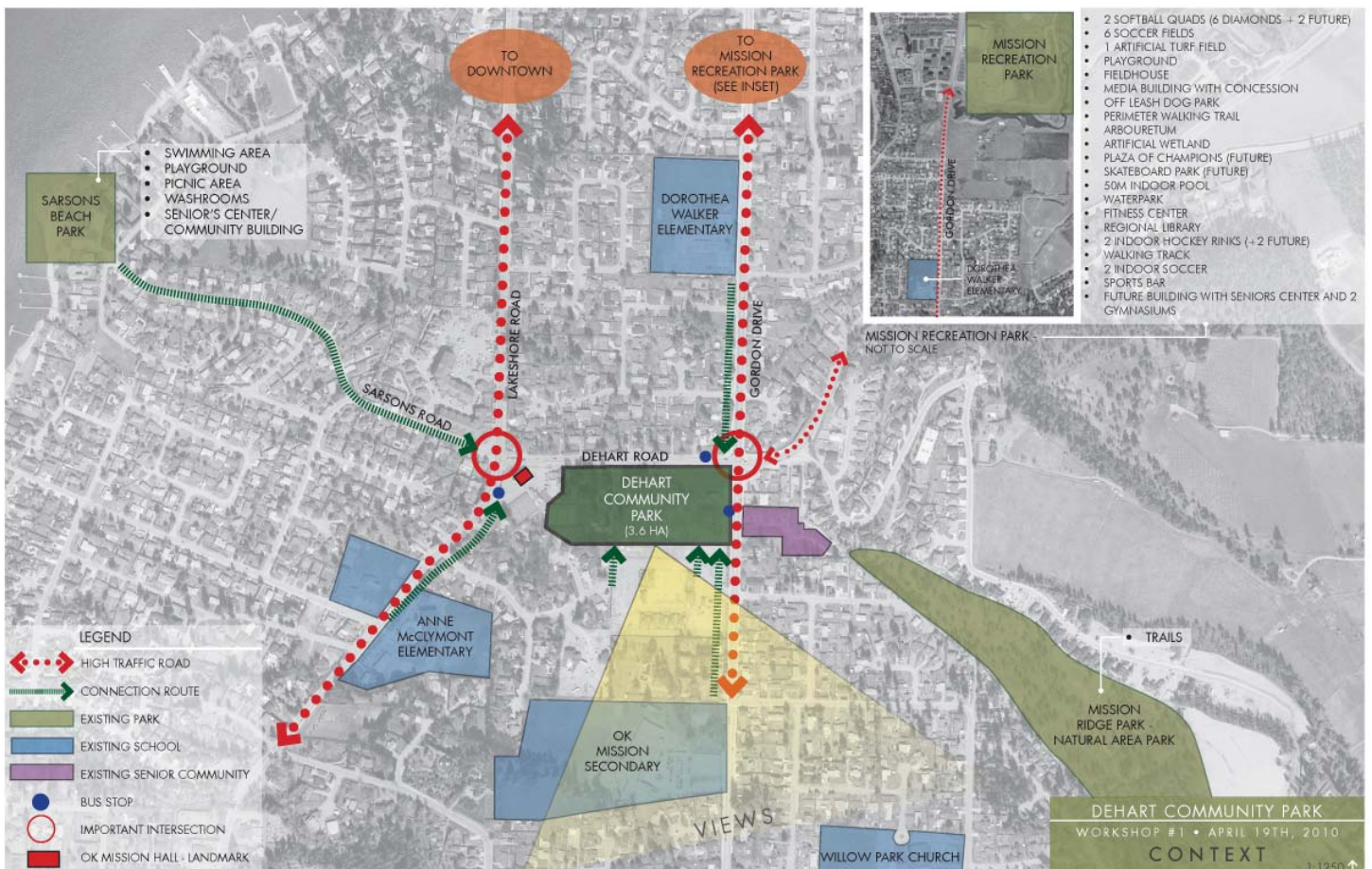
The DeHart Community Park Concept Plan is the result of a five month consultant lead public consultation process for the visualizing and designing of a future community park. Located in the heart of the North Mission neighbourhood, the park is conceived as an inclusive and place sensitive destination that will enrich the community through site appropriate design and a variety of amenities and programs.

Over 300 community members participated at various levels throughout the process sharing ideas, desires and concerns. The DeHart Community Park Concept Plan thoughtfully considers community input and concerns as well as the site's natural characteristics and the recreational needs of the community at large. The plan reflects the community's desire for a predominantly passive recreation site as well as the City of Kelowna's commitment to incorporating strategies that will help achieve a sustainable and carbon neutral development. The result is a comprehensive concept plan that supports a variety of amenities and activities for all ages and user groups and creates a vibrant focal point for the North Mission neighbourhood and surrounding community.

### Summary of Key Features

- Washrooms
- Picnic Shelter
- Shade Structures/Arbour
- Diverse Seating and Picnic Areas
- On-Site Parking
- Terrace
- Large Open Space/Meadow/Sportsfield
- Green Amphitheater
- Children's Play Area
- Youth Activity Area
- Multi-Use Court
- Gateway Features
- Trails
- Fitness Loop Equipment
- Novice Mountain Bike Course (Ages 8-12)
- Flexible Space
- Gardens (Heritage, Naturescape and Sensory)
- Tree Preservation
- Landscape and Habitat Enhancements
- Bocce Court
- Public Art
- Pedestrian Links from Neighbourhood
- Site Furnishings (i.e. Lighting, Trash/Recycling Receptacles)





Site Analysis Diagram: Context



# I. INTRODUCTION

## *Planning Objectives & Site Analysis Summary*

The City of Kelowna has assembled several parcels of land for a future park in the North Mission neighbourhood. Located between Lakeshore Drive and Gordon Road and adjacent to the Okanagan Mission Community Hall and Tennis Club, the future park is poised to serve as a central and meaningful community amenity in the heart of the North Mission neighbourhood. With Sarsons Beach Park to the west, Mission Ridge Park to the east and Mission Recreation Park and Mission Creek Greenway to the north, DeHart Community Park will complement and enhance the variety of park and recreational amenities available to residents in this area of the city.

DeHart Community Park is proposed as a Community Park. As defined by the City of Kelowna, “*Community Parks generally serve a neighbourhood park function for those in the immediate area, but also serve a population of approximately 12,000 people within a three kilometer radius.*” Given the community park definition of serving 12,000 residents within a 3 km radius, the nearest existing community level park is Quilchena Park (Kettle Valley Neighbourhood) to the southwest approximately 4.15 km away from the proposed site. South Kelowna Centennial Park is located to the east, approximately 4.78 km away and Lombardy Park to the north is 7.79 km away.

According to the City’s definition, Community Parks should generally fit the following criteria:

- Two hectares to six hectares in size dependent on the population they are serving
- Centrally located within the neighbourhoods they serve
- Have access to a major collector roadway with roadway on a minimum of two sides

Services and programming that can be found in community level parks may include:

- Playgrounds
- Multi-Recreational Courts (Tennis, Basketball, Hockey, Lacrosse)
- Sports Fields with Minimal Booking
- Washrooms
- Trails
- Park Security Lighting
- Passive Open Space
- Park Furniture
- Irrigated Turf, Trees and Shrubs
- On-Site Parking to Serve the Population the Amenities Attract
- A Gate which is Locked at Night



Looking East from Southwest Corner of Site

## Ia. Planning Objectives

The following Planning Objectives for the project were identified by the City of Kelowna:

- Provide a community level park in the North Mission neighbourhood where currently there is a deficiency of such services.
- Engage the public in participatory workshops to ensure a user driven design solution that reflects the needs and desires of the residents and positively impacts the surrounding neighbourhood.
- Provide improved pedestrian and cycling connections from the community into the park site.
- Capitalize and build upon the park's location adjacent to the existing Okanagan Mission Community Hall and Tennis Club site creating a significant community amenity in the heart of the North Mission neighbourhood.

## Ib. Site Analysis Summary

The proposed site for DeHart Community Park is bound by DeHart Road along the north edge and Gordon Drive along the east edge. A single family residential development is located adjacent to the south edge of the site while the west edge is adjacent to the Okanagan Mission Community Hall and Tennis Club. The site was originally divided into several parcels as is evident from the remaining buildings still found on the property. Several buildings have already been demolished and removed and the remaining buildings will follow suit as part of the development for the park. Historically a portion of the land had been farmed for over 100 years.

### Existing Conditions



*Existing Ponderosa Pines*

The site is predominantly flat with a cluster of existing, mature ponderosa pines and douglas fir trees in the northwest corner. A mixture of deciduous trees and shrubs are located throughout the northwest area of the site around the existing structures. Several mature lilac shrubs are also evident and are presumably a result of the past cultivation of this site.

