

APPENDIX B
SITE
INVENTORY
AND ANALYSIS

NORTHEAST
RIVER
VALLEY PARK
STRATEGIC
PLAN
SITE
INVENTORY &
ANALYSIS

Prepared for



City of Edmonton

Prepared by

PUBLICCITY

Public City Architecture Inc.
11-600 Clifton St.
Winnipeg, Manitoba, R3G 2X6
204.475.9323
www.publicCityarchitecture.com



The project team acknowledges that the traditional land on which Northeast River Valley Park is located is in Treaty Six Territory and within the Métis homelands and Métis Nation of Alberta Region 4. We would like to express gratitude to the diverse Indigenous Peoples whose ancestors' inhabited this territory for generations, such as Nêhiyaw (Cree), Denesuliné (Dene), Nakota Sioux (Stoney), Anishinaabe (Saulteaux) and Niitsitapi (Blackfoot) peoples. We strive to help make Edmonton a welcoming place for diverse communities to call home, and we commit to working in a spirit of generosity, openness and collaboration to help build an authentic and resilient gathering place for future generations.

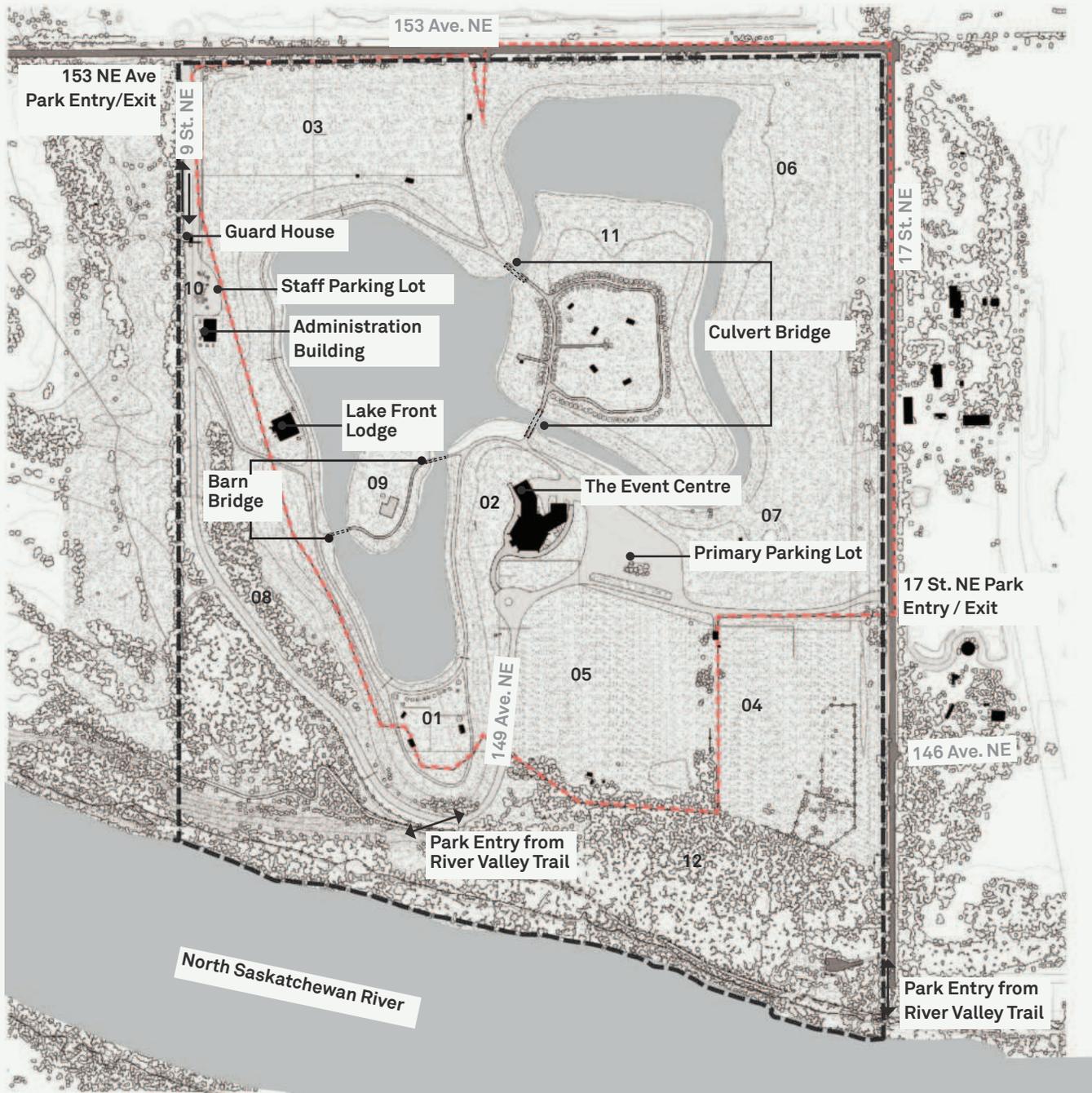
Table of Contents

Site Inventory & Analysis

07	00	Introduction
10	01	Background Review
11		Review of Planning & Development Initiatives
13		Summary of Relevant Plans, Documents, Codes, Standards & Policies
19		Review of Existing Environmental Information
20	02	Site Assessment & Analysis
21		Accessibility Review
22		Review of Pond Existing Conditions, Operations & Management
24		Site Conditions Review
28		Assessment of Physical Characteristics, Topography, Wildlife & Sensitive Vegetation
38		Historical Uses
41		Environmental Approvals
42		Existing Site Servicing & Utilities
44		Geotechnical Report Review
48	03	Recreation Opportunities Review
48		Current Uses
56		Building Assets
59	04	Guiding Principles

List of Drawings

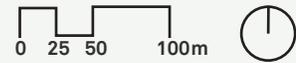
A: Existing Site Plan	6
B: Planning and Development Initiatives	10
C: Horse Hill Future Developments	12
D: Protective Overlays	16
E: Existing Zoning	18
F: 2023 Bird Sweeps	19
G: Slope Analysis	20
H: Pond Bathymetry (2024)	22
I: Sun and Wind Analysis	25
J: Hydrology	27
K: Terrain and Glacial Terraces	28
L: Site Plan with Sections Locations	30
M: Animal Habitat Corridors	34
N: Vegetation Zones	36
O: Disturbed Areas from Quarry Operations	38
P: Existing Site Servicing*	42
Q: Geotechnical Information	44
R: Pedestrian and Vehicular Circulation	46
S: Existing Programmatic Zones	48
T: Existing Structures	56



A: Existing Site Plan

--- Park Boundary

--- Quarry Operations Extents



- | | |
|----------------------|----------------------|
| 01 Lower Lawn | 07 Dugout Area |
| 02 Event Centre Area | 08 Highroad |
| 03 Upper Lawn | 09 Playground Island |
| 04 East Open Space | 10 Admin / Entrance |
| 05 West Open Space | 11 The Big Island |
| 06 Northeast Corner | 12 Forest Edge |

00 Introduction

Northeast River Valley Park, located at the intersection of 17 St. NE and 153 Ave. NE in Edmonton, represents a significant expansion within the city's extensive River Valley Park system. Covering 77 hectares, this site, formerly known as Our Lady Queen of Peace Ranch, became an official part of Edmonton's public green network in 2023. As the 11th largest park in the city, it enhances the North Saskatchewan River Valley Park System, a network that spans 7,300 hectares, making it Canada's largest continuous urban green space. The park is uniquely positioned within the "Quarry Node," as identified in the Ribbon of Green SW+NE planning framework. Defined by an oxbow river formation, the Quarry Node provides a sense of seclusion from the surrounding northeast neighborhoods while remaining well-connected to the broader urban landscape.

The ancient glacial lakes and rivers that deposited and cut through the site define its topographic conditions, where three distinct river terraces are remnant clues to primeval forces: the upper terrace, mid terrace, and lower terrace, featured in Map K on page 28, combine to give the park's unique terrain character. The fluvial deposits of sand and aggregate, while alluding to the area's geological past, are also fundamental in its recent history. Quarry operations from the 1960s to the early 2000s left behind a series of pits in the landscape. The voids left over from industrial extraction practices were later reshaped into the recreational ponds that define the park's landscape today.

The Strategic Master Plan for Northeast River Valley Park will establish a unique vision, guiding principles, and recommendations for the future use of the park. The park's development will prioritize the restoration and enhancement of its distinctive natural features while thoughtfully integrating and expanding accessible public amenities for all Edmontonians.

Today, Northeast River Valley Park is operating with a layout and amenities similar to those of the former Our Lady Queen of Peace Ranch. The park's amenities include a large Event Center building that is booked regularly throughout the seasons for large events and gatherings, and the Lakefront Lodge, which is currently unused due to building code alignment upgrades. However, the lodge will serve as a critical building for future site programming. The park's site amenities include trails for walking, running, cycling, and cross-country skiing, which wind through a landscape of open meadows, forested areas, and along the pond. The park's centerpiece is its large central pond, which supports non-motorized water activities and provides a picturesque setting for visitors. The park also hosts additional unique features, such as the barn-covered bridges that link to Playground Island and double as iconic photography spots and locations to host smaller gatherings. From an operations and maintenance perspective, the site contains an administration building and a maintenance wing of the event center for park maintenance and operations storage.

Northeast River Valley Park is evolving with a balance of active recreation, passive enjoyment of nature, and public programming initiatives, including spaces for Indigenous ceremonies. Future planning will continue to prioritize balancing passive recreational opportunities with environmental stewardship, preserving the site as both a crucial ecological corridor within Edmonton's River Valley and a gathering space for the community.



01

Inventory and Analysis Methodology



As a starting point, a background document review, site inventory and analysis were conducted to understand The Park, as it is today. The analysis has been conducted at several scales and methods. First, The Park has been reviewed at both a site scale, and a regional scale: The site scale reveals the physical characteristics of the park including geomorphology, topography, stormwater/surface water, vegetation, historical quarry land use and more recent use as a recreational camp; the regional scale illustrates the development initiatives and vehicular and pedestrian connections that will influence the park in the years to come. At both scales, a desktop analysis was complemented with a physical tour of the site which took place on May 15, 2024.

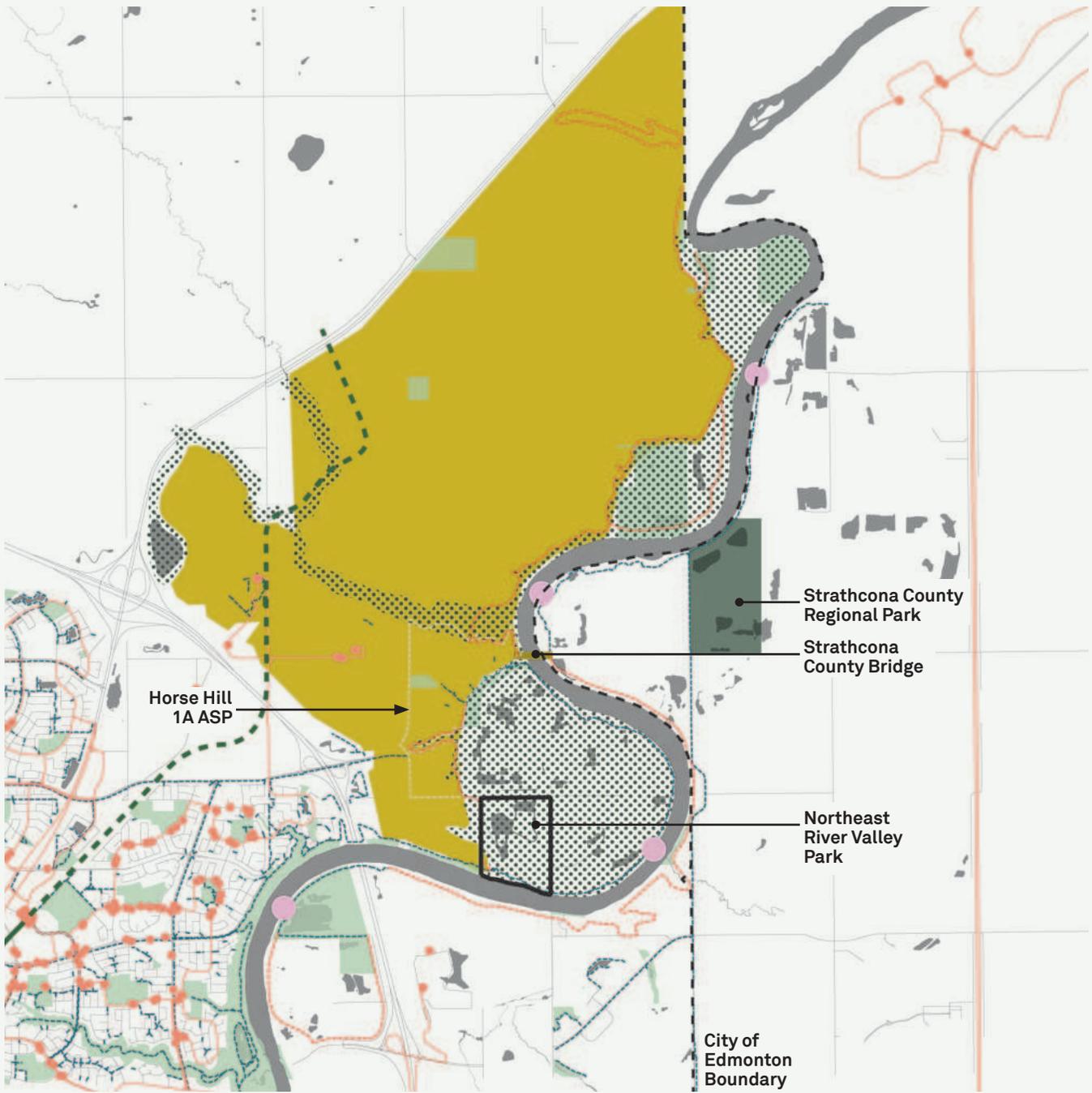
To support the desktop analysis and field work, the analysis report is supplemented with a City of Edmonton Internal Engagement process. Internal Engagement Meetings were held with select City of Edmonton groups to support the Strategic Master Plan process. The groups were separated into 5 focus themes, based on the strategic direction of the park:

- June 12th *Programming*
- June 17th *Indigenous Relations*
- June 18th *Operations*
- June 21st *Policy and Planning*
- June 24th *Ecology and Sustainability*

Each virtual meeting included an introduction to the park, brief background to the project and contextual base for an open, but thematically focused conversation. The meetings provided a fundamental understanding of The Park, the findings are included throughout the site inventory and analysis section of the report. See Appendix pages 4-29, for full meeting summaries.



- 01 Northeast River Valley Park
- 02 Existing covered bridge
- 03 Existing shoreline condition
- 04 Existing vegetative condition
- 05 Existing pond



B: Planning and Development Initiatives



01 Background Review

Review of Planning & Development Initiatives

The following planning and development initiatives include Northeast River Valley Park:



- 01 Horse Hill 1A Plan
- 02 Strathcona County Regional Park Master Plan
- 03 Strathcona County Footbridge
- 04 River Valley Trail System

→ Horse Hill 1 ASP

The Horse Hill Area 1A ASP in northeast Edmonton features a mix of low and medium density housing, parks, schools, and commercial spaces. It integrates natural features, preserves green corridors, and connects via Manning Drive and Anthony Henday. The plan emphasizes sustainability, vibrant community design, and ecological integrity near the North Saskatchewan River valley.

→ Horse Hill 1A (Approved, 2013)

Horse Hill 1A, part of the Horse Hill Area Structure Plan (ASP) in northeast Edmonton, is a planned urban development focused on creating residential neighborhoods with integrated commercial areas, schools, and parks. The development balances urban expansion with the preservation of natural and agricultural spaces, contributing to Edmonton's growth strategy.

→ Strathcona Regional Park (Master Plan, 2023)

Strathcona Regional Park is important as it is being actively developed from quarry site to park. As it is in such close proximity (and has such a similar landscape character) to Northeast River Valley Park, its use, and functions should complement and contrast whatever uses are proposed in the park.

→ Strathcona County Footbridge (Expected completion, 2025)

The Strathcona County Footbridge will be a key regional link, connecting Northeast River Valley Park via the River Valley Trail to Strathcona County. The pedestrian bridge will extend the existing trail network along the River Valley and will enhance the area's cycling and walking catchment, ultimately increasing the active transportation access to the Northeast River Valley Park.

→ National Urban Park Initiative (Ongoing)

Since 2021, the City of Edmonton has been in discussion with project partners including Parks Canada, the Confederacy of Treaty Six First Nations, the Otipemisiwak Métis Government (formerly the Métis Nation of Alberta), and the Government of Alberta (in an observer role) about the potential for establishing a national urban park in the Edmonton region.

At this stage, the NUP initiative has no direct impact on the Strategic Master Plan for Northeast River Valley Park, as no specific sites or parks have been selected. Through the early phase work of the NUP initiative, high level targets for the National Urban Park have been identified and align with principles of Northeast River Valley Park, including:

- *Conserving Nature Conservation, biodiversity and climate change mitigation and adaptation (conserve, restore and protect natural areas and open spaces)*
- *Providing inclusive and welcoming access to nature, ensuring people of all ages, abilities, and backgrounds can easily enjoy and experience the park.*
- *Advancing Reconciliation with Indigenous Peoples*

→ River Valley Alliance

The River Valley Alliance (RVA) connects people to Edmonton's River Valley by shaping parks and green spaces and envisioning a continuous trail network. While RVA develops a shared intermunicipal green vision, it does not provide maintenance or operational services to the existing network. In the adjacent map B: Future Developments, existing and proposed boat launches are included from a RVA project map. The original map can be found in the Appendix on page 41.

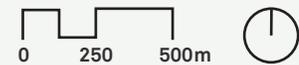


C: Horse Hill Future Developments

Northeast River Valley Park is situated at the southeast corner of the Horse Hill development, within the Quarry node as defined by the Ribbon of Green. When viewed alongside the future development areas of the Horse Hill ASP and adjacent developments like the Strathcona County Footbridge and Strathcona Regional Park, the site reveals significant connectivity potential throughout these areas. Ensuring critical connections along the river corridor and prioritizing access to Horse Hill 1A will be essential for the area’s integration and growth.

Currently, the park can be accessed by foot or bike via the River Valley trail network. Quarry Ridge Park, approximately 3 km east, and Hermitage Park, 6 km west, are the closest parks. Vehicle access is available through two main entry points: the primary entrance on 17th St. NE, leading to the main parking area, and a secondary entrance on 153 Ave. NE, providing access to staff parking. There is no direct public transit service to the park, with the nearest bus route (121) serving the Fraser, Evergreen, and Horse Hill communities. The Clareview Transit Station, roughly a 2-hour walk or 30-minute bike ride away, is the nearest transit hub. For larger events, chartered service through Edmonton Transit Services (ETS) is an option. Engagement with Horse Hill area planners suggests potential future transit along 153 Ave. NE. Currently, access is limited for those without vehicles or unable to cycle from other parts of the city. With the projected growth of 70,000-100,000 residents in the area over the next 50-100 years, planning for improved transit and accessibility is crucial.

The proposed path structure from the Ribbon of Green emphasizes North-South connections along the “Quarry Ridge,” closing a 1 km gap between Quarry Ridge Park and Northeast River Valley Park. Establishing this link would serve as a key neighborhood connection for Horse Hill ASP 1A residents and provide a “shortcut” for visitors traveling by foot or bike from Strathcona County. Additionally, the Horse Hill ASP 1A identifies an expanded ecological connection along the “Quarry Ridge” that would enhance habitat and animal movement, linking future open spaces and filtration areas in Horse Hill 1A with Northeast River Valley Park. To support this connectivity, flexible and robust strategies are needed on the park’s eastern edge to enable seamless integration with future developments to the east. Enhancing public transit access and connectivity is essential to fully integrate the park into the broader landscape and improve overall accessibility.



