



# West Point Estates (North)



## Outline Plan and Redistricting

Public Hearing

Parkland County Council Chambers

February 13, 2018



# Introduction

## West Point Estates “South”

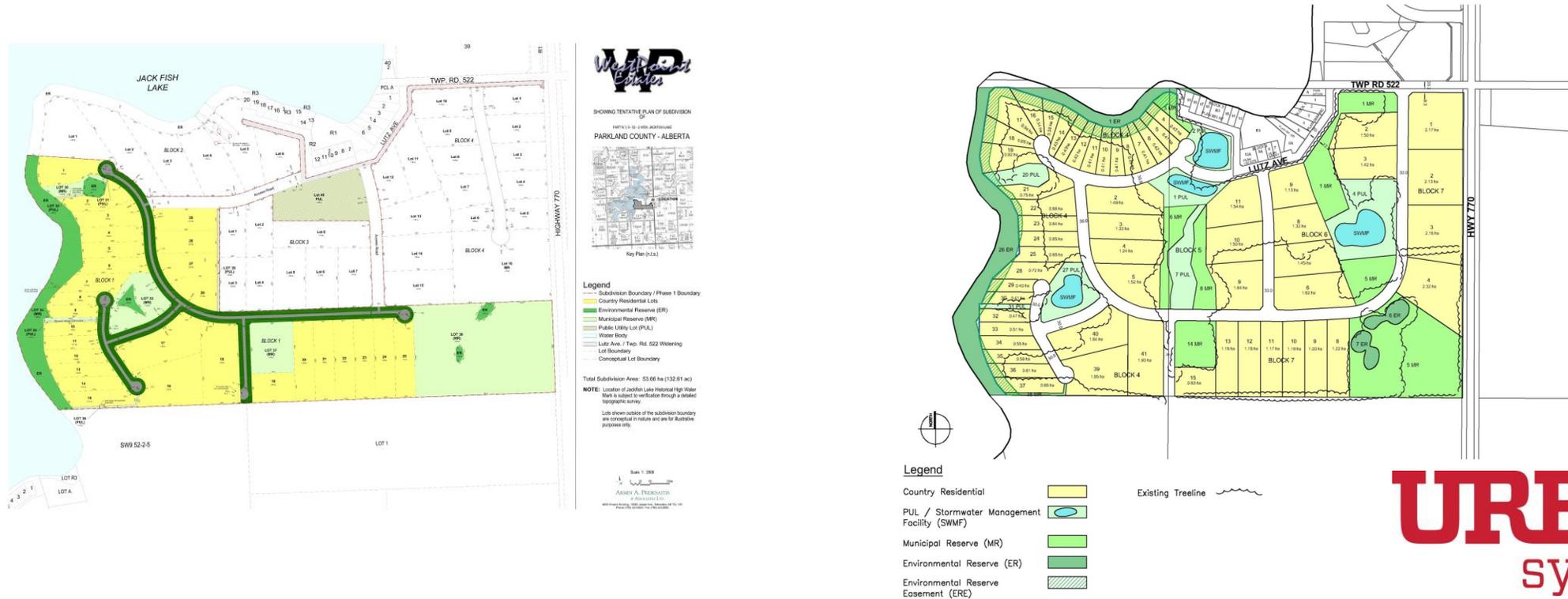
- Outline Plan, CR-R zoning and subdivision previously approved (29 lots) - included “shadow plan” for north area anticipating additional 29 lots (**total of 58 lots**)

## West Point Estates “North”

- Builds upon previous approvals with enhanced / additional technical studies, collaboration with Administration, public engagement – refined plan for **total of 57 lots**

## Administration Report Items

- Lutz Avenue improvements
- Emergency access
- Constructed wetlands
- Trails to the lakeshore
- Open space connectivity