Moving across the site from east to west, the existing grade gradually drops 5-6 meters. A noticeable drop in grade occurs along the south edge about halfway across the site where there exists a 2 meter cut in the land. Additionally, a 2 meter high embankment occurs along the south edge adjacent to the existing fence.

Several utility easements are located throughout the property including a storm sewer right of way running north/south through the center of the site, and a geothermal easement and a water meter house easement along the south edge. An easement for a high intensity gas transmission line is located adjacent to Gordon Drive.

Three existing tennis courts located in the western portion of the site will remain as part of the park but will continue to exist under a current lease agreement between the City of Kelowna and the Okanagan Mission Tennis Club.





Site Analysis Diagram: Existing Conditions

## Opportunities

A variety of open-ended design opportunities are available due to the site's natural topography, limited existing site features, and prominent location on DeHart Road and Gordon Drive. Opportunities include:

- **Site Topography:** The relatively flat site topography will allow for achievable accessible routes throughout while the design can take advantage of the existing cut in the land through earthwork gestures.
- **Existing Trees:** The existing tree zone offers a mature mixture of trees for immediate shaded park amenities such as small gathering areas, nature trails or native landscaping.
- **Street Frontage:** Being adjacent to two street fronts, DeHart Road and Gordon Drive, the site is highly visible and accessible from these edges.
- **Proximity to Okanagan Mission Community Hall:** The park's location adjacent to the Okanagan Mission Community Hall site positions the park to enhance this existing community focal point.
- **Community Connections:** Multiple potential connection points into the park from the surrounding community are evident.

## Constraints

Several constraints found on-site informed the design direction for the concept plan. Site constraints include:

- **Existing Utility Easements:** These include a storm sewer right-of-way, geothermal easement, water meter house easement, and a high-pressure underground gas transmission line. Any significant park features will be required to avoid the easements including proposed trees and structures. Some park paths may utilize or cross over the storm sewer right of way as illustrated in the Final Recommended Concept plan. (The requirements for the gas transmission line are stated below.)
- **Proximity to Residential Development:** The southern edge of the proposed park site is adjacent to single family residential development. Site elements and programming need to be considerate of and appropriate for this adjacent land use.
- **High Traffic Street Intersections:** As a neighborhood destination, it is anticipated that people will arrive to the park on-foot and on bikes. Intersections at DeHart Road and Lakeshore Road and DeHart Road and Gordon Drive are high traffic intersections requiring highly visible routes for pedestrians and cyclists to safely access the site.
- **Presence of Mature Trees:** Mature trees and tree clusters are generally found in the northwest area of the site. Proposed development should accommodate and be sensitive to the existing mature trees found on site to ensure their long-term health and survivability.

## Terasen High Pressure Underground Gas Transmission Line

The most restrictive easement is the Terasen high intensity gas line easement located along the eastern/ Gordon Drive property line. The requirements for locating any site elements within this easement are as follows:

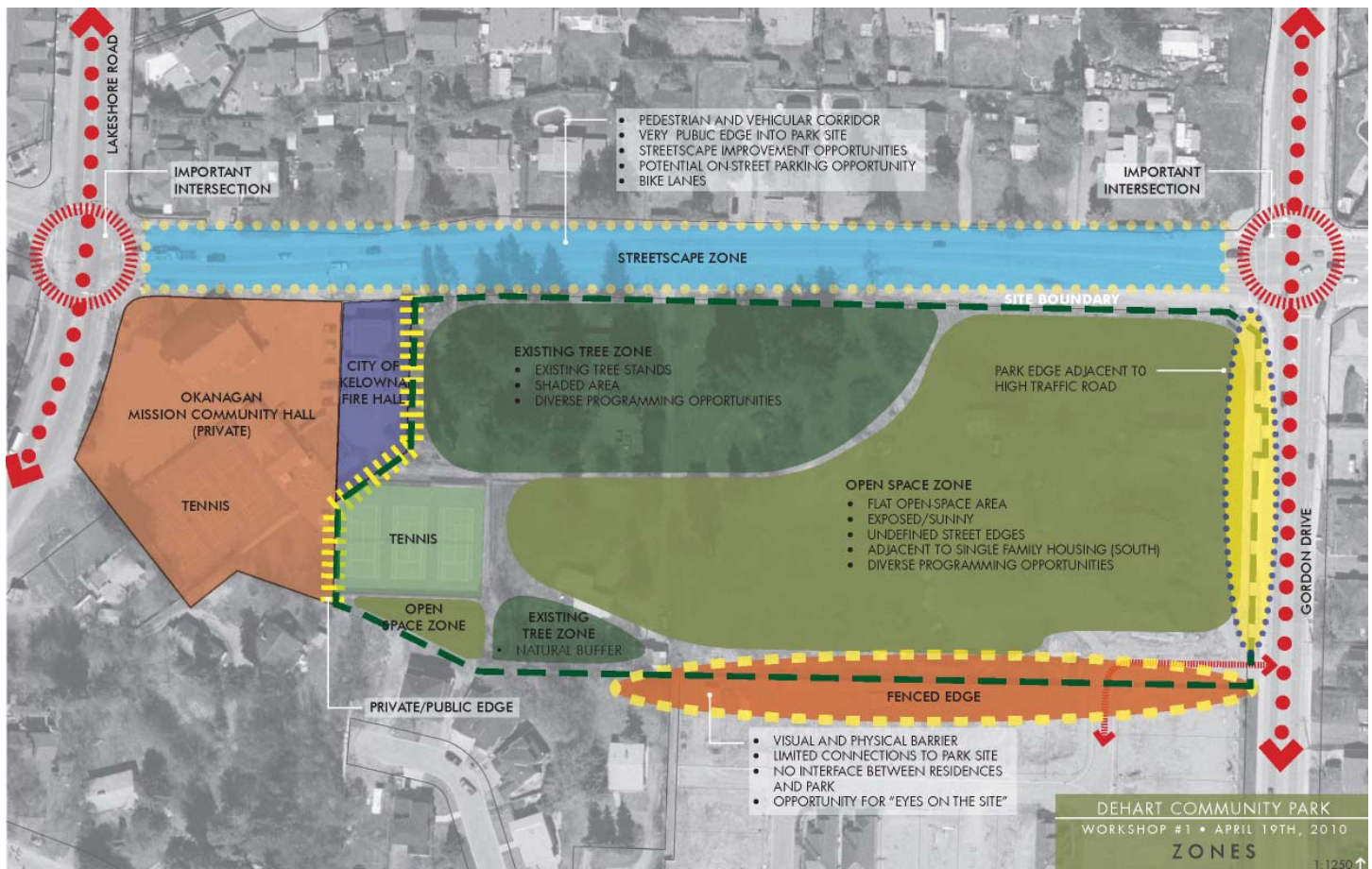
- Any ground disturbance will require a permit from Terasen.
- The transmission line is inspected every week or so by air, therefore siteline obstructions from the air should be avoided.

### Permissible Uses (all require a permit):

- Walking path constructed of a non-poured material (i.e, pavers, asphalt)
- Irrigation
- Plant material up to 6' high, including open playfield
- Fencing up to 6'high
- Berms to a max. of 2'
- Relocated gas line markers

### Non-permitted uses:

- Structures / buildings
- Trees greater than 6' high
- Heavy equipment / trucks, i.e., excavators etc.



Site Analysis Diagram: Zones



## II. PUBLIC CONSULTATION

### *Process Summary and Key Findings*

### Ila. Process Summary

The DeHart Community Park Concept Plan was informed by a series of publicly advertised meetings to ensure a user-driven design solution for the park. Being a significant public resource for the North Mission neighbourhood, input was solicited from a wide range of stakeholders and interest groups. The public consultation approach provided a key opportunity to facilitate important input, ideas and direction for the concept plan.

