



PREDATOR RIDGE

Predator Ridge

NEIGHBOURHOOD PLAN

AUGUST 2016

Prepared by:



Adopted by:



Assisted by:



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1 EXECUTIVE SUMMARY

1.1 OVERVIEW

This Neighbourhood Plan is an update and refinement of the 2014 Predator Ridge Neighbourhood Plan, offering a renewed vision for the resort community. The Plan provides policy direction to balance future growth of the Predator Ridge community within the context of its unique natural landscape, specifically recognizing the unique relationship between the resort community's two principal functions, namely:

- the operation of the Predator Ridge Golf Resort – one of the Okanagan's premier golf resort and spa destinations and a significant economic generator and employment centre for the City of Vernon; and,
- the ultimate build-out of the Predator Ridge community – including a mix of residential and tourism land uses, recreational amenities and associated infrastructure.

In support of policies outlined in the City of Vernon's Official Community Plan¹ (Bylaw Number 5151, 2008) and the Regional District of North Okanagan Regional Growth Strategy (Bylaw 2500, 2011), the Predator Ridge Neighbourhood Plan establishes a framework for the future sustainable development of Predator Ridge, with specific detail regarding: the location of land uses; density; servicing of development and its required infrastructure; environmental management strategies; and the dedication of public parks, resort parks and recreational networks.

¹ Future references to the Official Community Plan Bylaw Number 5151, 2008 within the Predator Ridge Neighbourhood Plan will be abbreviated as "OCP 2008."

1.2 LOCATION & DEVELOPMENT VISION

- The Predator Ridge Resort is located 10 km south of Vernon's urban centre in the Commonage highlands, neighboured by Ellison Provincial Park to the west and Sparkling Hill Resort to the north (Refer to Figure 1 – Location of Predator Ridge within Greater Vernon).
- The Neighbourhood Plan area of 480 hectares supports a diversity of tourist commercial and resort residential uses, along with an integrated network of parks and trails surrounding the open fairways of Predator Ridge's championship golf courses.
- The vision for Predator Ridge is to create *a world class resort community that values the civic pride of both permanent and seasonal residents, maintains its unique sense of place and character, and respects its natural resources.*

1.3 SITE INVENTORY & ANALYSIS

- The resort community is set within a dramatic montane landscape characterized by prominent rocky knolls, rolling grasslands, open forest and wetlands. The Plan Area spans an elevational range of approximately 270 metres from its highest point sitting above Commonage Road in the southeast corner of the Neighbourhood Plan area to the lowest point along the southwestern boundary with Ellison Provincial Park (refer to Appendix F – Landform Analysis).
- Owing to the complex terrain of Predator Ridge, slope systems (greater than 30%) define development areas of distinct benches, perched terraces and generous hillside landings (refer to Appendix F – Slope Analysis).
- Specialized technical studies were completed in order to address OCP 2008 requirements for neighbourhood planning and guide future phases of the development

process within the Plan area, including a Biophysical Inventory, Transportation, Civil Engineering, Geotechnical Hazard Assessment and an Archaeological Overview Assessment (refer to Appendices A, B, C, D and E respectively).

1.4 LAND USE (SCHEDULE A)

- The Predator Ridge Neighbourhood Plan accommodates a mix of residential, commercial and open space (park) resort programs with a total neighbourhood yield of 2120 dwelling units.
- Tourist Commercial land uses account for approximately 4.75% of the Plan area and are situated to form two neighbourhood centres (east and west), as well as a central “neighbourhood crossroads,” providing commercial services and meeting places for both the resort and community. Refer to Section 4.1 – Tourist Commercial for more detailed description and policy.
- Residential – Low Density land uses account for approximately 43.23% of the Plan area in the form of clustered single family, ground oriented multi-family homes and cottages offering a range of housing, including Residential – Low Density – Conservation, a designation to protect areas of identified conservation value. Refer to Section 4.2 – Residential – Low Density for more detailed description and policy.
- Resort parks (including the golf course parcel, natural areas and community parks) and dedicated public parks account for approximately 47.86% of the Neighbourhood Plan area, and represent a total designation of 229.83 hectares. Refer to Section 4.3 – Environmental Network:

Parks, Open Space & Trails for more detailed description and policy.

1.5 ENVIRONMENTAL NETWORK (SCHEDULE B)

- The environmental network within the Plan area represents 249.79 hectares and is comprised of dedicated public and resort parks (including topographic summits, the golf course parcel, landscape retention areas and community parks) and designed to conserve identified environmental features while also providing a range of recreational opportunities for residents and visitors. Refer to Schedule B – Environmental Network Plan.
- A comprehensive Environmental Plan Update Report was completed in compliance with OCP 2008 objectives (as detailed within the Environmental Areas Management Strategy) and includes detailed Terrestrial Ecosystem Mapping, field investigations and an Environmental Management Plan for Predator Ridge. Refer to Appendix A – Environmental Summary.
- In support of the Environmental Management Plan, development areas have been designed to minimize impact on environmental systems and maintain wildlife connectivity within and beyond the Plan area through the identification of wildlife corridors. Refer to Section 6 and Figure 8 of the Environmental Update Report for specific recommendations with respect to the management of identified wildlife corridors.

1.6 PARKS AND TRAILS (SCHEDULE C)

- Seven dedicated Public Parks, totaling an area of 19.96 hectares, provide passive recreation opportunities and habitat protection. The Public Park dedication fulfills the Parkland Transfer Agreement between Predator Ridge and the Regional District of North Okanagan signed October 22, 2009.

PREDATOR RIDGE NEIGHBOURHOOD

- Complementing the Public Parks, a significant amount of land is designated Resort Park (229.83 hectares) for golf course, community parks and natural areas.
- The Resort Park designation includes:
 - Two 18-hole championship golf courses, comprised of the Predator and Ridge courses, accounting for approximately 159.94 hectares of the total Plan area;
 - Natural Areas set aside to protect sensitive habitats and ecosystems and conserve Predator Ridge's environmental values, unique landscapes and natural character, accounting for 68.86 hectares of the total Plan area; and,
 - Small, recreation-focused Community Resort Parks, accounting for 1.03 hectares of the total Plan area.
- Predator's network of public sidewalk pathways (16.0 km), public trails (6.97 km) and resort trails (14.75 km) provides an alternative to vehicle use, offering pedestrian, cycling and recreational circulation, linking community destinations within Predator Ridge (note: this network provides a parallel recreation system to the golf cart paths which, for safety reasons, are not intended for public use).
- The system of trails and pathways also connect with park staging and lookout areas, the regional Ribbons of Green Trail System Plan, and the recreation trails at the adjacent Sparkling Hill Resort.

1.7 TRANSPORTATION (SCHEDULE D)

- Providing primary access to the neighbourhood via Commonage Road, Predator Ridge Drive serves as the community spine and gateway for Predator Ridge as well as the adjacent Sparkling Hill Resort. As a single, continuous loop, including a multi-use pedestrian pathway within its right-of-way, Predator Ridge Drive provides a

linkage the neighbourhood centres and residential communities to the west in.

- To minimize the visual, physical and environmental impact of road building and development, the Predator Ridge Neighbourhood Plan applies the City's Hillside Street Standards and sets forth policy to work with City Engineering staff to consider alternative road building standards to further minimize the development footprint.
- A network of public hillside local and strata roads provides access to Predator's various clustered neighbourhoods.
- Emergency Service access is planned via Commonage Road, Sparkling Hill Resort and Ellison Provincial Park (refer to Figure 4 Emergency Preparedness Strategy). Selected hillside local roads are linked by emergency accesses where complete circulation routes could be achieved and topography allows.
- The design of a comprehensive network of pedestrian, cycling and multi-use trails provides an immediate alternative to auto dependency for local neighbourhood trips.
- The structuring of the overall Plan area around a central transit-friendly collecting loop road (Predator Ridge Drive), serves to best accommodate future transit options and transportation alternatives.
- Access to the proposed Ellison Road (along the northwest property boundary of the Plan area) is reflected within the overall transportation network design and accommodated with the Street Hierarchy Plan.
- The provision of parking for all land use designations will be in accordance with the City of Vernon Zoning Bylaw requirement, unless otherwise specified through a shared use parking study or as predetermined through the

Parkland Transfer Agreement (i.e. public park trailhead parking).

1.8 SERVICING (SCHEDULES E, F & G)

- The Greater Vernon Water Utility services Predator Ridge by way of booster stations and reservoirs from Okanagan Landing Road. The Neighbourhood Plan area is serviced by two reservoirs located on Mt Royce and within Lariat Park to the south of Commonage Road (refer to Schedule E – Water Distribution Master Plan).
- Stormwater is managed within the Plan area utilizing a range of Low Impact Development strategies, including minimization of impervious surfaces, on-site infiltration, conventional piped systems to control concentrated peak flows, decentralized stormwater management ponds and the golf course to accommodate major events (refer to Schedule F – Drainage Master Plan).
- Ultimate sanitary sewer servicing for the Meadows Catchment Area shall be provided via a yet-to-be-determined gravity-flow system to the Eastside Road trunk sewer line. As an interim solution, development within the Meadows Catchment Area shall be serviced via lift stations and connected to the Smith Creek Catchment trunk sewer line (refer to Schedule G – Sanitary Master Plan).
- Predator Ridge participates in the City's spray irrigation program utilizing reclaimed wastewater in golf course and public street boulevard irrigation.
- An Emergency Preparedness Strategy, as illustrated in Figure 4, has been prepared to address wildfire hazard management within Predator Ridge, a designated forest interface area.
- Predator Ridge follows the principles of the North American Night Sky Association, intended to minimize the amount of night time ambient light with the goals of

preserving the rural experience of the Commonage while
balancing considerations for public safety.