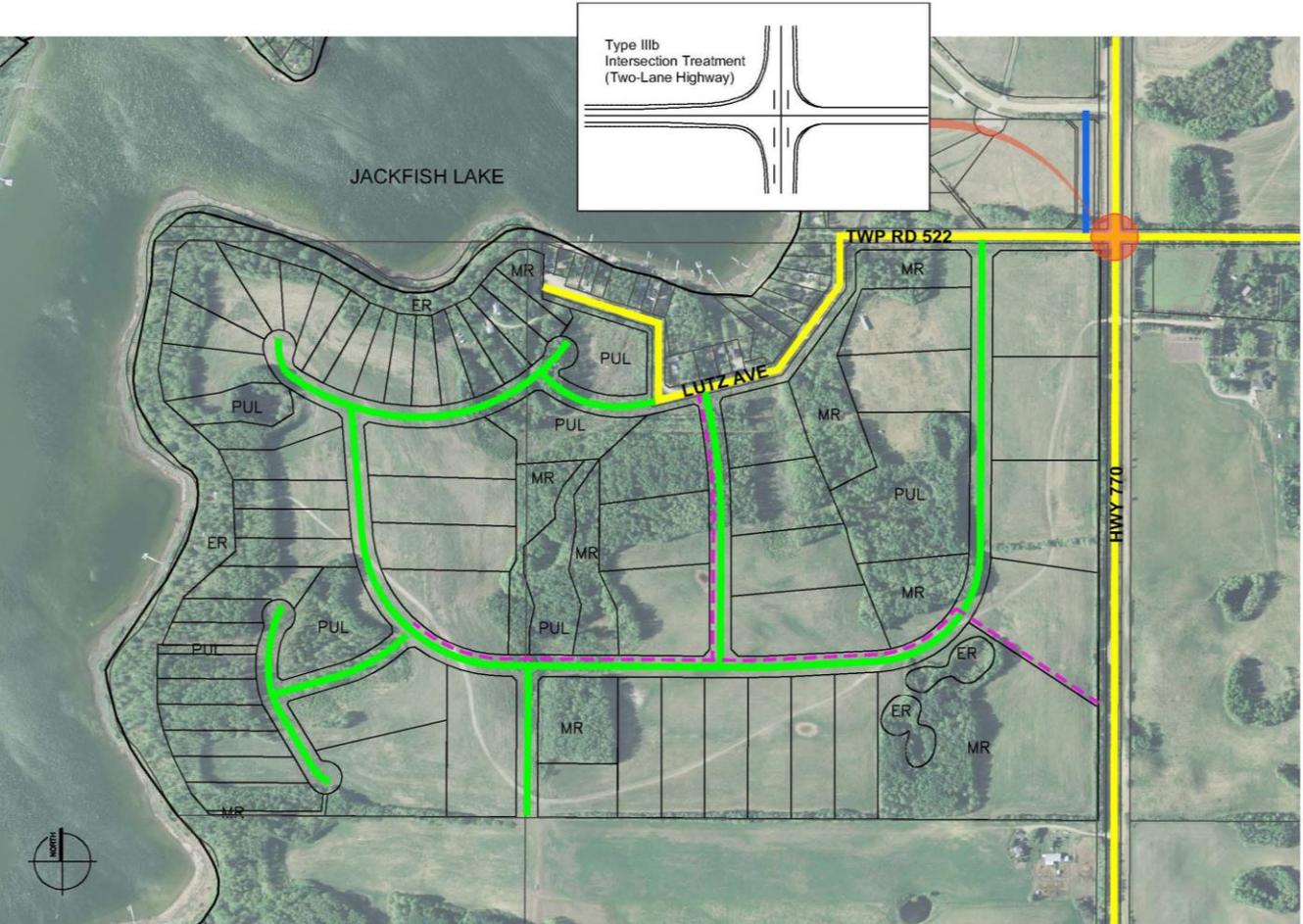


# Item #1 (Administration Report) - Recommended Revision to Outline Plan

## Lutz Avenue Construction Standard

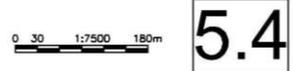
Revise Section 6.1: Phasing of Land Development and Infrastructure (bullets) to state:

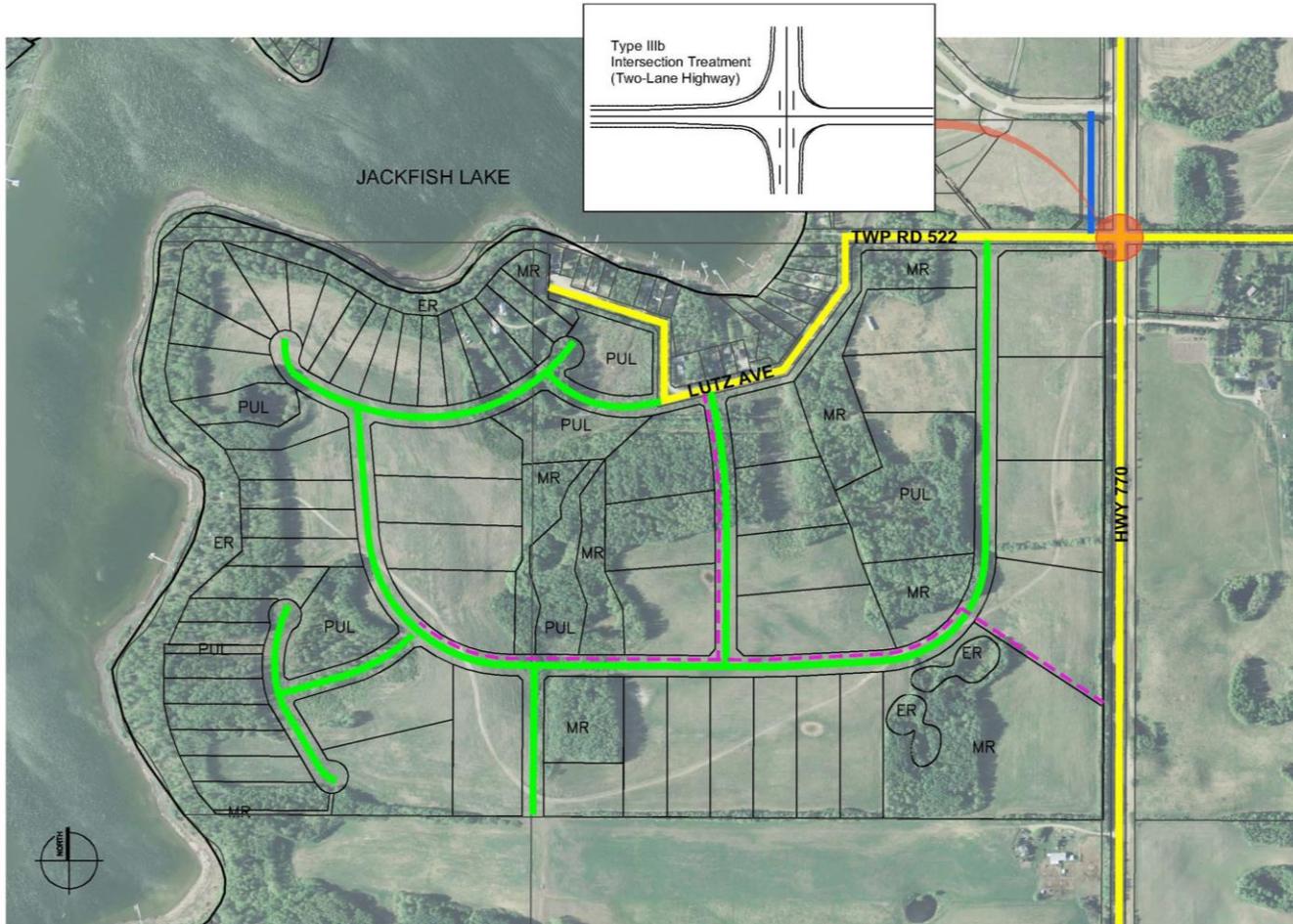
- road widening along Lutz Avenue, for construction of an appropriate road structure to ensure additional water truck traffic can be accommodated, to a gravel standard in accordance with Parkland County Engineering Standards with Phase 1 *and providing dust control prior to paving*;
- paving of Lutz Avenue upon sale of 50% of the proposed lakeshore lots or within three (3) years of development approvals, whichever comes first;
- constructing roadways within Phase 1, as paved roadways, in accordance with Parkland County Engineering Standards;
- constructing a secondary emergency access, as a gravel roadway, in accordance with Parkland County Engineering Standards (as described in Section 4.2.4) with Phase 1; and
- constructing paved development roadways *and upgrading Lutz Avenue to a paved standard*, in accordance with Parkland County Engineering Standards with Phase 2.