The following key stakeholders were invited to the public consultation meetings and workshops:

- Local residents of the North Mission neighbourhood and the City of Kelowna
- Okanagan Mission Community Residents Association (OMRA)
- Okanagan Mission Community Hall Association (OMCHA)
- Okanagan Mission Lions Club
- Okanagan Mission Tennis Club
- Okanagan Mission Senior's Centre

The general public consultation process included two participatory workshops where participants were invited to brainstorm, share, ask questions, generate ideas, and communicate concerns. Workshop #1 was structured around a workbook where each participant could identify and record what they wanted to have in the park and a group summary stating the top ten items that the group would like to have in the park. Workshop #2 was structured around two preliminary concept plans generated from the feedback received at Workshop #1. Participant groups were invited to comment on the two concept plans, identify a preferred option, and modify plans as they saw fit. Additionally, a public open house was held to solicit additional comments on the Recommended Concept. To ensure that a wide range of age groups and interests were heard from, a meeting with a local elementary school and a local high school were also conducted as part of the public consultation process. Public consultation meetings held during the DeHart Community Concept Plan process included:

- Initial Consultant Stakeholder Meeting (March 24, 2010)
- Meeting with City of Kelowna Fire Department (April 1, 2010)
- Meeting with Anne McClymont Elementary Students (April 19, 2010, 60 participants)
- Public Workshop #1 (April 19, 2010, 35 participants)



*Workshop #1 Group Work Session*



*Workshop #2 Group Feedback Session*



*On Site Open House Under the Tent*

- Meeting with Okanagan Mission High School Students (May 5, 2010, 16 participants)
- Public Workshop #2 (May 17, 2010, 44 participants)
- Public Open House (June 9, 2010, 181 participants)

The ultimate goal is to achieve support from Council and to secure funds for detailed design though construction of the park. The park planning process will continue forward with the following milestones:

- Final Recommended Concept and Design Report (October, 2010)
- Presentation to Council
- Submission to Council for 2011 budget request for Detailed Design
- Submission to Council for Budget Request for Construction

## IIb. Key Findings

Feedback from the public was generally consistent throughout the process and across the age groups particularly in terms of desired site character and intensity of development for the site. Participant comments primarily focused on wanting a park with a more natural character that prioritized passive recreation opportunities such as park trails, seating areas, informal gathering and picnicking areas, gardens and preservation of existing trees. Additionally, participants wanted to ensure that a diverse user group would be accommodated in the park including seniors, youth, and families. High intensity sports fields and a lot of development features were not desired for the park.

Several concerns arose during the process that were explored in the preliminary concepts and refined in the Recommended Concept plan. The recommended strategies for addressing these issues are discussed under Section III. Recommended Concept. These concerns focused on the following issues:

**Multi-Use Court Location:** The multi-use court location was an area of much discussion. While some participants favored the location as shown in one preliminary concept, others favored the location as shown in the other preliminary concept plan. (*Refer to Youth Area: Description for recommendation, page 16*)

**Parking:** While half of the participants in Workshop#1 desired on-site parking, approximately 1/4 of the participants in Workshop #2 were concerned that the parking shown in the preliminary concept plans was inadequate. (*Refer to Parking: Description for recommendation, page 19*)

**Tennis Courts:** There were multiple discussions around whether or not additional tennis courts should be added on site and if the tennis courts should be public or managed under a similar lease agreement between the City of Kelowna and the Okanagan Mission Tennis Club. (*Refer to Flexible Space: Description for recommendation, page 20*)

For a summary of participant feedback from the public consultation process, refer to **Appendix I: Workshop #1 Top 20 Summary**; **Appendix III: Workshop #2 Tabulation**; **Appendix V: Open House Tabulation**







# DeHart Community Park

## Final Recommended Concept

October 2010

## III. FINAL RECOMMENDED CONCEPT

### *Park Elements and Recommended Treatments*

The Final Recommended Concept was developed under direction from feedback generated during the public consultation workshops. The concept plan is the vehicle to ensure residents and stakeholders that quality and sensitive development as well as appropriate park elements will occur throughout the detailed design and construction of the park. (Refer to Appendix VI: Final Recommended Concept)

### IIIa. Vision Statement

DeHart Community Park is envisioned as a vibrant focal point in the North Mission neighbourhood that will serve diverse age groups and abilities through a variety of park features and programming. The park is intended to reflect the unique character of the North Mission neighbourhood and to heighten a sense of place within the community. The park will fit sensitively into the surrounding neighbourhood and will reflect the desires, interests and concerns of the community. Sustainable design technologies will be incorporated throughout the site to demonstrate a commitment to environmental issues and concerns.

### IIIb. Design Objectives

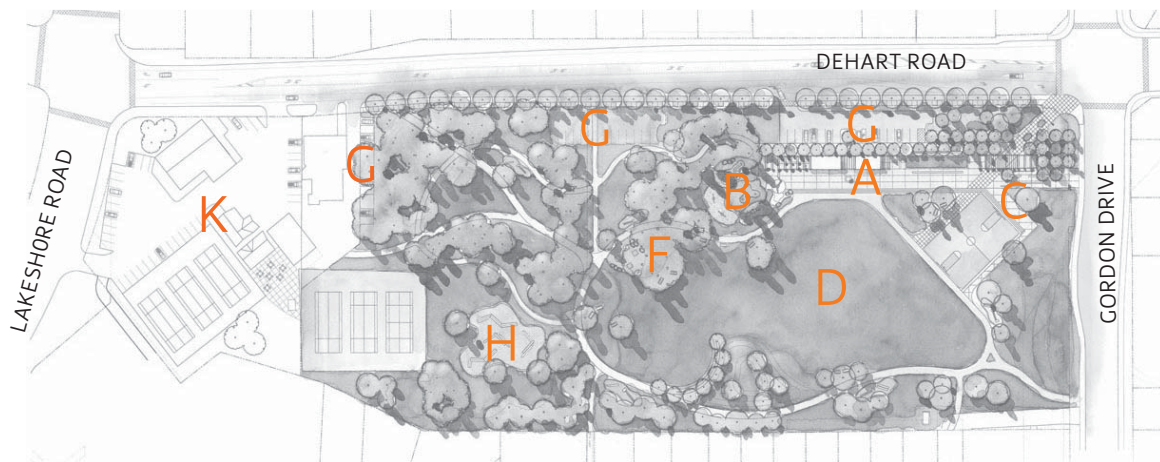
- **Universal Accessibility:** A universally accessible park that accommodates all ages and abilities throughout the site. Park features should meet all universal accessibility standards including path slopes and surfacing, transfer height requirements, and signage and other directionality strategies to meet the needs of individuals with physical and visual impairments.
- **Sense of Place:** A strong sense of place that reflects the distinct character of the North Mission neighbourhood. Form and materials should help to strengthen community heritage and identity while the preservation of existing trees and new landscape enhancements should help to increase the urban forest cover for the entire community.
- **Crime Prevention through Environmental Design:** A safe and comfortable public space for all ages and abilities. Principles and techniques used to achieve safe urban spaces should be incorporated throughout the design. Site lines should be maintained into and across the site to ensure “eyes on the site” from the surrounding community. Activity areas should be located in high visibility areas to encourage socializing and positive interactions between park users.
- **Sustainability Initiatives:** A site that demonstrates a commitment to environmental issues and concerns. Sustainability initiatives should be incorporated throughout the site and should include strategies for achieving a carbon neutral development.
- **Public Art:** A unique and creative park that enhances a sense of place. Public Art should be fully integrated into site features as a means to achieving a strong sense of place. The art should reflect the unique character of the site as well as the North Mission neighbourhood.

- **Park Programming:** A park that can support a variety of community activities, events and classes. A variety of spaces that are “flexible” in nature and can be transformed to accommodate diverse events should be provided to support diverse activities from large community events to smaller group classes and gatherings.
- **Youth Facilities:** A safe and positive environment that meets the needs of youth. Youth specific facilities should be incorporated into the design to provide safe, positive and healthy areas for gathering and socializing.

### IIIC. Design Philosophy

With the existing Okanagan Mission Community Hall positioned at the corner of Lakeshore Road and DeHart Road, the design strives to balance development at the opposing corner of the block. By concentrating the primary social hub and arrival at DeHart Road and Gordon Drive, the design establishes defined edges and a clear arrival into the park. The approach sought to concentrate development features in a manner that would clearly demarcate park edges, create a strong community focal point, and be sensitive to the adjacent residential neighbours while preserving the greatest portion of the park for passive recreation features.