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2 OVERVIEW

2.1 A FRAMEWORK FOR OUR FUTURE

Over the past two decades, the Commonage has been home to the Predator Ridge Resort Community. With its spectacular highland landscape and close proximity to both the Kelowna International Airport and Vernon's urban centre, Predator Ridge has established itself as one of the Okanagan Valley's most desirable places to live and recreate. Since its annexation to the City of Vernon, Predator Ridge has become a recognized tourist destination in Western Canada and has served as a catalyst for growth in the region.

The original Plan for the 480 hectare area was approved in 1996, providing an initial vision for the development of a golf resort community. A formal review of the 1996 Plan was undertaken resulting in an updated and refined Neighbourhood Plan in 2004. The 2016 Predator Ridge Neighbourhood Plan provides an update to the 2014 Plan, and aligns with the objectives and policies set forth in the OCP 2008.

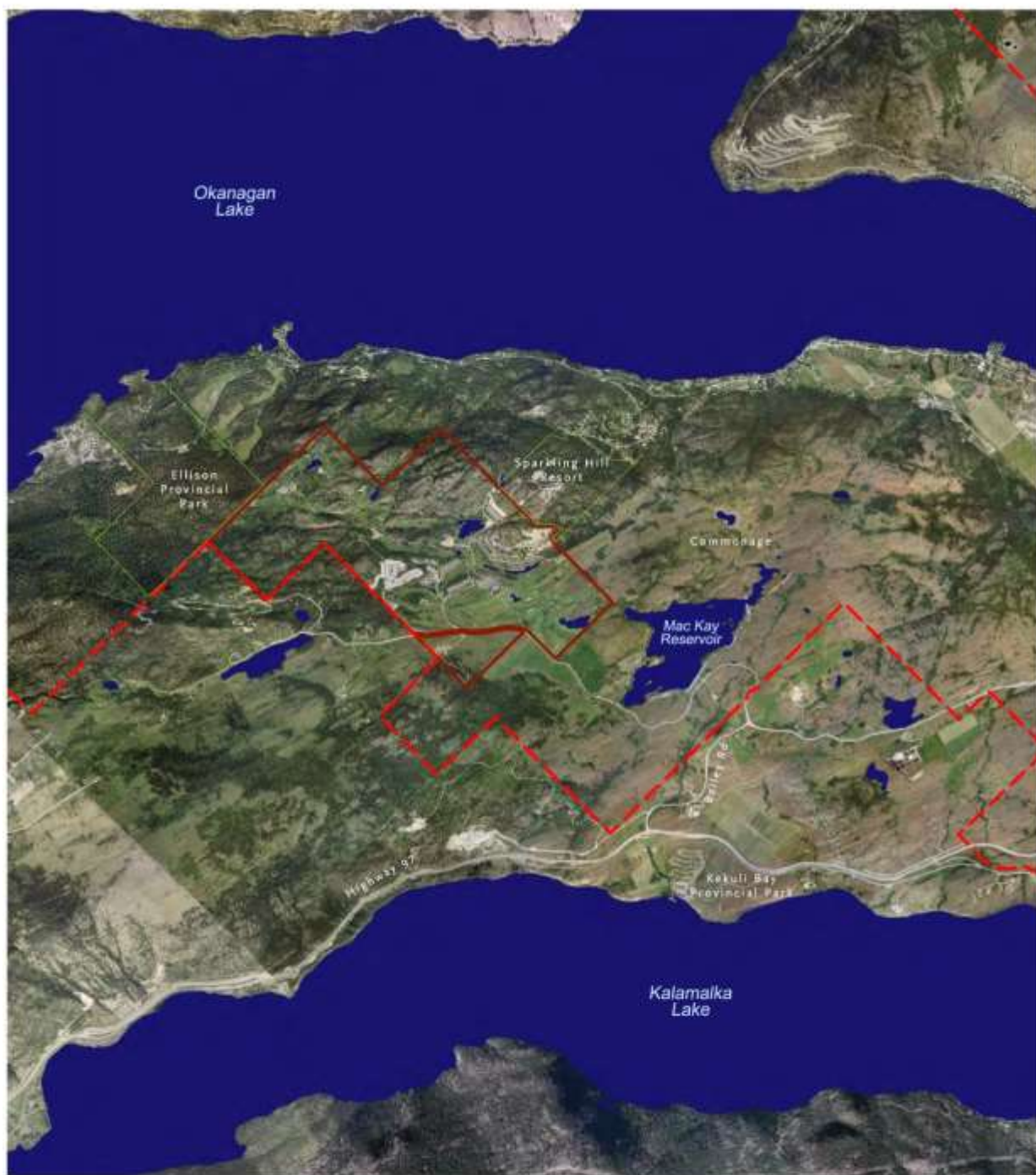
The 2016 Neighbourhood Plan reconciles the issues of land use, environmental and hillside management with the required infrastructure for the future development of the Predator Ridge community. The Neighbourhood Plan accommodates a total of 2120 residential and resort units.

2.2 NEIGHBOURHOOD PLAN AREA

The resort community of Predator Ridge is located in the southwest portion of the City of Vernon, within the Commonage Highlands between Okanagan Lake to the west and Kalamalka Lake to the east (refer to Figure 1 - Location of Predator Ridge within Greater Vernon). The resort community

is framed by Ellison Provincial Park to the west, Sparkling Hill Resort to the north, and the rural lands of the North Okanagan Regional District to the south and east (Figure 2 – Predator Ridge Neighbourhood Plan Area within Commonage). Approximately 65 hectares of the 480 hectare site are within the Agricultural Land Reserve², as delineated in Schedule A – Land Use Plan.

² The golf course program (non-farm use) within the ALR – including golf course, clubhouse, parking lots and driveway – was reviewed by the Agricultural Land Commission as Application #25-T-81-13422 on March 4, 1982. The application was approved on May 4, 1982.