Legend	
Existing Road	<span style="color: yellow;">—</span>
Proposed Road	<span style="color: green;">—</span>
Temporary Emergency Access Options	<span style="color: purple;">- - -</span>
Proposed Alberta Transportation Service Road	<span style="color: blue;">—</span>
Upgraded Intersection	<span style="color: orange;">●</span>

**Transportation Concept**  
West Point Estates Phase 1 Outline Plan

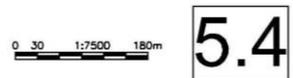




**Legend**

- Existing Road  Upgraded Intersection
- Proposed Road
- Temporary Emergency Access Options
- Proposed Alberta Transportation Service Road

**Transportation Concept**  
West Point Estates Phase 1 Outline Plan



## Item #2 (Administration Report)

### Emergency Access

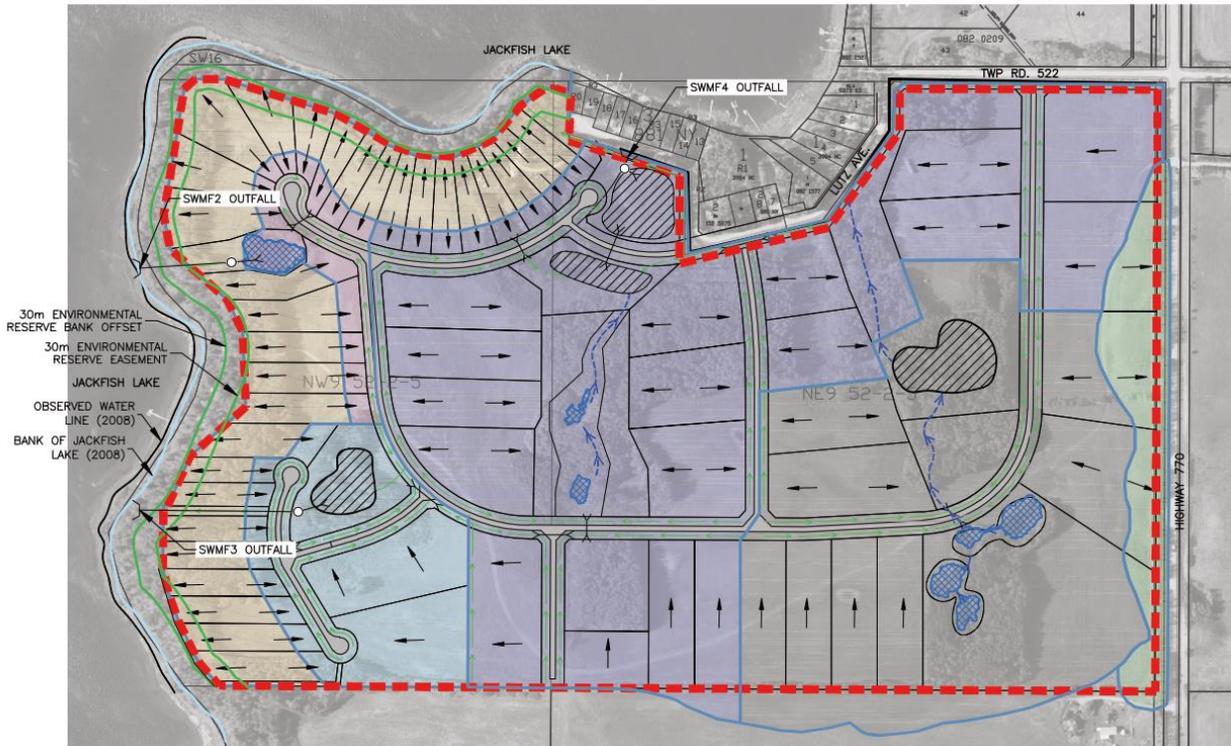
Section 6.1: Phasing of Land Development and Infrastructure (bullet 4) states:

- *constructing a secondary emergency access, as a gravel roadway, in accordance with Parkland County Engineering Standards (as described in Section 4.2.4) with Phase 1; and*

*While no revision to the application is warranted to address this item, Highlands is committed to:*

- *Providing temporary emergency access as identified in the Outline Plan with Phase 1, in consultation with the County and Alberta Transportation and defined through the Development Agreement; and*
- *Planning for connectivity to the lands to the south which will allow for the ultimate emergency access to be provided with future development.*





## Item #3 (Administration Report) - Recommended Revision to Outline Plan

### Constructed Wetland

Revise Section 5.1: Development Concept (section 5.1.2 Policies) to:

- *Add new Policy 5.1.2.4 All stormwater management facilities within West Point Estates will be in the form of constructed wetlands in accordance with County and Alberta Environment standards.*

# Items #4 + #5 (Administration Report)

## Trail Width

Revise Section 5.1: Development Concept (section 5.1.2 Policies) to:

- Add new Policy 5.1.2.11 All trails provided from private lots to the lakeshore will be a maximum of 8m in width through environmental reserve areas.

## Open Space Connectivity

From the Administration report:

- The Jackfish Lake Community and the County's Parks, Recreation & Culture department have commented that the proposed network of municipal reserve parcels allocated throughout the development do not provide optimum connectivity to adjoining properties, nor lands near the lakeshore and the 30 metre riparian environmental reserve (public access).

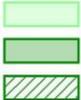
Highlands has previously responded to this item illustrating:

- North-south and east-west connectivity is provided to all open space areas (ER, MR and PUL lots) through a combination of road rights-of-way and the open spaces themselves.

Highlands is prepared to work with the County to ensure appropriate trail connectivity is provided to allow public through the Development Permit process.



**Legend**  
Proposed MR Locations  
Proposed ER Locations  
Proposed PUL Locations



**Open Space**  
West Point Estates Phase 1 Outline Plan

0 30 1:7500 180m

**5.6**

**HIGHLAND PROPERTY  
DEVELOPMENT  
(WEST POINT ESTATES)  
NEAR JACKFISH LAKE, ALBERTA  
IN NE & NW9-52-2-W5M**

# ***Our Company and Our Goals***

## ***Who We Are***

### **Our Company**

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- Serve clients in Alberta and throughout western Canada in a range of industries
- Provide a wide range of high quality, innovative and practical environmental services
- Experts in both aquatic and terrestrial ecology & biology
- Provide solutions to an extensive scope of environmental challenges
- Assist proponents in meeting their environmental goals and requirements
- Committed to the concept of health and safety on and off the work-site