### IIId. Park Elements and Recommended Treatments



*Key Plan: Park Elements and Recommended Treatments*



## A. SOCIAL HUB

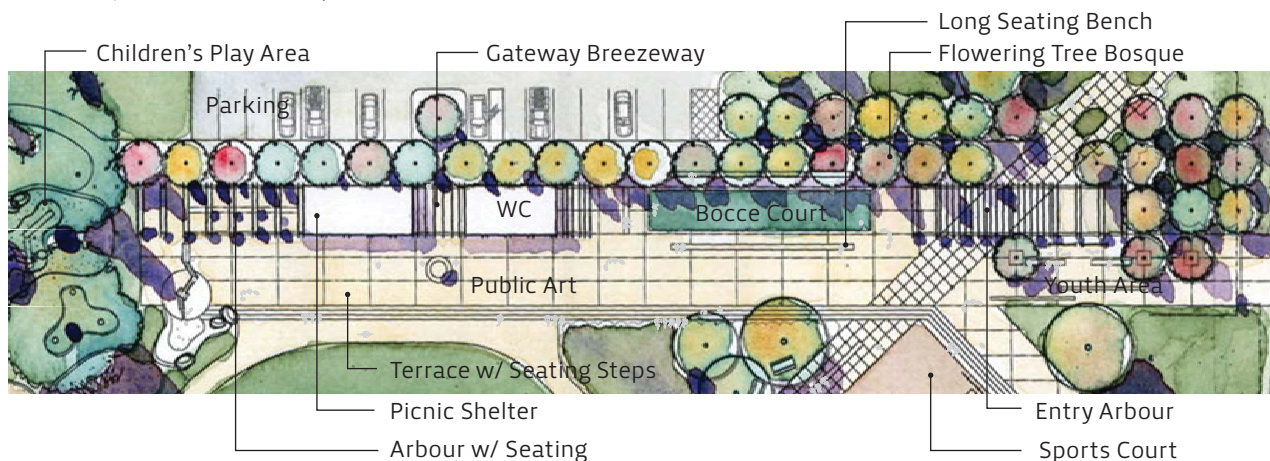
### Social Hub: Description



*Informal Gathering and Picnicking at the Social Hub*

The Social Hub is the social centre of the site. This area is the most developed in terms of built form and concentrates the primary park features in a manner that encourages socializing and gathering amongst all ages. The Social Hub is located to minimize disturbance to the existing mature pine trees located to the west. The primary structure of the Social Hub serves as a gateway, picnic shelter and accommodates washrooms. The structure extends both east and west in the form of a lighter arbour structure providing additional seating and gathering areas. The extended terrace and seating steps serve as a “park plaza” and can also function as a stage or activity area for programmed community events.

Being adjacent to the Children’s Play area, a bocce ball court, picnic area and the Youth Area, the Social Hub accommodates places and activities for all ages and group types. (Refer to Appendix IV: Open House Presentation, #6. Social Hub)



### Social Hub: Recommendations

#### Primary Structure:

- The primary structure should be conceived as a single structure that plays several roles including gateway, picnic shelter and washroom building.
- The form should reflect the roof forms found throughout many North Mission neighbourhoods.
- The structure should be constructed of wood and be a refined and contemporary interpretation of traditional, heavy-timber wood construction.
- The roof should be articulated in a hierarchical manner to distinguish the gateway component of the structure from the other functions of the structure.
- A wall within the gateway breezeway should accommodate interpretive storyboarding regarding sustainable technologies employed in the park as well as historical and ecological interpretation.
- The roof should be solid over the washrooms and picnic shelter and open-frame at the gateway and at the end of the picnic shelter to allow for filtered light and shade.



*Character Image for Primary Structure*

- The arbour post and beams should be constructed of the same material and dimensions as the primary structure. The arbour should accommodate vines and other appropriate plantings.
- The arbour should extend east to help create a gateway from the corner of DeHart Road and Gordon Drive.
- The picnic shelter should accommodate a community type picnic table and natural gas BBQ while the arbour should accommodate a variety of seating types and grouped benches.
- Linear plantings of ornamental trees should reinforce and define the north and east edges of the Social Hub.



*Community Picnic Table Precedent*

### Terrace

- The terrace should be constructed of hardscape paving materials such as concrete or concrete pavers. The paving should be contemporary in finish to relate to the modernist form of the primary structure.
- Seating areas should be accommodated throughout the plaza area including long benches and plaza seating steps.
- A full-size bocce ball court should be accommodated in the plaza aligned with the primary structure and arbour. Seating areas should be provided on each side of the court.
- Bike racks should be located in appropriate areas around the terrace.

### Gateway

- Diagonal specialty paving from the intersection of DeHart Road and Gordon Drive should be provided to define this entrance into the park.
- Arbour columns should be located along the edge of the diagonal path from the intersection of DeHart Road and Gordon into the site.
- Heritage gardens and seating should be provided to create an arrival place at the intersection of DeHart Road and Gordon Drive.
- An overhead gateway feature should be provided near the northeast corner of the site and should accommodate park signage. The gateway feature should not compete with but rather should complement the arbour and primary structure forms.



*Gateway Precedent*

## B. CHILDREN'S PLAY

### Children's Play: Description

The Children's Play area is located adjacent to the Social Hub in close proximity to the picnic shelter and washrooms. The playground concept focuses on natural play elements as a means of encouraging discovery and inquiry-based play. Four areas define the Children's Play Area including a climbing area, swinging area, water and sand area and a living willow tunnel structure. The Children's Play area extends from the western edge of the plaza into the existing trees to enhance the natural play concept and to provide immediate shade. (Refer to Appendix IV: Open House Presentation, #7 Children's Play)



### Children's Play: Recommendations

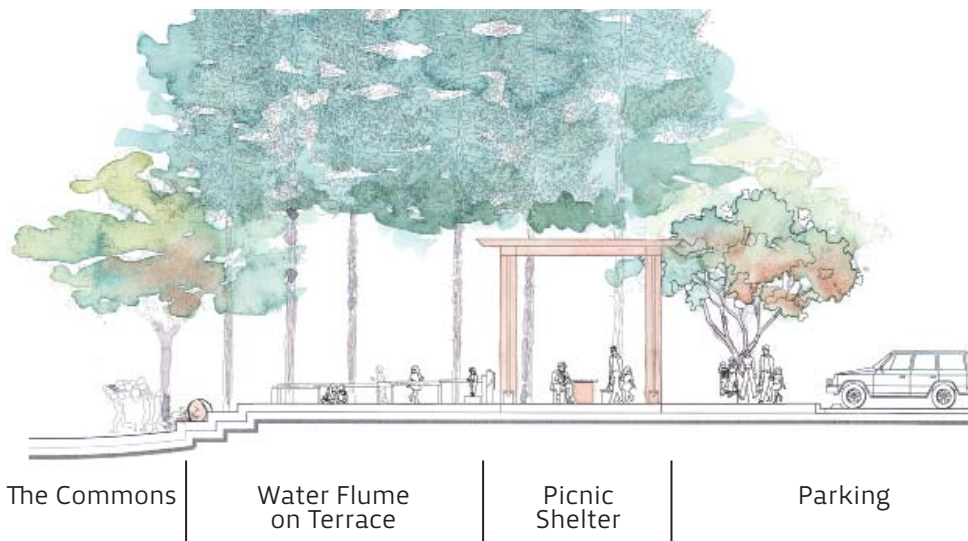
- All areas of the playground should be connected with a series of soft paths such as shredded mulch or crushed granular.
- All playground features and surfacing should be in accordance with all relevant Canadian Safety Council (CSA) standards, City of Kelowna standards for children's playscapes and equipment, and accessibility standards for playgrounds.
- Climbing area should provide natural play elements such as logs, wooden stepping-stones and small boulders.
- Swinging area should provide a variety of swings including a tire swing.
- Children's water play should be interpreted and inspired from a historic Okanagan water flume. The water source should be a pump-like water source that has limited flow and is controlled by the user. The water flume play structure should accommodate a variety of heights and lead to the sand area. Specialty paving around and underneath the water flume should be provided to enhance the concept of the water play feature.
- A living willow tunnel/structure or similar type of feature should be provided for "hiding" and crawling into/through.
- Child-friendly plant materials should be provided to enhance the natural play concept of the playground, to define the extents of the play area and to protect the existing root systems of the trees.



*Wooden Stepping Stones*



*Water Flume Water Play*



**Section: Social Hub and Children's Water Flume**



*Living Willow Tunnel*



## C. YOUTH AREA

### Youth Area: Description

A Mayor's Youth Forum was held in 2007 with a focus on civic park planning from a youths' perspective. Key findings included the following:

- Casual gatherings or individual activities are more popular uses in parks for youth than organized sports.
- Greatest concern to future park visitation was safety and cleanliness. Safety issues identified by youth included exposure to drugs and alcohol, homeless populations and intimidation by police and other adults.
- The second most common concern was the negative impact of the growing population in the City and availability of land for green space.

These findings helped to inform the proposed Youth Area for DeHart Community Park. Located adjacent to Gordon Drive, the Youth Area is targeted for teenagers as many teens walk north along Gordon Drive from Okanagan Mission Secondary School to existing bus stops and neighbourhoods. The Youth Area is intentionally located along the noisy edge of the site, near the existing bus stop, while also being visible from the road and accessible from sidewalks.