PREDATOR RIDGE NEIGHBOURHOOD PLAN

Figure 1
Location of Predator Ridge within Greater Vernon



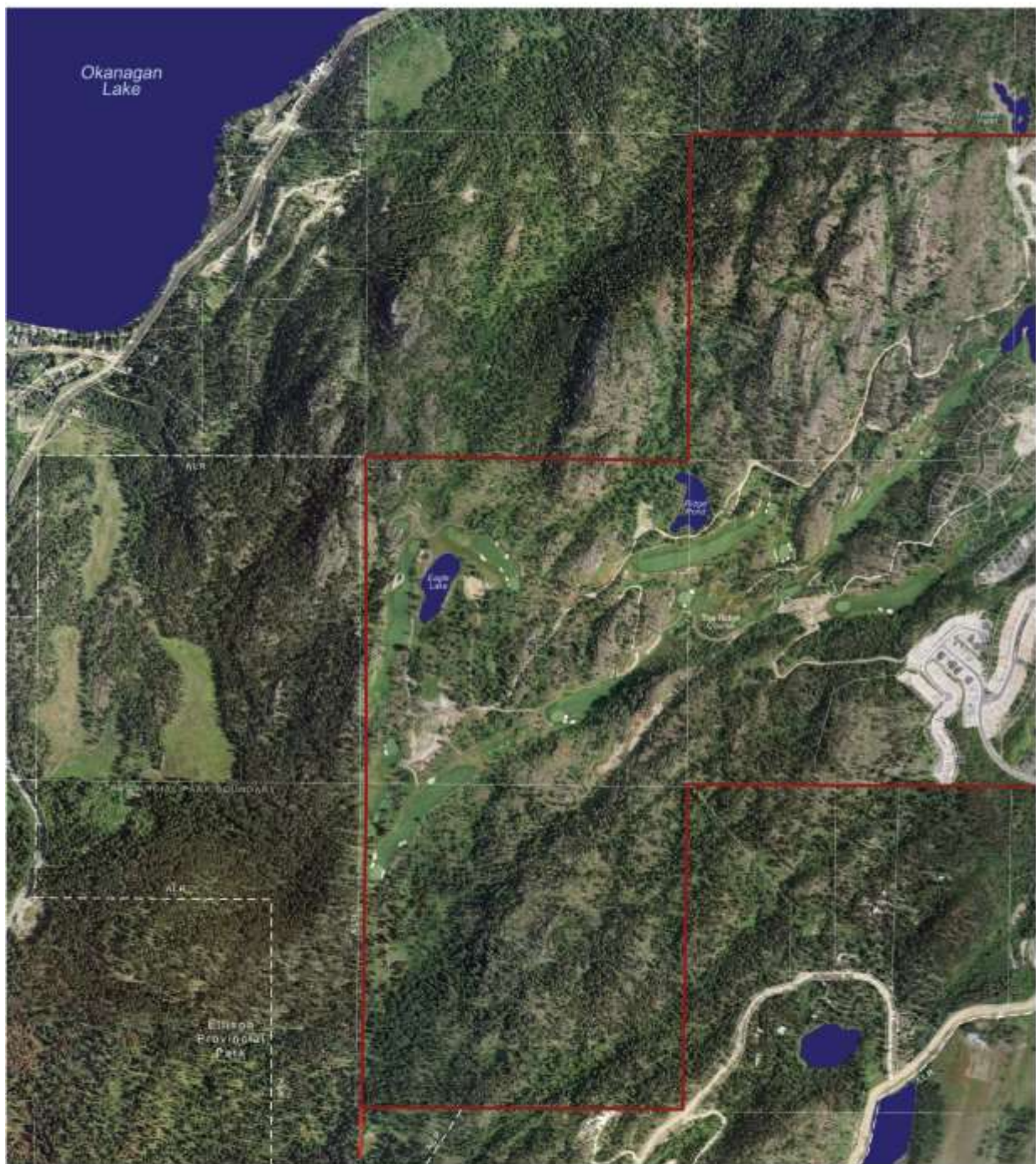
LEGEND

- - - City Of Vernon Municipal Boundary
- Predator Ridge Neighbourhood Plan Area

Scale 1:100,000

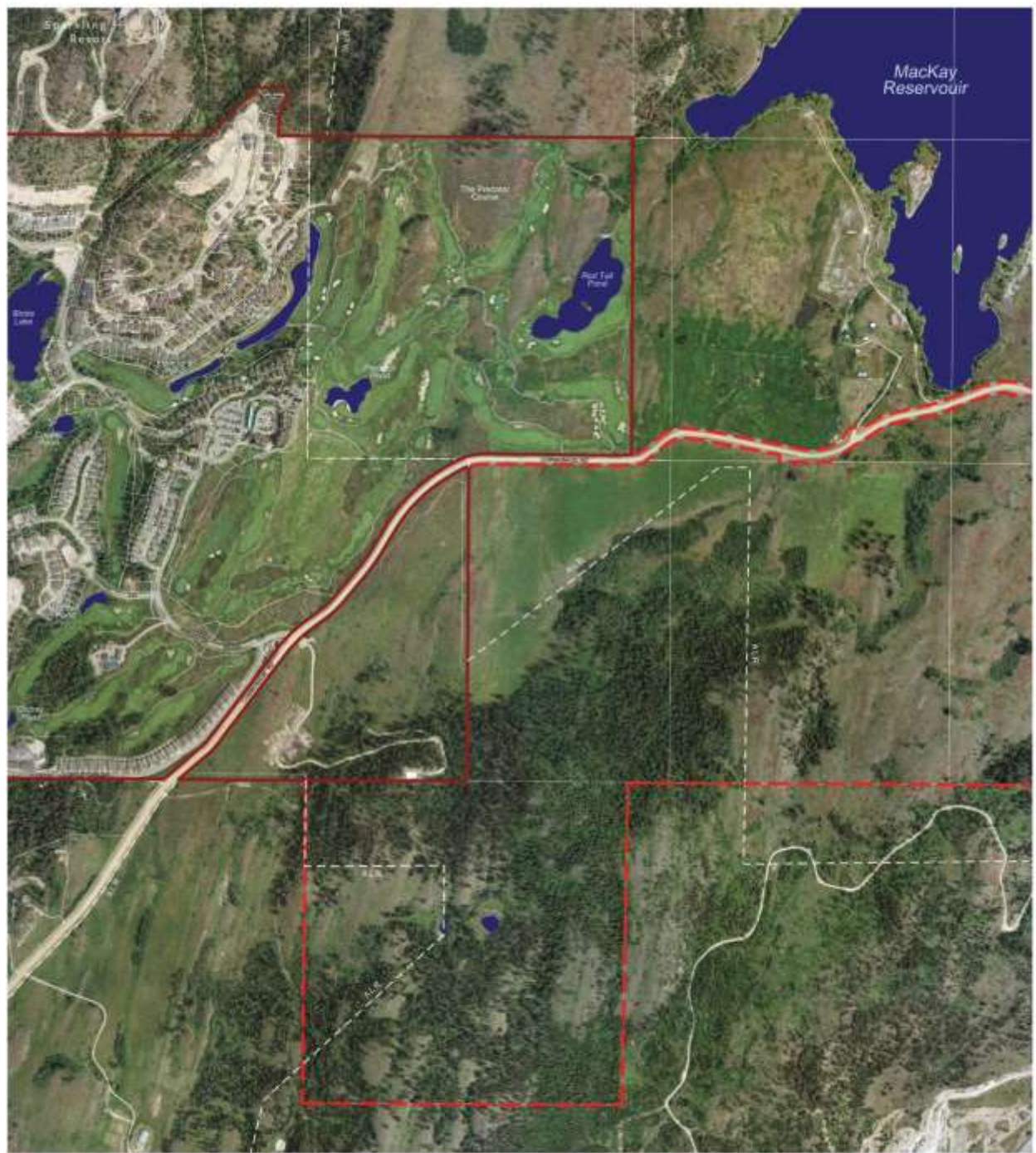


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PREDATOR RIDGE NEIGHBOURHOOD PLAN

Figure 2
Neighbourhood Plan Area within Commonage



LEGEND

- City of Vernon Municipal Boundary
- Predator Ridge Neighbourhood Plan Area
- ALR Boundary

SCALE 1:10,000



EKISTICS

2.3 RELATIONSHIP TO THE REGIONAL GROWTH STRATEGY AND THE OFFICIAL COMMUNITY PLAN

The Regional District of North Okanagan Regional Growth Strategy (RGS) was developed to provide "an integrated strategic policy framework for addressing growth management, economic development, transportation, other infrastructure, and environmental concerns."³

Furthermore, the RGS "focuses on concentrating growth within the growth areas and limiting development in the rural protection areas. The policies recognize the link between development, mobility, the environment and the economy, and have been designed to provide an integrated approach to sustainability, development, economic prosperity, and the provision of services."⁴

In accordance with and in support of the RGS, the City of Vernon's OCP 2008 contains the City's long range planning objectives and policies to guide its future development.

More specifically, the OCP 2008 presents a vision – supported by a set of guiding principles – outlining the City's objectives for addressing the form and character of existing and future land use, transportation patterns, and infrastructure provision. As stated within the OCP 2008:

"This vision... is encapsulated in the Guiding Principles... intended to guide the development of and subsequent implementation and decision- making arising from the OCP."⁵

The following demonstrates the linkages of the PRNP to the OCP 2008:

- Protect and preserve green spaces and sensitive areas
The PRNP implements the Environmental Management Areas Strategy and sets aside approximately 249.79 hectares of parkland including 89.86 hectares of

³ Regional District of North Okanagan RGS, "Regional Policies," p.9

⁴ Same as above.

⁵ OCP 2008 – Section 1.0 "Planning Context."

natural landscape areas (Public Park, Natural Areas, and Community Resort Parks) to serve the recreational needs and conservation goals of the community. Additional steps have been taken with the creation of a Residential – Low Density – Conservation Development Permit Area to reduce density, carefully manage development and protect natural features within designated areas of identified environmental sensitivity.

Refer to Section 4.3 Environmental Network: Parks, Open Space & Trails for a more detailed description and associated policies.

- Ensure housing meets the needs of the whole community
The PRNP sets forth a set of policies intended to address the future housing needs of the Predator Ridge community through the development of a range of single-family and ground-oriented multi-family dwellings in keeping with the form and character of the existing community.

Refer to Section 4.1 Tourist Commercial and Section 4.2 Residential – Low Density for more detailed descriptions and associated policies

- Create a culture of sustainability
The PRNP supports the City's Spray Irrigation Program, utilizing recycled greywater for golf course irrigation; promotes the use of best practices in environmental management; encourages the use of green building and geothermal energy technologies; and, fosters a culture of sustainability through the implementation of a neighbourhood design that is sensitively integrated into the natural features and character of the surrounding landscape.

Refer to Section 3.0 Vision for a more detailed description and associated physical planning principles.

- Protect agricultural land

The PRNP supports the protection of agricultural land through the provision of setbacks and buffers where development areas are proposed adjacent to the Agricultural Land Reserve. These areas are managed as part of the larger Environmental Network of protected open spaces within the Plan area.

Refer to Section 4.3 Environmental Network: Parks, Open Space and Trails for a more detailed description.

- Create strong, compact and complete neighbourhoods

The PRNP builds on the historical success of the Predator Ridge community, its rural village character and destination recreational amenities. The Plan weaves together a comprehensive system of parks, open space and clustered neighbourhoods, guiding the build out of a more complete master planned community with a variety of housing types and tenures, a pedestrian-oriented public realm and neighbourhood scale commercial services.

Refer to Section 3.0 Vision for a more detailed description and associated physical planning principles.

- Provide alternative transportation

The PRNP supports alternative transportation through the design of a pedestrian friendly street hierarchy in accordance with the City's Street Standards, the provision of an interconnected network of multi-use pathways, sidewalks and walking trails and effectively reduces vehicle trips through the clustering of development, the mixing of pedestrian scale residential and commercial land uses and the provision of recreational amenities within a comprehensive masterplan.

Refer to Section 4.5 Transportation for a more detailed description and associated policies.

- Revitalize the Downtown

While located approximately 10km south of the City Centre, Predator Ridge is a significant contributor to the City's economy, both as an employment centre for local residents as well as significant source of destination tourism and development related economic activity for the greater Vernon area.

Refer to Section 2.2 Neighbourhood Plan Area for a more detailed description.

- Ensure development pays for itself

Capital improvements within the Plan area are 100% developer/landowner financed and the PRNP is based on an in-depth review of historical development at Predator Ridge, a rigorous investigation of physical constraints and servicing requirements and a review of the City's engineering standards (including Hillside Street Standards) to provide the most efficient long term infrastructure servicing strategies.

Refer to Section 4.6 Utilities for a more detailed description of the Plan Area servicing strategy and associated policies.

- Create a youth friendly city

The PRNP supports the creation of a more youth friendly neighbourhood in support of the City's efforts through the provision of amenities, including two championship golf courses and a golf academy, a comprehensive system of recreational trails and a community centre with indoor pool and community park/playground, as well as all ages programmed events within the resort.

Refer to Section 3, Vision "Structure & Amenity" for a more detailed description of the Plan Area servicing strategy and associated policies.

Neighbourhood Plans

To guide future development, the OCP 2008 requires the preparation of detailed Neighbourhood Plans for areas outside of the City Centre that are expected to accommodate a significant population.

Neighbourhood Plans are detailed plans that supplement the OCP 2008 and provide additional guidance for new growth and development in a given area.