### **Our Goals**

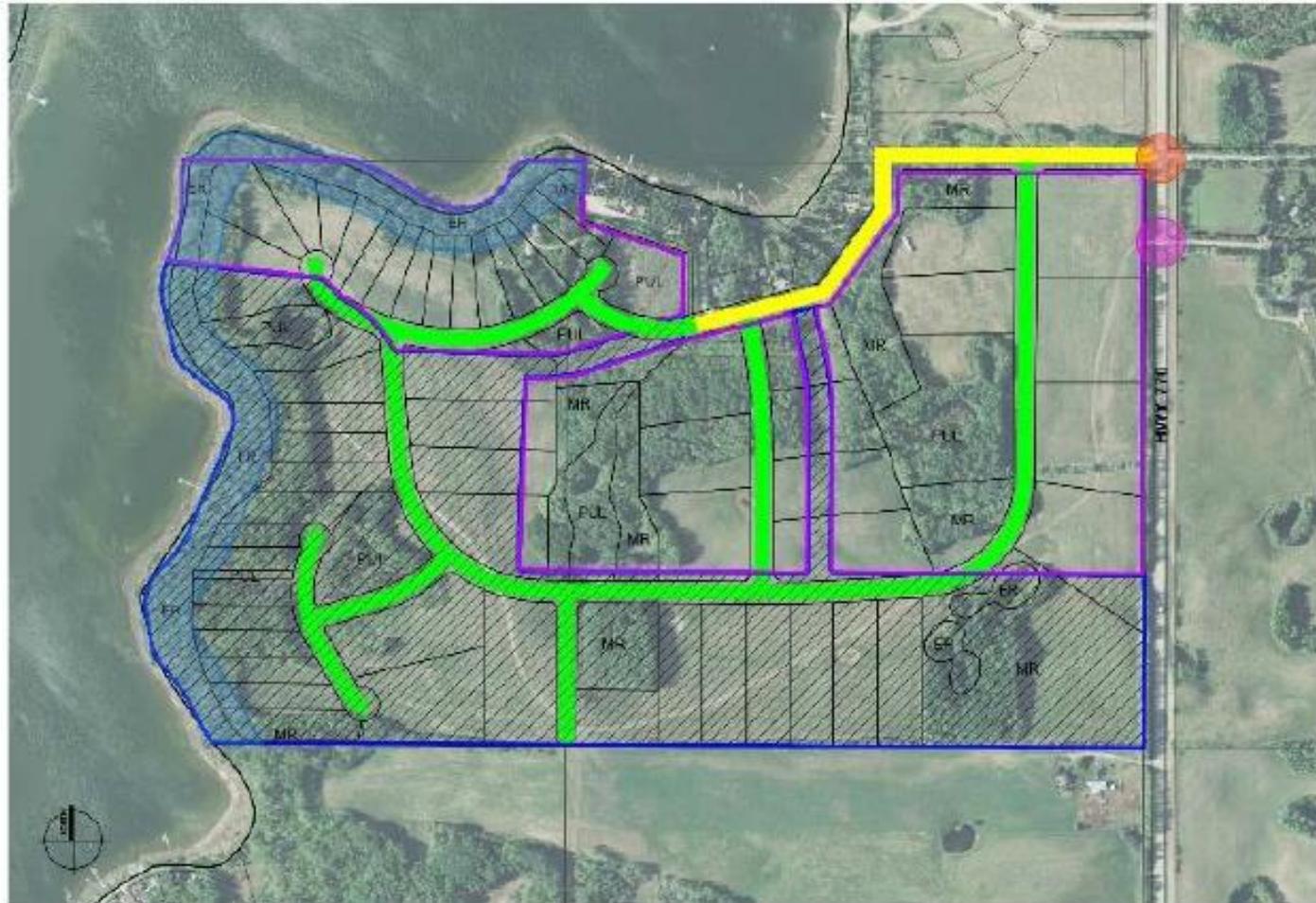
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- To provide clients with **efficient effective** environmental services
- To help achieve **responsible** development, operations and maintenance while ensuring environmental protection
- To develop **innovative practical** solutions for ecological challenges
- To produce honest, competent and **credible scientific results**
- To provide direct **personal service** of skilled experienced principals and key staff
- To achieve **safety** requirements and expectations throughout the entire scope of work





Figure 5-1 - Land Use Concept



**Legend**

- |  |  |                                     |   |
|--|--|-------------------------------------|---|
| Proposed Redistricting Area                          |  | Upgraded Road                       |  |
| Previously Approved Outline Plan Area (CRR District) |  | Proposed Road                       |  |
| Riparian Buffer Area                                 |  | Proposed Temporary Emergency Access |  |
|  |  | Upgraded Intersection               |  |

**Land Use Concept**

West Point Estates Phase 1 Outline Plan

0 20 1,230 1,000

5.1

# ***Environmental Reports***

- **BIOPHYSICAL ENVIRONMENTAL ASSESSMENT**
- **WETLAND ASSESSMENT AND IMPACT REPORT (WAIR)**
- **ENVIRONMENTAL PROTECTION PLAN**



# ***Biophysical Assessment***

## ***98.5 ha (241 acres)***

A Biophysical Environmental Assessment is an assessment of the ecological, biological and physical elements of an ecosystem. The biophysical information is used to determine if environmentally sensitive lands or conservation values exist that should be protected and/or avoided in the development strategy, if various regulatory approval processes are applicable and if select mitigation and/or monitoring may be recommended.

# ***Biophysical Assessment***

## ***98.5 ha (241 acres)***

### **Valued Ecological Components (VECs):**

- **Water, Aquatic Ecosystem, Fish Habitat and Riparian Areas --- Jackfish Lake**
- **Wetlands --- 12 present; C&D values**
- **Fish and Wildlife & Species at Risk**
- **Soils, Vegetation & Environmentally Significant Areas**
- **Historical Resources**

# ***Potential Environmental Impacts***

- **Potential environmental effects identified and listed**
- **Cumulative effects**
- **Avoidance, minimization and mitigation measures to address potential effects**
- **Best Management Practices and Environmental Protection Planning**
- **Residual Effects**
- **Regulatory laws, regulations, guidelines and permitting**

# ***Wetland Impact & Assessment Report (WAIR)***

- **Alberta Water Act, Alberta Wetland Classification System, Alberta Wetland Policy & Various Directives and Guidelines adhered to.**
- **Wetlands present were further addressed within a Wetland Impact & Assessment Report (WAIR).**
- **Avoidance and minimization taken into consideration in development plan (6 wetlands are to be undisturbed; Environmental Protection Plan identifies and lists avoidance and minimization measures for these wetland areas).**
- **Replacement will be implemented for the disturbed wetlands:**
  - **On Site Restoration (0.695 ha)**
  - **In lieu Fee Replacement (0.695 ha)**
- **No residual effects – WAIR meets regulatory requirements**