- Existing Bus Stops
- Existing Bus Routes
- - - Proposed Path Network
- - - Existing Path Network
- - - Future LRT Line
- Existing CoE Parks
- Existing Golf Course
- ▨ Ecological Corridor (Horse Hill 1 A Plan)
- Proposed Stormwater (Horse Hill 1 A Plan)
- Proposed Open Space (Horse Hill 1 A Plan)
- Proposed Roads (Horse Hill 1 A Plan)



- 01 City Plan - Green and Blue Network Map
- 02 Breathe: Edmonton's Green Network Strategy - Ecology Network Map
- 03 Ribbon of Green SW+NE Land Classification Map

Summary of Relevant Plans, Documents, Codes, Standards & Policies

The following apply to Northeast River Valley Park:

Guiding Documents: Urban Development

- The City Plan | June 2020

“The City Plan,” is a comprehensive strategic document guiding the future development of Edmonton, Alberta. It sets the vision and framework for the City’s growth and transformation over the coming decades. The Northeast River Valley Park is located within a zone dedicated to environmental protection, interspersed with wellness and celebration oriented parks, an area that generally encompasses the North Saskatchewan River and its tributaries.

- CONNECT(ED)MONTON: Edmonton’s Strategic Plan 2019-2028 | September 2022

Edmonton’s strategic plan for 2019-2028, focuses on economic diversification, environmental sustainability, enhanced urban living, sustainable transportation, and improved governance. It aims to make Edmonton more resilient, inclusive, and livable through innovation, climate action, community engagement, and infrastructure development.

Guiding Documents: Ecology & Sustainability

- Breathe: Edmonton’s Green Network Strategy | August 2017

“Breathe: Edmonton’s Green Network Strategy” and the Northeast River Valley Park are closely aligned in their goals and actions. The Park is a vital component of Edmonton’s broader green network, contributing to the City’s ecological health, connectivity, community wellness, and sustainable development.

- Ribbon of Green SW+NE | June 2020

“Ribbon of Green” provides a vision, guiding principles and strategic guidance for the southwest and northeast reaches of the North Saskatchewan River Valley and Ravine System. The next phase of work, the Ribbon of Green Completion, is now underway as part of the River Valley Planning Modernization project. Once complete, a comprehensive Ribbon of Green Plan will provide strategic guidance for the whole River Valley and Ravine System.

Based on the 2020 version, the Northeast River Valley Park is located in the Edmonton East Reach within the “Quarry Node,” defined by an oxbow river formation that lends the park a sense of remoteness and seclusion from the rest of northeast Edmonton. According to the Northeast land management map (page 65), the park comprises two land classifications:

Active/Working Classification:

- Integrates nature with recreation through trails, viewing areas, and gathering spaces.
- Infrastructure focuses on safety, ecological protection, and accessibility.
- Supports sustainable recreational activities, cultural education, and balanced environmental management.

Preservation Classification:

- Aims to protect and restore the natural environment with minimal disturbance to wildlife and vegetation.
- Prioritizes ecological health, safeguarding ecosystem functions, key habitats, wildlife corridors, and sensitive cultural/historic sites.

The Edmonton East Reach, particularly the Quarry Amenity Node, guides Northeast River Valley Park’s planning by blending ecological restoration, cultural heritage, and recreation. The Quarry Node will include event spaces, trails, and eco-parks while prioritizing ecological health and low-impact infrastructure. The planning of Northeast River Valley Park should also consider the potential expansion eastward, and ensure seamless integration with future lands, enhancing both ecological and recreational opportunities.

→ The Way We Green: The City of Edmonton's Environmental Strategic Plan | July 2011

"The Way We Green" serves as a roadmap for Edmonton's environmental sustainability efforts, aiming to create a healthy, resilient, and sustainable urban environment for current and future generations.

→ Natural Connections Strategic Plan - Biodiversity Action Plan | 2009

The "Edmonton Biodiversity Action Plan" outlines the City's strategy to conserve and enhance biodiversity within its urban environment. It integrates biodiversity conservation into local planning processes and emphasizes the importance of protecting Edmonton's natural areas, which include wetlands, forests, and river valleys.

→ Natural Connections Strategic Plan | 2007

The "Natural Connections Strategic Plan" is a comprehensive guide for conserving and managing Edmonton's natural areas. The plan emphasizes integrating conservation efforts into urban planning, aiming to create a functional ecological network that connects the river valley with upland natural areas and regional landscapes.

→ City-Wide Natural Area Management Plan | January 2014

The "City-Wide Natural Area Management Plan" for Edmonton, outlines a comprehensive framework for managing and restoring the City's natural areas. These areas, comprising approximately 2200 hectares, include the North Saskatchewan River Valley and upland wetlands and forests. Within Northeast River Valley Park, the riparian river bank is considered a natural stand, area number 3410.

→ Guidelines for Developing Site-Specific Natural Area Management Plans in the City of Edmonton | May 2014

The guidelines emphasize the integration of site-specific strategies with broader City-wide conservation objectives. Key sections cover ecological assessments, public use, management challenges, construction mitigation, and operational guidelines, aiming to preserve ecological integrity while facilitating sustainable public use and engagement.

→ Climate Resilient Edmonton: Adaptation Strategy and Action Plan | 2018

The plan highlights the need for adaptive management approaches to ensure parks can withstand and recover from climate impacts, such as changing temperatures, increased precipitation, and extreme weather events. Key actions include enhancing green infrastructure, integrating climate resilience into park planning and design, and promoting biodiversity.

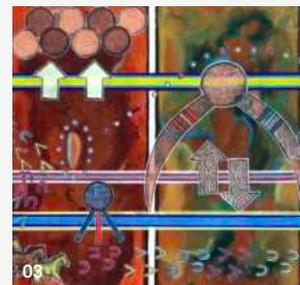
→ City of Edmonton Wetland Strategy | 2012

The City of Edmonton's Wetland Strategy focuses on securing and managing the City's natural and constructed wetlands to maximize their ecological function and engage the public in conservation efforts. The strategy addresses the critical role of wetlands in providing ecosystem services such as water purification, erosion control, and flood management, which are essential for maintaining the City's ecological network and biodiversity.

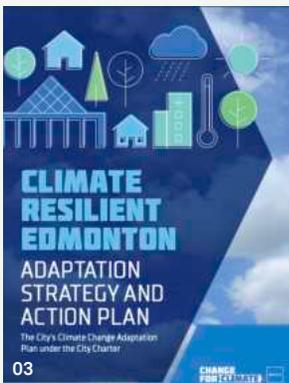
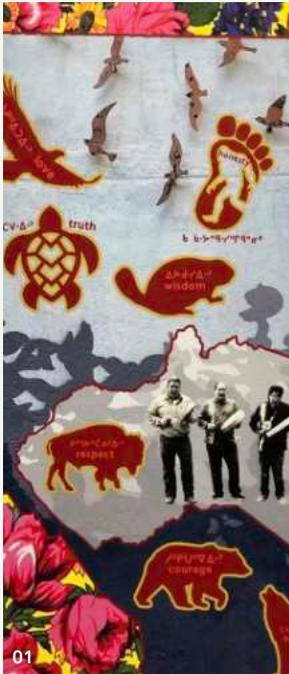
Guiding Documents: Indigenous Framework

→ City of Edmonton Indigenous Framework | November 2021

The City of Edmonton's Indigenous Framework aims to guide its relationship with Indigenous peoples and communities. It focuses on reconciliation, collaboration, and respect for Indigenous rights and cultures within the City's policies and practices. Key elements include promoting Indigenous representation, supporting Indigenous economic development, and integrating Indigenous perspectives into urban planning and decision-making processes. The framework also emphasizes building partnerships and fostering understanding between the City and Indigenous communities to achieve shared goals of sustainability and cultural preservation.



- 01 Photo from the "City-Wide Natural Area Management Plan" by the City of Edmonton
- 02 "Amiskwaciy-wâskahikan" by MJ Belcourt from the City of Edmonton Indigenous Framework
- 03 Mixed media painting by Dawn Marie Marchand from the City of Edmonton Indigenous Framework
- 04 Painting by Lana Whiskeyjack from the City of Edmonton Indigenous Framework



- 01 “Heart Beat of a Nation” by Brad Crowfoot from the City of Edmonton Indigenous Framework
- 02 Development Setback Diagram from City of Edmonton Policy C542A
- 03 Climate Resilient Edmonton Adaptation Strategy and Action Plan

Codes

→ Alberta Building Code

The latest edition, NBC-2023 Alberta Edition, became mandatory as of May 1, 2024. This code outlines safety standards and construction requirements for all buildings in Alberta, including those in Edmonton (City of Edmonton).

→ Energy Code Requirements

The National Energy Code for Buildings 2020 and the energy efficiency requirements of Section 9.36 of the NBC(AE) 2023 apply to new buildings and additions. These codes set minimum standards for energy efficiency related to the building envelope, HVAC systems, and other components (City of Edmonton).

→ Development and Building Permits

These permits ensure compliance with zoning regulations and building codes, and involve inspections to verify that construction meets all safety and regulatory standards (City of Edmonton).

Standards

→ City Design and Construction Standards

These standards ensure that all infrastructure work in Edmonton meets consistent quality and safety criteria. They cover various aspects, including general provisions for developers, complete streets design, drainage, water, landscaping, street lighting, and pavement marking (City of Edmonton).

→ City of Edmonton Access Design Guide COE-IM-GUIDE-0015 V04 | November 2021

The City of Edmonton Access Design Guide provides guidelines and standards for creating accessible environments within the City. It outlines requirements for buildings, public spaces, and infrastructure to ensure they are inclusive and accessible to all residents and visitors, including those with disabilities. The guide covers aspects such as building design, signage, pathways, transportation facilities, and amenities, aiming to promote universal access and enhance quality of life for all individuals in Edmonton.

Policy

→ Council Policy: Public Engagement | June 7, 2024

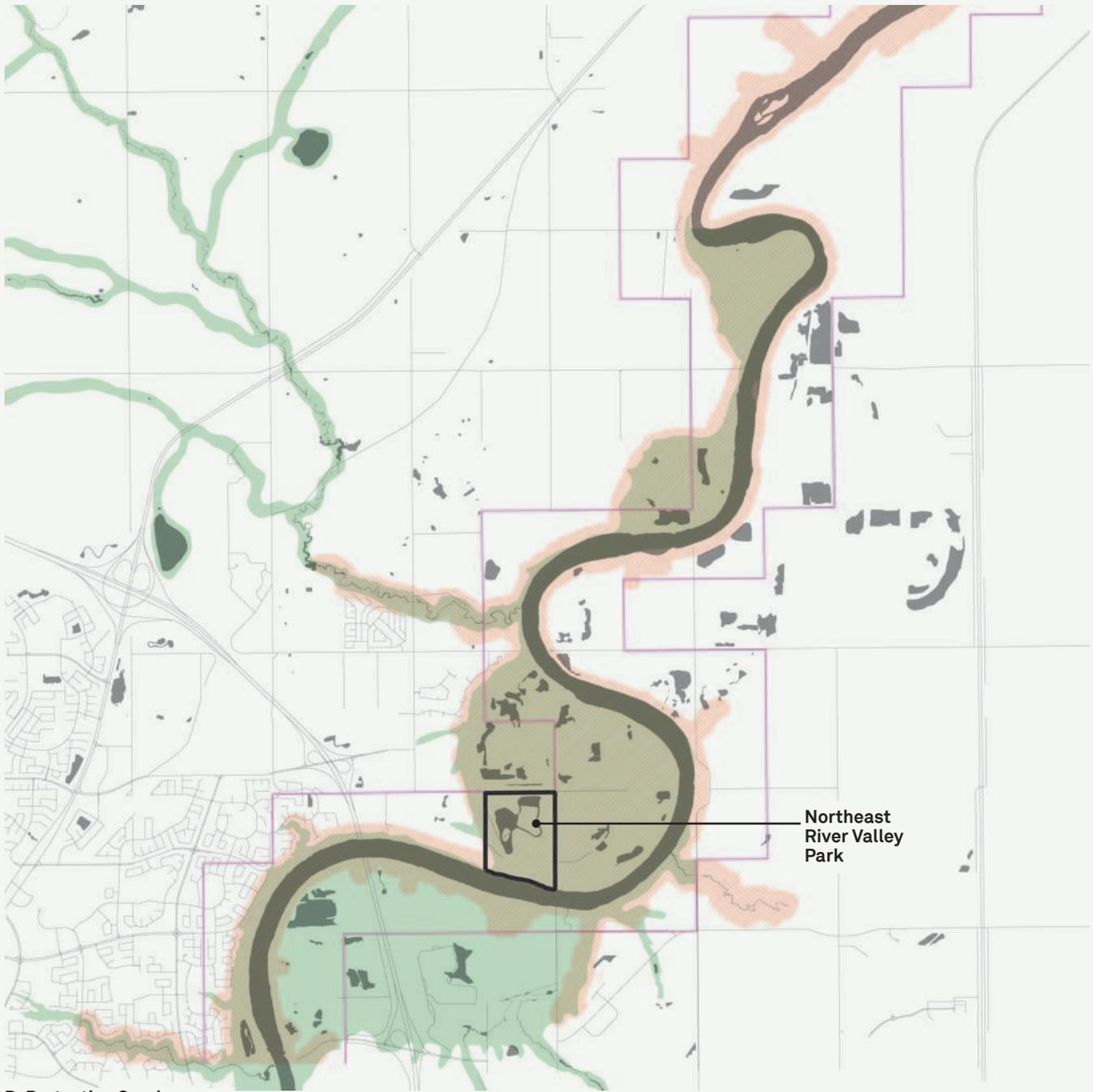
Policy C593A aims for a consistent, coordinated, and outcomes-driven approach to public engagement, ensuring that public input is effectively integrated into decision-making.

→ Capital Project Governance | April 18, 2024

The “Capital Project Governance C591” policy establishes a structured approach to managing capital projects, ensuring alignment with the City’s strategic goals. It defines roles and responsibilities, outlines the project lifecycle from initiation to completion, and emphasizes financial planning, risk management, and performance monitoring. The policy promotes stakeholder engagement and effective communication, ensuring compliance with laws and regulations, and encourages continuous improvement for efficient, transparent, and accountable project delivery.

→ Development Setbacks From River Valley/Ravine Crests | September 2016

The policy C542A aims to ensure urban development is safe from environmental hazards like slope instability, flooding, and fire, and to preserve the ecological and recreational value of the river valley. The policy also ensures public access along the upland areas for amenities and safety, incorporating planning measures like top-of-bank roadways and walkways. It emphasizes coordination with other City plans and encourages land acquisition for conservation through various measures, including environmental reserve easements and eco-gifts.



D: Protective Overlays



North Saskatchewan River Valley & Ravine System Protection Overlay

Key Wildlife & Biodiversity Zones (KWBZ)

Environmentally Significant Areas (ESAs) of Alberta



→ Natural Area Systems | September 2016

The City of Edmonton's Policy C531 aims to conserve, protect, and restore natural areas such as uplands, wetlands, and riparian zones to maintain an integrated system supporting biodiversity and ecological services. It mandates balancing ecological considerations with economic and social factors, encouraging public engagement, and forming partnerships for effective conservation. The policy applies to all City staff, requiring ecological information with development proposals, and includes guidelines for environmental reserve dedication and management plans for natural areas.

→ Climate Resilience | June 2024

The City of Edmonton's Climate Resilience Policy (C627A), approved on June 11, 2024, aims to foster a climate-resilient community through comprehensive planning, service delivery, and decision-making processes. The policy sets ambitious emission reduction targets: a 35% reduction by 2025, 50% by 2030, and achieving carbon neutrality by 2050. Within the policy, "Climate Resilience Commitments" include Carbon Capture and Nature Based Solutions - Promoting a nature-based solutions approach to climate resilience by implementing and promoting actions that protect, sustainably manage, and restore natural and modified ecosystems.

→ Corporate Tree Management Policy | October 2020

The Corporate Tree Management Policy (Policy C456C), adopted by the City Council on October 7, 2020, aims to ensure the growth, sustainability, stewardship, and protection of the City of Edmonton Urban Forest, which includes all boulevard, open space trees, and natural stands on City-owned land.

→ Open Space Policy | August 2017

The Open Space Policy (Policy C594), adopted by the City Council on August 29, 2017, aims to create and manage an integrated, sustainable, and vibrant green network in Edmonton. This network comprises interconnected public parks and open spaces that deliver ecological services, community benefits, and support biodiversity, climate regulation, and recreational opportunities.

→ Integrated Pest Management | July 2019

The Integrated Pest Management Policy (Policy C501A), adopted by the City Council on July 3, 2019, outlines Edmonton's approach to managing pests on City-owned properties and public spaces. It emphasizes an Integrated Pest Management (IPM) strategy that prioritizes long-term pest prevention through mechanical, physical, biological controls, habitat manipulation, and judicious pesticide use.

Applicable Protective Overlays

- *The North Saskatchewan River Valley and Ravine System Protective Overlay is a zoning tool used by the City of Edmonton to manage and protect the natural, recreational, and aesthetic values of the river valley and ravine system. Land inside of this overlay is subject to a set of policy and development procedures (Bylaw 7188). More information on the project and process, as well as opportunities to engage, can be found on the Ribbon of Green and North Saskatchewan River Valley Planning Modernization.*
- *A site within Alberta's Key Wildlife and Biodiversity Zones (KWVZ) has several important implications for land use, development, and conservation. These zones are areas identified by the Alberta government as critical for wildlife habitat, biodiversity, and ecosystem health.*
- *Alberta's Environmentally Significant Areas (ESAs) are regions identified for their critical ecological functions, rare or unique features, or important contributions to biodiversity. Being designated as an ESA has significant implications for land use, development, and conservation.*
- *Migratory Birds Convention Act (MBCA) is a federal law in Canada that provides protection for migratory birds and their habitats. Canada seasonally hosts approximately 450 species of native birds, the majority of which are protected under the Migratory Birds Convention Act, 1994.*

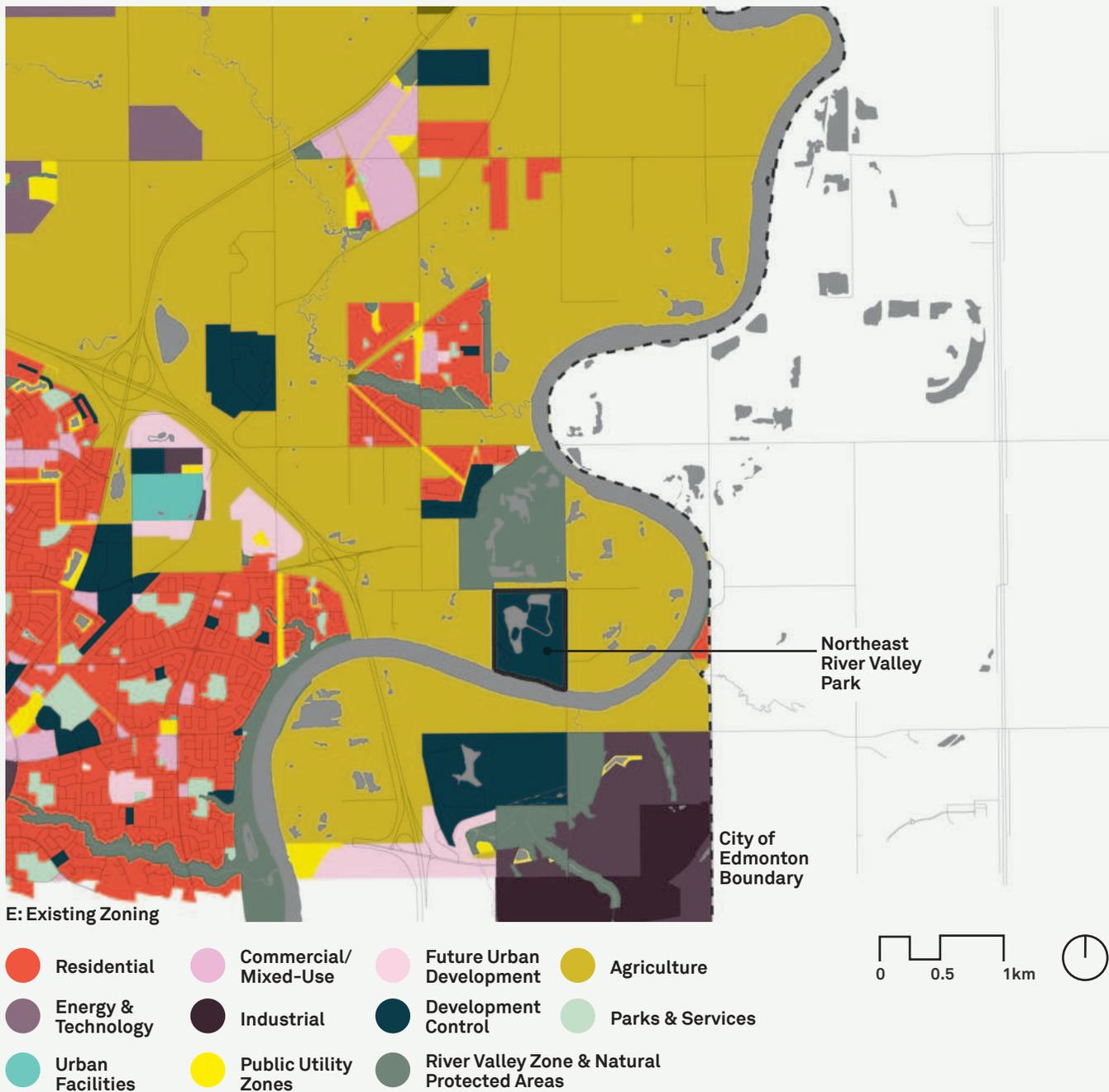
Current Zoning By-Law

→ Zoning By-Law

Edmonton's Zoning Bylaw 20001 regulates land use, building types, and activities permitted in different zones within the City. This bylaw ensures that developments are compatible with their surroundings and adhere to municipal land use plans (City of Edmonton).

