

Killarney Lake Park Management Plan

Recreation Activities Implementation Update

Presented to:

City Council Livable Community Committee
April 3, 2025

Presented by:

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Planning, RTC



Fredericton

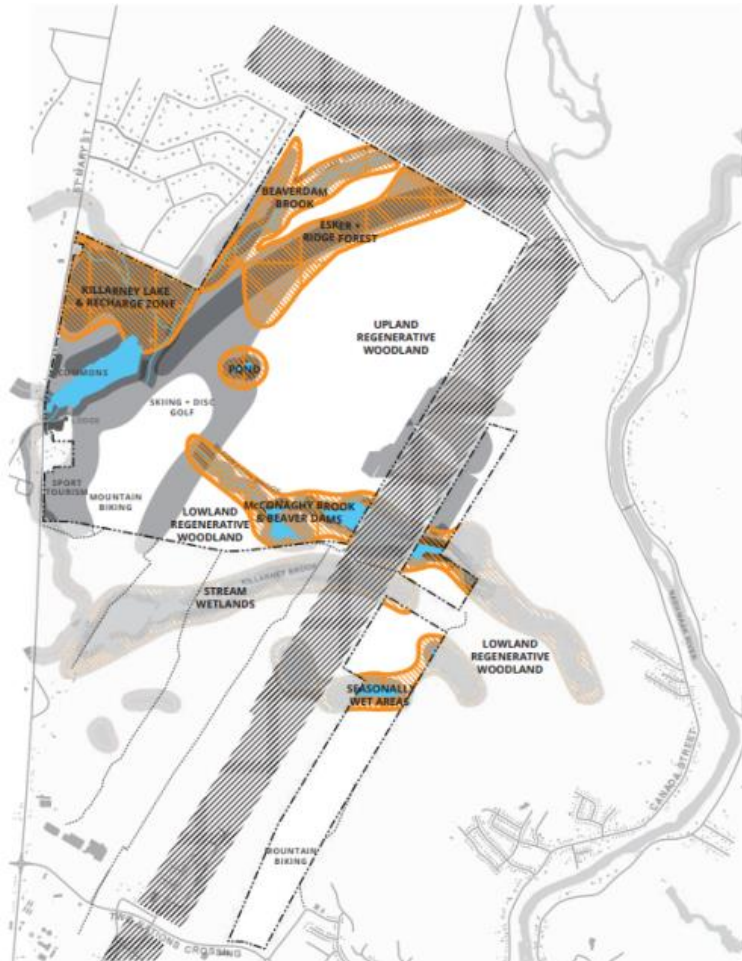
Outline

- Background & Context
- Recreation Projects Updates
 - Championship Disc Golf Course
 - Mountain Bike Skills Park & Trail Network
 - Natural Playpark
- Stakeholder Engagement
- Timelines
- Discussion

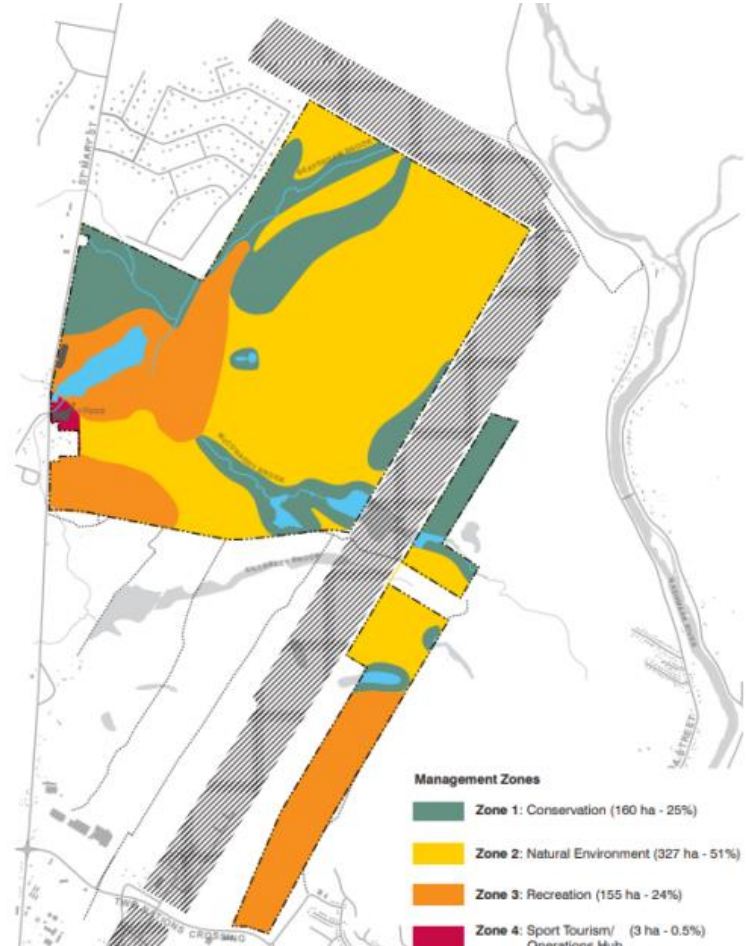
Background & Context

- Killarney Lake Park was first conceived in 1977, when the City began acquiring land for a large park on the City's northside.
- Prior to becoming a nature-based park facility, the area was logged aggressively for centuries, and experienced significant disturbance and impact.
- Because of this history, the entire park landscape is classified as an early successional forest with juvenile ecologies (i.e. shallow and infertile soils, limited species diversity, etc.).
- The Killarney Lake Management Plan was adopted by City Council in June 2020 and is intended to:
 - Compliment the vision for Odell Park, towards a sustainable future
 - “develop a park capable of providing the recreational needs that Odell Park [does] not have the capacity to absorb”.
 - Serve as a regional sport / competition hub.