The Predator Ridge Neighbourhood Plan addresses issues related to land use, density, and servicing. Guided by the OCP 2008 “Neighbourhood Planning Process” (Section 20.7), the Predator Ridge Neighbourhood identifies and considers:

- a. OCP 2008 Guiding Principles
(Refer to Section 2.3 – Relationship to the Regional Growth Strategy and OCP 2008, above.)
- b. Current and future community needs
(Refer to Guiding Principles above and Section 3 – Vision.)
- c. Community impact and benefit
(Refer to Section 3 – Vision)
- d. Context of the neighbourhood planning area
(Refer to Figure 1 “Predator Ridge within Greater Vernon” and Figure 2 “Predator Ridge within the Commonage.”)
- e. Natural features
(Refer to the Predator Ridge Environmental Update Report as part of Appendix A – Environmental Summary.)
- f. Management considerations arising from application of the EMA Strategy
(Refer to Section 4.3 – Environmental Network: Parks, Open Space and Trails.)
- g. Potential archaeological significance of the site
(Refer to Section 1.3 – Site Inventory and Analysis and Appendix E – Archeological Summary.)
- h. Hillside Guidelines
(Refer to Section 4.5 – Transportation.)
- i. Existing and required infrastructure
(Refer to Section 4.6 – Utilities.)
- j. Transportation linkages
(Refer to Section 4.5 – Transportation.)
- k. Parks, recreation and open space
(Refer to Section 4.3 – Environmental Network: Parks, Open Space and Trails.)
- l. Community facilities, services and amenities
(Refer to Section 3 – Vision, “Structure and Amenity.”)
- m. Land use and densities
(Refer to Section 4 – Land Use Designations.)

- n. Development pattern and sequencing
(Refer to Section 2.1 – Framework for Our Future.)
- o. Neighbourhood built form and character
(Refer to Section 3 – Vision, Built Form: From Planning to Placemaking.)
- p. Opportunities for the use of alternate development standards
(Refer to Section 5 – Development Permit Guidelines.)
- q. Neighbourhood sustainability and contribution to overall community sustainability.
(Refer to Section 3 – Vision, “Sustainability: Towards a Complete Community.”)

Official Community Plan Designations

The Predator Ridge Neighbourhood Plan area is identified in the OCP 2008 as being within Neighbourhood Planning Area 2 (NPA-2) which consists of the Hillside Residential and Agricultural District. Furthermore, the Neighbourhood Plan area is within Development District and Development Permit Area #3 (Hillside Residential and Agricultural District). Both the Hillside Guidelines and the Environmental Management Area Strategy apply to lands within the Plan area.

Environmental Management Areas Strategy (EMAS)

The EMAS identifies specific challenges, objectives and policies for implementation, in accordance with the following guidelines for varying degrees of environmental sensitivity⁶:

High sensitivity polygons (red polygons) would require highly detailed development permit applications, and would restrict development or increase environmental management demands based on site specific inventories and SEI inventories.

Moderate sensitivity polygons (yellow polygons) would limit development to a lesser degree, responding to property specific conditions and the presence or absence of key natural and habitat features, but also requiring conservation, protection and mitigation planning as part of development permit application materials.

Low sensitivity polygons (green polygons) would require the lowest level of conservation and protection planning, but would require property specific environmental information to contribute to the environmental management strategies developed as part of the development process.

According to the EMAS, management guidelines and policies are “designed to ensure these sensitive and significant ecosystem and natural features are protected and enhanced while continuing to provide reasonable

⁶ City of Vernon, Environmental Management Areas Strategy, Section 3, p.6

potential for development when taking into account the entire property.”

As such, the Predator Ridge Neighbourhood Plan includes:

- Specific management recommendations and an Environmental Management Plan, designed in response to detailed biophysical inventories of the Plan area (refer to Appendix A – “Neighbourhood Plan Environmental Update” Report, Section 6 and Figure 8);
- A significant environmental network of parks and natural areas (refer to Section 4.3 – Environmental Network: Parks, Open Space and Trails); and,
- Site-specific Development Permit guidelines for conservation on defined areas of low density residential development (refer to Section 5 – Development Permit Areas).

Hillside Guidelines

Hillside Guidelines “provide a standard of development which results in appropriate residential hillside development, while promoting innovation and flexibility to enhance our unique hillside character. Hillside requirements are intended to enhance the desirability and marketability of hillside developments, while supporting the key goal of managing hillside development.”⁷

The Predator Ridge Neighbourhood Plan applies Hillside Guidelines in the calculation of density (refer to Section 4.7 – Neighbourhood Plan Land Use Summary) and the clustering of homesites and neighbourhoods in consideration of unique natural features, steep slope systems and consolidated development areas (most efficient for access and infrastructure and servicing).

⁷ City of Vernon, Hillside Guidelines, Section 1.1, p.6

OCP 2008 Policy Summary

The goals and supporting policies of the OCP 2008 have been integrated into the overall Predator Ridge Neighbourhood Plan vision and designed to encourage the creation of a vibrant resort community that complements the scenic Commonage landscape.

For a more detailed review of OCP 2008 policy and its specific Neighbourhood Plan context, refer to Appendix G – Neighbourhood Plan Policy Context.

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3 VISION

The vision for the Predator Ridge Neighbourhood Plan is to create *a world class resort community that values the civic pride of both permanent and seasonal residents, maintains its unique sense of place and character, and respects its natural resources.*

The Predator Ridge Neighbourhood Plan examines the relationship between the resort, local residents, future community needs and the unique natural landscape in articulating a long term vision for Predator Ridge.

Creating an Authentic Experience

The goal of the Neighbourhood Plan is to foster good place making and establish a community where people can form attachment and affinity - a place to call home. The process of creating place is fluid: the needs and desires of communities, local government, economic goals and the natural environment all need to be continually considered towards a long term vision. Predator Ridge is a community that is evolving from a comprehensive masterplan to a truly unique place to live, play and experience the Okanagan and its natural landscape.

Predator Ridge is recognized throughout Canada as a world class resort community and golf destination. Set in the ruggedly beautiful Okanagan landscape, Predator Ridge presents the charm of a rural village with top ranked golf courses, recreational activities, tourist accommodation and established residential neighbourhoods, all integrated with the natural surroundings.

Rooted in the Landscape

Predator Ridge has been designed to provide two distinct golf experiences – the Predator Course situated in the rolling grasslands of the Commonage and the Ridge Course set within the montane landscape of rocky outcrops and pine/fir forests. Throughout the preparation of the two 18 hole courses, care has been taken to preserve the natural habitat to create a golf experience integrated with the natural environment.

Special attention has also been given to the design of the residential experience. In keeping with the number of well-

established neighbourhoods of exceptional quality already developed at Predator Ridge, homesites are sited to respond to both the natural landscape and dramatic vistas, while offering a range of housing forms in response to community needs.

Structure & Amenity (Refer to Fig. 3 “Predator Ridge Concept Plan”)

Responding to the natural topography of the land, two neighbourhood centres have been situated to serve as anchors for the Predator Ridge community. The Predator Village has developed as the heart of the resort community, bringing visitors and residents together in a vibrant social setting with the golf Clubhouse and Lodge as its centrepiece. Its mix of uses provides commercial and recreational facilities for the community, along with tourist accommodation, spa and resort facilities.

Located adjacent to Ellison Provincial Park, Meadows Landing offers a unique enclave of golf-front living. Planned to provide both ground oriented and apartment living opportunities, Meadows Landing includes essential supporting commercial and social amenities, affording residents the opportunity to remain in the community through different life stages.

Landscape features, such as wetlands, rocky knolls and important view corridors are celebrated and protected through their incorporation into public and resort parks. Steep non-developable areas are preserved as open space, allowing the resort neighbourhoods to be surrounded by significant natural areas.

Predator Ridge Drive serves as the community’s collector street, structuring the resort’s vehicle circulation, and also provides access to the heart of the community from Commonage Road, creating a looping route linking together the Village, neighbourhood centres, and resort facilities. Streets, pathways and walking trails have been designed specifically for Predator Ridge to ensure that the experience of driving, cycling or walking within the community allows people to experience the unique natural setting.

Built Form: From Planning to Placemaking

The Predator Ridge Neighbourhood Plan emphasizes a human scale of integrated living and respect for the natural and built landscape. It is this approach to development that draws people

to the community, thoughtfully locating places to live, play, shop and work within a single community. Through the implementation of the Neighbourhood Plan, the vision for Predator Ridge will continue to be realized.

The central concept for physical design at Predator Ridge is inspired by the natural setting through the use of natural materials, retention of natural landscapes and the siting of clustered neighbourhoods nestled into the land, seeking a balance between the built and natural landscape. Ultimately, it is the celebration of its natural character that defines Predator Ridge as a timeless resort. (Refer to Section 5.1 for more detailed form and character design guidelines.)

Sustainability: Towards a Complete Community

Building on the established quality of the Predator Ridge community, its rural village character and destination recreational amenities, the Predator Ridge Neighbourhood Plan supports the City's efforts to create a culture of sustainability through the promotion of best practices in community planning, environmental protection and development. The Plan represents a comprehensive approach to planning an integrated system of parks, open space and clustered neighbourhoods, guiding the build out of a complete master planned community.

Implementation of the Plan will ensure the development of a variety of housing types while, at the same time, accommodating flexibility to respond to market conditions to ensure long term economic feasibility and the implementation and management of community amenities.

3.1 PLANNING PRINCIPLES

In support of the OCP 2008 Guiding Principles, the Predator Ridge Neighbourhood Plan has been prepared based upon the following complete community planning principles:

Design Compact Pedestrian Oriented Neighbourhoods, providing:

- a coherent pattern of streets and uses;
- improved accessibility, safety and pedestrian comfort;
- vehicular traffic calming.

Achieve Well Managed Growth, through:

- neighbourhood level planning;
- the efficient use of capital resources.

Integrate Parks and Environmental Areas, providing:

- parks within an average five-minute walking distance;
- connectivity between neighbourhoods, parks and natural areas.

Improve Environmental Integrity, through:

- preservation, conservation and stewardship of natural and cultural resources;
- restoration and enhancement of critical habitats.