Northeast River Valley Park is zoned DC2 (Direct Development Control Provision). DC2 zones are site-specific, custom zones created to allow for developments that could not otherwise be accommodated under a standard zone. These zones provide flexibility to address unique site conditions or development opportunities that do not fit within the existing zoning framework.

The vision and guiding framework as developed by the Strategic Master Plan will influence what the future zoning by-law of The Park will be.





Review of Existing Environmental Information

Environmental reports include Phase 1 Environmental Site Assessment dated December 2005; an update to the Phase 1 assessment dated May 2007; and Phase 2 Environmental Site Assessment. A memorandum was issued in October of 2021 written by Paul Fuellbrandt, an Environmental Scientist from Integrated Infrastructure Services of the City of Edmonton stating he agrees with the conclusions of Phase 2 ESA that additional assessment or remediation of the site is not required. See full Environmental Site Assessments for more information.

In addition to the ESA's, the bird sweep monitoring plan has been reviewed. Bird Sweeps indicate observations of birds and locations of active nests, and in the cases where the bird is protected under the Migratory Birds Convention Act, a buffer zone of restrictive activity is enacted. The recommended setback for the clay-colored sparrow and savannah sparrow nests is 30 m and the recommended setback is 50 m for the barn swallow nests. Nest search information is an active process, and is only valid for a maximum of seven days from the search date

The drawing indicates the locations of active nests as identified from two search periods dating back from 2023. The June 27th bird sweep located 10 nests in the Southeast Field and three nests on Playground Island, two of which were spotted on the Barn Bridges. Active nest observations indicate that the nests belong to three bird species: Clay-colored Sparrows, Savannah Sparrows, and Barn Swallows. In addition to the nest observation, a total of 18 different bird species were observed, on the June 27th bird sweep. The July 11th bird sweep searched the Southwest Field and the Highroad zones. Bird sweeps indicate nine active migratory bird nests, species include Savannah sparrow, Clay-colored sparrow and Song sparrow. In addition to the sparrows located on site, twenty-four species were observed.

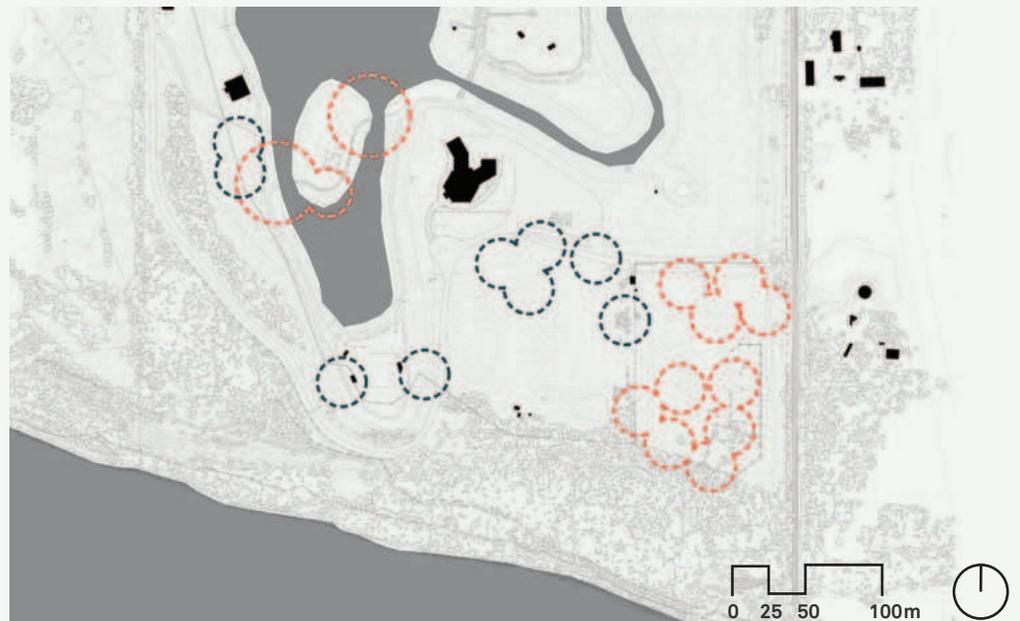
Barn swallows are a migratory bird species and are protected under the Migratory Birds Convention Act. Under the Act, disturbance or destruction of their nest during the breeding period is prohibited. In addition, barn swallows are listed as Threatened under Schedule 1 of the Species At Risk Act (SARA). Under the SARA, barn swallow nests are protected from 1 May or the date when adults are first seen building or occupying the nest, whichever is earlier, until 31 August or the date when a bird is last seen at the nest, whichever is later.

Bird sweeps continued from August 28 to August 31 and from September 13th to September 19th, 2023. From August 28th - 31st, one occupied Barn swallow nest was found within the 100m study area, however no other significant wildlife features were observed. From September 13th to September 19th, the Barn swallow on the west Barn Bridge was identified as active.

Refer to the Bird Sweep reports for a full list of species documented on the site, including the continuation of the program in 2024.

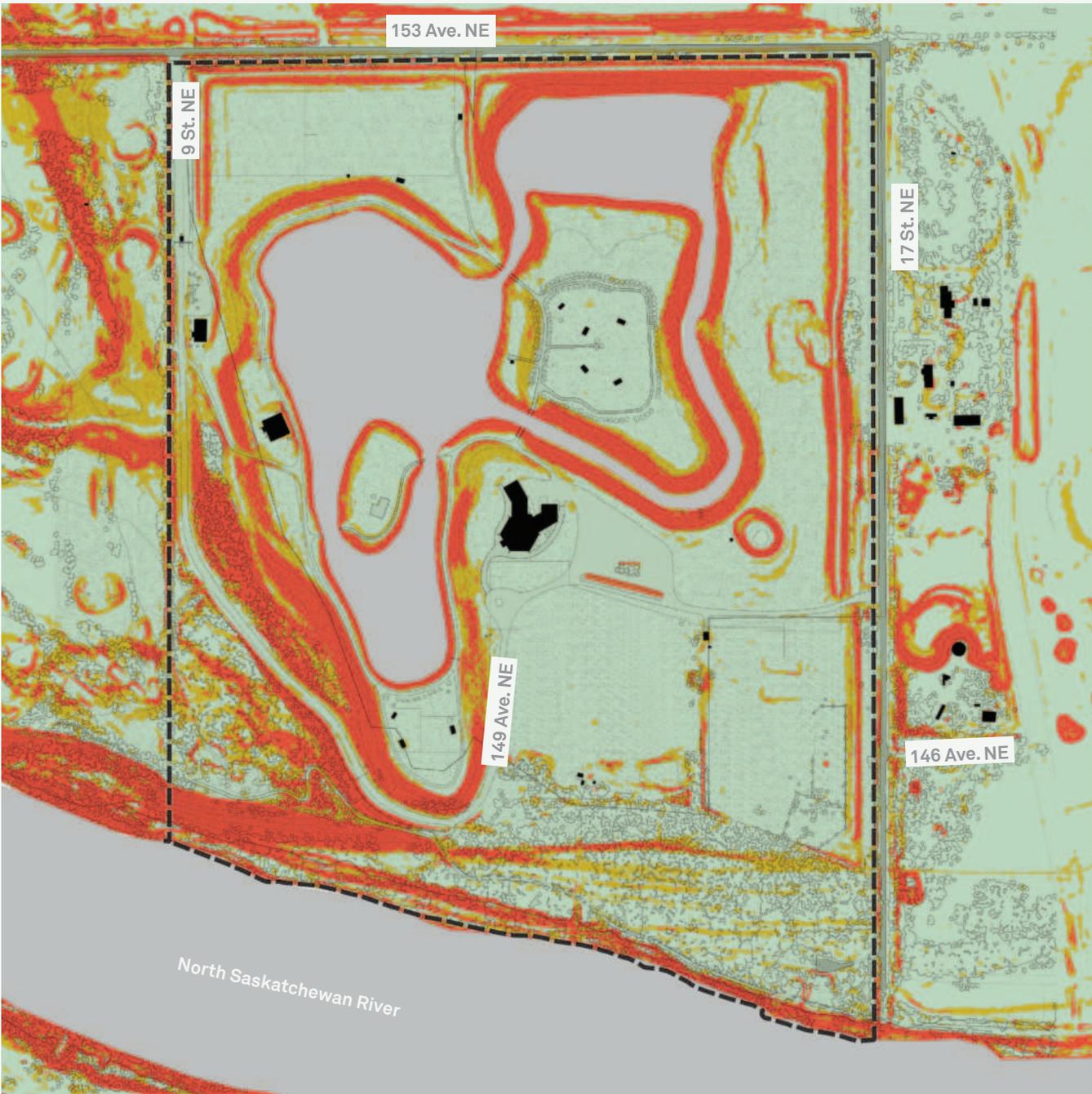
--- Bird Sweep
(June 27, 2023)

--- Bird Sweep
(July 11, 2023)

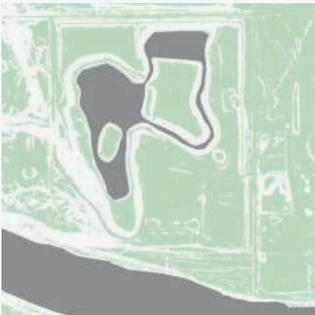


- 01 Barn Swallow spotted on East Bridge.
- 02 Clay-colored sparrow nest with four eggs. Spotted in the June 2023 bird sweep.
- 03 Mallard Duck

F: 2023 Bird Sweeps



G: Slope Analysis



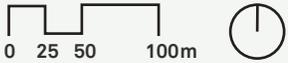
Below 4.9% Slope
"Fully accessible"



4.9 - 9% Slope
"Moderate"



Over 9% Slope
"Difficult"



--- Park Boundary

02 Site Assessment & Analysis

Accessibility Review

The following summary includes key points from *Our Lady Queen of Peace Ranch Accessibility Audit* by the City of Edmonton in 2021. See full report for more detailed information.

Administration Building

- Ramp upgrades required
- No assistive listening technology available
- Barrier-free washroom available but some upgrades needed
- Front counter is not barrier-free
- Hallways and doors meet accessibility standards

Lake Front Lodge

- Exterior ramp available but upgrades required
- No exterior door operator
- No assistive listening technology available
- Basement only accessible by stairs, elevating device not functional at time of report
- Barrier-free washroom available but some upgrades needed
- Front counter is not barrier-free

Event Centre

- Accessible main entrance with power door operators
- Some improvements needed in barrier-free washrooms
- Open area is accessible and has two accessible water fountains

Open Spaces

- Paved pathways required between program locations
- Upgrades required to the boat launch and playground

The Park has a series of trails that can be classified according to the City of Edmonton River Valley Trail Maps (refer to Map F). Moderate trails have grades of 5 to 9%, which can be challenging for some users with reduced mobility, particularly over longer sections. Difficult trails have grades of 10% or more, posing significant challenges for most users and necessitating good skills and fitness, regardless of the mode of travel.

The City of Edmonton Access Design Guide COE-IM-GUIDE-0015 V04 is the guiding document for barrier-free design at the Park.



- 01 Existing Administration Building
- 02 Existing Lake Front Lodge
- 03 Existing Event Centre
- 04 Existing Event Centre
- 05 Existing open space



H: Pond Bathymetry (2024)



Contours Interval 0.5m _____
 Pond Outline _____



01



02



03



04

Review of Pond Existing Conditions, Operations and Management

Water quality monitoring is conducted regularly through visual surveys and quality checks, adhering to the guidelines set forth by the Canadian Council of Water Quality. One of the significant concerns is bacterial contamination, particularly the presence of Enterococcus bacteria, which can impact water contact activities. Additionally, there is a potential risk of swimmer’s itch, caused by a parasite that lives in waterfowl and snails, necessitating the implementation of strategies to reduce snail populations to mitigate this issue. Another critical factor is the presence of blue-green algae, especially in the deeper ponds, which requires consistent visual surveys for effective monitoring.

A desktop review of the ponds, utilizing aerial imagery, mapping, and site photographs, highlighted several challenges with the current pond system. The ponds lack diversity in plant materials, and the surrounding upland areas, including the golf course to the west, are predominantly mowed lawns, which are likely resource and nutrient-intensive. The presence of an underwater aeration machine further indicates high nutrient content and oxygen depletion in the ponds. Enhancing water quality requires effective vegetation management at the pond edges and adjacent areas that drain into the pond, including the golf course. Increasing the size and biodiversity of plant life in these areas is crucial for managing runoff and improving the ponds’ overall ecological functioning.

By treating the pond and its surrounding wetland and shoreline as an integrated biophysical entity, it will enhance biodiversity and create a more interesting and wildlife-friendly facility. Preliminary recommendations include the construction of a wetland in a portion of the pond and increasing the circulation and flow of water between the ponds. These recommendations aim to create a robust ecosystem, that will also enhance human recreational opportunities on the ponds.

The following summarizes the Water Quality Assessment Report from August 30, 2022. See full report for more detailed information.

A water quality assessment of Our Lady Queen of Peace Ranch (OLQP) in Edmonton was conducted at the City’s request to monitor Enterococci bacteria levels. Weekly PCR testing over four weeks in recreational water areas revealed one sample in August 2022 exceeding safe limits, indicating possible fecal contamination near the shoreline. Consequently, the water was deemed unsuitable for recreational use at that time. Further testing, including for Escherichia coli (E. coli), was recommended to confirm contamination sources.

Key findings and actions included:

- 01 Elevated Enterococci levels in three out of four samples, suggesting human rather than animal contamination due to low water temperatures.
- 02 Recommendations to investigate nearby sewer lines and conduct follow-up testing after addressing any identified issues.
- 03 Initial anomalous results in August 2022 led to the discovery and repair of a leaking manhole by February 2023.

Further collaborative testing in March 2023 with the University of Alberta showed excellent water quality, with no significant contamination from various potential fecal sources during the winter. However, concerns were raised about possible contamination during the spring thaw due to mobilized wildlife fecal matter and storm drain impacts. Continued monitoring is required to assess these seasonal changes.

Bathymetric Survey

The bathymetric survey data provided by the City of Edmonton in May 2024 offers detailed insights into the pond’s depth and elevation profiles. This analysis is crucial for understanding water flow, circulation, and the overall health of the ecosystem. Depth variations influence water movement, nutrient distribution, and sediment retention, all of which directly affect habitats for aquatic vegetation and wildlife. Deeper areas serve as thermal refuges, while shallower zones encourage plant growth and provide habitat for aquatic species and waterfowl. Water circulation patterns driven by bathymetry play a vital role in oxygenation and preventing stagnation, ensuring a balanced ecosystem.



01



02

Site Condition Review

Climate Overview

Edmonton experiences a humid continental climate, characterized by significant seasonal temperature variations and distinct weather patterns throughout the year. The climate includes cold, snowy winters and warm, sunny summers, with distinct transitional seasons. The weather can be quite variable, with significant temperature swings, especially during the shoulder seasons. The City often experiences low humidity, especially in winter, leading to dry air conditions. Edmonton has a high number of sunny days throughout the year, with an average of 2,300 hours of sunshine annually.

Winter (December to February)

- Temperature: Cold, with average temperatures ranging from -10°C to -15°C, but can drop below -20°C during cold spells.
- Snowfall: Frequent snowfall, with snow cover lasting from November through March.
- Daylight: Short daylight hours, with the shortest day in December having about 7.5 hours of daylight.
- Precipitation: Mostly in the form of snow.

Spring (March to May)

- Temperature: Gradually warming, with average temperatures ranging from 0°C to 15°C.
- Snowmelt: Snow begins to melt in March, with snow-free conditions typically by late April.
- Precipitation: Increased rainfall compared to winter, with occasional snow in early spring.
- Daylight: Increasing daylight hours, with significant changes as the season progresses.

Summer (June to August)

- Temperature: Warm to hot, with average temperatures ranging from 15°C to 25°C, and occasionally exceeding 30°C.
- Precipitation: The wettest season, with frequent thunderstorms and rain showers.
- Daylight: Long daylight hours, with the longest day in June having about 17 hours of daylight.
- Humidity: Generally low to moderate.

Fall (September to November)

- Temperature: Cooling down, with average temperatures ranging from 15°C to 0°C
- Frost: First frosts typically occur in September, with snow possible by late October.
- Precipitation: Decreasing rainfall, with increasing chances of snow as the season progresses.
- Daylight: Decreasing daylight hours, transitioning to the shorter days of winter.

Northeast River Valley Park is almost completely open and exposed to the elements with the exceptions of some forest cover on the south edge of the site.

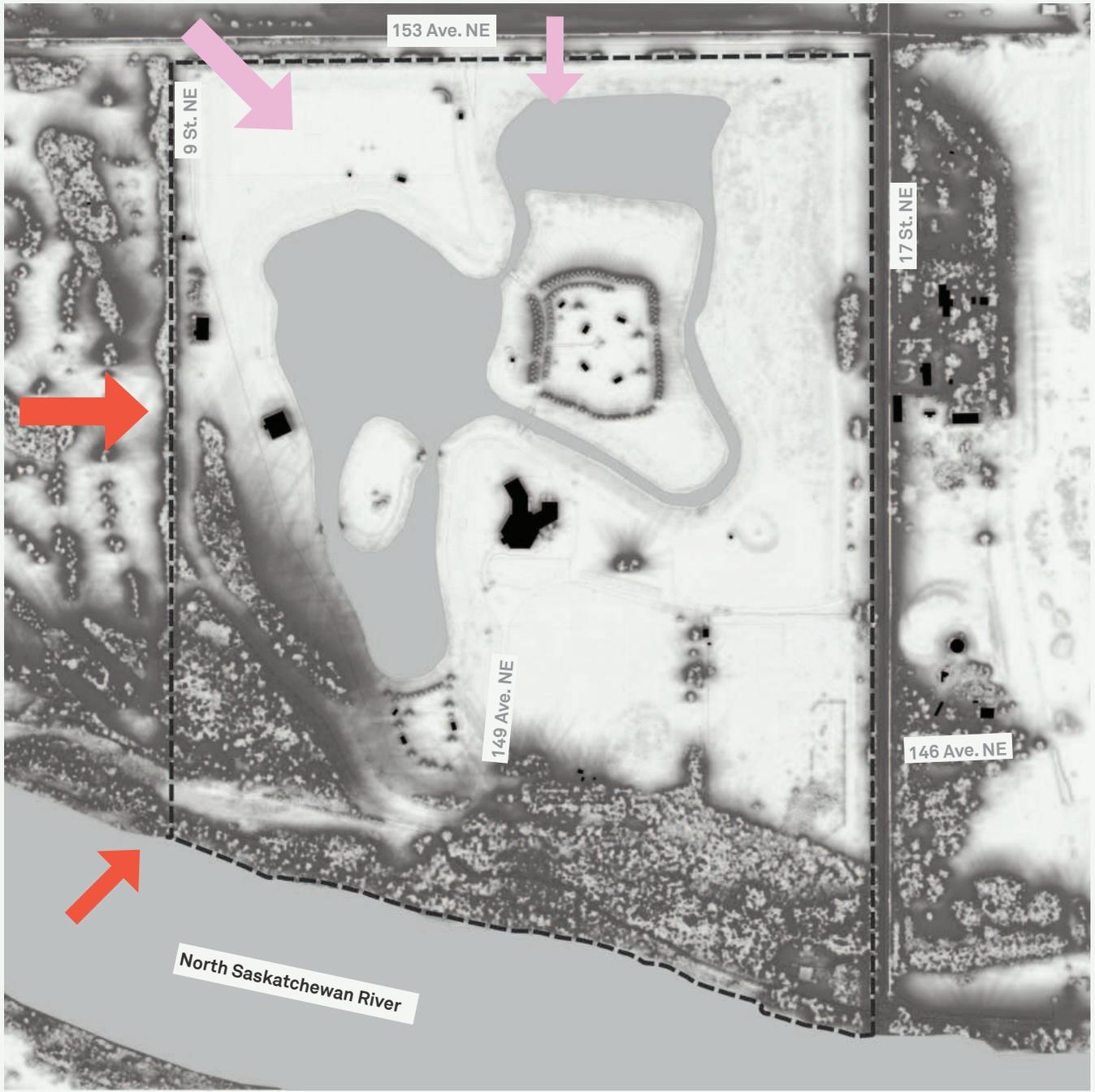
Winds

The prevailing winds in Edmonton vary throughout the year, influenced by seasonal weather patterns. Generally, the wind patterns are described as follows:

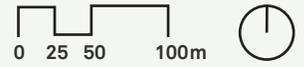
Winter (December to February)

- Direction: Winds predominantly come from the northwest and north.
- Speed: Wind speeds can be moderate to strong due to cold Arctic air masses moving southward.