Background & Context



-  Established Ecologies
-  St. Mary's First Nation
-  Water Bodies - Watercourses, Lakes & Wetlands



- Management Zones**
-  Zone 1: Conservation (160 ha - 25%)
 -  Zone 2: Natural Environment (327 ha - 51%)
 -  Zone 3: Recreation (155 ha - 24%)
 -  Zone 4: Sport Tourism/
Operations Hub (3 ha - 0.5%)
 -  Water Bodies - Watercourses, Lakes & Wetlands
 -  St. Mary's First Nation
 -  Vehicular Access & Parking

Background & Context

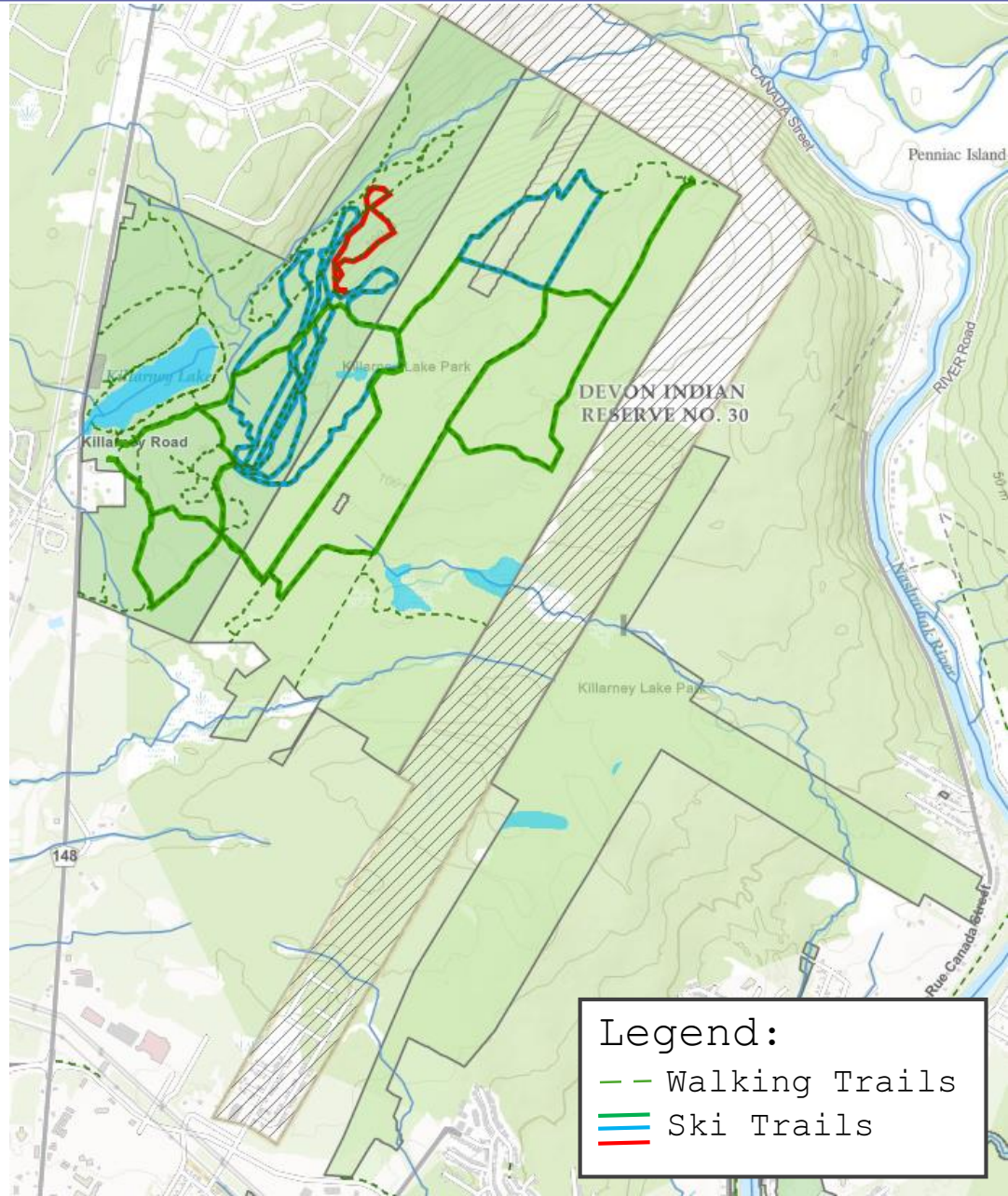
- Planned uses align with the:
 - Killarney Park Management Zones; and,
 - Urban Forest Management Strategy's vision "to sustain a biodiverse urban forest throughout the City for a resilient environment and healthy people".
- As directed by the Plan, staff are working with designers and an ecologist to ensure:
 - Areas of increased ecological potential are identified.
 - Uses are realigned away from these areas as required.
- Temporary openings in the tree canopy will release and strengthen the forest undergrowth.

Background & Context

Fredericton's Outdoor Recreation Hub

Existing Uses:

- Ski Trails
- Walking Trails
- Snowshoe Trails
- Swimming
- Accessible Dock

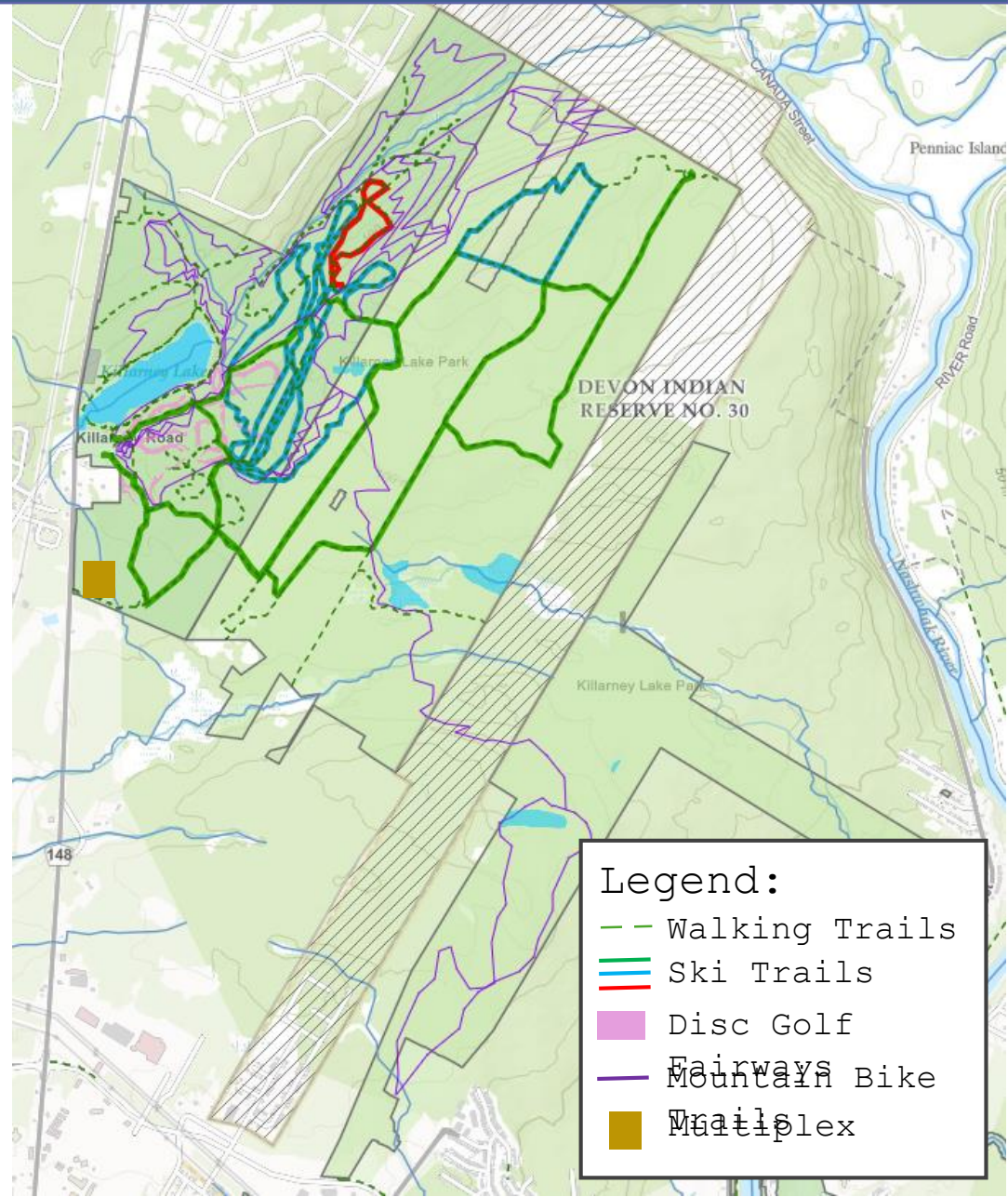


Background & Context

Fredericton's Outdoor Recreation Hub

Existing & Planned Uses:

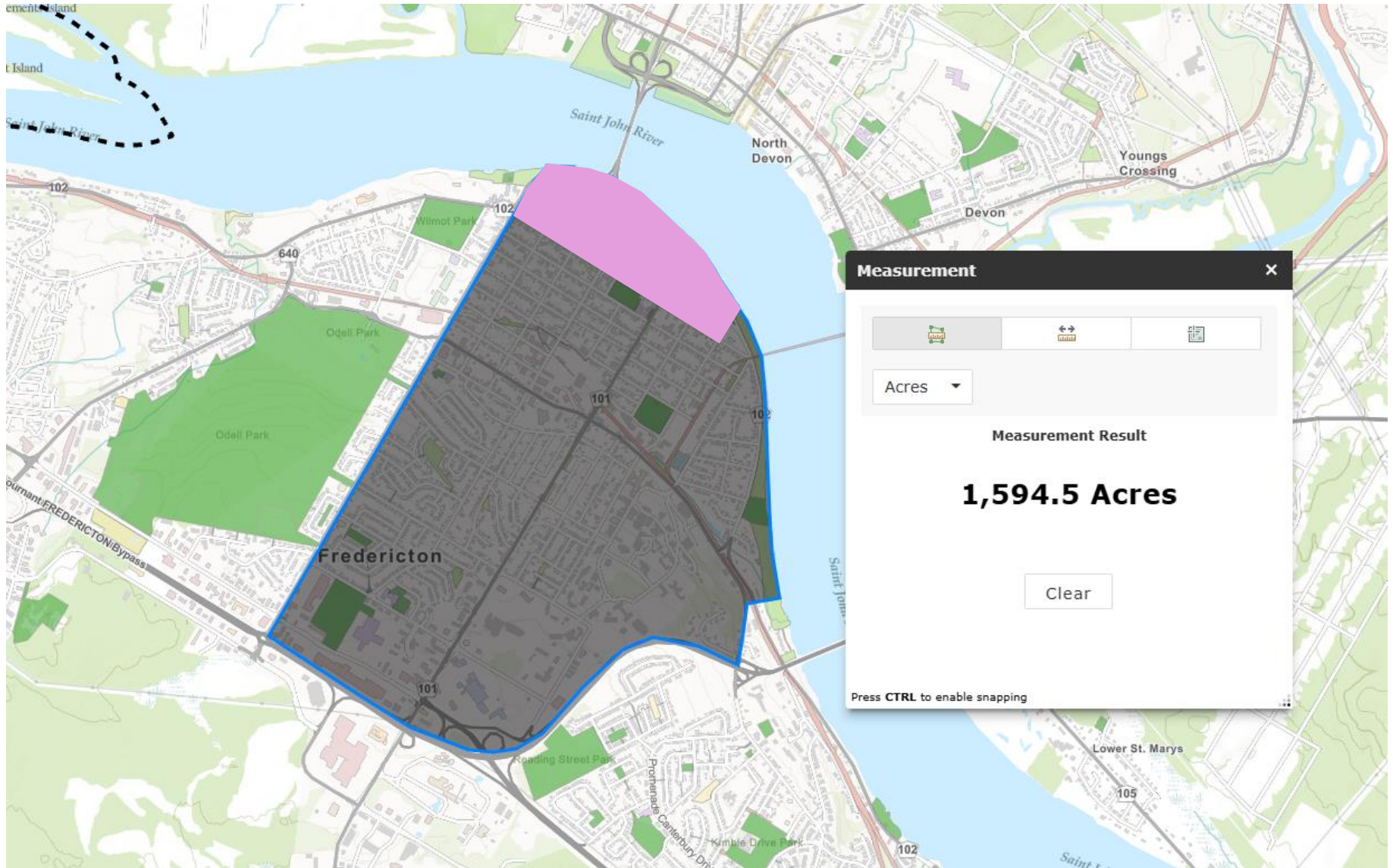
- Ski Trails
 - Competition Level
- Walking Trails
- Snowshoe Trails
- Swimming
- Accessible Dock
- Disc Golf
 - Year-round Use
 - Competition Level
- Mountain Biking
 - Skills Park
 - Year-round Trails
 - Competition-potential
- Inclusive Natural Play Area
- Accessible Beach Access