Develop Economically Viable Commercial Precincts, providing:

- a mixture of retail, office and commercial uses with possible residential units above;
- a pedestrian focused shopping experience;
- a critical mass of residents to support commercial uses.

Foster Socio-economic and Age Mixed Communities, providing:

- a variety of housing types and tenures;
- services for a diversity of lifestyles and life stages.

Increase Transportation Choices, providing:

- a connected transportation system;
- a network of dedicated pedestrian and cycling routes.



PREDATOR RIDGE NEIGHBOURHOOD PLAN

Figure 3
Predator Ridge Concept Plan



LEGEND

- City of Vernon Municipal Boundary
- Predator Ridge Neighbourhood Plan Area
- Resort Commercial
- Resort Residential
- Public Park
- Resort Residential - Conservation DPA
- ALR Boundary

SCALE 1:10,000



EKISTICS

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4 LAND USE DESIGNATIONS

The general land use designations for the Predator Ridge Neighbourhood Plan are outlined in Schedule A. This Section describes the land use designations, their planning rationale and associated development policies to guide the development of Predator Ridge.

4.1 TOURIST COMMERCIAL

4.1.1 Description

The Tourist Commercial designation is intended to create attractive, vibrant, pedestrian friendly resort commercial areas that remain active throughout the day and evening. To accomplish this, tourist commercial land uses include hotels, resorts, restaurants, retail spaces, cafés, commercial recreation, entertainment venues, civic gathering spaces, parks and natural areas.

The Tourist Commercial designation, as shown on Schedule A – Land Use Plan, contains approximately 4.75% or 22.82 hectares of the Neighbourhood Plan area.⁸

4.1.2 Rationale

Four Tourist Commercial precincts are planned to serve the resort and residential land uses within the Predator Ridge Neighbourhood Plan (refer to Figure 3 – Predator Ridge Concept Plan):

Predator Village

Predator Village, located in the eastern portion of the Plan area, is intended to be the heart of the

⁸ Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of zoning and subdivision. In cases of discrepancy, the values stated in Table 2 - Neighbourhood Development Summary will take precedence over those in the PRNP text.

community, bringing resort visitors and residents together in a vibrant social setting. Located on Predator Ridge Drive, Predator Village is wrapped by the golf course, and affords panoramic views over the Commonage. It has a mix of uses that provides commercial and recreational facilities for the local community, is the home of the Predator Ridge Golf Club, tourist accommodation, spa and resort facilities.

Meadows Landing

Located adjacent to Ellison Provincial Park on Predator Ridge Drive, the proposed Meadows Landing in the western portion of the Plan area offers a unique enclave of golf-front living (ground oriented and apartment forms) with supporting commercial and social amenities, affording residents the benefits of remaining within the community through different life stages.

Outlook Crossing

Situated atop the ridge that links the Smith and Meadow watershed basins, and located at the centre of the Predator Ridge Drive loop, Outlook Crossing provides a central meeting point for the community. With sweeping vistas over both the Commonage and Lake Okanagan, the location affords a civic gathering place as well as mixed use commercial node to serve the needs of the resort and neighbourhood.

Gateway

Located at the entrance to the resort community at Predator Ridge Drive and Commonage Road, the Gateway serves as a modest commercial space scaled to the needs of the neighbourhood with a future opportunity for limited commercial retail, offices and/or accommodation above, within The Commonage neighbourhood.

4.1.3 Policies

- a. Focus higher density residential uses in Predator Village and Meadows Landing and provide multi-family residential housing opportunities in close proximity to village services.
- b. Reinforce and strengthen the viability of Predator Village by permitting mixed use buildings with commercial activities on the lower levels and residential or condominium hotel uses above. Discourage commercial development located above residential uses.
- c. Establish a retail 'Main Street' to complement the existing Clubhouse facility in Predator Village and support a range of appropriate neighbourhood retail and commercial services and amenity space.

- d. Encourage resort buildings to address the streetscape and plaza spaces to create a well defined public realm through the siting and orientation of buildings, entrances, balconies and ground level uses to frame views, define spaces and promote pedestrian activity through the introduction, for example, of outdoor cafes, general stores, restaurants and shops.
- e. Create positive, well detailed public realm spaces within the Tourist Commercial areas through the design of public squares and plazas established in conjunction with the development of the golf course and recreational pathways.
- f. Encourage the improvement of existing pedestrian connections to and within the Predator Village area in conjunction with longer-term village and resort parking.
- g. Encourage and facilitate the provision of shade and protection from the elements for pedestrians through the provision of landscape features (i.e. trees), awnings, overhangs, canopies and/or arcades over walkways.
- h. Plan for the provision of pedestrian amenities within the resort public realm such as benches, human scale lighting, street trees, garbage receptacles and bicycle racks in the Neighbourhood Centres.
- i. Establish landscape buffers that create a transition between residential and adjacent commercial buildings and parking areas through landscape design that incorporates layering of shrubs, trees, landscape structures and lower walls, as required.
- j. Parking should be provided behind buildings where possible, or screened through landscape design to establish a pedestrian friendly

environment and reduce the visual impact of parking areas.

- k. Sidewalks and parking areas are to be designed according to barrier free access standards.
- l. Employ City of Vernon Hillside Guidelines to ensure that built form responds to the complex topography and minimizes the physical, visual and environmental impact of hillside development. Built form should complement the hillside setting.
- m. Minimize the amount of streetlight and other nighttime ambient light to preserve the rural experience of the Commonage with due consideration for public safety.
- n. Promote high quality and complementary architectural form and character in keeping with the established community character – including physical designs sensitively integrated into the natural setting; human scale building massing and articulation; and materials and colour palettes inspired by the natural setting – through the administration of Development Permit requirements for form and character in commercial and multi-family developments.
- o. Limit height within Outlook Crossing to 4 Storeys.

4.2 RESIDENTIAL – LOW DENSITY

4.2.1 Description

Residential lands will allow Predator Ridge to develop as a resort community as well as a tourist destination. The Residential – Low Density designation is intended for detached single family dwellings and ground oriented multi-family residential homes and cottages.

The Residential – Low Density designation, as shown on Schedule A – Land Use Plan, contains approximately 43.23% or 207.59 hectares of the Neighbourhood Plan area.⁹

Areas designated as Residential – Low Density are permitted densities up to 30 units per hectare or 12 units per acre.

Residential – Low Density – Conservation designation

Within the Residential – Low Density land use designation, two distinct areas have been designated within a specially designed, conservation focused Development Permit Area (DPA), including residential lands framing the Summit Park (parcel N) and a small residential precinct located between the Outlook Crossing and Ridge Pond.

The Residential – Low Density – Conservation DPA builds on policies already in place within the City's Hillside Residential and Agricultural District (EMA³) guidelines.

Developed in accordance with the findings of the Environmental Management Plan and recommendations of Registered Professional Biologists, the following Residential – Low Density – Conservation DPA goals were established to preserve habitat value, wildlife connectivity and landscape character. The Residential - Low Density – Conservation DPA is subject to a set of strict guidelines and serves to:

- reduce overall unit density (from 12 upa to 1 upa – equivalent to rural residential zoning);
- prescribe a process through which to determine most appropriate homesites, in consultation with a Qualified Environmental Professional;

⁹ Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of zoning and subdivision.

- restrict the physical extents of the development envelope (i.e. minimize footprint);
- ensure greater performance measures with respect to landscape preservation, site sensitive design and green building; and,
- establish effective, long term protection mechanisms as per current best practices in private land conservation, including but not limited to: strata regulations, third party covenants, photo-point monitoring, financial incentives and/or remedies for non-compliance.

The Residential – Low Density – Conservation designation, as shown on Schedule A – Land Use Plan, contains approximately 7.53% or 36.20 hectares of the Neighbourhood Plan area.¹⁰

4.2.2 Rationale

The variety of ground oriented residential housing types and lot sizes within the Residential – Low Density designation affords a mix of housing opportunities and allows for a high level of interconnectivity among residential, tourist commercial and park uses, fostering a livable, pedestrian scale environment. Residential – Low Density neighbourhoods are clustered and sensitively integrated into Predator's varied hillside terrain to minimize disturbance, take advantage of hillside vistas and create a healthy balance of residential development and open space. The residential neighbourhoods are well connected by walking and cycling paths to permit easy access to community amenities and services without the use of a vehicle.

In the special case of the Residential – Low Density – Conservation DPA, additional Development Permit Area requirements apply. Owing to their identified visual and environmental sensitivity as well as aesthetic and ecological

¹⁰ Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of zoning and subdivision.

value, areas designated as Residential – Low Density – Conservation are subject to a set of strict guidelines ensuring the protection of sensitive features and natural character through the creation of management areas, the application of best practices to limit the impact of residential development and the use of private land conservation mechanisms, including covenants registered on title. Refer to Section 5.1 for a detailed description of the Residential – Low Density – Conservation DPA guidelines and DP process.

4.2.3 Policies

- a. Encourage the provision of a variety of housing forms, lot sizes and tenures to provide a diversity of residences to support a range of lifestyles and life stages.
- b. Minimize potential conflicts arising from adjacent land uses, housing types and/or tenures in the planning, design and construction of residential neighbourhoods through consideration of appropriate buffers, transition areas and/or other mitigating program elements.
- c. Secure additional community amenities as part of new development for community open space and facilities such as pedestrian green spaces between buildings, hillside pocket parks and squares.
- d. Require the provision of public pedestrian amenities such as universally accessible pathways, benches, and plantings along new major streets.
- e. Require that sidewalks and parking areas be designed according to barrier free access standards.
- f. Minimize the amount of streetlight and other nighttime ambient light to preserve the rural experience of the Commonage with due consideration for public safety.

- g. Require special areas designated as Residential – Low Density – Conservation land use to adhere to Residential – Low Density – Conservation DPA guidelines as described in Section 5.1.