# ***Water Quality***

## ***Jackfish Lake***

- **Mitigation of 60m lake riparian buffer**
- **Access trails from some residences would have some influence (voluntary reduction in maximum trail width exceeds County requirements)**
- **Infrastructure development includes erosion and sediment control guidelines using Best Management Practices and monitoring specified in the Environmental Protection Plan**
- **Sewage pump outs off site disposal**



# ***Riparian Area***

## ***Jackfish Lake***

- **Mitigation 60m riparian area buffer**
- **Access trails from some residences could have some influence but has been minimized exceeding requirements**
- **Regulatory enforcement (Provincial and Federal)**
- **Resident Environmental Code of Conduct (RECC)**

# ***Other Ecological Factors***

- **Jackfish Lake water quantity (Stormwater Management Plan)**
- **Environmentally Significant Areas and Species at Risk (Biophysical Assessment)**
- **Wildlife and nesting birds under Migratory Bird Convention Act and Alberta Wildlife Act (EPP)**
- **Forested areas, soil conservation, invasive species and weed prevention under various guidelines (EPP)**
- **Boating activity (Jackfish Lake listed under Vessel Operation Restriction Regulations)**
- **Human population and communities (PECC)**

# ***Environmental Residual Effects***

- **Some potential disturbance through buffers**
- **Some removal of treed areas**
- **Increased potential boat activity and human community**

**All federal, provincial and municipal government environmental laws, regulations and policies have been addressed.**

# ***Environmental Regulations and Policies***

- ***Federal, Provincial and Municipal Governments***
- ***West Point Estates **Resident Environmental Code of Conduct (RECC)*****



# Thank You

We Would Like To Hear From You

**ENVIROMAK Inc.** Environmental Management Consultants

**BIOPHYSICAL ENVIRONMENTAL ASSESSMENT**

PROPOSED HIGHLAND PROPERTY DEVELOPMENT,  
JACKFISH LAKE, ALBERTA  
IN NE & NW9-52-2-W5M

Via Email

February 24, 2017 [Revised June 26, 2017] *File Reference # 06-24-03*

Regulatory Approvals Centre  
Main Floor Oxbridge Place  
9820 106 Street  
Edmonton Alberta T5K 2J6  
Email: [enrd-waapplications@gov.ab.ca](mailto:enrd-waapplications@gov.ab.ca)

WETLAND ASSESSMENT AND IMPACT REPORT (WAIR)  
FOR THE PROPOSED HIGHLAND PROPERTY DEVELOPMENT WITHIN NE & NW9-52-2-W5M  
IN PARKLAND COUNTY, ALBERTA