- 01 Winter hike in Northeast River Valley Park (Waskahegan Trail Association)
- 02 Summer paddling at Northeast River Valley Park (City of Edmonton)



I: Sun and Wind Analysis



- Park Boundary
- ← Prevailing Winds
May to October
- ← Prevailing Winds
November to April
- Low Sun Exposure
- High Sun Exposure



Spring (March to May)

- Direction: Winds often shift to a more westerly direction, with occasional southwesterly winds as warmer air begins to move in.
- Speed: Wind speeds are generally moderate, with occasional strong gusts during transitional weather systems.

Summer (June to August)

- Direction: The prevailing winds are typically from the west and southwest.
- Speed: Wind speeds are usually lighter compared to winter, though thunderstorms can bring strong, gusty winds.

Fall (September to November)

- Direction: Winds tend to shift back to the northwest and north as cooler air returns.
- Speed: Wind speeds can be moderate to strong, especially during fall storms and the transition into winter.

At Northeast River Valley Park, the upper terrace shields the west side of The Park from westerly winds, often providing a calm and protected area. Meanwhile, the northeast slope limits sun exposure, creating a cooler, shaded environment. Despite these specific areas of protection, most of the park is generally exposed to both sun and wind.

Additionally, odors from the nearby Edmonton Waste Management Centre (EWMC) occasionally impact the area, particularly during regularly scheduled lagoon turning, as highlighted by several groups during internal engagement sessions. In the short term, strategies to further reduce odor impacts could include coordinating lagoon turning during off-peak hours or developing a ‘smell forecasting’ system to provide timely updates to the public. These initiatives could help enhance the overall experience for nearby residents and park visitors.

Flood Levels

Northeast River Valley Park is located on a flat mid-level river terrace between 35m above the North Saskatchewan River on the southwest corner of the park and 8m on the southwest corner. While flooding isn’t a threat to any permanent structures or pathways today, there is flooding and erosion along the south edge of the park.

Surface Water Flows/Stormwater Runoff

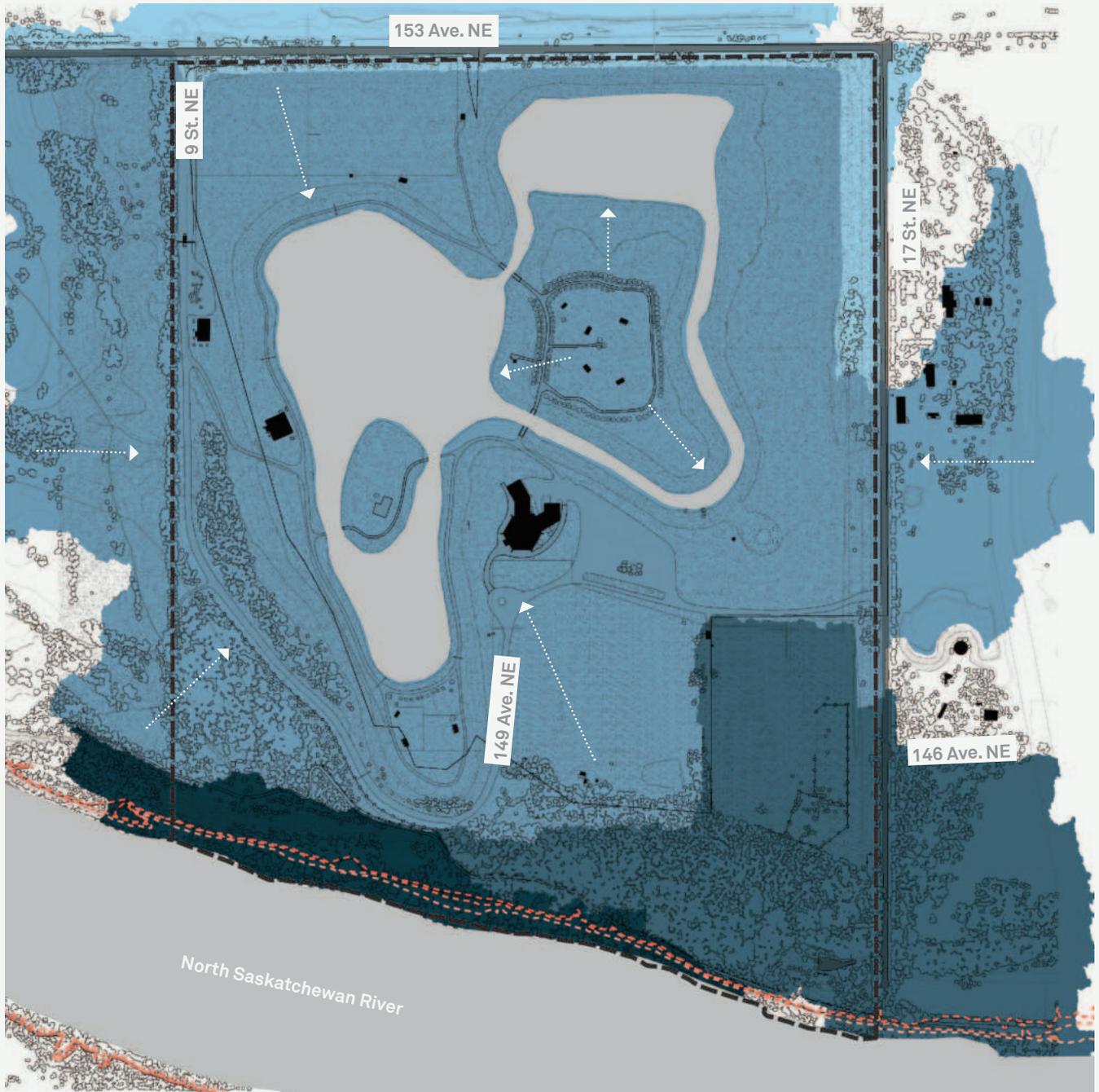
To understand the surface water flows on the site, the terrain was studied and divided into watersheds. Watersheds represent catchments of overland drainage. Of particular note, watershed 3 (medium blue), theoretically includes both parts of the west adjacent property (Plan 9520335 Lot 2), currently Raven Crest Golf & Country Club and parts of the east adjacent property (NW-27-53-23-4), currently a quarry operation. During a rain event, the terrace on the western edge of The Park largely flows into the pond. In remote instances along the Lake Trail there are localized swales which capture the water, before running into a culvert beneath the trail, and ultimately into the pond. Common maintenance practices of golf courses often include the use of intensive fertilizers which may impact the water quality of the pond, if not filtered first. Surface water quality may be impacted by nutrient-rich golf courses to the east and north.

Watershed 1 is located at the southern edge of the park, along the ravine slope. Water in this catchment is directed towards the North Saskatchewan River, the largest impact of surface water flow in this area is related to erosion or slumping of the ravine bank. Watershed 2 catchment is located to the east of watershed 1 and flows toward the North Saskatchewan river, as this area is largely forested and terrain slopes are minimal, erosion risk from surface water is reduced. Watershed 4 is located along the northern edge and eastern edge of the park; a terrain buffer prevents water from collecting on the site. Localized low points, primarily ditches capture the water in remote areas along 153 Ave. NE and 17th St. NE. To the north of the site, The Quarry Ridge Golf Course has ponds, likely previous quarries that hold water.

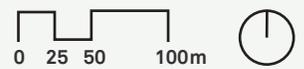


01 Existing pond at Northeast River Valley Park (City of Edmonton)

02 Existing pond at Northeast River Valley Park (City of Edmonton)



J: Hydrology



Watershed 1

Watershed 2

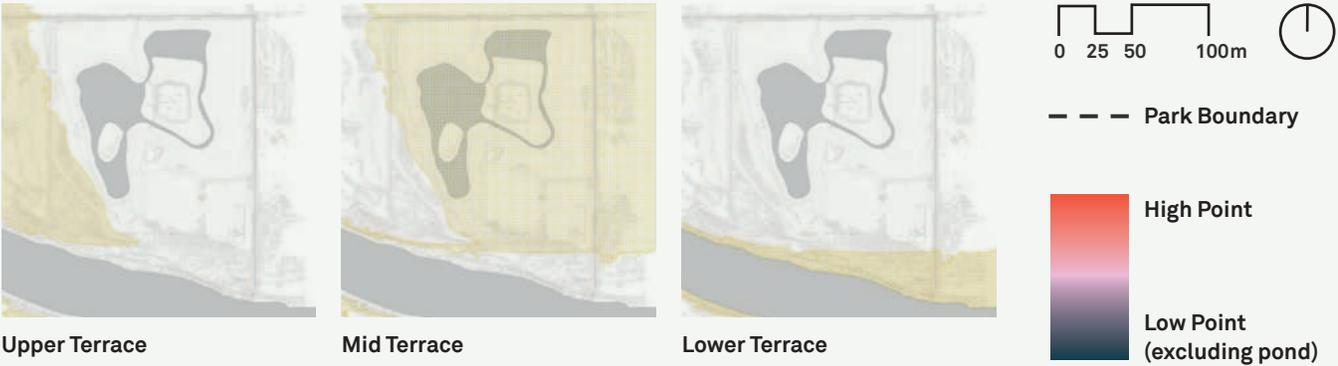
Watershed 3

Watershed 4

- Park Boundary
- - - Typical River Level
- - - 10 Year Flood Level
- - - 50 Year Flood Level
- - - 100 Year Flood Level



K: Terrain and Glacial Terraces



Upper Terrace

Mid Terrace

Lower Terrace



01



02

- 01 Aerial view of North Saskatchewan River
- 02 Aerial view of Northeast River Valley Park

Physical Characteristics

Glacial History

During the last Ice Age, massive glaciers covered much of the region, sculpting the landscape as they advanced and retreated. As these glaciers moved, they carved out the deep valleys and deposited a variety of sediments that shaped the current topography. The retreat of the glaciers left behind the North Saskatchewan River, which continued to erode and refine the valley, creating steep slopes and terraces that characterize Northeast River Valley Park today. Glacial till, sand, and gravel deposits are common throughout the area, contributing to the diverse soil composition and supporting a wide range of vegetation. The Park's high bluffs and rolling terrain are a direct result of this glacial activity.

The Park is positioned within a major meltwater channel, where the cutting of soft aggregate has defined the river valley and shaped the park's terrain. The North Saskatchewan River began carving a valley into the underlying sediments and rock around 12,000 years ago, following the melting of glaciers and the draining of Glacial Lake Edmonton. At times, the river stopped cutting downwards and deposited sand and gravel, with some of the original beds and bars preserved as terraces along the valley sides. Over the last 8,500 years, the river has maintained the same elevation but has actively eroded the valley sides, creating steep walls prone to slope failure.

Terrain

Northeast River Valley Park in Edmonton is situated along the North Saskatchewan River, featuring steep slopes and riverbanks that create a varied landscape. The area exhibits significant elevation changes, with high bluffs overlooking the river and lower floodplains near the water. The Park includes several high bluffs and cliffs that provide panoramic views of the river and surrounding areas. Closer to the river, the terrain flattens into floodplains and terraces, which are often grassy and may be prone to seasonal flooding. The varied topography supports an extensive network of trails and pathways. This diverse topography supports a variety of vegetation zones, from dense forests on the slopes to open meadows and wetlands in the lower areas.

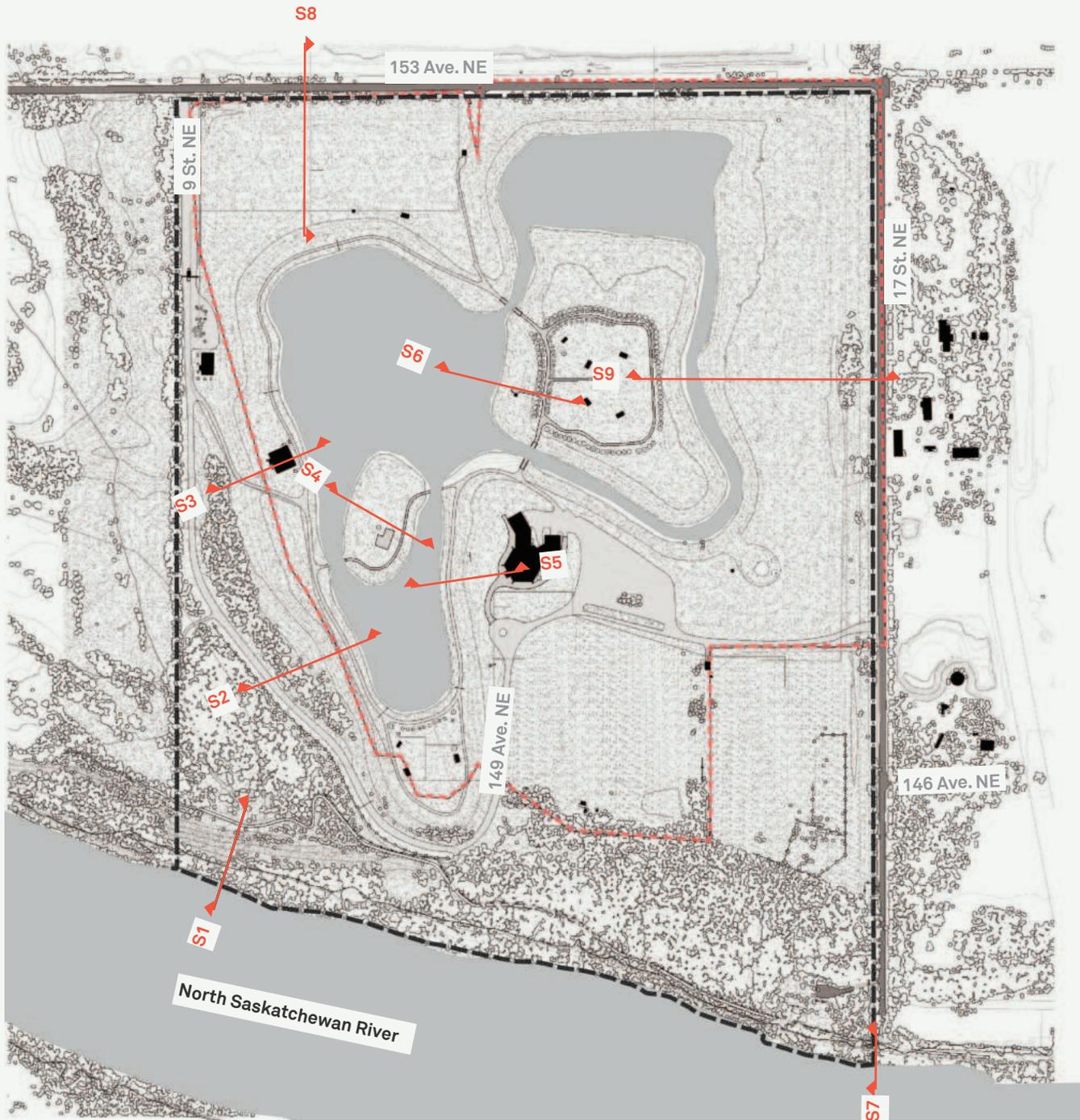
Edmonton's River Valley is shaped by a diverse range of geomorphological features. Carved over millennia by the North Saskatchewan River, the valley exhibits a series of terraces and slopes that reflect its dynamic geological history. The valley's geomorphology includes steep embankments along the riverbanks, characterized by varying slopes that influence the accessibility and use of different terrace levels. These terraces, such as the Upper, Mid, and Lower Terraces, offer distinct landscapes and ecosystems, from treed areas to open parklands, catering to diverse recreational and ecological needs. The river itself forms a central axis, with its flow influencing the formation of meanders, islands, and floodplains, creating a mosaic of habitats and scenic vistas throughout Edmonton's extensive river valley system.

At Northeast River Valley Park, The Upper Terrace is defined by a steep embankment along the North Saskatchewan River, with approximately a 45% slope, and wraps along the northeast edge of the park with a 20-25% slope towards the north. (See sections 1 and 2)

The Mid Terrace is a larger, flatter area where most of the park's activities are concentrated today. Including the buildings, pond, and large grassland area. (See sections 3,4,5,6,8,9)

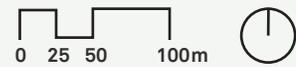
The Lower Terrace frames the south edge of the park and eventually wraps along the North Saskatchewan River toward Fort Saskatchewan. This area is largely treed and includes a vital shared-use path within the river valley. (See section 7)

The terrain ranges from approximately 643m above sea level in the higher western regions to around 607m meters in the lower central and eastern areas. The highest elevations are concentrated along the western edge (see sections 1 and 2) , transitioning to a large flat terrace that features a pond, buildings, and grassland (see sections 3,4,5,6,8,9). The northern and western edges of the site are defined by earth mounds (see sections 8 and 9), which provide a topographic buffer to the roads, offering natural protection and visual separation from traffic.