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4.3 ENVIRONMENTAL NETWORK: PARKS, OPEN SPACE & TRAILS

4.3.1 Description

Refer to Appendix A – Environmental Summary for a comprehensive Biophysical Inventory and Environmental Management Plan for the Predator Ridge Neighbourhood Plan.

The Predator Ridge Environmental Network establishes a system of connected public parks, natural areas and wildlife corridors, landscape buffers and golf course open spaces, which account for approximately half of the total Plan area.

Specifically, the network of parks and open space includes:

Public Parks	<i>ha</i>	<i>ac</i>
Vista View	0.40	.99
Lariat Park	2.58	6.38
Park Promontory	6.31	15.59
Birdie Lake Ravine Park	2.53	6.25
Basin Pond	0.52	1.28
Park Crest	4.53	11.19
Village Meadows	3.09	7.64
SUBTOTAL	19.96	49.32

Resort Parks	<i>ha</i>	<i>ac</i>
Golf Course Parcel (Predator & Ridge Courses)	159.94	395.22
Community Resort Parks	1.03	2.55
Natural Areas	68.86	170.15
SUBTOTAL	229.83	567.92

Total Parks & Open Space	249.79	617.24
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Table 1 – Parks and Open Space Areas

Note: All land use areas are approximate, intended for planning purposes only. All designated areas are subject to refinement through more detailed site design and engineering at the time of subdivision.

The Environmental Network (refer to Schedule B – Environmental Network Plan) is comprised of both Public and Resort Park land uses, described within the following subsections.

4.3.2 Rationale

The identification of a comprehensive and interconnected Environmental Network for the Plan area establishes a range of park types and uses (from conservation to recreation) while preserving connectivity between upland and lowland habitats through the incorporation of wildlife corridors in the neighbourhood design.

As a key component of the Environmental Network, park dedication and management is intended to balance the protection of natural landscapes with the outdoor recreational pursuits of residents and resort visitors. Public and Resort Park designations accommodate both active and passive park activities (for the resort golf program as well as passive community recreation), while designated natural areas also protect valuable habitat and provide corridors for wildlife movement.

The Plan provides a high level of habitat and wildlife connectivity through the design of corridors linking upland and lowland habitats across private and public lands. Corridors are protected via a variety of mechanisms, including Development Permit Area guidelines (Residential – Low Density – Conservation), park dedication and, where road crossings occur, the construction of dedicated wildlife underpasses (where topographically feasible).

Specific park types and policies are detailed below.

4.3.3 Public Parks

Seven parks offer natural areas for public recreation, while preserving important landscapes representative of the Commonage Range. In general, parks are located to include

topographic high points within the Plan area, so as to protect the community's significant views and natural character.

The Public Park designation, as shown on Schedule A – Land Use Plan, contains approximately 19.96 hectares of the Neighbourhood Plan area.¹¹

When the 65 hectares of ALR lands that lie within the Plan area are subtracted, this parkland designation meets the 5% public park dedication requirements. The public park dedication fulfills the Parkland Transfer Agreement between Predator Ridge and the Regional District of North Okanagan signed October 22, 2009.

A description of each park, including its area, is listed below.

Vista View (Parkland Transfer Agreement, Schedule D, Park "W")

- Located at the northern edge of the Falcon Point neighbourhood, this park offers views over Smith Creek and the Commonage beyond the Plan area.
- Park Area: 0.40 ha

Lariat Park (Parkland Transfer Agreement, Schedule D, Park "G")

- Occupying the southeastern corner of the Plan area, this park is located within The Commonage neighbourhood on the highest point of land in Predator Ridge, and offers spectacular views of the Commonage, City of Vernon, and Lake Okanagan. Park Area: 2.58 ha
- Park Area: 2.58 ha

Park Promontory (Parkland Transfer Agreement, Schedule D, Park "J")

- Situated above the Longspoon neighbourhood, this park affords a ridge top panorama extending from the Commonage grasslands in the east to Okanagan Lake in the west.
- Park Area: 6.31 ha

Birdie Lake Ravine Park (Parkland Transfer Agreement, Schedule D, Park "Y & Z")

- Extending the length of the forested ravine, this park provides recreational linkages between Birdie Lake and the trails of Sparkling Hill Resort to the north.
- Park Area: 2.53 ha

Basin Pond Park (Parkland Transfer Agreement, Schedule D, Park "W")

- Providing a staging area to the adjacent Tatted Pond trails and scenic wetland, this park marks the gateway to Sparkling Hill Resort.
- Park Area: 0.52 ha

Park Crest (Parkland Transfer Agreement, Schedule D, Park "O")

- Located along the northern edge of the Plan area, Summit Park is part of a series of exposed summits that define Predator Ridge and visually connect it to Okanagan Lake.
- Park Area: 4.53 ha

Village Meadows (Parkland Transfer Agreement, Schedule D, Park "V")

- Located at the northwestern corner of the Plan area, this park provides uninterrupted vistas of Ellison Provincial Park and Okanagan Lake.

- Park Area: 3.09 ha

4.3.4 Resort Park

Resort Park areas will preserve and protect important landscapes beyond the boundaries of public parks, including natural open spaces such as upland forests, rocky knolls, sensitive marshes, steep hillsides, landscape buffers to the adjacent Agricultural Land Reserve, community parks and the golf course lands.

The Resort Park designation, as shown on Schedule C – Parks & Trails Plan, contains approximately 229.83 hectares or 47.86% of the Neighbourhood Plan area¹² and is composed of the following:

^{9 & 10} Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of zoning and subdivision.

Golf Course

The Predator Ridge Golf Courses are included in the Resort Park designation. The two championship golf courses (Predator & Ridge) have a combined total of 36 holes with an area totaling approximately 159.94 hectares.

Ponds and wetlands, such as Birdie Lake, have been incorporated into the design of the golf course and are reflective of the overall intent to minimize impact on the natural environment while integrating the golf courses into the natural topography and landscape. The resulting design is a balance between recreation and habitat conservation with the golf courses surrounded by designated natural areas and residential neighbourhoods.

Community Resort Parks

Recreation focused community resort parks accommodate amenities such as tennis courts and playgrounds, walkways and trails, social gathering spaces and natural interpretation areas. These parks are intended for use by residents and visitors, and are managed by the resort.

Natural Areas

The Neighbourhood Plan aims to identify, conserve and enhance environmentally sensitive lands. Protected natural areas include environmental management areas, existing lakes and wetlands, designated wildlife corridors and landscape buffer areas adjacent to the Agricultural Land Reserve.

4.3.5 Pathways and Trails

A significant network of pathways and trails for walking and cycling are provided throughout Predator Ridge.

Neighbourhood trails, multi-use pathways and sidewalks provide extensive pedestrian connectivity and allow residents and visitors to access key community destinations and

recreational areas along a variety of routes throughout the Plan area (refer to Schedule C – Parks & Trails Plan).

Public Sidewalk and Multi-Use Pathways

Safe pedestrian movement along major collector roads will be provided by separated pathways alongside the roadways throughout the Plan area. These sidewalks and multi-use pathways will connect the residential neighbourhoods and create pedestrian and cycle linkages to public parks, trails, and commercial areas.

Public Trails

A dedicated public trail system linking public parks is provided in accordance with the Parkland Transfer Agreement between Predator Ridge and the Regional District of North Okanagan signed October 22, 2009. Public trails complement the network of public sidewalks and are designed to connect public park trailheads to public parks and destination lookouts.

Public Trail and Emergency Access

Emergency access routes are strategically located in order to ensure emergency access throughout the Plan area and to provide pedestrian links to all neighbourhoods (refer to Figure 4 Emergency Preparedness Strategy). Forming part of the recreational trail system, these public trail and emergency access routes are limited to pedestrian and emergency vehicle use (emergency vehicle access is made possible by removable gates or bollards).

Resort Trails

In order to create a convenient network of recreational pathways for pedestrians and bikes, a system of resort trails will supplement the aforementioned public trails. These trails will be available to the public at the discretion

of the resort. Resort trails will be managed by the resort to ensure safety.

Golf Cart Paths

Golf cart paths are not considered part of the pedestrian pathway and trail system as they travel within the golf course “strike” zone and are considered unsafe during golf course operation. As such, designated golf cart paths are designed to minimize conflict with other modes of transportation and a dedicated pedestrian network has been planned.

4.3.6 Policies

- a. Public parks and park facilities (trailhead parking) are provided in accordance with the Parkland Transfer Agreement between Predator Ridge and the Regional District of North Okanagan signed October 22, 2009.
- b. Adhere to the recommendations for environmental management found in Section 6.0 of the Predator Ridge Environmental Update (refer to Appendix A, EBA Report, “Predator Ridge Environmental Update”), including management of: wildlife corridors; grasslands; ponds and wetlands; ponderosa pine / rocky knolls; broadleaf and riparian; grasshopper sparrow habitat; wetland and riparian enhancement; pond enhancement for herptiles; and development areas servicing, site design and landscaping.
- c. Provide open space and parkland for the recreational use and enjoyment of residents and visitors.
- d. Provide an interconnected network of pathways – including walking paths/trails, sidewalks and multi-use pathways – that connect the resort centres,

parks and existing and future residential neighbourhoods.

- e. Where applicable, explore opportunities to create a Local Service Area (improvement district) with existing landowners and residents to improve existing pathway connectivity, use, signage and safety.
- f. Redevelopment in existing neighbourhoods should consider pathway improvements, where feasible.
- g. Incorporate a range of trail classes to provide for a range of recreational use and skill.
- h. Provide for connections from the trail system in Predator Ridge to the pathways designated in the Greater Vernon Parks and Recreation's Ribbons of Green trail system for recreational enjoyment and stewardship education. The alignment of trails shall be sensitive to environment, wildlife and surrounding residential uses.
- i. Prepare a pathway map to guide shared trail use to minimize user conflicts. Incorporate anticipated routes of travel into a path system to minimize unmanaged trail establishment through natural areas.
- j. Plan for the provision of public park amenities such as signage (for wayfinding and interpretation), benches, garbage receptacles and bicycle racks in public trailhead/parking areas.
- k. Establish destination points such as areas for sitting, picnicking and informal lookouts.
- l. Work with Greater Vernon Parks and Recreation to establish, maintain and improve appropriate active park programs (i.e. playgrounds, community gardens, etc.) based on identified community need.