Background & Context

- Today the park comprises 1,594 acres / 645 hectares
- Existing ski trails comprise approximately 65 acres, or 4% of the total park area.
- Ski trails combined with planned disc golf, mountain bike, and ball fields uses will comprise approximately 9% of the total park area.

Background & Context



Recreation Activities Updates

Outdoor Recreation Hub Benefits:

- Opportunities for all ages and abilities
- Affordable opportunities for healthy, active living
- Designs that foster learning and skill development
- Increased year-round access to the City's largest park
- Foster a connection with and respect for nature
- Improved access to special features and ecologies
- Educational opportunities
- Visitor attraction
- Sport tourism potential

Recreation Activities Update

Mountain Bike Skills Park & Trail Network



Photo Credit: www.nanaimo.ca

Concept Design Overview

- Natural surface single track trails
- Includes Adaptive Mountain Bike Trails
- Long-term Total Concept Layout = +/- 32km
- Preliminary Trail Development = 15km
 - 2 phases planned for 2025 & 2026
- 'Marysville Connector' & southeast trails part of future phases
- Potential for trails for winter use
- Sport Tourism: Competition course integrated into network layout
- Visitor attraction



Photo Credit: River Valley Cycling

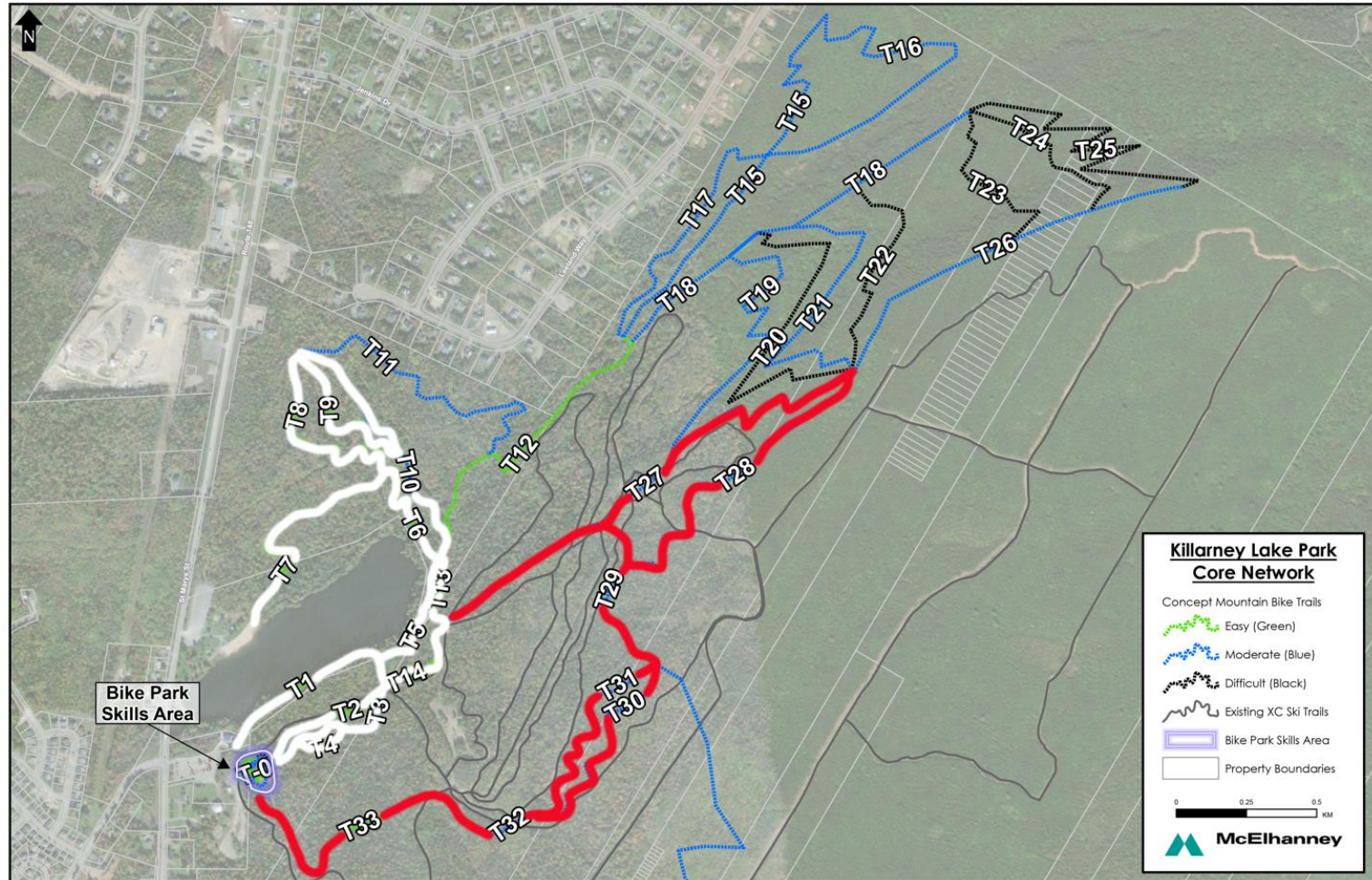


Recreation Activities Update: MOUNTAIN BIKING



Recreation Activities Update: MOUNTAIN BIKING

Trail Network and Phasing



- 2025 & 2026 Trail Construction to include red and white trail sections
- Some Adaptive trails included in preliminary phases
- Remaining trails to be built as part of the longer term Park