The intention of the Youth Area is to provide a safe, casual gathering area for teens with diverse activities such as a multi-use sports court with seating steps, and an informal gathering area with skateboard rails, chalk/art boards and a variety of seating elements. The location of the Youth Area helps to animate the Gordon Drive street edge by providing active spaces for gathering, socializing and recreating.

To ensure unobstructed views into the park, the court was rotated away from Gordon Drive and oriented towards The Commons and Social Hub. By locating the court in this manner, the court does not require continuous, high fenced edges to contain balls from entering Gordon Drive and will subsequently allow predominantly open views into the park. The court is intended as a small scale facility for informal pick-up basketball, roller blading, ball hockey or bike riding as opposed to formal competitive games. (Refer to Appendix IV: Open House Presentation #8. Youth Area and Appendix VI: Final Recommended Concept)



Multi-Use Sports Court



Youth Gathering Area



Multi-Use Sports Court

### Youth Area: Recommendations

- Multi-use sports court should be located parallel to the diagonal entry path from DeHart Road and Gordon Drive and outside of the Terasen easement.
- Multi-use sports court should be constructed of asphalt paving and should accommodate seating steps along the northeast edge. The court should be located below the level of the Terrace and at grade with The Commons and multi-use path. A long seating bench should be located along the west edge of the court for gathering and game watching.
- The multi-use court should be a predominantly non-fenced facility. Visually open fences should be located behind the basketball hoop backboards only.
- A variety of youth activity elements should be provided in the youth gathering area including skateboard rails, chalk/art boards, diverse seating areas and bike racks.
- Paving from the plaza should extend east to Gordon Drive providing a connection to the sidewalk.

## D. THE COMMONS



*Informal Picnicking on The Commons*

### The Commons: Description

The Commons is a centrally located green open-space for informal gatherings and activities such as casual frisbee and soccer games as well as larger community events. The Commons is defined by a paved multi-use path and accommodates a variety of activities and spaces along the edges including fitness stations, picnic tables, seating areas, meadow plantings, and a small green amphitheater. (Refer to Appendix IV: Open House Presentation, #9 The Commons)



*Green Amphitheater*



*Community Event on The Commons*



*Mowed Open Space w/ Meadow Edge*

### The Commons: Recommendations

- The commons should be maintained as a large green open space. Minimum dimensions of mown turf should be 100m x 65m (+/-).
- Mowing regimes for the park should establish mow-lines to create an area of maintained open-space (i.e. turf) with meadow edges. Meadow areas can accommodate both recreation activities and habitat enhancement while requiring a less intensive turf management regime.
- Mowing under trees should be discouraged to permit a natural groundcover and understory to develop.

- Existing drop in grade should be utilized to accommodate the green amphitheater. Earthworks should be used to build up the grade behind the amphitheater to establish new and interesting topography. Amphitheater steps should be constructed of concrete with a light sandblast finish. Height of steps should be 300mm for comfortable access and seating.
- Picnic tables should be located in small groups along the shaded edges of The Commons.
- Benches should be accommodated along the edges of The Commons and should be contemporary in form with aluminum and wood finishes.
- Canopy trees should be provided along the edges of The Commons in informal arrangements to provide enhanced canopy cover, shaded areas, and to contribute to the overall urban forest.

## E. PUBLIC ART

### Public Art: Description

The integration of public art offers a key opportunity for engaging community artists in creating a unique, vibrant and place-specific park. By integrating the public art into site features, everyday elements such as a fence or paving become a creative expression unique to this particular park site. (Refer to Appendix IV. Open House Presentation, #12 Public Art)

### Public Art: Recommendations

Public Art should be considered for the following site elements:

- Multi-Use Sports Court Backboard Fencing
- Artistic Gateway Feature
- Decorative Terrace Paving
- Nature Art in “Nature Node”
- Artistic Bird Boxes in “Nature Node”

Additionally, a focal point art feature should be located on the terrace in relation to the arrival breezeway structure. This art feature should reflect the unique character and history of the North Mission neighbourhood.



*Decorative Terrace Paving*



*Sports Court Art Fence*



*Nature Art*

## F. NATURE NODE

### Nature Node: Description

The Nature Node is a small gathering area nestled into the existing trees and serving as the terminus feature for the connector path from the western property line. The intention for the space is to function as an outdoor classroom and to accommodate small groups in a woodland setting. The Nature Node is defined and contained by naturescape gardens and other natural elements such as boulder groupings. The Nature Node



is enhanced by the inclusion of “nature art,” informal platforms for seating or picnicking and other elements that support nature learning and observation such as bird houses.

#### Nature Node: Recommendations

- The Nature Node should be located to serve as a terminus feature at the end of the connector path from the western property line to The Commons.
- An access point into the commons should be provided alongside the Nature Node. This access point should be a simple mowed meadow path.
- The Nature Node should include informal seating platforms, nature art, other natural features such as boulders, and wildlife viewing opportunities such as bird boxes.
- The Nature Node should appear carved out of the woodland and be surrounded and defined by plantings and other natural features.
- Surfacing in the Nature Node should be shredded mulch.



*Songbird*



*Informal Seating Platform*

## G. PARKING FACILITIES

### Parking: Description

A small right-in/right-out parking area is proposed along the north edge of the Social Hub. The parking location provides direct access to the heart of the park from DeHart Road. Additionally, eight parking spots are located to the east of the Fire Hall to satisfy requested parking needs of Fire Hall staff.

While parking facilities identified on the plan are limited, it is hoped that alternative modes of transportation will be used to access the site from the surrounding neighborhood to help meet sustainability goals of the City. To encourage alternative modes of active transportation, multiple pedestrian connections to the site are provided and new bike facilities are planned for DeHart Road.

In response to concerns regarding inadequate parking in the Recommended Concept, an area is identified that could accommodate more parking facilities. The need to expand the parking could be triggered if additional park facilities are added to the park.

### Parking: Recommendations

- Initial parking area should accommodate a minimum of sixteen spaces including two universally accessible spaces.

- Pervious paving should be considered for the parking lot to manage surface stormwater and to set the “sustainability tone” for the site.
- Parking demands should be assessed over time to determine the need to expand the parking facilities on-site.
- Eight parking spaces should be accommodated on park property on the east side of the Fire Hall to serve Fire Hall parking needs. These will be dedicated for use by Fire Hall staff only.

## H. FLEXIBLE SPACE

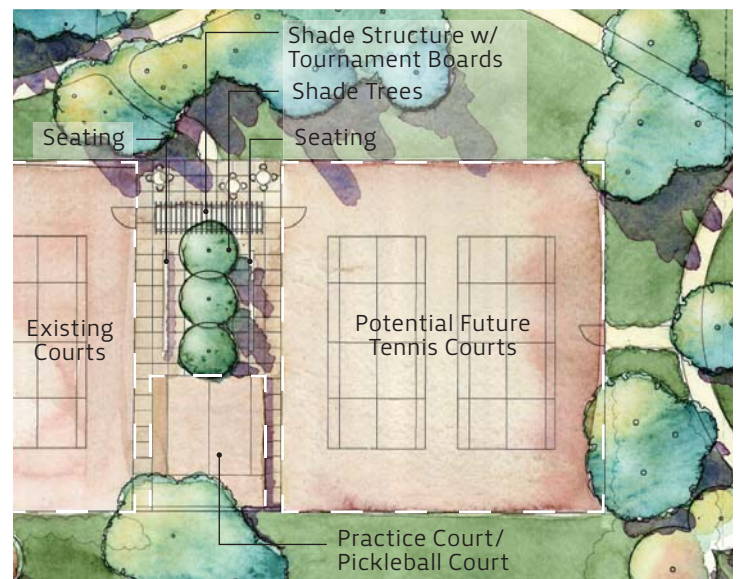
### Flexible Space: Description

Flexible space is identified on the Final Recommended Concept plan adjacent to the existing tennis courts. The intention of the flexible space is to provide some immediate park facilities that may be removed and replaced with other park facilities depending on demand for a specific facility. In the short-term, a small novice mountain bike course for ages 8-12 is accommodated in the flexible space area.



*Interim Mountain Bike Course (Ages 8-12)*

In response to discussions regarding the provision of additional tennis courts on site, the flexible space is large enough to accommodate up to two additional public tennis courts depending on demand for these facilities. The City of Kelowna is currently exploring other park sites to accommodate new public tennis courts. If it is determined by the City that public courts are in demand and no other appropriate location has been identified, public courts could be accommodated within the flexible space limits. While the priority is for public courts, the City of Kelowna could support the Mission Tennis Club through an appropriate use agreement for the additional courts. Should public courts be eventually identified on another site, the courts on-site could ultimately serve the Mission Tennis Club.