1.0 GENERAL INFORMATION

**ENVIRONMENTAL PROTECTION PLAN**

PROPOSED HIGHLAND PROPERTY DEVELOPMENT  
(WEST POINT ESTATES) NEAR JACKFISH LAKE, ALBERTA  
IN NE & NW9-52-2-W5M

**ENVIROMAK Inc.** Environmental Management Consultants

**ENVIROMAK Inc.** Environmental Management Consultants

## Contact Information

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Phone: (780) 425-2461



# Stormwater Management

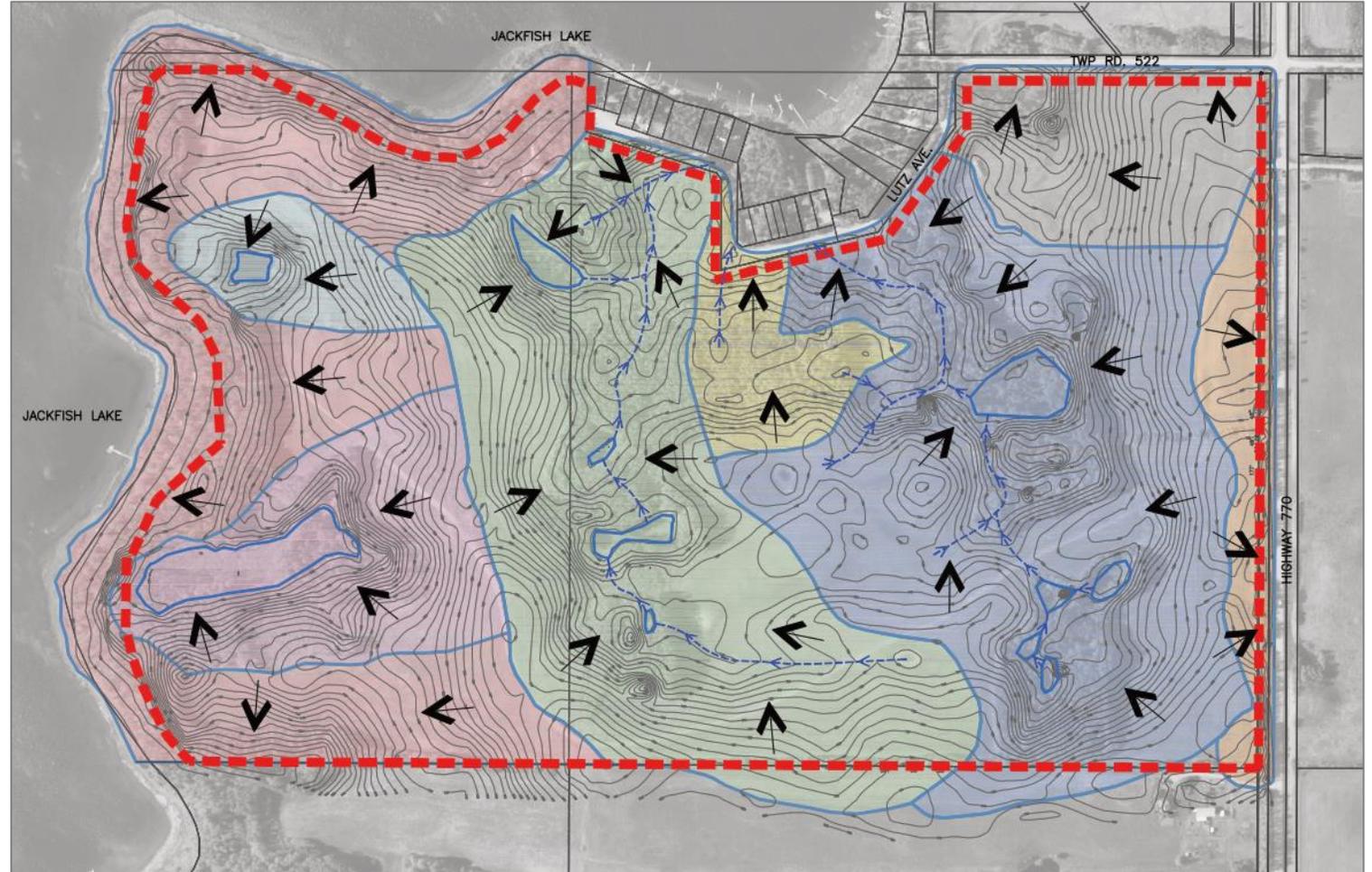


## BASIC PRINCIPLES

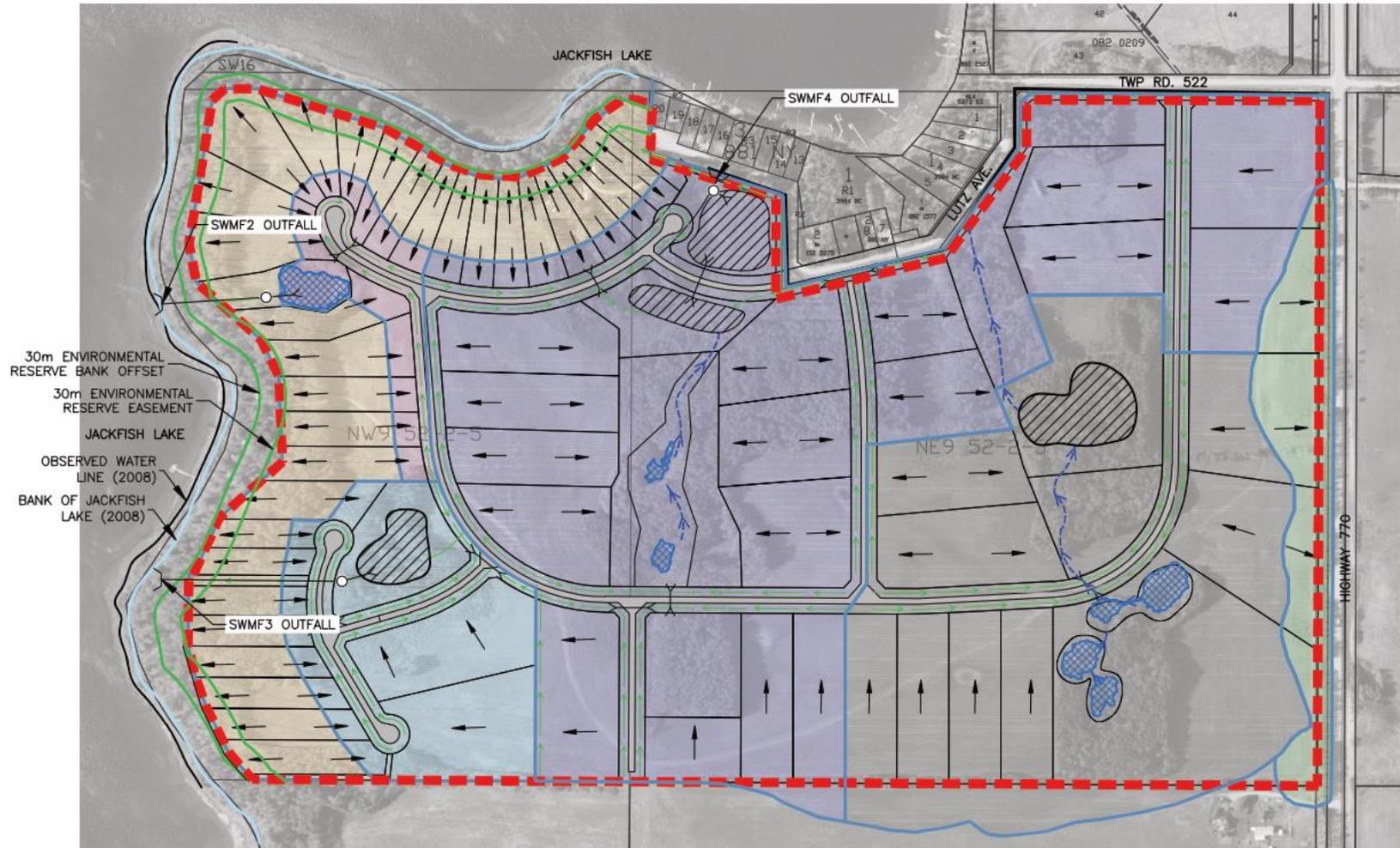
- Maintain existing drainage patterns
- Preserve existing vegetation/wetlands
- Reduce potential for flooding and erosion
- Control increased runoff to pre-development rates
- Remove sediment, nutrients and other contaminants

# Existing Drainage Patterns

- **8** Pre-development basins
- **23 hectares** drain directly into the lake
- **12** existing wetlands (Class C and D)