Recreation Activities Update: MOUNTAIN BIKING

APPENDIX A - ADAPTIVE MOUNTAIN BIKING (AMTB) TRAIL DIFFICULTY RATING SYSTEM

	aMTB WHITE	aMTB GREEN	aMTB GREEN SQUARE	aMTB BLUE	aMTB BLACK	aMTB DBL BLK	aMTB DBL BLK
TRAIL WIDTH: (ave/min)	1.8m+ (72"+)	1.8m/1.5m (72"/60")	1.7m/1.4m (66"/54")	1.5m/1.2/ (60"/48"+)	1.2m/1m (48"/40")	1.1m/0.98 m (44"/38.5")	<0.98m (<38.5")
TREAD SURFACE:	hardened or surfaced	firm and stable	mostly stable some variability	mostly stable some variability	widely variable	widely variable and unpredictable	widely variable and unpredictable
OBSTACLES (TTF):	no obstacles	obstacles full width 2" or less / no asymmetrical tread areas	obstacles full width 5" or less / partial width 2" or less	obstacles full width 8" or less / partial width 3" or less	obstacles full width 12" or less / partial width 6" or less	obstacles full width 12" or less / partial width 10" or less / assistance recommended	impassable obstacles / assistance required
UNAVOIDABLE BRIDGES: (wider if not straight)	1.8m+ (72"+)	1.5m+ (60"+)	1.5m+ (60"+)	1.4m+ (54"+)	1.2m+ (48"+)	1m+ (40"+)	<0.98m (<38.5") possible
MAX TRAIL GRADE:	10% (6 deg)	15% (8.5 deg)	20%+ (11 deg)	20%+ (11 deg)	20%+ (11 deg)	25%+ (14 deg)	25%+ (14 deg)
CAMBER: TURNS, BERM & TTF	level	only enough to drain	Some off camber possible: max 36.5% (20 deg)	Some off camber possible: max 36.5% (20 deg)	Some off camber likely: max 58% (30 deg)	Off camber certain: 58%+ possible (>30 deg)	Off camber certain: 58%+ possible (>30 deg)
CAMBER: TRAIL STRAIGHTAWAYS	level	only enough to drain	max outslope 5-8% (3-5 deg)	max outslope 5-8% (3-5 deg)	max outslope 8-14% (5-8 deg)	max outslope 8-14% (5-8 deg)	14%+ (> 8 deg) outsloping possible
MIN FLAT CORNER RADIUS:	7.5m (24.5 ft)	6m (20 ft)	6m (20 ft)	6m (20 ft)	6m (20 ft)	4.5m (15 ft)	4m (13 ft)
MIN BERM CORNER RADUS:	n/a	n/a	6m (20 ft)	4.5m (15 ft)	4.5m (15 ft)	<4m (13 ft)	< 3m (10 ft)
EXPOSURE:	no exposure	no exposure	no exposure	minimal exposure	exposure likely	exposure likely	exposure likely
RECOMMENDED EQUIPMENT:							
<small>*Riders may choose to take equipment on trails falling outside of recommended trail difficulty at their own risk, but in this case support rider always recommended. !</small>							

RECOMMENDED EQUIPMENT / CATEGORY DESCRIPTIONS (LEGEND)

WHEELCHAIR:

- Manual wheelchair (with or without front wheel attachment)
- Powerchair
- Scooter
- Any other mobility related device



CROSS-COUNTRY (RECUMBENT / COMBINED CRANK & STEERING):

- **One wheel in the front** and two in the back
- Front wheel drive
- Seating – recumbent type seating with legs straight ahead
- Full or no suspension depending on brand



ALL-MOUNTAIN (RECUMBENT / COMBINED CRANK & STEERING):

- **Two wheels in the front** and one wheel in the back
- Rear wheel drive
- Seating – recumbent type seating with legs straight ahead
- Full suspension or rear suspension only depending on brand



ALL-MOUNTAIN (KNEELING / HANDLEBARS W/ SEPARATE CRANK):

- Two wheels in the front and one wheel in the back
- Rear wheel drive
- Seating – kneeling with cranks below you and handlebar above
- Full suspension or rear suspension only depending on brand



BOWHEAD ALL ELECTRIC

- Two wheels in the front and one wheel in the back
- Articulating front end
- Full electric with hand twist throttle; no crank; Rear wheel drive
- Seating – recumbent type seating with legs straight ahead
- Full Suspension



Recreation Activities Update: MOUNTAIN BIKING

Management and Design

Objectives:

- Trail clearing limit: 1.0m to 2.5m
- Strong preference to limb trees along edge of trail in lieu of cutting.
- Trunks create a slalom course that increases fun and slows down users.
- Avoid trees >30cm DBH. Generally avoid most trees over 15cm DBH.
- Maintain old growth Acadian forest species (i.e. yellow birch, sugar maple, hemlock, etc.).
- Engage expertise of trail designers and ecologist to preserve integrity of natural systems while creating challenging and interesting trails.
- On-the-ground proposed trail route delineation, realignment where required.
- Inventory and analyze areas with increased ecological potential:
 - Significant / mature tree specimens
 - Areas of increased species diversity
 - Evidence of habitat and faunal associations
 - Rare plant / tree species
 - Areas of spring water movement and potential amphibian breeding areas