*Concept Sketch for Potential Future Tennis Courts in Flexible Space*

### Flexible Space: Recommendations

- A low-cost mountain bike course of low wood structures should be constructed in the short-term and include skinnies, rails, teeter totters and other technical trail features, but no dirt jumps. The difficulty of the course should target ages 8-12. Limits of the mountain bike course should be clearly delineated to discourage any “off-road” cycling.
- Any future tennis courts should follow the same design standards as the existing courts on-site.
- If practice/pickleball court is relocated, the court should have a concrete wall vs. plywood wall for noise attenuation. The wall should be located on the south end of the court for visibility and safety issues. Visually open fencing should be provided around the court at the same height as standard tennis fencing.
- A gathering and seating area should be provided between the existing courts and any new courts. Shade should be provided through a small shade structure and medium canopy trees. Tournament boards could be accommodated within the shade structure.

## I. TRAILS

### Trails: Description

Park trails were one of the most highly desired park amenities identified throughout the public consultation process. The Recommended Concept provides two primary trail types along with recommended seasonal mowed meadow trails.

### Trails: Recommendations

- All trails should be universally accessible in terms of grade, surfacing material and directionality techniques such as edging and clear changes in materials where paths merge.
- Seating areas should be provided along the edges of park trails.
- Fitness stations should be provided along the park trails creating a “fitness loop” feature for the site.
- Trails should connect to all primary site features and be configured to provide trail loops.
- Trail intersections should be a “T” or a “Y” configuration with a generous radius.
- An asphalt paved multi-use path should be accommodated around The Commons. Efforts should be made to accommodate the longest route possible. A minimum length of .40 km should try to be achieved. The path should follow City of Kelowna guidelines for a Class 4. Standard Multi-Use path and be 2.5-3m wide.
- A 3m wide asphalt paved multi-use connector path should connect from DeHart Road at the northeast corner of the Fire Hall to the primary multi-use path to accommodate commuters heading southeast from DeHart Road and northwest from Gordon Drive. The path should follow City of Kelowna guidelines for a Class 4. Standard Multi-Use path and be 3m wide.
- Nature trails should be accommodated throughout the existing tree area. Nature trails should follow City of Kelowna design guidelines for Class 6. Nature Trails and be 1-2m wide. Concessions should be made to modify these trails to ensure accessibility in terms of surfacing and width. Recommended surfacing material is compacted aggregate.



*Paved Multi-Use Trail*



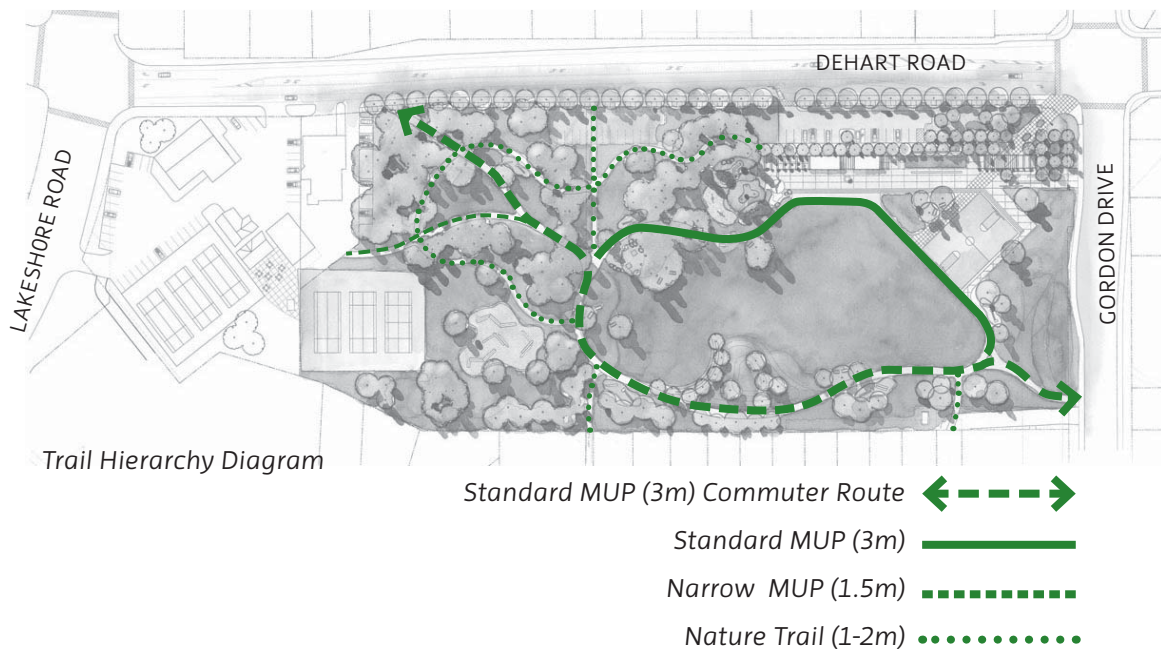
*Woodland Nature Trail*



*Seasonal Mowed Meadow Trail*



- An asphalt paved connector path from the western property line to The Commons and the primary multi-use path should be provided. This connector path should follow City of Kelowna guidelines for a Class 5. Narrow Multi-Use Path and be 1.5m wide.
- Seasonal mowed meadow trails should be mowed occasionally to provide unique and enhanced trail amenities. Meadow trails to be 1m wide.



## J. LANDSCAPE CHARACTER

### Landscape Character: Description

The proposed landscape character for the site is more natural with several different landscape typologies occurring throughout. While the existing tree stands help to establish the existing landscape character, landscape enhancements and improvements will build upon this existing character and add new landscape typologies. (Refer to Appendix III: Open House Presentation, #11 Landscape Character)



Naturescape  
Garden



Meadow



Sensory Garden



Heritage Garden

### Landscape Character: Recommendations

- All new landscape enhancements should prioritize native, locally adapted, and low maintenance landscape materials.
- Existing trees should be prioritized for preservation. Understory enhancements should be provided to provide increased habitat.
- Canopy trees should be provided throughout the site in informal arrangements to provide enhanced canopy cover, shaded areas, and to contribute to the overall urban forest.
- Formal ornamental tree arrangements should occur along the north edge of the Social Hub and define the curved form of the green amphitheater.
- Native and non-seeding meadow grasses should be utilized in The Commons to establish a low-maintenance and water conserving green open-space.
- Naturescape gardens should be incorporated into the Nature Node and amongst the existing trees to increase habitat and to define and enclose spaces such as smaller seating and gathering areas.
- A sensory garden should be provided along the edge of Gordon Drive. The sensory garden should be more manicured in form due to its proximity to a highly visible public edge.
- Heritage gardens should be located at the DeHart Road/Gordon Drive entrance into the site to enhance and formalize the arrival into the park and to reflect the history of the area. Partnerships to maintain the heritage gardens should be entertained.
- High visibility edges of the site should read as manicured and maintained. Meadow grasses should be limited to the southern edge of the site, under existing tree clusters and within naturescape gardens.

### K. OKANAGAN MISSION COMMUNITY HALL

#### Okanagan Mission Community Hall Site Improvements: Description

Due to the park's proximity to the Okanagan Mission Community Hall, a potential connection through the Okanagan Mission Community Hall site along with associated improvements was explored during the design process. The design proposed to relocate the existing practice court into the park to provide clear access to the park from within the Okanagan Mission Community Hall site. Additionally, landscape improvements, improved sidewalk connections, and reconfigured parking was proposed to improve the site in a manner that would benefit both the Okanagan Mission Community Hall as well as park users and the community at large. However, during discussions with the Okanagan Mission Community Hall, support for the improvements could not be garnered due to concerns about liability and maintenance and the improvements have been removed from the Final Recommended Concept Plan. These design considerations may be revisited during the future development of the park. (Refer to Appendix IV: Open House Presentation #5. Recommended Concept)



Okanagan Mission Community Hall

#### Okanagan Mission Community Hall Site Improvements: Recommendations\*

- Provide an improved sidewalk with landscape median along the northwest edge of the existing tennis courts. The landscape median can serve as a buffer between the parking and the tennis courts while the sidewalk can provide a community link for pedestrians heading north on Lakeshore Drive.
- Relocate the existing practice courts onto the park site to improve the connection point from the OMCH site into the park and to provide public access to the proposed pickle ball courts that will be accommodated in the practice courts. Vehicle turning radius from the rear bay of the Fire Hall must not be compromised.
- Reconfigure parking between the Okanagan Mission Community Hall and the existing Fire Hall to maximize parking capacity in this lot and to prohibit short cutting of vehicles through the Community Hall site to avoid the red light at the intersection of DeHart Road and Lakeshore Road.