- m. Encourage the development of an Integrated Pest Management Plan (IPM) to minimize the use of fertilizers, pesticides and herbicides to encourage the sensitive management and maintenance of the golf course while controlling the spread of noxious and invasive weeds.
- n. Retain natural vegetation where possible and encourage the use of native and drought resistant vegetation for new development.
- o. Provide wildlife corridors linking habitat reserves with each other and with adjacent lands. Wildlife corridors should allow for both north-south and east-west movements.
- p. Provide culverts under roadways where required and/or feasible to allow for the passage of small wildlife. Prohibit the use of fertilizers, pesticides and herbicides within 10m of any open wetland or ephemeral stream.
- q. Protect riparian areas by developing a Stormwater Management Plan that mimics pre-development flow patterns and rates, using ravines and gullies.
- r. Where practical, pursue trail connections between Predator Ridge and Ellison Provincial Park.

4.4 PUBLIC AND INSTITUTIONAL

4.4.1 Fire Protection Services & Emergency Preparedness

Predator Ridge is serviced by Vernon Fire-Rescue Services. The landowner will work with the City to explore opportunities for a fire hall to be located within the Plan area.

The City of Vernon OCP 2008 dictates the use of non-combustible and fire retardant building materials within forest interface areas, and the implementation of sprinkler systems in all buildings.

It is noted that the North Okanagan wildfire fighting base is located on Bailey Road and Highway 97, approximately 6 km east of Predator Ridge. During fire season it is staffed and well equipped with helicopters and other immediate response vehicles. Ongoing cross-training with Predator Ridge golf course maintenance staff and the utilization of golf course irrigation systems to provide additional flows for firefighting further supports emergency preparedness within the Plan area.

The Emergency Preparedness Strategy (refer to Figure 4) illustrates the major and minor access and egress routes, as well as identifying key staging areas within Predator Ridge that will enable efficient response in the case of emergency. The street network is designed in such a way to enable emergency access to lands beyond while the golf course – including fairways and cart paths – provides an excellent firebreak and allows for multiple access options to developed areas within the Plan area.

The Major Emergency Routes include the Predator Ridge Drive connection to Commonage Road and the proposed Ellison Road connection to East Side Road.

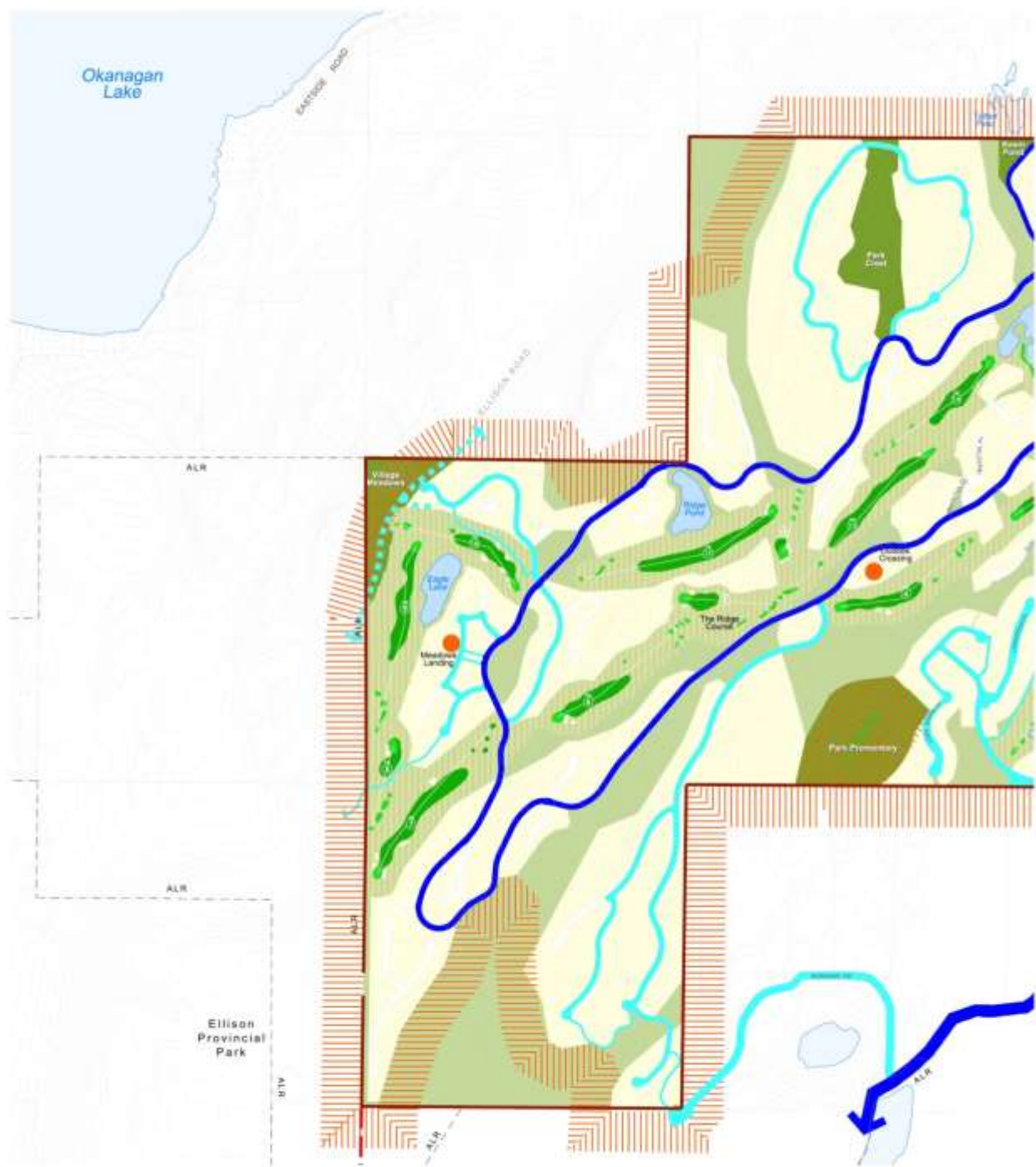
The Minor Emergency Routes include four additional connections beyond the Plan area, including the Birdie Lake Ravine Park emergency connector, the Sunset Properties emergency connector (via the City's Mt. Royce reservoir access road), the Howard's Road emergency connector and the Ellison Provincial Park emergency connector.

Refer to Schedule D – Street Hierarchy Plan for locations of Major and Minor Emergency Routes.

4.4.2 School Services

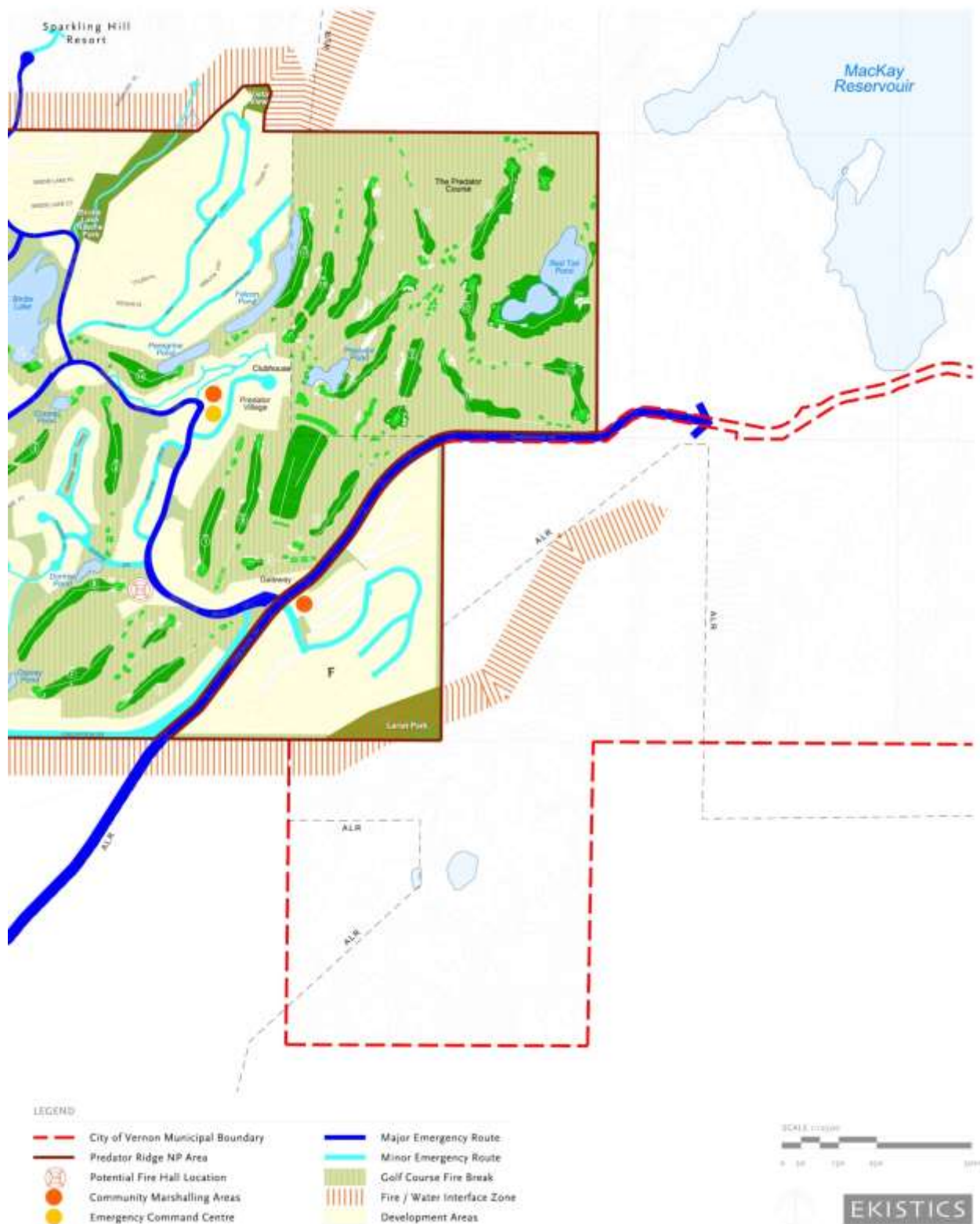
The School District No. 22 recommended that a future school site is not required for the Predator Ridge Neighbourhood. This recommendation is made in light of the established resort nature and the older demographic profile of Predator

Ridge residents. It is recommended that Predator Ridge and School District No. 22 make a mutual effort to accommodate school transportation needs if and when they arise in the future.