Recreation Activities Update: MOUNTAIN BIKING



Photo Credit: Soft Yoghurt, Trail Forks

Recreation Activities Update: MOUNTAIN BIKING



Photo Credit: www.mountainbikeatlantic.com

Recreation Activities Update: MOUNTAIN BIKING



Photo Credit: Good Trails, You Tube

Recreation Activities Update: MOUNTAIN BIKING



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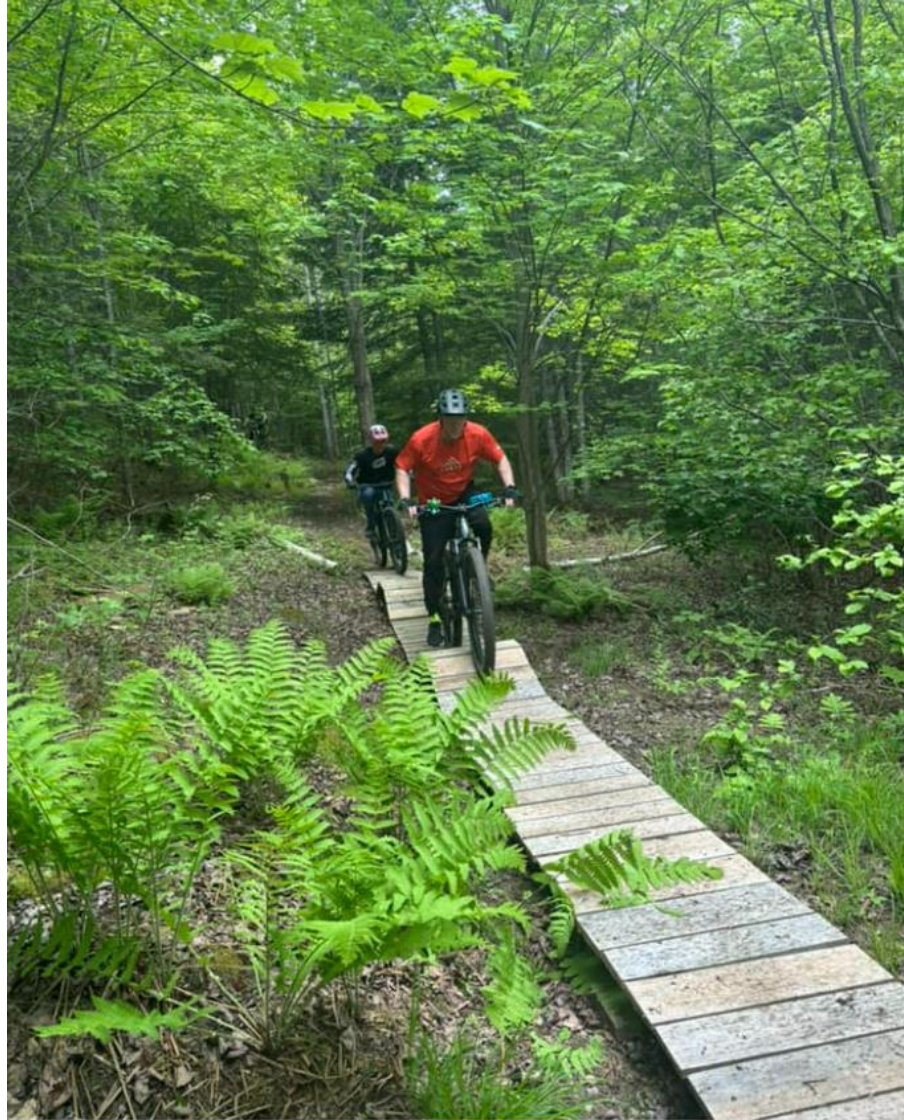


Photo Credit: River Valley Cycling

Recreation Activities Update: MOUNTAIN BIKING



Photo Credit: Kootenay Adaptive Sport Association

Recreation Activities Update: Mountain Biking



Photo Credit:
www.mvpf.org



Photo Credit:
www.nanaimo.ca



Photo Credit: The Railyard, FB



Photo Credit: www.havefunbiking.com

Recreation Activities Update

Championship Disc Golf Course



Recreation Activities Update: DISC GOLF

Features and Sustainability

Alignment:

- Competition-level 18-hole, par 67 course (9-hole winter course).
- 2 tee + 2 basket layout allows multiple course options and levels for users.
- Stadium viewing and event areas.
- Disc golf is a flight-based, rather than ground-based sport. This means:
 - No manicured fairways, pesticides, herbicides, or intensive irrigation; and,
 - Fairways are integrated into the natural landscape.
 - Selective removal and thinning with a focus on weaker trees and invasive species to create a healthier, more resilient and biodiverse forest.