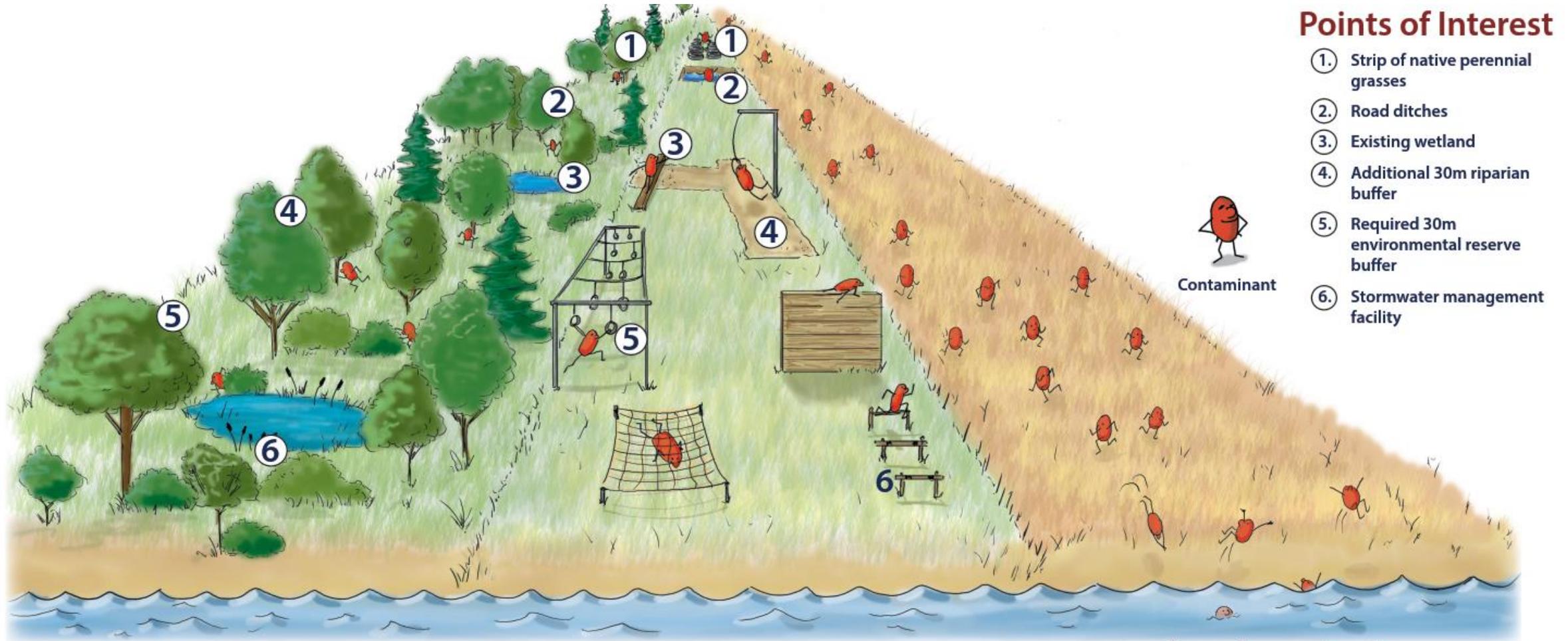


# Proposed Stormwater Management Plan



- 6 Post-development basins
- **14 hectares** drain directly into the lake (restricted use)
- **60 m** buffer on lakefront properties
- **3** Constructed Wetlands
- **1** retained wetland
- **3** outfalls

# Riparian Buffer



## Points of Interest

1. Strip of native perennial grasses
2. Road ditches
3. Existing wetland
4. Additional 30m riparian buffer
5. Required 30m environmental reserve buffer
6. Stormwater management facility

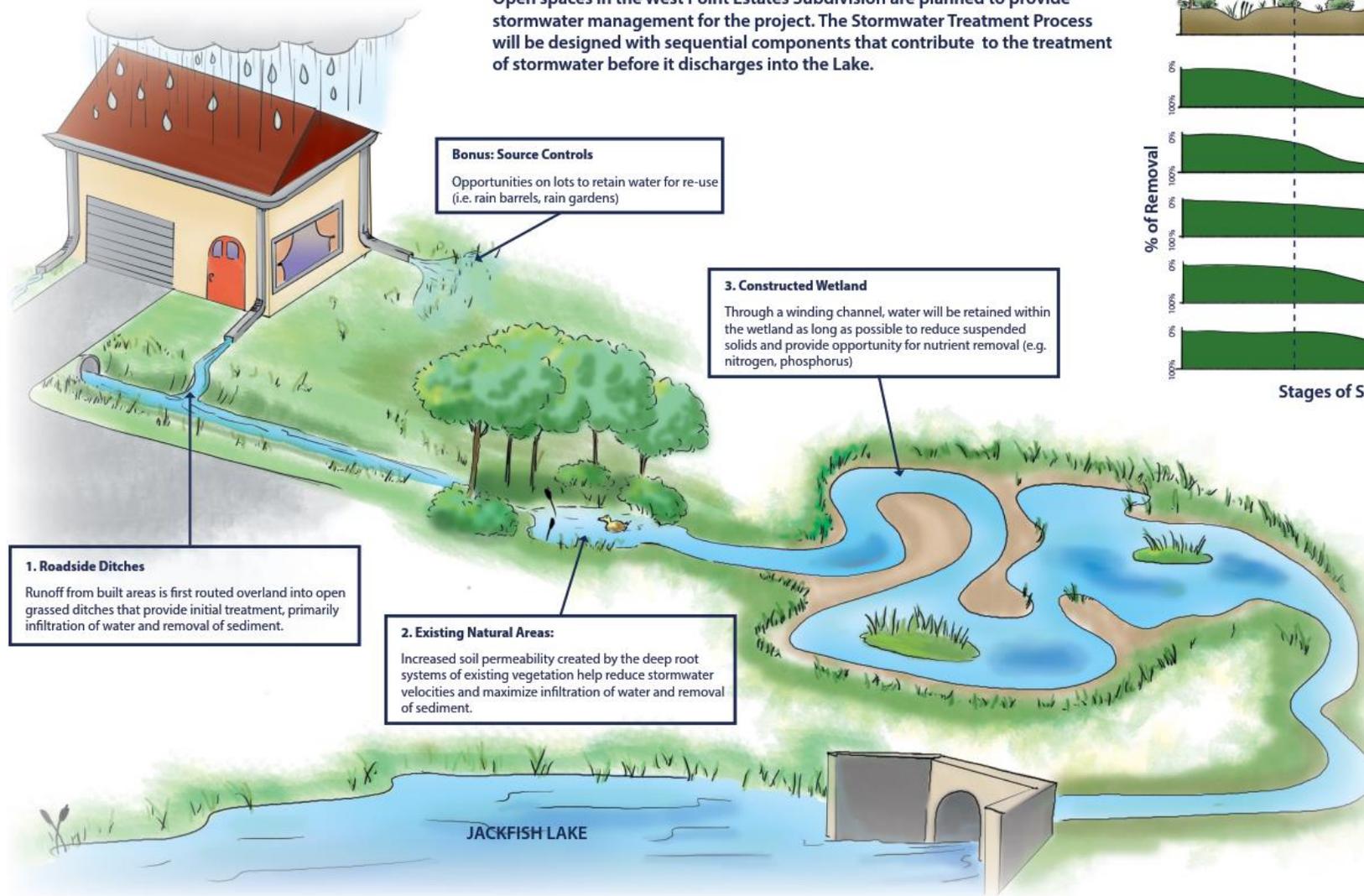
Naturalized Riparian Area

Agricultural Land Adjacent  
to Water Body

# The Stormwater Treatment Train

## The Stormwater Treatment Process

Open spaces in the West Point Estates Subdivision are planned to provide stormwater management for the project. The Stormwater Treatment Process will be designed with sequential components that contribute to the treatment of stormwater before it discharges into the Lake.