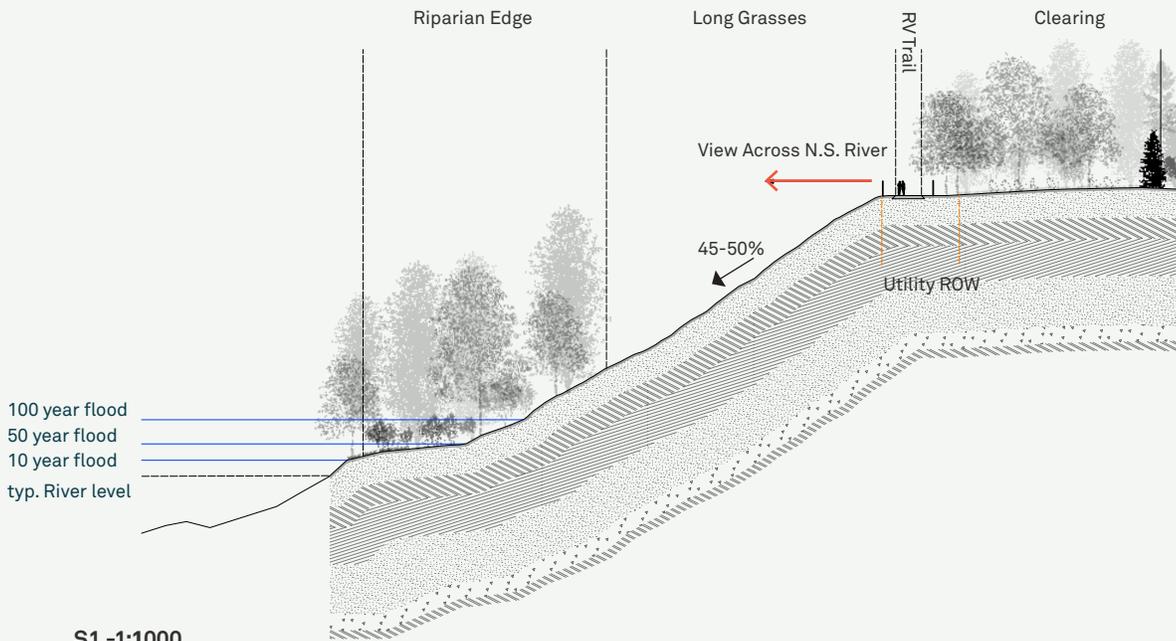
L: Site Plan with Sections Locations

- — — Park Boundary
- - - Quarry Operations Extents

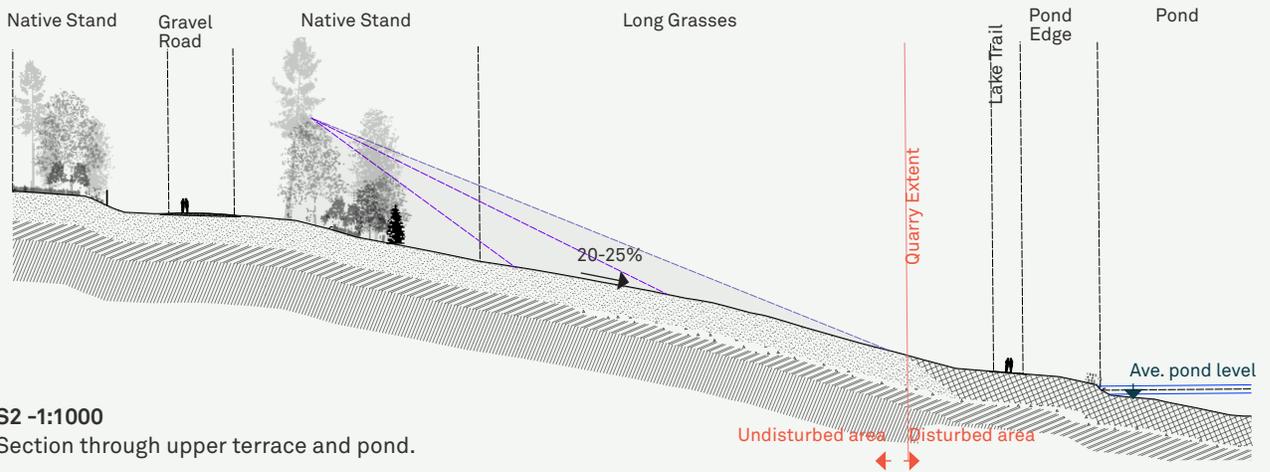


Existing Site Sections

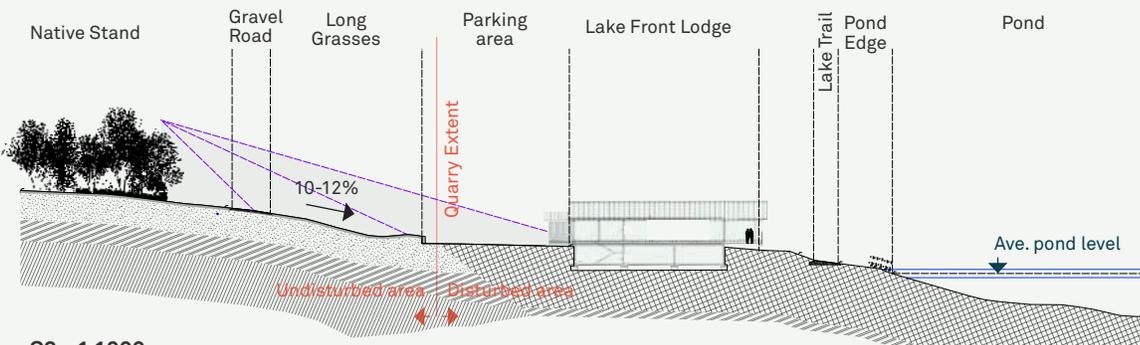
The site plan features sections S1 through S9, highlighting existing topographical transitions and relationships between natural and built elements. These sections reveal how the land interacts with the river, the pond, architectural structures, and terraced landscape, providing a detailed understanding of the existing landscape. The sections also capture the extents of the former quarry operations, illustrating areas of significant ground disturbance.



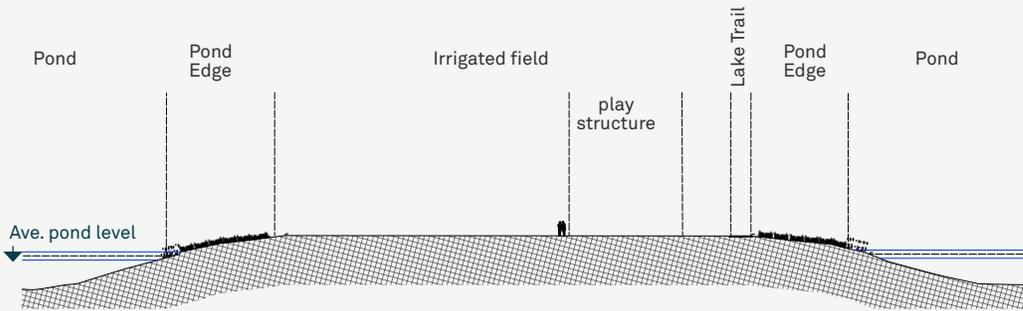
S1 -1:1000
Section through upper terrace and the North Saskatchewan River.



S2 -1:1000
Section through upper terrace and pond.



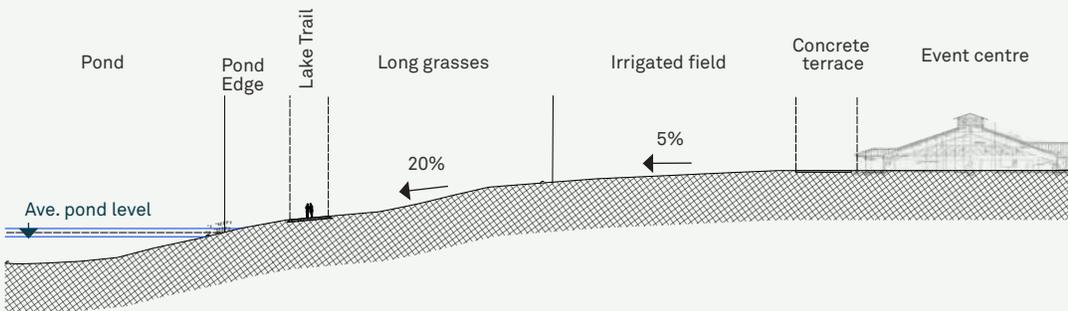
S3 - 1:1000
Section through Lake Front Lodge and the pond.



S4 - 1:1000

Section through "Playground Island" and the pond.

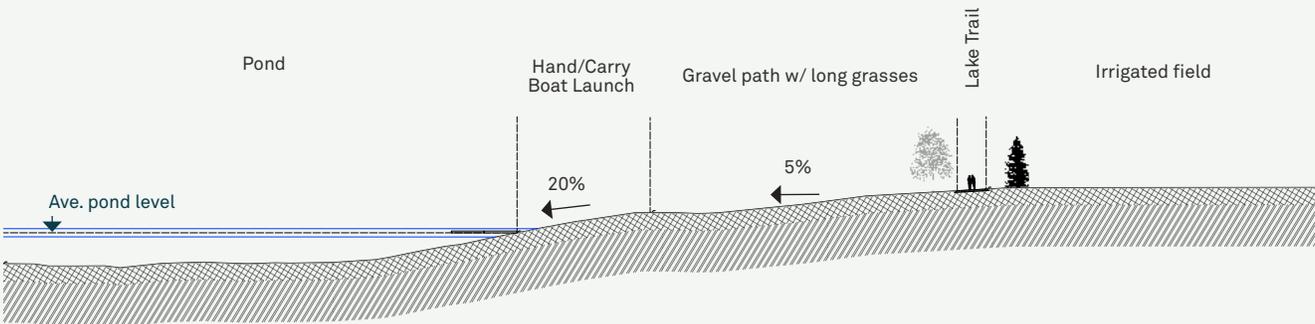
The section is located within the Disturbed area (refer to Drawing L: Site Plan with Sections Locations)



S5 - 1:1000

Section through "Event Centre" and the pond.

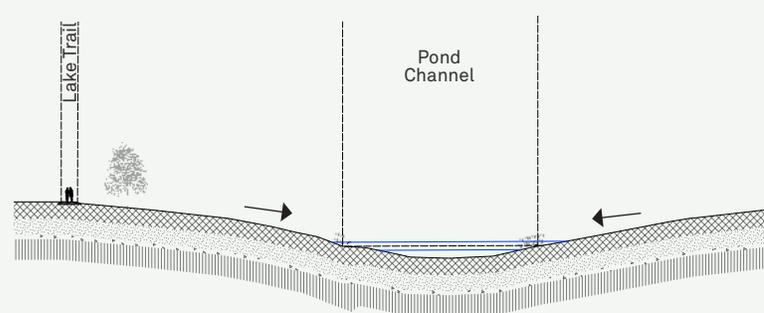
The section is located within the Disturbed area (refer to Drawing L: Site Plan with Sections Locations)

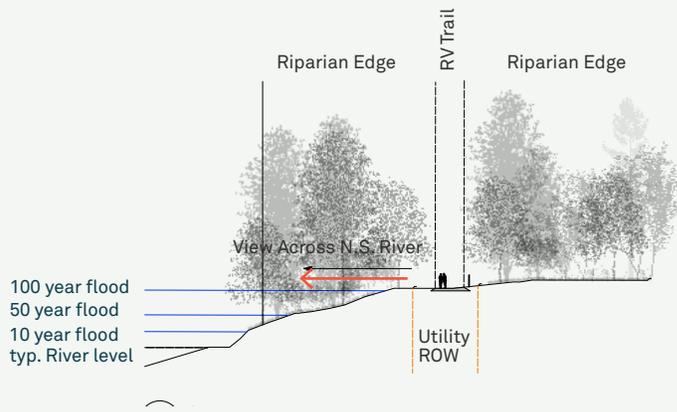


S6 - 1:1000

Section through "The Big Island" and the pond.

The section is located within the Disturbed area (refer to Drawing L: Site Plan with Sections Locations)



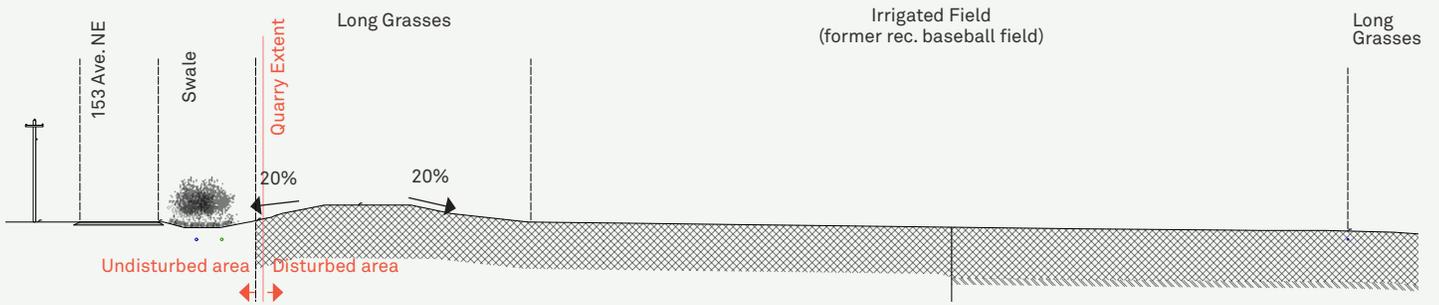


S7 - 1:1000

Section through lower terrace and the river.

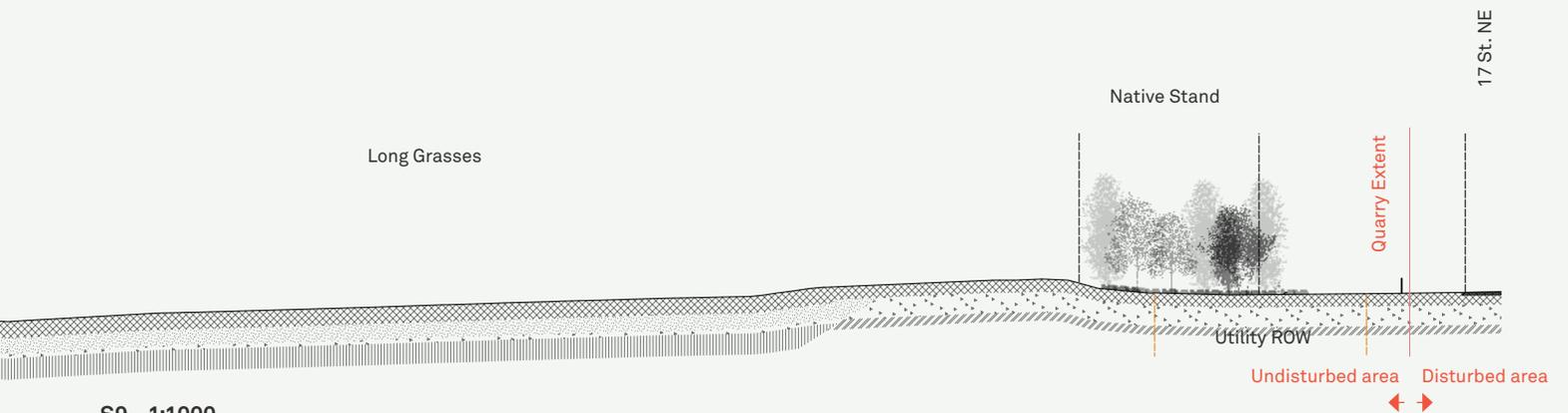
The section is located outside of the Disturbed area (refer to Drawing L: Site Plan with Sections Locations)

* Soil profile not available outside of geotechnical study area.



S8 - 1:1000

Section through 153 Ave. NE and "Upper Field".



S9 - 1:1000

Section through 17th St. NE and the pond.



M: Animal Habitat Corridors



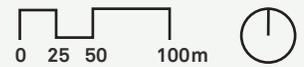
Terrestrial Corridors



Arboreal Corridors



Fish Habitat



--- Park Boundary



Wildlife

Northeast River Valley Park in Edmonton serves as vital habitat for a diverse array of wildlife, owing to its proximity to significant wildlife corridors. Through the internal engagement process, and desktop research it was discovered that the The Park supports a variety of mammalian species, including white-tailed deer (*Odocoileus virginianus*), coyotes (*Canis latrans*), and red foxes (*Vulpes vulpes*), which use the dense forests and open meadows for habitat and foraging. Additionally, smaller mammals such as beavers (*Castor canadensis*) and muskrats (*Ondatra zibethicus*) are observed in the riparian forest in the south portion of The Park.

The avian population within the park is notably rich, comprising species such as the bald eagle (*Haliaeetus leucocephalus*), great blue heron (*Ardea herodias*), and numerous waterfowl which thrive in the park's diverse ecosystems. According to *iNaturalist*, a platform for documenting and identifying biodiversity, amphibian species, including the Western Tiger Salamander (*Ambystoma mavortium*), and reptiles such as the Red-sided garter snake (*Thamnophis sirtalis parietalis*) have been sited near to the park and contribute to the area's ecological diversity.

Northeast River Valley Park's location adjacent to the North Saskatchewan River Valley Corridor enhances its ecological connectivity. This connectivity is critical for wildlife movement and genetic exchange, which are essential for maintaining the health and viability of these species within the urban landscape. The Park's integration into this larger network of natural habitats is important in the conservation of regional biodiversity.

Northeast River Valley Park is found within several critical overlays which protect the wildlife habitat in the park including the Key Wildlife and Biodiversity Zone, and North Saskatchewan River Valley and Ravine System Protection Zone. By categorizing the Environmental Sensitivity Methodology data (ESM) as provided by the City of Edmonton, and overlaying the arboreal, terrestrial and aquatic habitat layers on the site, it is revealed how critical the Northeast River Valley Park is as a natural corridor for animal movement. The park's proximity to The Edmonton Waste Management Centre (EWMC) on the south side of the river, accentuates the park's significance as a regional habitat connection as EWMC land use is not beneficial to wildlife movement or habitats, creating a sizable corridor gap in the northeast of Edmonton.

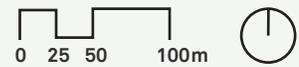


- 01 White-tailed deer (*Odocoileus virginianus*)
- 02 Coyote (*Canis latrans*)
- 03 Red fox (*Vulpes vulpes*)
- 04 Beaver (*Castor canadensis*)
- 05 Great blue heron (*Ardea herodias*)
- 06 Western Tiger Salamander (*Ambystoma mavortium*)
- 07 Red-sided garter snake (*Thamnophis sirtalis parietalis*)



N: Vegetation Zones

--- Park Boundary



Maintained Grass

Open Meadows

Trembling Aspen

White Spruce

Naturally Wooded
Shrubs

Golf Course
Shelterbelt



- 01 Pond edge lined with long grasses and wetland plants
- 02 Balsam poplar and White Spuce are surrounded by long grasses.
- 03 Native stands along the river's edge
- 04 Emergent Trembling aspen in the southern fields

Vegetation Zones

Northeast River Valley Park includes a range of vegetation zones, each contributing to the park's potential ecological richness. The park's topographical diversity, from high bluffs to low-lying floodplains, has the capacity to support a variety of plant communities adapted to distinct environmental conditions.

The elevated bluffs and slopes are predominantly forested with a mix of deciduous and coniferous trees, including species such as trembling aspen (*Populus tremuloides*), balsam poplar (*Populus balsamifera*), and white spruce (*Picea glauca*). These forested areas play a significant role in soil stabilization and erosion control.

In contrast, the floodplains and terraces adjacent to the North Saskatchewan River feature a blend of grasses, shrubs, and wetland plants. Common species in these areas include reed canary grass (*Phalaris arundinacea*), willow (*Salix* spp.), and cattails (*Typha latifolia*), which thrive in the moist, nutrient-rich soils. These zones are vital for supporting wetland-dependent wildlife and contribute to the overall hydrological balance of the park.

From the landscape development drawings from 2008, the park's open meadows were seeded with a combination of Mountain View June Grass, Glacier Alpine Bluegrass, Spike Trisetum, and Plateau Rocky Mountain Fescue in the short native seed mix (see open meadows layer in Map L: Vegetation Zones). While the wet meadow areas were planted with a seed mix comprising Fowl Blue Grass Nutra, Tufted Hairgrass Nutra, Hairy Wily Rye Nutra, Western Wheatgrass, White Top, Hillcrest Awned Wheatgrass, and Perennial Ryegrass. Today, the variety of the native grasses on-site have not been surveyed.