(\*The above recommendations are not reflected on the Final Recommended Concept for DeHart Community Park)

## L. COMMUNITY CONNECTIONS

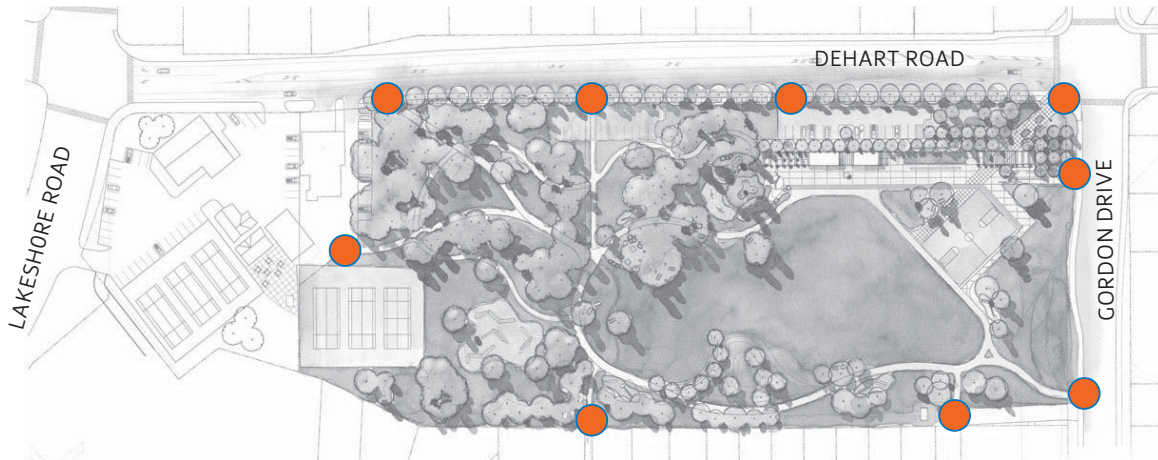
### Community Connections: Description

Providing pedestrian and cyclist connections into the site from the greater community is a high priority for the park. The recommended concept provides nine links at different points around the entire perimeter of the site.

### Community Connections: Recommendations

Access links to the community should include connections from:

- Western property line
- DeHart Road at the northwest corner of the Fire Hall
- DeHart Road at the existing storm sewer right of way
- DeHart Road at the proposed parking lot
- DeHart Road and Gordon Drive intersection
- Gordon Drive at the Youth Area
- Gordon Drive at the southeast corner
- Existing residential development adjacent to the southern edge of the park
- Sherwood Road into the park at the existing storm sewer right of way
- Additional connections should be accommodated into the park by providing sidewalks and bike lanes along the south side of DeHart Road as well as high visibility crosswalks at the intersections of DeHart Road and Lakeshore Road and Gordon Drive. These improvements are discussed further under Section IIIg. DeHart Road Improvements.



*Community Connection Points*

## IIIe. Sustainability & Carbon Footprint

Achieving a sustainable and carbon neutral development is an important goal for the project. The park site provides an opportunity to showcase sustainable strategies, to inform and educate the public about sustainable technologies, and to demonstrate the City of Kelowna's commitment to the health of the community. Such initiatives can be incorporated into the park design and can also be an integral part of construction and operational practices.



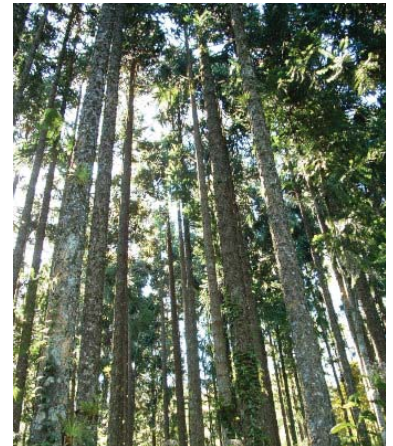
## Design Elements

The Final Recommended Concept is set up to accommodate sustainable features to help achieve the objective of a site that demonstrates a commitment to environmental issues and concerns. The following design features should be prioritized for incorporation into the detailed design for the park:

- **Meadow:** A native grass meadow is an environmentally sensitive alternative to a traditional lawn or turf area. Meadow grasses require less water, less fertilizers/pesticides and can be mowed in a manner to create a green open space for passive recreation activities. Mowing regimes should be restricted to areas that are needed to serve as recreational facilities thus reducing maintenance costs and the amount of gasoline expended to mow the site.
- **Drought Tolerant/Low Maintenance Landscaping:** With the exception of the heritage gardens, all future landscape materials should be drought tolerant and low maintenance to ensure water efficient irrigation practices and water use reduction. Native and locally adapted plants generally fulfill these criteria. Plantings with similar water use requirements (hydro zones) should be grouped together and water conservation calculations must be undertaken as per City of Kelowna requirements.
- **Pervious Parking Lot:** Pervious materials should be considered for the parking lot surfacing to reduce stormwater runoff into the municipal storm system.
- **Tree Preservation and Landscape Enhancements:** By prioritizing the preservation of existing trees and adding new trees and landscape materials to the site, the park is contributing to the overall urban forest for the City of Kelowna. Trees provide multiple environmental benefits including increased urban habitat, reduced heat island effect, delayed and reduced stormwater, and CO2 absorption.
- **Re-use of Site Materials:** Any appropriate existing site materials should be retained on site for incorporation into the design. Examples might include existing bricks from house demolition for use as decorative paving and felled hardwood trees, if available, for incorporation into the Children's Play area as natural play elements.
- **Washroom:** Washroom technologies should consider a grey water recycling system as well as passive solar for heating washroom water.



*Modified Mowing Regime*



*Tree Preservation and Enhancements*

## Construction Practices

With some preliminary planning, construction practices can contribute to achieving a sustainable and carbon-neutral site. The following practices are recommended for consideration during the detailed design phase and prior to the beginning of construction:

- Reduce quantity of materials used
- Select materials with low emission factors
- Select local and regional material suppliers
- Divert demolition waste to recycling facilities rather than landfills
- Consider wood first for construction of shelters and arbours

## Operations Practices

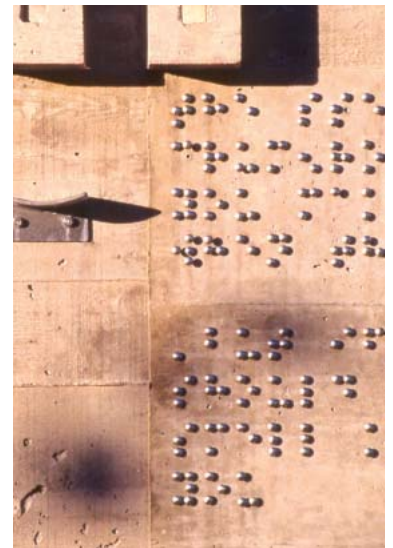
The City of Kelowna can make a key contribution to achieving a carbon neutral development through how the site is maintained and managed. The following operations practices are recommended for consideration:

- Energy efficient lighting systems
- Off-grid energy system to service park amenities (i.e. solar, wind or geotherma)
- Comprehensive park recycling program
- Minimized mowing regime
- Limited to no permanent irrigation
- Use of well for non-potable irrigation water

## IIId. Mobility and Accessibility

A mobility consultant was invited to review the Recommended Concept to ensure that the site would be universally accessible and accommodate the needs of individuals with visual impairments. The following recommendations should be prioritized for incorporation into the plan during the detailed design phase of the project:

- All trails and primary site features should be universally accessible in terms of grade, surfacing material and directionality techniques such as path edging and change of path material or texture where path merging occurs.
- All site furniture including picnic tables, water fountains, benches etc should be at the appropriate heights and transfer heights to ensure universal accessibility.
- Diagonal paving leading into the site from the intersection of DeHart Road and Gordon Drive should extend west to provide directionality cues to the entrance of the Social Hub.
- Any entrances to buildings should be well defined by colour contrast, landmarks or change in surface texture.
- Walkways at the same level as their surroundings should be of a contrasting colour, texture and/or material.
- Contrasting colours should have a light reflectance value of 70 or above to meet accessibility standards.
- Entrance/walkway into the park should not cross parking areas and should have a straight line of travel. Pedestrian paths should not cross behind parked cars.
- Branching and convergence of paths should be identified by textural/material differences.
- Primary multi-use path should have a divisional line to delineate pedestrian flow from bicycle flow.
- Change in terrain should be cane detectable.
- Obstructions, benches, garbage cans, planters and signs should be placed outside the path of travel.
- Benches should be installed at the same level as the walkway, set back and cane detectable. A tactile change in the area surrounding the bench can be used to indicate a seating area.
- Key landmarks such as art, trees, and bushes should be situated to provide orientation to certain areas of the park and to also provide a buffer between any hazards.
- Adequate lighting should be installed to highlight main areas along all primary routes.
- Any hazards should be identified by tactile warning surfaces.
- High contrasting signage along key routes or directing to key areas should be considered with urban braille incorporated into all primary signage.
- Audible signals at primary intersection crosswalks should be installed.