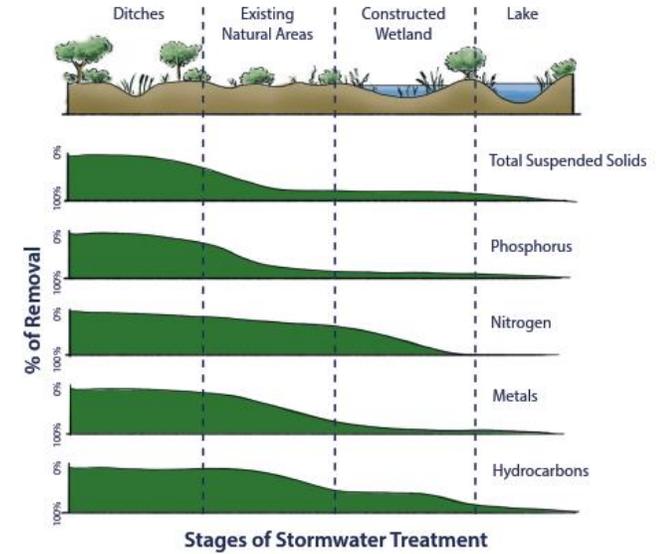


**Bonus: Source Controls**  
Opportunities on lots to retain water for re-use (i.e. rain barrels, rain gardens)

**1. Roadside Ditches**  
Runoff from built areas is first routed overland into open grassed ditches that provide initial treatment, primarily infiltration of water and removal of sediment.

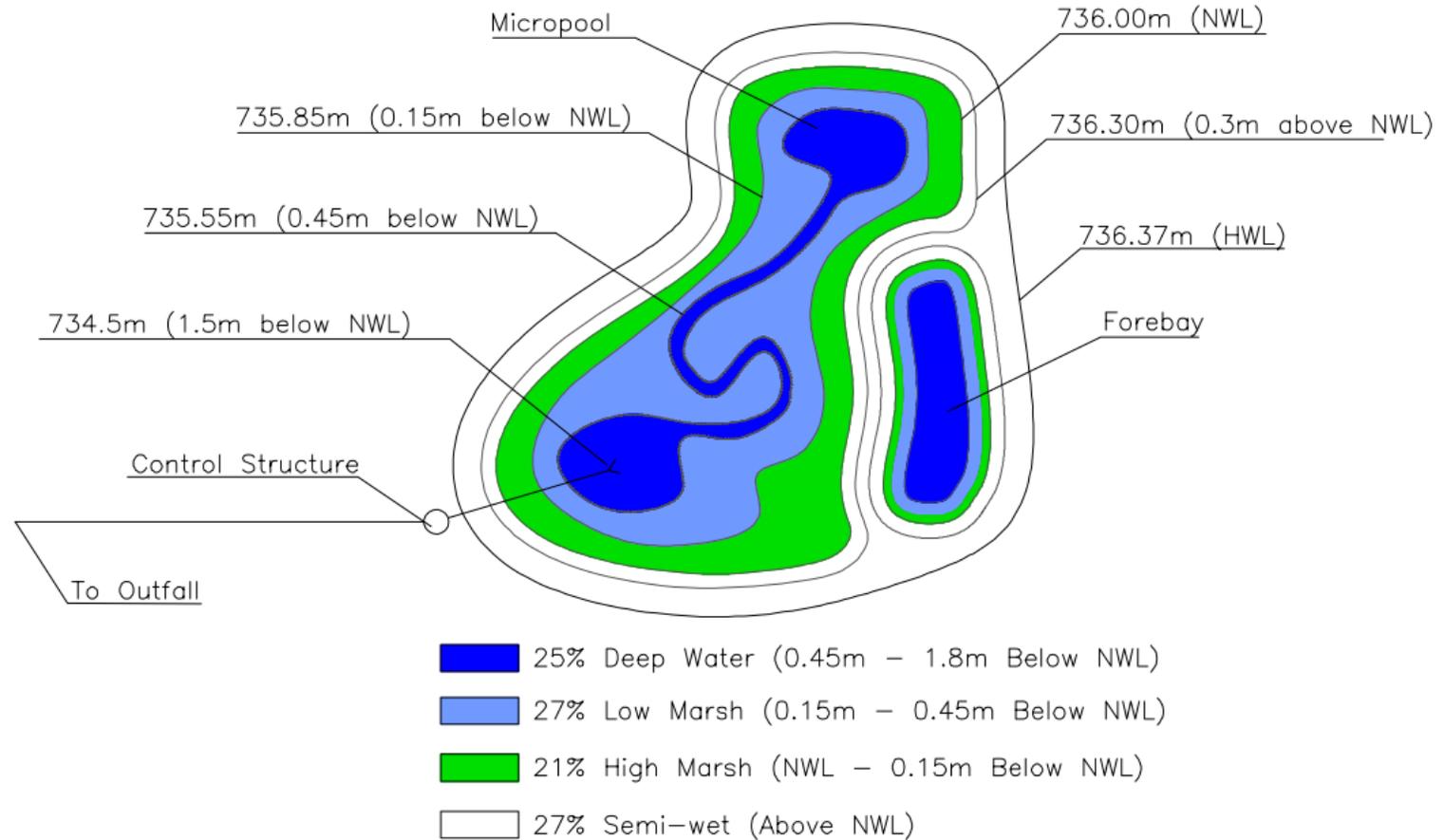
**2. Existing Natural Areas:**  
Increased soil permeability created by the deep root systems of existing vegetation help reduce stormwater velocities and maximize infiltration of water and removal of sediment.

**3. Constructed Wetland**  
Through a winding channel, water will be retained within the wetland as long as possible to reduce suspended solids and provide opportunity for nutrient removal (e.g. nitrogen, phosphorus)



# Constructed Wetlands

- Control runoff to pre-development rates
- Reduce the potential for flooding
- Remove sediment in forebays and micropools
- Removal of Phosphorus and Nitrogen by aquatic plants and long retention times



# Closure

## Policy Alignment / Previous Approvals

## Proposed Actions to Address Administration Report Items

- Lutz Avenue improvements
- Emergency access
- Constructed wetlands
- Trails to the lakeshore
- Open space connectivity



### Legend

Country Residential		Existing Treeline	
PUL / Stormwater Management Facility (SWMF)			
Municipal Reserve (MR)			
Environmental Reserve (ER)			
Environmental Reserve Easement (ERE)			

Land Use Concept  
West Point Estates Phase 1 Outline Plan

**URBAN**  
systems