The health and vitality of the open meadows are increasingly at risk due to the encroachment of several noxious weed species identified under the Provincial Weed Control Act. These invasive species pose significant threats to the ecological balance of the area by outcompeting native plants, reducing biodiversity, and altering the natural habitat. Among the species listed under this regulation are:

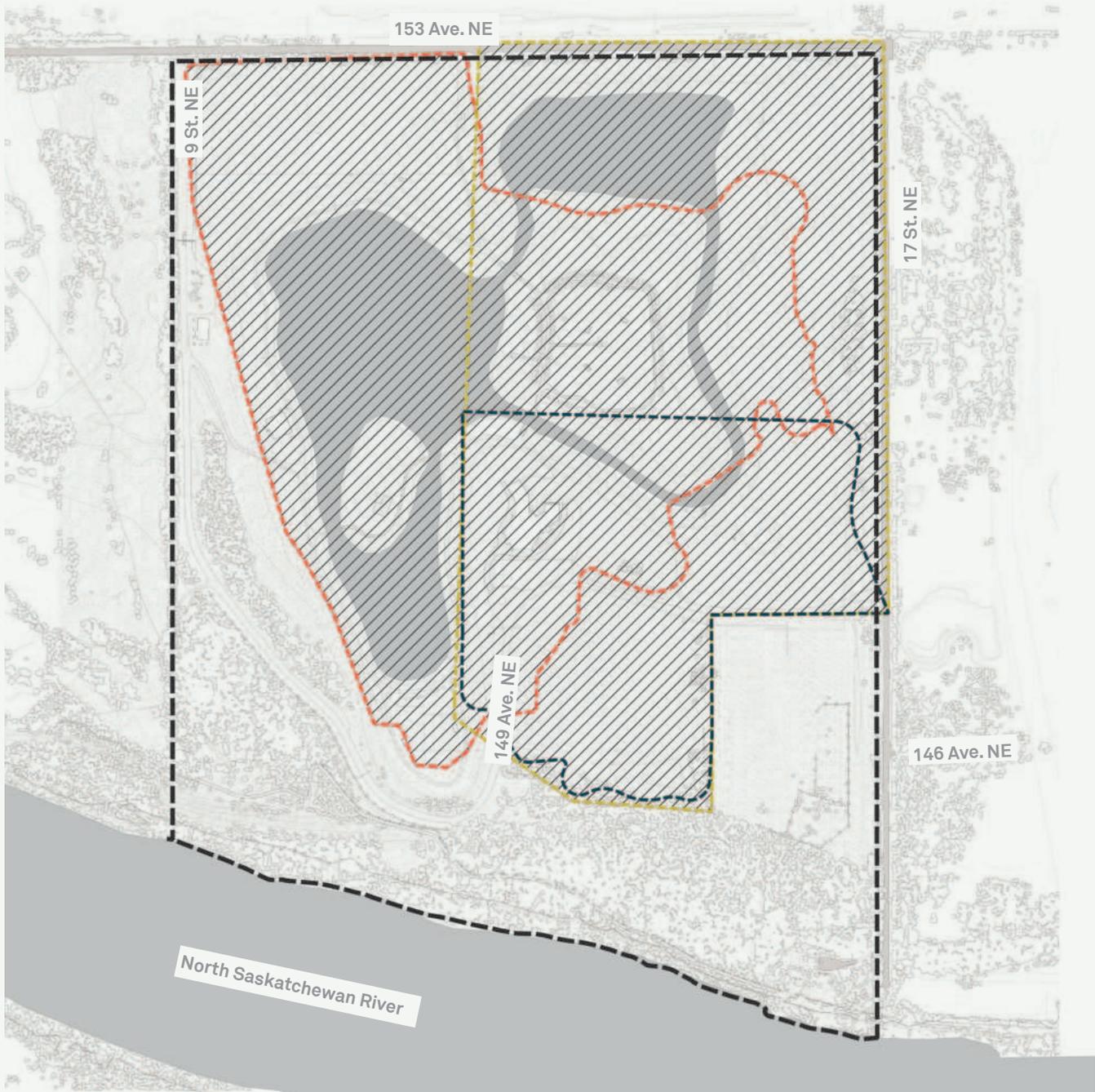
- ≥ Tansy, *Tanacetum vulgare*
- ≥ Leafy spurge, *Euphorbia esula*
- ≥ White Cockle, *Silene latifolia*

Herbicides are currently used to limit the spread of weeds, however the persistence of weeds is a known issue, without replacing the weeds with another native planting scheme or strategy, the weeds will eventually re-emerge. Throughout many of the open meadows, bird sweeps have located swallow nests which are protected birds in the Migratory Birds Convention Act. A key challenge in the open meadow vegetation zone is the management of the noxious weeds, while maintaining the habitat for ground nesting birds.

The open meadows along the forest edge in the southeast portion of the park, have emergent trees of trembling aspen. This observation of early succession alludes to the potential of promoting an expanded riparian buffer zone along the northern edge of the riparian zone.

Irrigated fields of cut grass are located on the northeast corner of the park in the Sports Field (3.1 hectare), in the middle of the "The Big Island" (2.1 hectare), surrounding the Events Centre and along the southern edge of the pond in the "Firepit Area" (.75 hectare). Individual public trees, as found in the Public Tree Inventory are located throughout the park including: a row of White Spruce (*Picea glauca*) in the "Firepit Area"; a group of Trembling Aspen (*Populus tremuloides*) in the southern corner of the Event Centre; Balsam Poplar (*Populus balsamifera*) and White Spruce (*Picea glauca*) are arrayed along the Lake Trail on the "The Big Island".

Native stands with dominant species of trembling aspen, black spruce, and white spruce combine to compose the riparian river's edge. Noxious weeds are also noteworthy in the native stands, in particular Common Buckthorn (*Rhamnus cathartica*) pose a threat to the habitat of native vegetation species in the understory.



0: Disturbed Areas from Quarry Operations





- 01 Campers at Our Lady Queen of Peace Ranch hiking
- 02 Campers at Our Lady Queen of Peace Ranch rafting
- 03 Camper jumping off dock at Our Lady Queen of Peace Ranch
- 04 Former quarry / current project site
- 05 Children playing in the natural pools.

Historical Uses

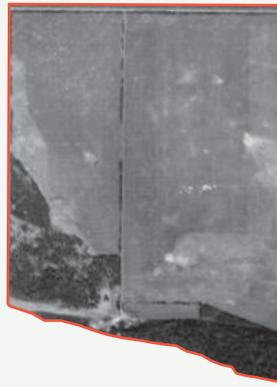
According to the supplied historical aerial images and the Phase 1 Environmental Site Assessment (ESA), from 1949 to 1957 the site was an agricultural field. The earliest signs of the site being excavated for aggregate are visible in the 1962 aerial photograph, as reported in the Phase 1 ESA. From 1962 until 2003 the site was increasingly dominated by quarry operations. To understand the scope of the quarry operations on the site today, the visible quarry extents were traced in the supplied aerial images from 1978, 1988 and 1998. The three dashed outlines (yellow - 1978, blue - 1988, red - 1998) were also combined to create a fourth layer called, “disturbed area”. The disturbed area can be understood as the land that was at one point in the last 48 years an active quarry operation.

Since 2004, Walton International Group - an asset management and global real estate investment company who is focused on pre-development land - purchased a large portion of the park converting the former quarry site into a private camp/park with an iconic pond, trail system and unique recreational nodes for children. While several schematic plans were drawn for the site, not all were built. Today the unique recreational facilities include: a sports field; pond for non-motorized water sports; a hand boat launch; several picnic areas with firepits located along the trail system; a playground on the “Playground Island”; an amphitheatre area with outdoor seating and firepit; ropes course; and natural pool.





1924



1948



1950



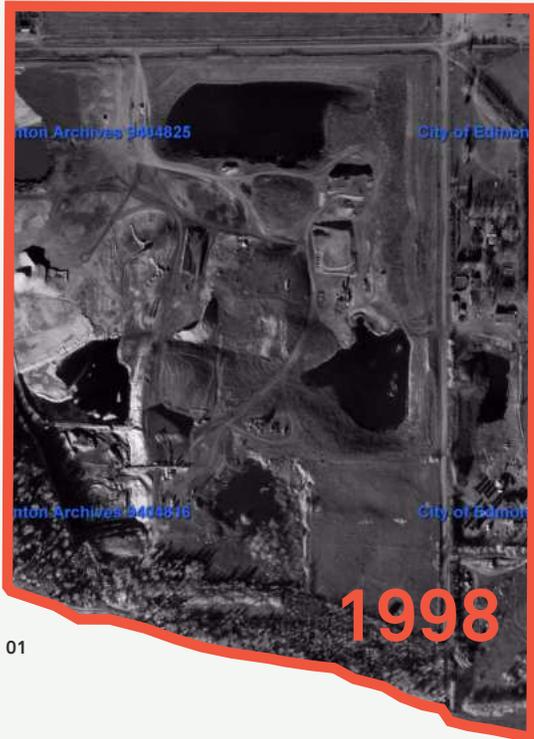
1957



1978



1988



01



02

01 Timeline showing site conditions and industrial activities from 1924 through 1998

02 Photo showing excavation of the existing pond network at Northeast River Valley Park

Environmental Approvals

The following environmental approvals may be required for future development of Northeast River Valley Park:

Municipal Approvals

- Environmental Site Assessment

An updated ESA to evaluate the potential environmental impacts of the development and to propose mitigation measures.

- North Saskatchewan River Valley Area Redevelopment Plan (Bylaw 7188)

Any development within the North Saskatchewan River Valley and Ravine System requires a review under this bylaw to ensure it aligns with the River Valley Area Redevelopment Plan (ARP).

Land Development Applications

Technical studies are required to support the review and assessment of Land Development Applications (LDAs) related to open spaces.

Provincial Approvals

- Water Act Approval

If development involves altering water bodies, such as creeks, wetlands, or the North Saskatchewan River, approval under Alberta's Water Act would be necessary. This includes any work that affects water flow or water quality.

- Public Lands Act

If development affects public lands or water bodies, approvals under this act might be required to ensure sustainable use and conservation of these resources.

- Environmental Protection and Enhancement Act (EPEA)

This act requires an environmental assessment for projects that could significantly impact the environment. The EPEA process includes public consultations and the development of an Environmental Protection Plan (EPP).

- Wildlife Act

If the development affects wildlife habitats or involves species at risk, compliance with the Alberta Wildlife Act and possibly a Wildlife Research Permit would be required.

Federal Approvals

- Fisheries Act

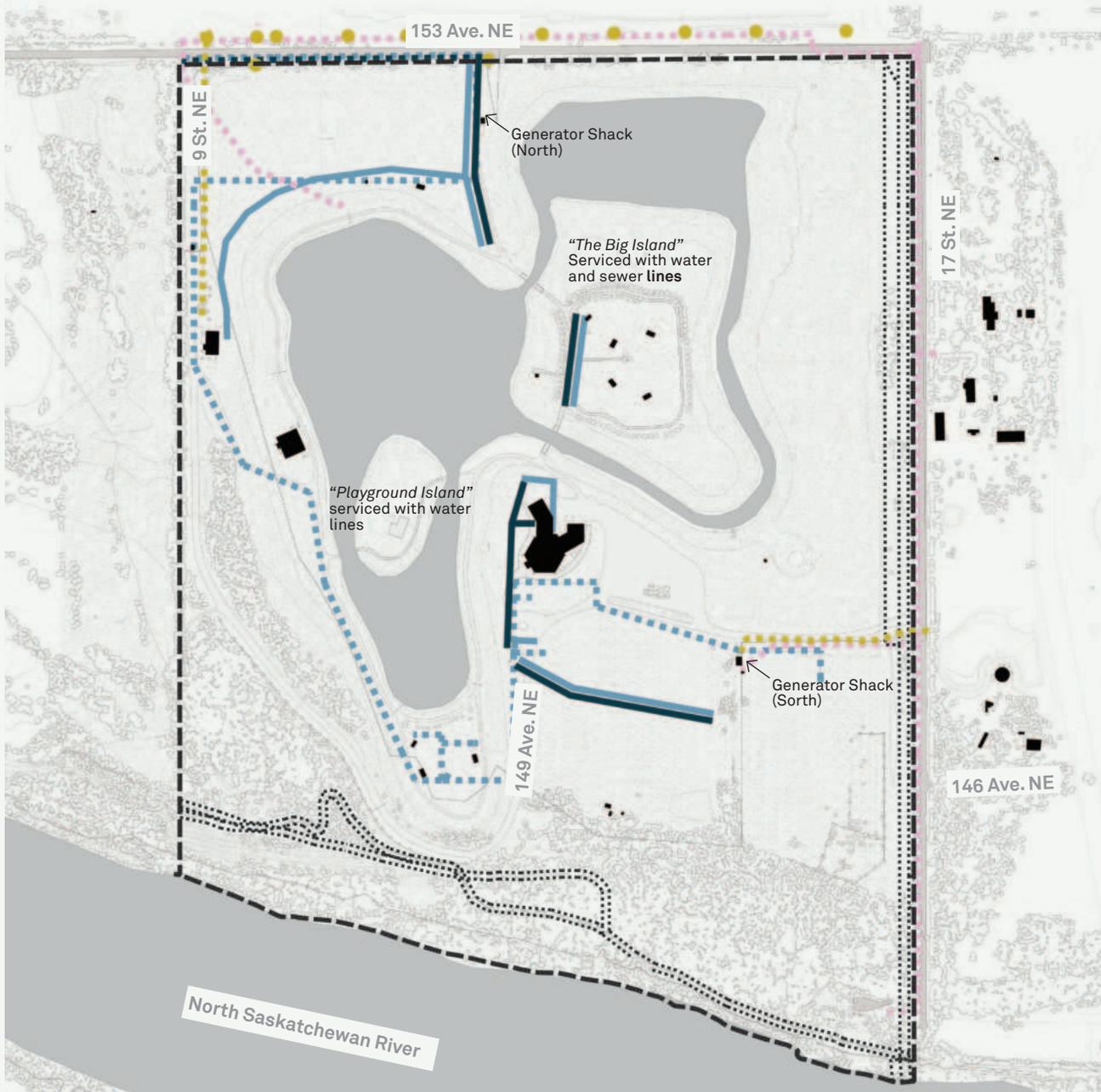
If the development impacts fish habitats, approval under the Fisheries Act from Fisheries and Oceans Canada would be necessary. This would involve an assessment of potential impacts on fish and fish habitats and the development of mitigation strategies.

- Species at Risk Act (SARA)

If the development area includes habitats for federally listed species at risk, approval under SARA would be required. This involves assessing the impact on these species and developing recovery strategies.

- Canadian Environmental Assessment Act (CEAA)

For larger projects with significant potential environmental impacts, a federal environmental assessment under CEAA might be required. This involves a comprehensive review of environmental, social, and economic impacts.

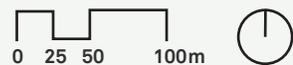


P: Existing Site Servicing*

Existing Site Servicing & Utilities

Based on the provided survey, the site is serviced by a water line running from the sports field to the administrative building, Lake Front Lodge, firepit area toilets, and the Events Centre. Power poles run along the north edge of 153 St NE., cross under the road, and connect to the administrative building. Natural gas, communication lines (Telus), and power run along the eastern edge before connecting at 149 Ave. NE. Utility right-of-ways are along the southern and eastern edges of the park. The Phase 1 Environmental Site Assessment notes that two pipelines carry crude oil, and a third transports high vapour substances.

*Internal Engagement meetings revealed that the site's servicing details exceed what is shown in the City of Edmonton's survey and drawings. The existing information shows incomplete sewer and water lines, with irrigation lines omitted. A comprehensive utility survey will be necessary in future phases to ensure accurate data.



- Park Boundary
- Water Lines
- Water Lines - 2008 As Built
- Sewer Lines
- Sewer Lines - 2008 As Built
- Natural Gas Lines
- Power Lines & Poles
- Communications
- Utility ROW

Geotechnical Report Summary

The following summarizes the Geotechnical Investigation Report from March 20, 2006, by Hoggan Engineering & Testing . See full report for more detailed information and note that construction has occurred on the site since the time of this report. It is recommended that a new geotechnical report is completed before moving to the next phases of design.

Fill

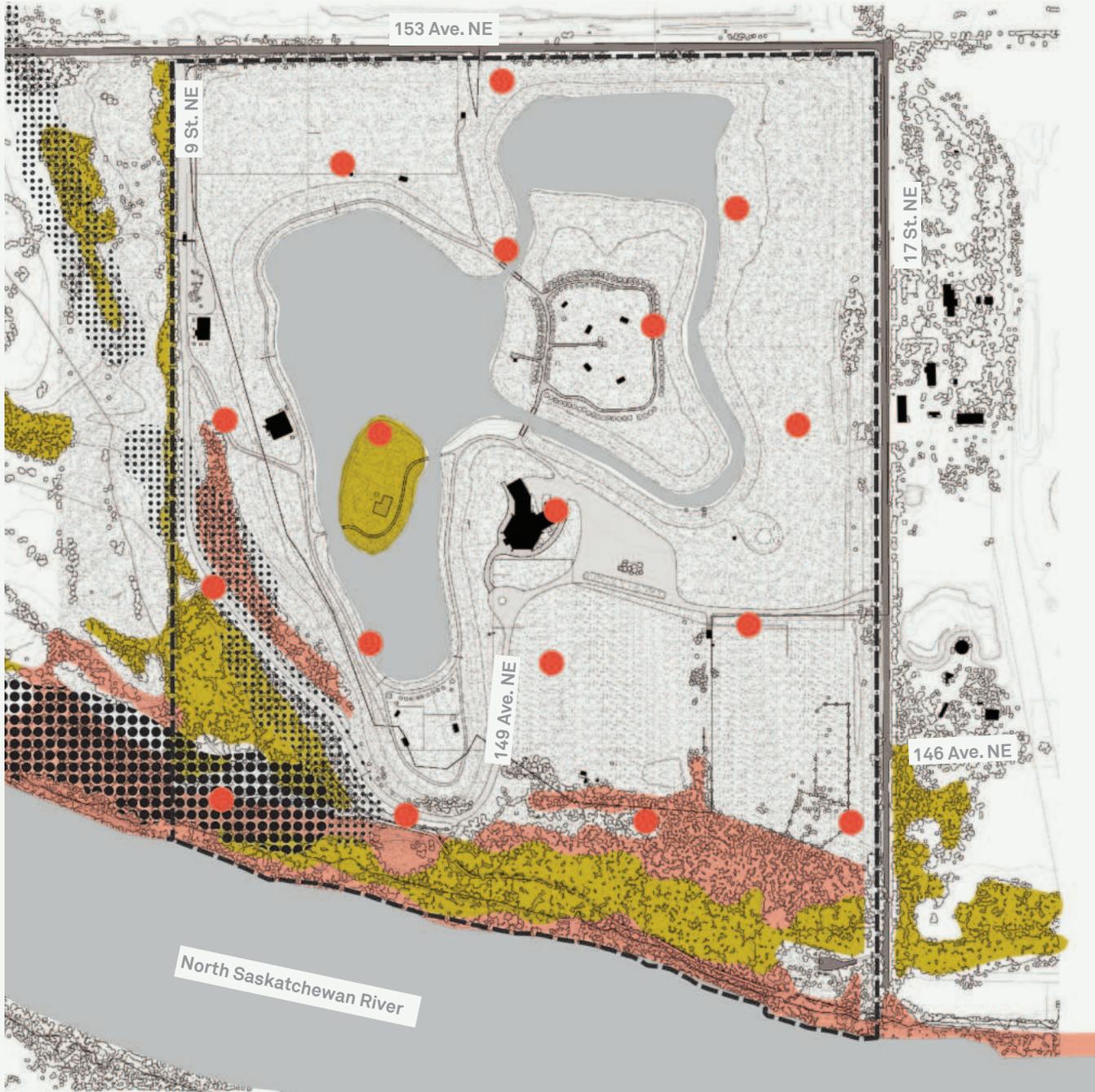
Large amounts of fill are present at this site in most locations. This fill resulted from the gravel and sand pit operation that occurred onsite and is the main soil issue for the design and construction of underground and surface utilities as well as buildings and other structures onsite.

The design of surface and underground utilities and buildings on fill soils requires careful consideration due to the potential for low to moderate settlement. While the fill appears generally consolidated, accurately estimating future settlement is challenging, particularly for granular fill soils. Therefore, all structures placed on this site should be designed to accommodate some degree of settlement.

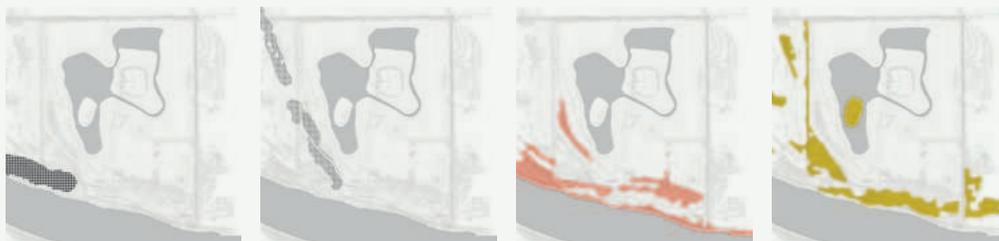
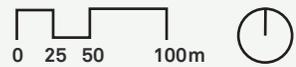
Utilities such as sewers and roads can be constructed on fill soils, as they can tolerate moderate settlement. It is recommended to use rural road designs with limited curbs and sidewalks and to employ a uniform backfill approach to minimize settlement risks. To facilitate repairs without disturbing road structures, it is advantageous to avoid placing underground utilities directly beneath roads.