Braille Wall

## IIIg. DeHart Road Strategy

The City of Kelowna Transportation Department is currently reviewing the need to widen DeHart Road into an arterial or urban arterial cross section. Due to the future possibility of expanding DeHart Road, the existing road right-of-way was not utilized in the Recommended Concept. While the City's Transportation Department will be looking at the details of the road cross-section, it is important to consider the public realm along the south side of the road. This area of the road is the face of the future park and will need to accommodate an increase in pedestrians and cyclists accessing the site. The streetscape design should achieve a strong public realm image that addresses noise and safety issues while establishing a positive interface with the park.

### Recommendations for the south side of DeHart Road:

- Continuous sidewalks from Lakeshore Road and Gordon Drive
- Widened boulevards providing a buffer between road traffic and pedestrian traffic
- Canopy trees in the boulevard providing an improved streetscape edge
- On-street bike lanes
- Clear parking lot ingress and egress points
- Crosswalks at points where the sidewalk is interrupted such as at the parking lot ingress and egress points
- Left turn lane required west bound on DeHart Road.

## IIIh. Civil Engineering Summary

### Site Servicing

- An existing sewer right of way passes through the site from south to north at approximately mid-block along Dehart Road. Storm and sanitary service connections to the proposed park would likely be provided from the north end of these sewers where they intersect the Dehart Road property line. Should site grades prove difficult to service the entire property from this location then a second connection could be provided from the sewers in Dehart Road at the west end of the site.
- A domestic water supply main exists in Dehart Road. Service can be provided from this main at a location that best suits the parks needs.

### Utility Services

- Fortis power supply is located along the north side of Dehart Road on an overhead system. There are existing overhead power lines extended into the park site to service the single family homes that will be decommissioned. Coordination with Fortis is required to confirm if the park's power needs can be provided from the existing on-site system. At this phase it is assumed that a separate park power source will be required and it is preferred that the park power source be housed in a below grade vault. If this approach is found to be cost prohibitive, the above grade power source should be screened with an artist wrap or appropriate plantings. If an artist wrap is used, the graphic should be in keeping with the character of the park and the North Mission neighbourhood.



Utility Box with Artist Wrap



- Terasen gas service can be provided from a domestic main in Dehart Road. Service can be provided from this main at a location that best suits the parks needs. There is an existing gas transmission line within the site along the east property line located in a 18m right of way. A direct connection to this transmission line is not possible. Any grading and surface treatments in the right of way will need to be approved by Terasen by a permit.
- Though Telus and Shaw services are not required for the park development there are existing manholes, boxes and duct lines along the Dehart Road property line. Any regrading and site entrances provided along the Dehart Road property line will need to take into account these existing infrastructures and adjust manhole rims accordingly. Telus and Shaw should be contacted during the detailed design to obtain input on how their respective services will be impacted by the on-site works.

### **Roadworks Improvements**

- Vehicle parking for the proposed park will be provided from an access off Dehart Road. As part of this assignment it is proposed to widen Dehart Road to provide a dual left turn lane for its full length. The configuration would be similar to other dual left turn lanes constructed in Kelowna with raised medians placed at either end to clearly define the limits. The laning will include four or five lanes at intersections to accommodate a left turn lane two west bound and two east bound lanes. The road widening must tie to the existing lane configurations at Gordon Drive and Lakeshore Drive so that the other legs at these intersections are not impacted.

### **Stormwater Management Plan**

The proposed stormwater management facilities for the Dehart Community Park may include two similar systems to slow the flow of rainwater runoff from the site. These are summarized below:

- Direct surface drainage to low lying vegetated areas where the water can permeate into the ground. A lawn basin set with a grate elevation slightly higher than the surrounding ground will service as an overflow to prevent flooding during peak storm events.
- In areas where ponding water would not be desirable (ie: play fields and walkways) lawn basins will be utilized to direct rainwater into underground rock trenches. Each lawn basin is equipped with two exiting pipes. The lower (initial flows) pipe conveys rainwater into underground rock trenches constructed within the storm sewer trench. The higher (overflow) pipe conveys rainwater into the municipal storm sewer.
- The existing site consists of relatively permeable sand with minimal rainwater runoff during average annual rainfalls. The above mentioned infiltration systems will provide a hydraulic disconnect between proposed surface treatments and the storm drains to simulate the pre-development hydraulic condition.

## IV. IMPLEMENTATION

### *Recommended Phasing and Costing*

#### IVa. Recommended Phasing

Constructing the park in a single phase will be the most efficient and cost effective development approach. Phasing in construction over multiple years will result in increased engineering fees, staff administration time and construction management costs. Costs of throw away items should also be considered such as initially installing an irrigated turf area and then removing a portion of the irrigation system to install a facility such as the multi-use court. It is recommended that the park be constructed in a comprehensive single phase as much as possible per the Final Recommended Concept. Elements that could be phased in over time include the future parking, new tennis courts, and public art elements that are not integral to site features (i.e. public art on the multi-use court backboard fencing).

From a design perspective it is also recommended that the park be constructed in a comprehensive single phase per the Final Recommended Concept as each component of the park is closely related to and dependent upon the adjacent component particularly in regards to the Social Hub. The Social Hub relies on a series of elements to create a clearly defined edge along DeHart Road and to demarcate the entrance into the park. The structures of the Social Hub stretch east and west to define the Youth Area and the Children's Play Area respectively while also relating to the park entrance from the intersection of DeHart Road and Gordon Drive. While the Social Hub will set the tone for the more structured area of the site, the passive recreation areas such as The Commons, trails, and various landscape treatments are equally as important and will provide a complete park amenity when constructed in relation to the Social Hub.

#### IVb. Costing

##### **Introduction**

The estimate presented in this report is prepared by BTY Group and is intended to provide an assessment of the direct and indirect construction costs for the proposed DeHart Community Park in Kelowna, BC. The estimated costs contained in this report are based on conceptual design drawings and information prepared by Phillips Farevaag Smallerberg. The information provided is not detailed design or tender documentation to allow the project to proceed for a fixed price tender call; as such the estimate should not be considered as the final estimated cost of the proposed development. The estimate provides a reasonable cost envelope within which the project design can be developed. In order to maintain the budget parameters established in this report, BTY strongly recommends that further cost estimates be prepared at major design stage milestones to track and monitor the cost of the proposed design.

##### **Project Description Understanding**

It is proposed to construct a new community park next to the existing Okanagan Mission Community Hall along DeHart Road. The new park will provide the community with opportunities for various recreational activities including lawn sports, informal sports court games, hiking and biking, picknicking and socializing and gathering. The construction includes various hard paving, soft landscape, water play, arbour, washrooms, shelter, terrace, children's play area, mountain bike course, trails, large open space, small green amphitheater and associated mechanical and electrical services. (Refer to Appendix VIII: Costing Report)

## Construction Cost Summary

The estimated construction cost is summarized as follows:

Item	Estimated Cost
	\$
D11.1 Site Preparation	194,400
D11.2 Hard Surfaces	605,100
D11.3 Site Improvements	1,101,600
D11.4 Landscaping	999,700
D12 Mechanical Site Services	130,000
D13 Electrical Site Services	125,800
Z1 General Requirements & Fees	410,400
<b>Net Construction Costs</b>	<b>\$3,567,000</b>
Design Allowance 10.00%	356,700
Construction Allowance 5.00%	196,200
<b>Sub-Total Construction Cost (September 2010)</b>	<b>\$4,119,900</b>
Escalation Allowance	Excl.
<b>Total Construction Cost (September 2010)</b>	<b>\$4,119,900</b>

The following separate prices are not included in the above estimate:

Item	Estimated Cost
	\$
D21.1 OKM Community Hall Sitework	274,800
D21.2 Two Additional Tennis Courts	195,800
D21.3 Future Parking	140,900
D21.4 DeHart Road Improvement	411,200
<b>Total Separate Price Items (September 2010)</b>	<b>\$1,022,700</b>

Note: The above estimate includes the general requirements & fees and design & construction allowances.