Recreation Activities Update: DISC GOLF



Recreation Activities Update: DISC GOLF



Short Par 3 Before

Short Par 3 After

Recreation Activities Update: DISC GOLF

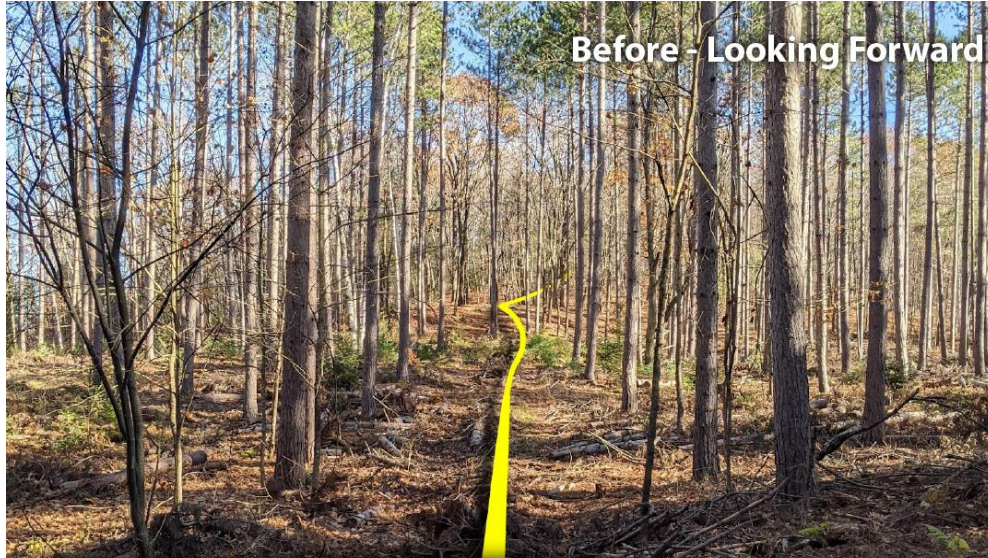


Par 3 Tunnel Before

Par 3 Tunnel After

Recreation Activities Update: DISC GOLF

Before - Looking Forward



After - Looking Forward

Before - Looking Back



° Hole 1 - Blue Tee °
Par 4 - 465 ft
270' to Landing Zone, 195' Approach
+20' Elevation to pin, plays ~525'