For building foundations and slabs-on-grade, which are sensitive to settlement, it is advised against placing them on fill soils. Instead, pile foundations should be used, penetrating through the fill to reach native undisturbed soil, accounting for potential negative skin friction. Simple structures like storage sheds and animal shelters can be placed on fill if designed to withstand moderate settlement. Each building site should undergo further investigation to provide detailed soil design parameters.

To mitigate the impact of fill soils, structures should be located away from the edges of old excavations to reduce the risk of differential settlement. While treatment methods such as excavation and recompaction or dynamic compaction can reduce settlement risk, these are not deemed necessary for this site based on test results and project scope. Alternatively, a long-term settlement monitoring program over 1-2 years can be implemented to record and assess settlement before construction.



Q: Geotechnical Information



>30% Slopes

15-30% Slopes

Poor Nutrient Level Soil

Medium Nutrient Level Soil

--- Park Boundary

● Borehole Locations

●●●●● > 30% Slopes

●●●●● 15-30% Slopes

■ Poor Nutrient Level Soil

■ Medium Nutrient Level Soil

Underground Utilities

The subsurface soil conditions encountered are considered generally fair for the installation of underground utilities. The clay and clay fill soils would be considered fair to satisfactory, with the large areas of sand and silt considered poor to fair.

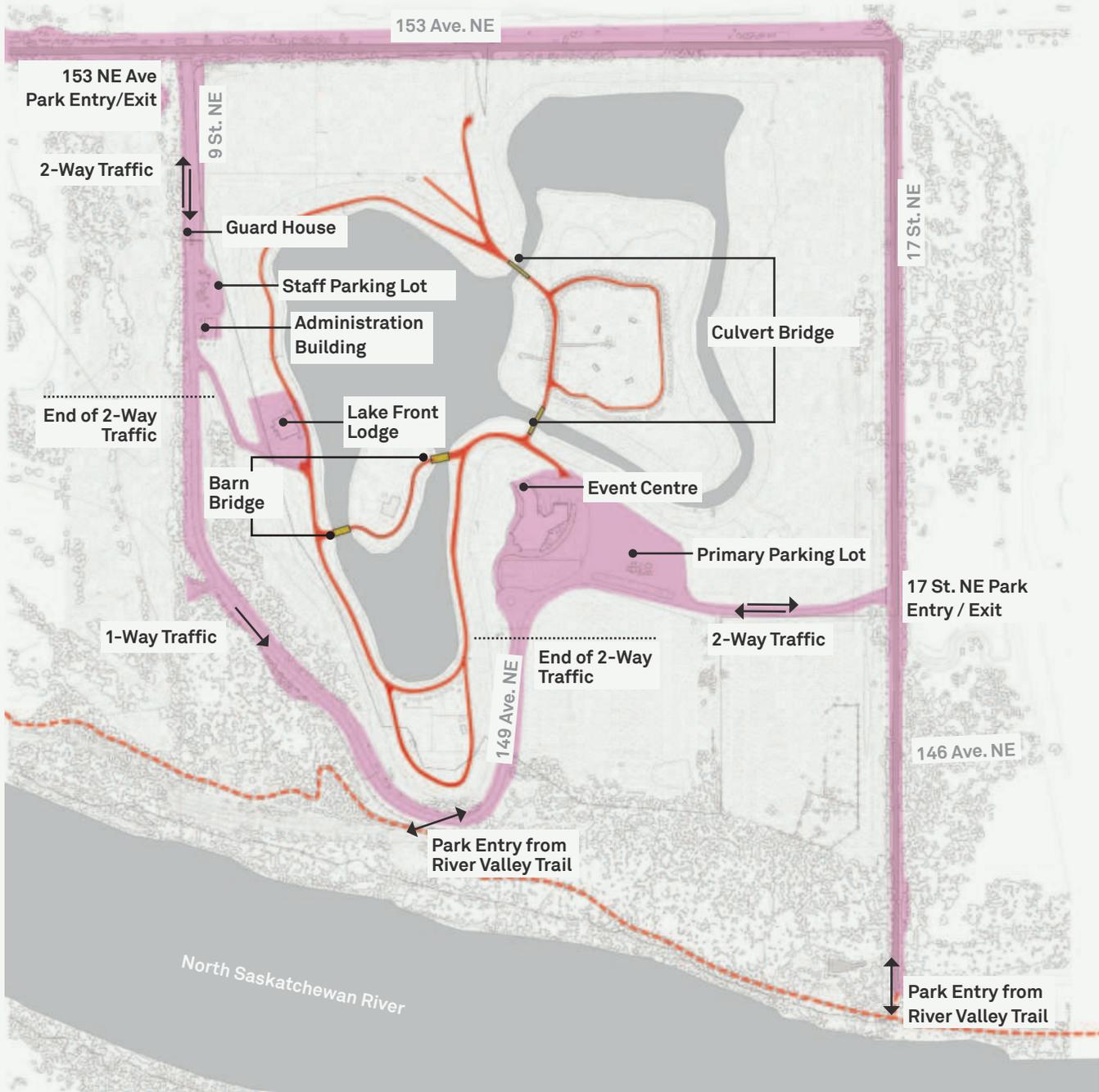
Surface Utilities

The subsurface soil conditions across the site range from poor to fair for the construction of roads, curbs, and sidewalks, especially in disturbed areas. Challenges are anticipated in utility areas due to material mixing during trench backfilling and general fill subsidence. It is essential to remove existing topsoil and other deleterious materials before constructing roads, sidewalks, and other surface utilities. The clay fill found in several testholes is generally suitable for supporting surface utilities.

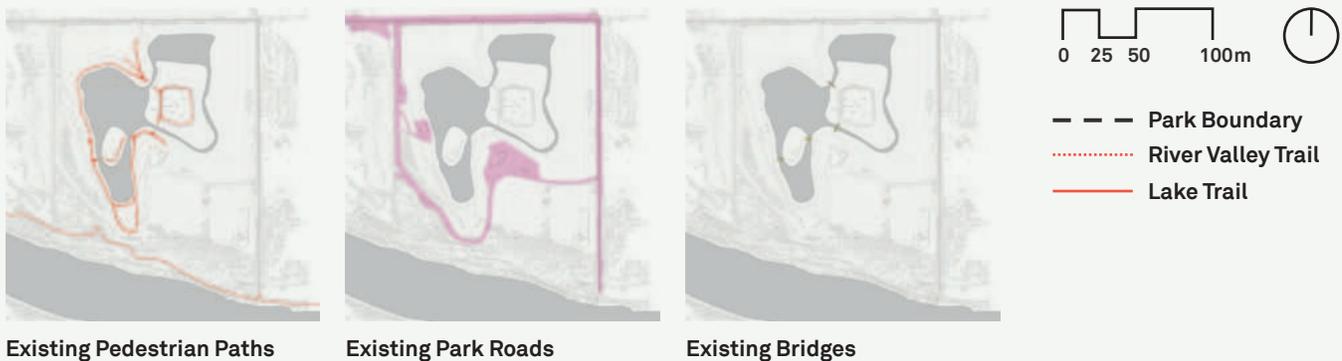
A significant concern for surface utility construction is the sandy nature of many soils encountered, which, despite being near optimum moisture content, may be difficult to compact. Additionally, most of the clay fill and natural clays near the surface were above optimum moisture content, with some areas being very moist. Underground utility installation will further degrade soil conditions through mixing and disturbance. Extra subgrade work beyond standard scarification and recompaction is necessary to create a suitable working platform for pavement structures and ensure long-term support. Soil conditions near existing ponds were poor, while other areas were considered fair. Enhanced drying during trench backfill for underground utilities can improve soil conditions for road and sidewalk construction.

Groundwater Issues

Water table readings at the site vary from low to high relative to the ground surface, with most levels expected to be moderate, generally falling between elevations of 610 to 611 meters (for reference the pond level was indicated at $\pm 10.5\text{m}$ in the Bathymetric Survey from 2024) Historically, the water table in the Edmonton area rises about one meter from low winter to high spring and summer readings, suggesting that the measured levels are near the seasonal low. Saturated conditions are likely to be encountered in trenches depending on design elevations and subsoil nature, with free water observed during drilling in many test holes. Moderate water ingress in trenches is anticipated, necessitating temporary dewatering and potential construction delays. It is recommended to avoid opening long stretches of utility trenches to manage these conditions effectively.



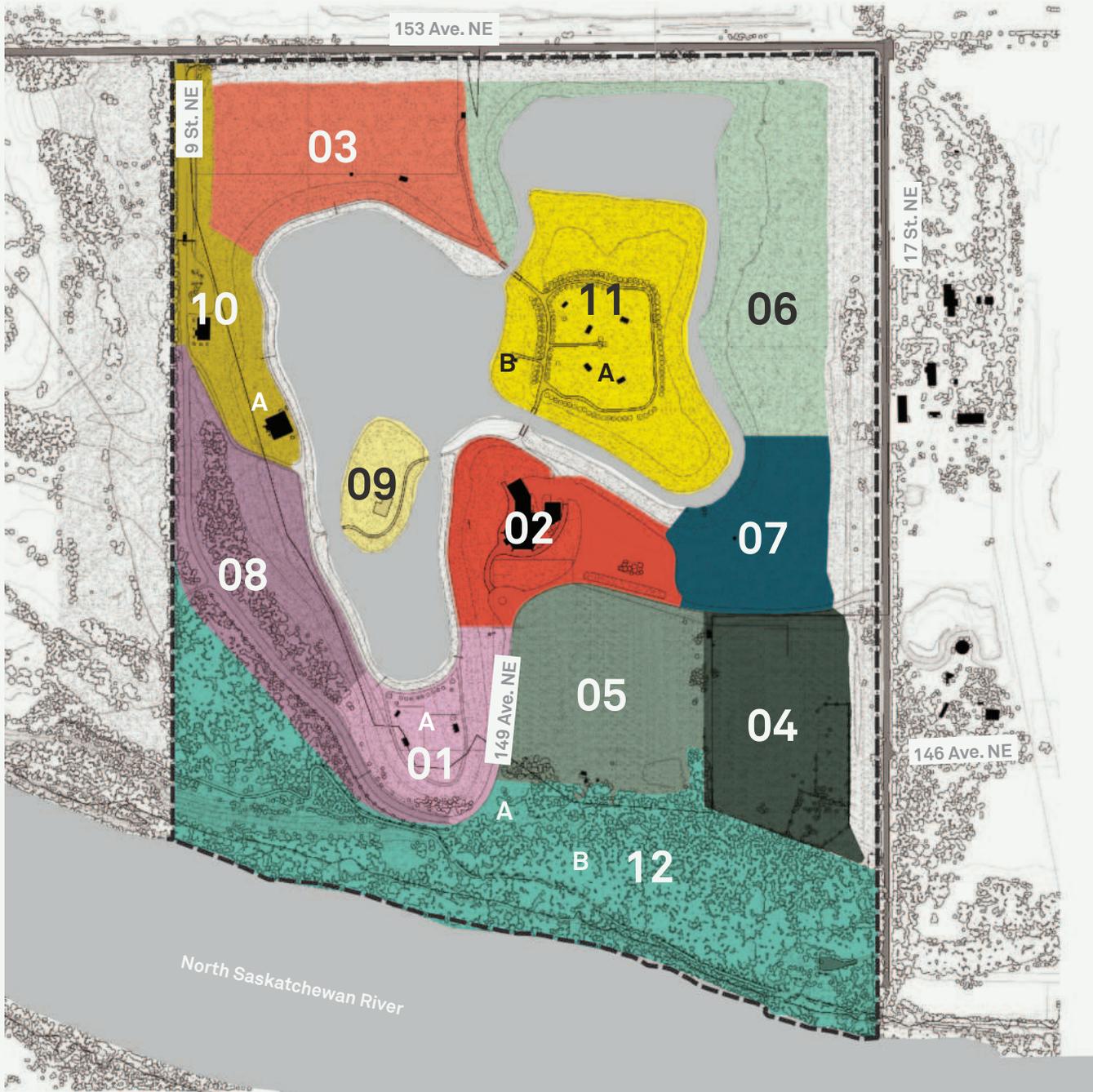
R: Pedestrian and Vehicular Circulation



Site Circulation

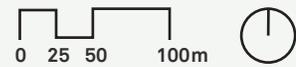
The entrance to the park is located at 17 St. NE, offering direct access to the parking lot and Event Centre. However, the entrance at 153 Ave. NE and 9 St. NE is more commonly used by visitors due to its better visibility and convenience from the main road. This entrance directs park employees to the staff parking lot and Administrative Building, but it also guides visitors onto a service road through the park's interior, leading them toward the Event Centre.

Internal Engagement sessions have indicated that the current one-way and two-way traffic patterns adds to the confusion for visitors navigating the park circulation. Internal Engagement sessions have also revealed that the pedestrian circulation between the Lake Front Lodge and the Event Centre lacks clarity. The introduction of additional pedestrian connections, including designated winter trails designed for seasonal use, could greatly enhance accessibility and flow. To further refine these routes, mown trails are being tested to identify primary paths of travel, provide secondary pathways, and establish better connectivity between key areas. These test trails will aid in informing more permanent solutions while supporting current circulation needs. Additionally, incorporating comprehensive wayfinding strategies, including clear signage and markers, would guide visitors more effectively, ensuring an intuitive and seamless experience across all seasons



S: Existing Programmatic Zones

- | | |
|--|---|
| 01 Lower Lawn
a. Fire pit and Picnic Area | 09 Playground Island |
| 02 Event Centre Area | 10 Admin / Entrance
a. Fire pit and Picnic Area |
| 03 Upper Lawn | 11 The Big Island
a. Picnic Area
b. Hand/Carry Boat Launch |
| 04 East Open Space | 12 Forest Edge
a. Amphitheatre and Fire pit
b. Ropes Course |
| 05 West Open Space | |
| 06 Northeast Corner | |
| 07 Dugout Area | |
| 08 Highroad | |



--- Park Boundary

03 Recreation Opportunities

Current Uses

Northeast River Valley Park hosts a variety of outdoor activities such as hiking, cycling, picnicking, paddling, bird watching, cross country ski trails, and snowshoeing. The Park includes a lake which is available for non-motorized boating in warmer months. Through the summer months the park organizes many activities including: Instructor-led summer outdoor adventure day camps; free outdoor library activities on the Playground Island; learning basic outdoor skills with the Play Rangers Programs; self directed scavenger hunts, such as Park Perks Passport and Nature Treasure Chest; and Compost School Workshops. These ongoing initiatives use the parks existing social infrastructure to create a place for nature based education and play.

The Event Centre, central to the Park's current operations, offers a versatile 12,000 square feet of event space designed with extensive natural lighting from overhead doors and a capacity for up to 1,000 guests. Integrated audio-visual equipment, an outdoor event space with stunning lake views, and an Alberta Health Services-certified commercial kitchen enhance the venue's appeal. The kitchen is available for booking either independently or alongside the Event Centre, making it a prime option for licensed caterer events, subject to venue availability. The Centre is well-suited for a variety of gatherings, including weddings, conferences, cultural celebrations, and festivals.

However, some operational challenges have been identified. The maintenance storage area is located in close proximity to the primary event space, creating an overlap of uses that could lead to noise, visual clutter, and logistical conflicts, which may compromise the guest experience. Additionally, deficiencies in the maintenance infrastructure, such as outdated electrical systems, challenges in fueling vehicles, and undersized hose bibs for water access, have been noted. Addressing these issues is crucial for improving operational efficiency and ensuring the smooth functioning of the Event Centre.

Northeast River Valley Park has two other outdoor spaces available for rentals. The Forest Amphitheatre features wood benches, a large grated fire pit and a raised platform for interpretive or ceremonial use. The Barn Bridges are iconic to the park and connect Playground Island to the Lake Trail. The west bridge is available to be booked for more intimate gatherings of up to 30 people. Both spaces are available for photography and ceremony bookings.

The Park has also been home to other Civic Events which are not bookable through the City's booking system due to their approval requirements. An example of such an event is a ceremonial sweat which took place at the riparian forest edge near The Forest Amphitheatre, where 45 people participated over the course of four days.

Northeast River Valley Park is currently divided into programmatic zones which describe the Park based on previous and current land uses (Fire Pit Area, Event Centre, Sports Field, Pool, Highroad, Playground Island, etc.) The following section highlights the existing programmatic zones on the site, and the specific features and amenities in each zone as of May 15, 2024.

Surrounding Park Uses:

The surrounding area features a variety of parks and recreational spaces within Edmonton and Strathcona County, offering diverse amenities and programming. Key parks within a 15 minute drive include Britnell Park (5.7 km away), Horse Hill School Park (5.5 km away), Bannerman Park (4.4 km away), and Centennial Park (5.8 km away). These parks provide facilities such as basketball courts, bookable open spaces, baseball diamonds, soccer pitches, rinks, and teaching stations.

Horse Hill Future Uses:

The park's design and usage should align with the phased development of the Horse Hill area in Edmonton. Over the coming years, the district will gradually introduce parks featuring sports fields, playgrounds, event spaces, and trails connecting to the River Valley. Additionally, gardens, educational farms, and community recreation centers with indoor facilities are planned. These features support sustainable growth and regional connectivity, ensuring the area evolves cohesively with broader urban development strategies.

01 Lower Lawn

The firepit area, located at the southern tip of the pond at an elevation of 613m, is well-serviced with irrigation, and is connected to the water and sewer lines. Defined by a large area of cut grass and surrounded by hills with long grasses, the U-shaped hill formation provides shelter and protection from wind. This area, partially situated on a former mining site, connects to the Lake Trail via a gravel path and features existing amenities such as toilets, picnic tables, and a fire pit.



02 Event Centre Area

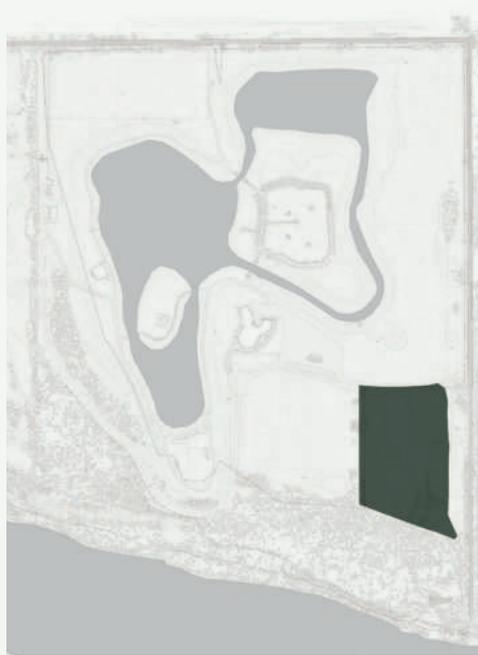
The Event Centre area serves as the primary point of entry into the park for visitors arriving by car. The elevation above the pond gives this area an overview of the park. Concrete surfaces around the facility connect the parking lot to the Lake Trail, which loops around the ponds and offers more intimate views of the park. A maintained lawn with picnic tables surrounds the Event Centre.





03 Upper Lawn

Previously used for recreational baseball, the area includes an irrigated level field, public toilets, and access to the Lake Trail. The grass surface is in poor condition and is not currently usable as a sports field.



04 East Open Space

Thought to be planned as a horse enclosure, this area was cleared and partially fenced but not developed, and appears to be renaturalizing. While there are no organized paths or trails in the area, a service road connects the riparian forest to the Southeast Field.

Fences limit terrestrial movement of animals in this area, making unique habitat zones for both tree growth and land nesting birds as documented in the bird sweeps completed by the City of Edmonton.

05 West Open Space

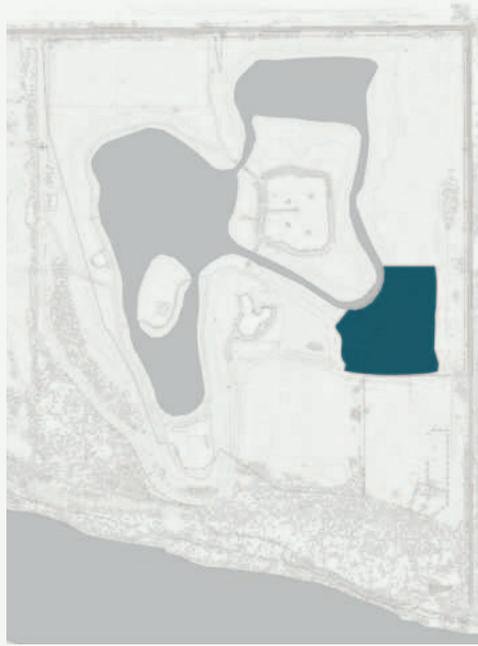
The Southwest Field is more open due to previous harvesting of alfalfa and use as debris storage by previous ownership. A portion of this area is now used for overflow parking while the remainder shares a similar habitat qualities with the Southeast Field.



06 Northeast Corner

The Northeast Field is not connected to any existing trails and access is limited to this corner of the site. The terrain of the field is defined by slightly rolling hills along 17th St. NE, and significant cross slopes along 153rd Ave. NE. Cross country ski trails were groomed within this area in the winter of 2023/24, however they were not well used due to low snow levels, and difficulty maintaining the trails.





07 Dugout Area

The Dugout Area consists of a former pool that is no longer in use. Currently, the dugout remains empty most of the time but can partially fill with water during heavy rain events. The dugout has steep slopes leading into a pool of unknown depth. Situated along the main entrance road of the park, it creates a significant visual impact on the park's landscape. Additionally, its proximity to the parking lot makes it one of the first areas visitors are likely to encounter.



08 Highroad

The Park's highest elevated area provides a commanding view, making it a focal point for visitors. A service road connects the Administrative Building, the Lake Front Lodge, and the Event Centre, facilitating access for service vehicles and in some cases, informal trails for guests. Natural forest stands enhance the park's biodiversity and provide spaces for recreation. However, the western edge poses a risk from golf balls due to nearby courses, necessitating protective measures. Vital connections to the River Valley Trail further integrate the park into the broader River Valley.

09 Playground Island

Playground Island features distinctive barn-like bridges linking the island to the Lake Trail. These bridges serve not only as functional pathways but are frequently rented as scenic photography backdrops. To enhance the structural capacity of the bridges, an additional structural assessment is recommended to determine improvements for load capacity, and potential usage.

The island itself is centered around a playground, with steep edges that limit water access. However, the area lacks shade and protection from wind and sun, presenting comfort and usability challenges. The Playground Island presents untapped potential for enhanced programming and ecological value.

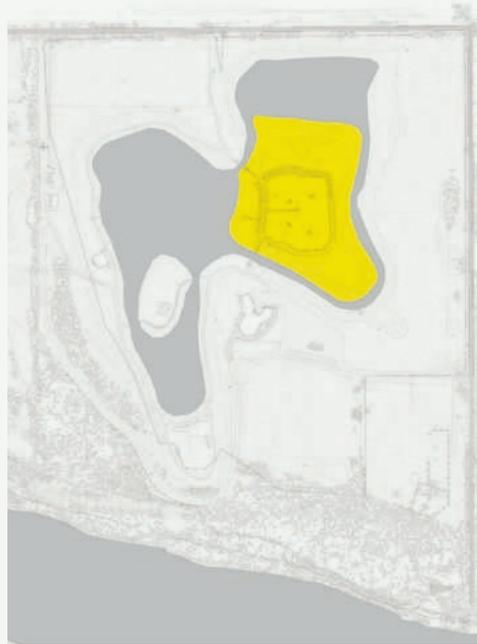


10 Admin/Entrance

In its previous role as a camp and recreational site, this area of Our Lady Queen of Peace Ranch served as the entrance and included several key structures that remain today: a welcome gatehouse with overhead signage; an administrative building with a parking lot; and the trading post building, now known as the Lake Front Lodge. Additionally, this area of the park is connected to the Lake Trail, the service road (9th St. NE), the northwest entrance to the park directly off 153 Ave. NE and in very close proximity to the Sports Field programmatic zone and the pond.

The western edge of this area, similar to the Highroad area, is adjacent to hole 14 of the Raven Crest Golf & Country Club, creating a risk of errant golf balls entering the park.





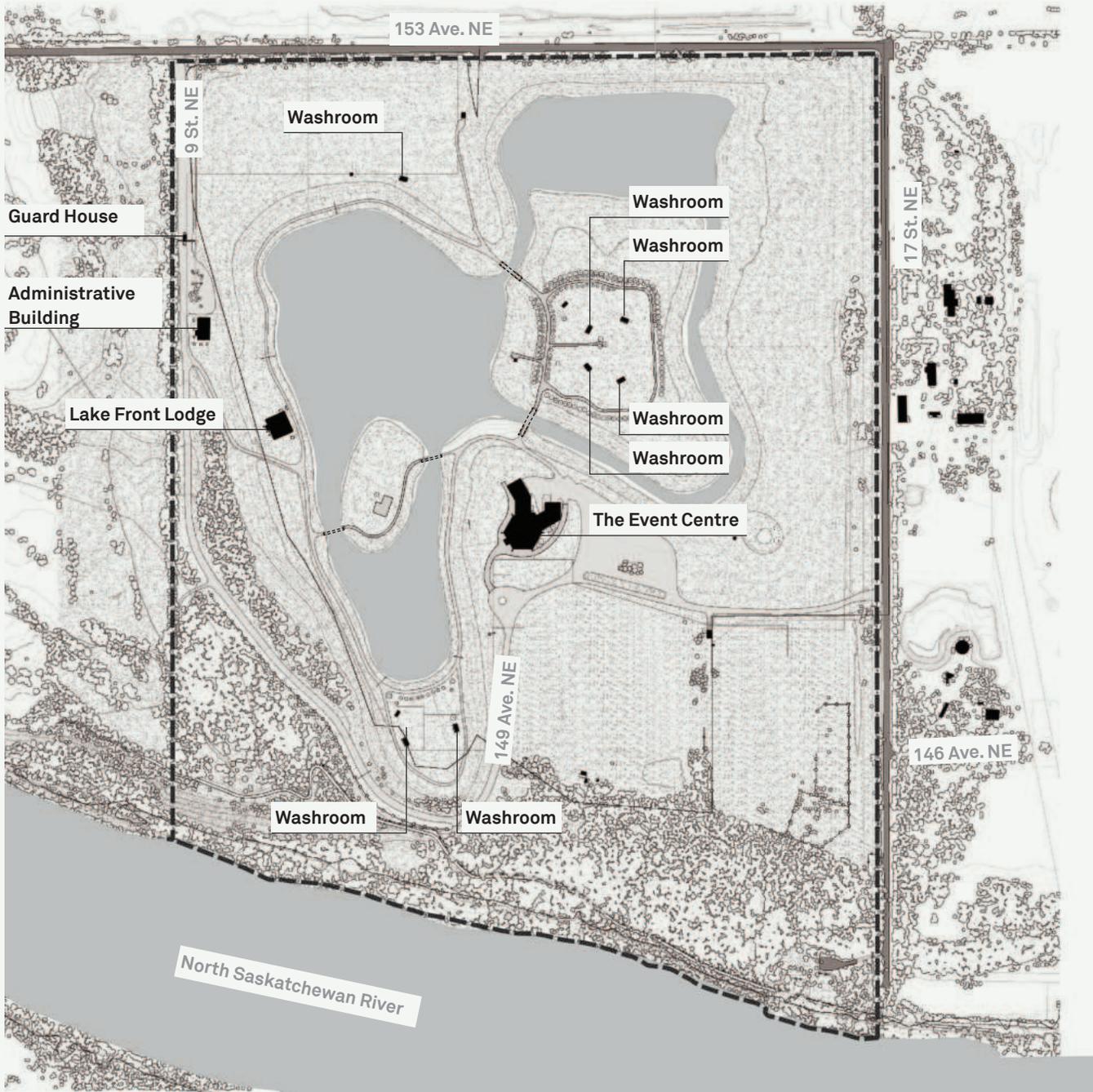
11 Big Island Area

The Island area is well connected to the Lake Trail through two culvert bridges, both of which are in good condition. On the Island, four centralized seasonal bathrooms are situated off the path and enclosed by a single ring of trees. The free standing trees were planted around 2008 when the park was originally developed and threatened by pests and insects (ash borer, dutch elm, banded arm bark beetle, spruce beetle). On the western edge of the island, a generous slope enables easy access for hand launching boats into the pond.

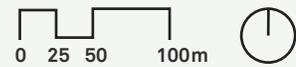


12 Forest Edge

The Forest Edge serves as both a visual and physical buffer between the Park and the North Saskatchewan River. The Forest Edge includes the River Valley Trail, smaller forest walking trails, a seating circle/ amphitheater with a fire pit, a disassembled ropes course, two former house sites, and informal river access points. 17th St. NE provides access to the River Valley Trail and is sometimes used for parking. Clearings within the forest have recently been used for Indigenous ceremonies including Sweats. The existing wildlife trails in the area are actively used by species such as deer, beavers, and muskrats, contributing to the site's ecological activity. However, a chain-link fence runs parallel to the River Valley Trail, forming a boundary that restricts the natural movement of terrestrial wildlife through the riparian corridor. This barrier leads to habitat fragmentation and interferes with the natural flow of wildlife, impacting the area's ecological balance.



T: Existing Structures



--- Park Boundary

Building Assets

Building Summaries, taken from: OLQP Site Report Buildings, September 2021:

(Refer to Building Assessment, Structural, Mechanical, and Electrical reports for more detailed information)

Administration Building

- Built: 2011
- Type: 1-storey residential-style bungalow
- Gross Floor Area:
 - Basement: 232.57 sq/m
 - Main Floor: 237.9 sq/m
- Services: gas and City water
- 3 gas-fired force air furnaces, 2 exterior air conditioners
- Exterior is clad in fibre cement board siding and metal roof-good condition
- The interior contains a series of generously sized offices in the main floor and significant storage in the basement
- Male and female accessible washrooms on the main floor. Additional door operator and panic button could be added to achieve full Universal Accessibility standard.
- Barrier free ramp serves the main floor (approx, 1:12)
- Some water ingress noted in the basement mechanical room. No sump pump was visible
- Building sited upon small ridge that overlooks property and picturesque views

Refer to Building Condition Assessment Report, OLQPR15 Admin Building, November 25, 2022 for more information

Lake Front Lodge

- Built: 2011
- Type: 1-storey residential style bungalow
- Gross floor area: 930 sq/m
- Services: gas and City water to the property
- 4 gas-fired force air furnaces
- Hydraulic elevator serves basement area - currently non functional
- Generous unfinished basement with built in storage
- Large balcony with covered deck facing the lake (east)
- Large open hall area
- Building sited adjacent to pond on attractive setting

Refer to Building Condition Assessment Report, OLQPR14 Lake Front Lodge, November 25, 2022 for more information.

As per document NEP102 - Structural Commentary of Trading Post, September 8, 2023, the building structure in its current condition does not appear to pose any severe risk to occupancy, although there are some existing deficiencies that should be remediated in the short term. The safety of the building is also contingent on the future use of the building remaining as intended in the original design drawings, which is an office space with limited public access.

A code review for the Lake Front Lodge submitted on June 26, 2024, by the Modern Office of Design and Architecture (MoDA), evaluated the building's compliance with the Alberta Building Code and assessed the feasibility of reclassifying its occupancy from Group D (Business and Personal Services) to Group A2 (Assembly). The proposed reclassification would enable the expanded uses, such as day programs, and community functions.

Event Centre

- Built: 2008
- Type: Assembly Occupancy
- Event space: 1180 sq/m
- Gross floor area: 2378 sq/m
- Capacity: 800 capacity in the main hall. (Fire department has indicated an occupancy of 1073 for non-fixed seats and tables; 1361 for seating)
- Amenities: large communal hall; full commercial kitchen and storage areas; functional attached shop and garage; DJ booth including professional audio/visual equipment and controls.
- Structure: main hall - glulam beams supporting roof structure; service areas (kitchen, shop, etc) - assumed to be steel frame with concrete block infill.
- Services: zoned fire suppression system consistent with contemporary assembly occupancy structure; In floor hydronic heating system fed by gas-fired boilers and buffer tanks. The building is connected to the City sewer system.
- Washrooms: womens - 9 stalls plus universal; male - 4 stalls, 6 urinals, 1 universal; separate universal washroom. Additional door operator and panic button could be added to achieve full universal accessibility standard. (Minor upgrade)
- Two backup generators serve the property - unclear if they are tied into general grid or just to "The Hall."
- Notes:
 - Well sited and composed building in very good condition
 - It appears the project specified high quality components and that the building has not been excessively used
 - The building is fully accessible and adjacent parking is available
 - Landscaping and pathways to the building are in good condition

Washroom Buildings

There are seven washroom facilities throughout the site, each approximately 23 sq/m. Each washroom facility includes four individual washrooms stalls accessible from exterior doors. Each stall includes a toilet, a sink and shower (the showers have been disabled). Each bathroom facility includes a central storage and mechanical room.

Guard House

The Guard House at Our Lady Queen of Peace Ranch (902 - 153 Ave. NE) is a single-story, wood-framed building with a gross floor area of approximately 10 sq/m. Built in 2011, it functions as the property's controlled access point. The building is powered through the Administrative Building and lacks an independent electrical room, plumbing, or fresh water connection. The facility features a large gateway with dual gates and is accessed by gravel roads. For further details, see the Building Condition Assessment Report, OLQPR16 Guard Shack and Auto Gate, dated November 25, 2022.

Covered Bridges

There are load limits on the two covered bridges that result in use restrictions as follows:

- Limit of 30 pedestrians permitted on the bridge
- City maintenance vehicles only, max 2.5t trucks
- Notes: To ensure structural integrity and expand capacity, perform thorough load evaluations. Potential solutions include economically strengthening the structure using a decking system or by adding girders.

Refer to MEMO Load Limits for NE River Valley Park Bridges

04 Guiding Principles & Recommendations

A Land-Based Approach to the Northeast River Valley Park Strategic Plan

A land-based approach to the design of Northeast River Valley Park recommends using the site's natural features and processes to guide both design and programming decisions. Rather than responding solely to recreational and sports needs, this approach centers on the ecosystems and historic landforms of the area. By prioritizing the preservation and enhancement of natural ecosystems, the design will support biodiversity, climate resilience, and environmental education while honoring Indigenous knowledge and fostering reconciliation.

Participants in the City of Edmonton's Elders' circle state that healing the land should be at the core of the park's guiding principles, emphasizing the need to heal the scars left behind by decades of industrial quarry excavation. The project's parallel Indigenous engagement process will further reinforce these principles by integrating traditional ecological knowledge and creating space for cultural practices, education, and reconciliation initiatives. These approaches will support stewardship, adaptability to environmental and social changes, and ensure the park remains relevant and valuable for future generations.

Guiding Principles

The following guiding principles can be referenced for all future work at Northeast River Valley Park to provide a clear, unified vision and a framework for decision-making. They reflect community values and needs, fostering a sense of ownership and pride while promoting inclusive engagement. They align with city planning documents and the city's strategic priorities. Emphasizing sustainability, resilience, and long-term feasibility for maintenance and operations, these principles guide the design toward environmental stewardship and long-term viability. By enhancing user experience through all-season usability and creating memorable spaces, they also honor Indigenous knowledge and historical context, promoting cultural respect. Facilitating effective collaboration, these guiding principles align stakeholders' goals and provide transparency in the design process. They offer a scalable framework for future development and adaptive management, ensuring the park remains functional, beautiful, meaningful, and resilient, enriching both the community and the environment.

Priorities for Future Site Development at Northeast River Valley Park:

- 01** Support the development of Indigenous programming, ceremonies, and knowledge sharing.
- 02** Improve site circulation, wayfinding, entry, and access.
- 03** Increase biodiversity of plant material (open meadows, forests, and pond edge).
- 04** Increase the natural functioning of the pond system to improve water quality, biodiversity of vegetation and animals, and enhance non-motorized recreational opportunities.
- 05** Create and/or improve park infrastructure to support nature-based programming and activities.
- 06** Upgrade existing infrastructure to support multiple scales of rentals and programming available at one time.
- 07** Promote programming that takes advantage of the unique river valley park setting and landscape terrain.

Guiding Principle 1: Design Based on Decolonization and Reconciliation

- Engage with Indigenous knowledge holders: Collaborate with Indigenous communities to understand the historical and cultural significance of the river valley and surrounding areas.
- Embrace “wâhkôhtowin”: Guide the design process with the concept of interconnectedness, revealing and mapping biological relationships through land-based knowledge.
- Celebrate land-based processes: Propose a ‘working landscape’ that highlights educational opportunities and Indigenous connections to the land.
- Inclusive signage and ceremonies: Incorporate Indigenous languages in signage and provide spaces for public and private ceremonies.
- Possible programming opportunities:
 - Cultural Education and Interpretation*
 - Storytelling Sessions*
 - Interpretive Signage*
 - Workshops and Demonstrations*
 - Traditional Craft Workshops*
 - Cultural Demonstrations and Ceremony*
 - Traditional Ecological Knowledge Tours*
 - Medicinal Plant Walks*
 - Cultural Festivals*
 - Solstice Celebrations*
 - Public Art*
 - Cultural Centers*
 - Youth Programs*
 - Community Partnerships*
 - Language Signage*
 - Language Classes*
 - Land Acknowledgements*
 - Sacred Sites*

Guiding Principle 2: A Memorable, Vibrant Park for All Seasons

- Year-round flexibility: Create a social realm that thrives throughout the year, offering diverse recreational and programming opportunities.
- Community engagement: Understand and reflect the unique characteristics of the community in the design, enhancing everyday experiences.
- Artistic involvement: Integrate opportunities for artists to contribute to the park’s development.
- Winter-first strategy: Design with a winter-focused approach to ensure the park is vibrant and functional in all seasons.
- Possible programming opportunities:
 - Cross-Country Skiing and warming huts*
 - Snowshoeing*
 - Tobogganing*
 - Kick Sledding*
 - Canoeing, Kayaking, Stand Up Paddle Boarding*
 - Cycling*
 - Disc Golf*

Workshops and Classes
School Education Programs
Interpretive Trails
Audio Guides and Mobile Apps
Summer Day Camps
Nature Play Area
Junior Ranger Programs
Craft and Nature Art Classes
Small Scale Outdoor Concerts and Performances
Art Installations and Exhibits
Community Festivals
Picnic Shelters

Guiding Principle 3: Ecological Resilience and Climate Change Adaptation

- Large-scale ecological planning: Work with climate and ecology experts to address future challenges and opportunities, enhancing the park's role as a carbon retention pool.
- Climate risk mitigation: Develop strategies to mitigate climate change impacts while supporting recreational uses.
- Local material use: Utilize local materials and set climate-positive goals for the park, promoting sustainable practices.
- Biodiversity and resilience: Foster habitats for diverse flora and fauna, enhancing ecological balance and recreational experiences.
- Land-Based Design: Take advantage of unique river valley park setting and landscape features.
- Possible programming opportunities:
 - Wildlife Viewing and photography*
 - Nature Walks and Hikes*
 - Workshops and Classes*
 - School Programs*
 - Dip Netting and boardwalks*
 - Forest school*
 - Stargazing*
 - Outdoor Activities and Nature Based Lessons*
 - Interpretive Trails*
 - Audio Guides and Mobile Apps*
 - Volunteer Opportunities*

Guiding Principle 4: Inclusive and Accessible Design

- Equity and inclusivity: Ensure the design process considers gender and diversity characteristics, promoting inclusivity for all people.
- Accessibility for all: Design spaces that are safe and inviting for all ages, abilities, and genders, promoting a sense of belonging.
- Sustainable mobility: Provide infrastructure for various modes of transportation, reducing automobile dependence and encouraging sustainable mobility.
- Community pride and engagement: Create a space that fosters a sense of ownership and care, enhancing community engagement and well-being.

- Possible programming opportunities:

All of the proposed programming opportunities should support an accessible and inclusive public realm.

Accessible canoe/kayak launch

Adequate lighting and appropriate signage

Integrated seating opportunities and rest areas along trail systems

Barrier-free parking throughout the park

Wide, paved trails connecting main park elements

IN PROGRESS