Recreation Activities Update: DISC GOLF

Example Par 5's

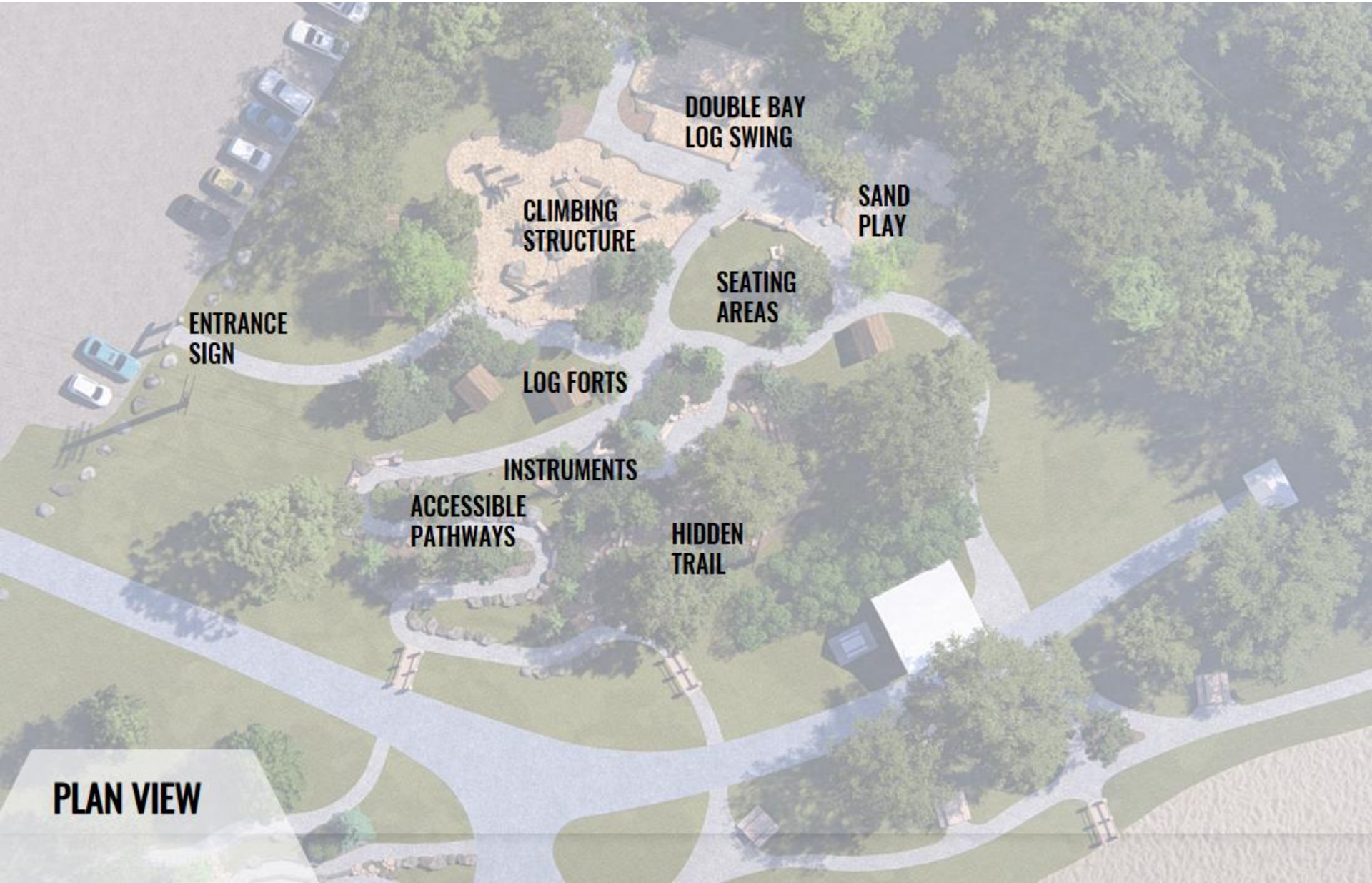


Natural Play Area



Killarney Natural Playpark

Recreation Activities Update: NATURAL PLAYPARK



Recreation Activities Update: NATURAL PLAYPARK



PLAN VIEW

Recreation Activities Update: NATURAL PLAYPARK



ENTRANCE

Recreation Activities Update: NATURAL PLAYPARK



CLIMBER

Recreation Activities Update: NATURAL PLAYPARK



SEATING AREAS

Recreation Activities Update: NATURAL PLAYPARK



INSTRUMENTS

Recreation Activities Update: NATURAL PLAYPARK



SAND PLAY

Recreation Activities Update: NATURAL PLAYPARK



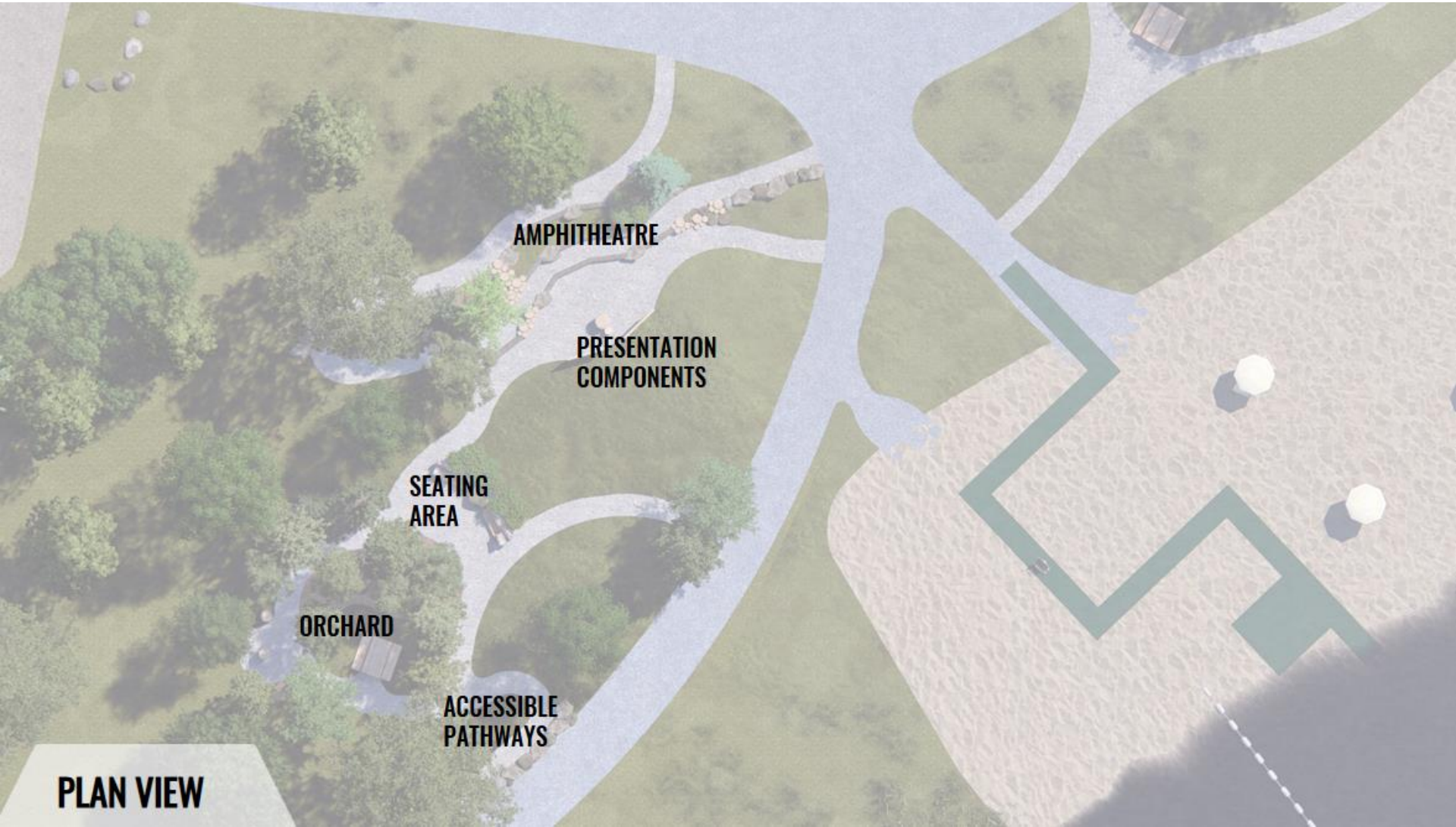
ACCESSIBILITY

Recreation Activities Update: NATURAL PLAYPARK



BEACH ACCESS

Recreation Activities Update: NATURAL PLAYPARK



Recreation Activities Update: NATURAL PLAYPARK



AMPHITHEATRE

Recreation Activities Update: NATURAL PLAYPARK



ORCHARD

Recreation Activities Update

Stakeholder Engagement:

- ✓ River Valley Cycling
- ✓ Fredericton Disc Golf
- ✓ Fredericton Tree Commission
- ✓ Wostawea
- ✓ Ability NB
- ✓ Parasport NB

Recreation Activities Update

Stakeholder Engagement – What We've Heard:

- ✓ Need for dedicated trails for walkers; off-leash dog walking
- ✓ Need to ensure operational capacity for grooming if adding winter uses
- ✓ Ensure safe trail crossings for different uses (i.e. at areas of low speed)
- ✓ Ensure barrier free parking spaces are maintained for winter use
- ✓ Share special events info to support organizer planning
- ✓ Snowshoe trails are important, should be maintained
- ✓ Take caution during and outside of migratory bird season
- ✓ Usage management during wet /spring periods (i.e. temporary closures if needed)
- ✓ Educate the public about important ecological features and species

Timelines

Timelines & Next Steps:

Disc Golf:

- Tree removal and thinning: Winter
- Course development: Summer - Fall

Mountain Biking:

- Skills park & Phase I Trails: Summer - Fall
- Phase II Trails: 2026

Natural Playpark:

- Phase I: Playground Summer - Fall 2025
- Phase II: Amphitheatre TBD

Recreation Activities Update

Park Plan Implementation & Alignment

- Focus on Killarney 2025 – 2026 to facilitate completion of in-progress projects
- Park Plan implementation in progress for Odell, Carleton & Wilmot. Some areas of focus include:

Odell:

- Lodge Landscaping (2025)
- Removal of unsanctioned trails

Carleton:

- Stormwater Mgmt & Cognitive Arboretum (Concept/Detailed Eng. Design 2025, Construction 2026)
- Relocate boat launch to Hamilton Court (est. completion 2027)
- Grand Lawn, Riverfront Lawn, River's Edge Revitalization (pending boat launch relocation)

Wilmot:

- Playpark East, Parking Lot & Drop-off Loop, Stepping Stone Courtyard (Concept 2025, Detailed Eng. 2026, Construction 2027/2028)

Questions & Discussion