PREDATOR RIDGE NEIGHBOURHOOD PLAN

Figure 4
Emergency Preparedness Strategy



Sustainable community design provides for a choice of transportation modes and routes. The Neighbourhood Plan provides designated pathways to facilitate walking and cycling as viable modes of transportation within the community. Refer to Appendix B – Transportation Summary for a comprehensive transportation evaluation of the Predator Ridge Neighbourhood Plan.

Predator Ridge Drive offers a single continuous loop linking neighbourhood centres and residential communities.

Traffic flows and volumes are managed internally within the Neighbourhood Plan area including traffic to and from the adjacent Sparkling Hill Resort.

4.5.1 Policies

- a. Adhere to the recommendations for traffic management and parking requirements presented in the Predator Ridge Transportation Planning Report including implementation of the Predator Ridge Drive cross-section (refer to Figure 5).
- b. Work with City of Vernon to develop/refine project-specific street standards to: minimize cut and fill in road construction, reduce conventional curb and gutter infrastructure, and explore alternative lighting and drainage standards.
- c. Minimize the impact of collector standard streets within residential neighbourhoods through site sensitive, pedestrian oriented design, including landscape buffering and traffic calming.
- d. Accommodate the provision of future transit service through planning for future facilities and/or physical design requirements (pull-outs/bus stops).

- e. Connect Predator Ridge with the Sparkling Hill Resort to the north to allow for easy access between the Tourist Commercial Centres.
- f. Maintain future right-of-way access to the proposed Ellison Road along the northwest property boundary of the Plan area.
- g. Provide pedestrian connections and emergency connectors (vehicular) for cul de sac road lengths greater than 150m in length, where topography allows.
- h. Provide a network of pathways to accommodate walking and cycling, including a walking trail network, sidewalks along collector roads and the multi-use pathway loop to accommodate both pedestrians and cyclists.
- i. Where appropriate, consider end of trip facilities for cyclists, including secure bicycle storage and/or bike racks in highly visible locations within Outlook Crossing, Predator and Ridge Neighbourhood (Tourist Commercial) Centres.

- j. Create a positive pedestrian realm within the Plan area through the provision of pathways, street trees, landscaping, pedestrian scale lighting, street furniture and permeable surface treatment where possible.
- k. Phase the improvement of pedestrian connections within the Predator Village area in conjunction with longer term village and resort parking solutions.
- l. Consider improvements to the Predator Ridge Drive "chicane" (minimum radius horizontal alignment) in conjunction with longer term village development.
- m. Work with the Ministry of Transportation and Infrastructure to explore opportunities for intersection improvements and/or traffic calming treatments at the intersection of Predator Ridge Drive and Commonage Road in conjunction with development of the Gateway Tourist Commercial area.
- n. Where required and where feasible, access to lands beyond the Plan area shall be secured via future road reserve or other agreed upon method of corridor protection, to be provided at time of subdivision.
- o. The provision of parking for the Residential – Low Density land use designation will be in accordance with the City of Vernon Zoning Bylaw requirement.
- p. The provision of parking for public park trail heads shall be in accordance with the Parkland Transfer Agreement between Predator Ridge and the Regional District of North Okanagan signed on October 22, 2009.
- q. The provision of parking for tourist commercial uses shall be determined according to the findings of a shared use parking study.
- r. Investigate opportunities to reduce parking requirements for residential and commercial developments that promote and/or accommodate Low Speed Vehicles (LSVs),

car-sharing and/or other forms of alternative transportation.

4.6 UTILITIES

The expansion of the City's infrastructure will be necessary to accommodate the proposed future development in Predator Ridge. Ultimate design and functions appropriately in each intermediate phase. Schedules E, F, G illustrate the utility servicing concept for the Predator Ridge Neighbourhood Plan. While recognizing the importance of satisfying the functional demand created by the growth in population and community activity, the planning of new infrastructure will also take into account and mitigate environmental impacts related to development.

Prior to any substantial new development or subdivision in the undeveloped portion of the Neighbourhood Plan area, engineering pre-design work must be provided for all proposed infrastructure to ensure phasing considers Refer to Appendix C – Engineering Summary for a detailed report.

4.6.1 Water Distribution Plan

Refer to Schedule E – Water Distribution Master Plan for a conceptual layout of community water infrastructure.

The Greater Vernon Water Utility currently services Predator Ridge by way of booster stations and reservoirs from Okanagan Landing Road.

The on-site water distribution system was modeled as part of the 2004 Neighborhood Plan process. The layout within the Smith Creek Catchment Area has not changed since the model was completed. Demand nodes for higher density and commercial use remain and will provide adequate fire flow. Calculations for buildings larger than single family dwellings should be completed to determine if they meet Fire Underwriters Survey guidelines.

Expansion of the water distribution system into the Meadows Catchment Area will require the installation of pressure reducing stations.

4.6.2 Drainage Master Plan

Refer to Schedule F – Drainage Master Plan for a conceptual layout of catchment boundaries and drainage patterns.

The storm water drainage within the Neighbourhood Plan is divided into two distinct catchment areas, Smith Creek and the Meadows.

Existing development at Predator Ridge is within the Smith Creek Catchment Area. This catchment area includes more than ten ponds which provide detention storage for all of the development areas within the catchment area. The details of the Storm Water Management Concept are presented in the Storm Water Study prepared by Quantum Consulting Ltd. submitted to the City of Vernon in October of 2002.

The Storm Water Management Plan currently includes a piped system for the minor flow events and routes the major flows overland. This concept will continue throughout the remaining phases of the development.

Development within the Meadows Catchment Area will result in the construction of new storm water management facilities to control the storm water discharge from the site to the predevelopment flow rates. These ponds have been incorporated into the golf course and form part of the existing natural pond network in the Meadows area. The details of the Storm Water Management Plan for this area will be completed as development in the area is undertaken.

4.6.3 Sanitary Servicing Plan

Refer to Schedule G – Sanitary Master Plan for a conceptual layout of sanitary servicing infrastructure for the Plan area.

Within the Smith Creek Catchment Area, the City of Vernon used to operate a treatment plant that was designed to service approximately 500 units. In 2007 a sanitary main line was installed to the City of Vernon sewage treatment facility. This was a joint project between Predator Ridge, Sparkling Hill Resort and the City of Vernon. To date, all existing development within this catchment area drains by gravity to the old treatment plant site and beyond through the gravity main to the City of Vernon sewage treatment facility.

The Smith Creek Catchment Area will continue to be serviced through this main. The future development areas within the Smith Creek Catchment Area drain by gravity to the treatment plant. The lands within Development Area F will drain by gravity to the gravity sewer located in Predator Ridge Drive.

Ultimate sanitary sewer servicing for the Meadows catchment area will be provided via a gravity-flow system to the Eastside Road trunk sewer line. The route for the gravity-flow system has not yet been determined. The landowner will work with the City of Vernon to determine the most feasible alignment, timing and phasing for the completion of the system, acknowledging that the Right of Way required (~1km) may not be available. As an interim solution, as development proceeds in this area, sanitary servicing via lift stations connecting to the Smith Creek sewer line will be considered, pending completion of the gravity-flow system. Sewer servicing design shall consider the ultimate connection to Eastside Road (refer to Schedule G – Sanitary Master Plan).

Timing and feasibility of servicing options for the Meadows Catchment will be reviewed and, as necessary, an agreement will be reached that defines acceptable routing, responsibilities and works, as well as subsequent timing for conversion from one receiving point to another.

4.6.4 Spray Irrigation Program and Beneficial Re-Use of Water

Predator Ridge supports the City's Spray Irrigation program, facilitating the beneficial reuse of high-quality, treated/reclaimed wastewater in the irrigation of golf course lands. Where feasible, extension of irrigation infrastructure beyond the Meadows Catchment, connecting to lands within the Agricultural Land Reserve, may be considered.

Future development within the Neighbourhood Plan area will consider the expanded use of reclaimed water for non-potable uses (e.g. toilet flushing, "purple pipe" systems), subject to the amendment of the British Columbia Building Code.

4.6.5 Shallow Utilities

The Predator Ridge Neighbourhood Plan area will be serviced with underground hydro, telephone, cable and gas services, designed according to the City of Vernon's Hillside Guidelines.

4.7 NEIGHBOURHOOD PLAN LAND USE SUMMARY

				Area		x	Density	=	Yield
Parcel	Land Use (as per OCP 2008 designation)	Gross Area (total parcel area)	Slope >30% (excluded from unit calculation)	Developable Area (net slopes >30%)			Density		Yield
		ha	ha	ha	ac		UPA		units
A	Residential – Low Density	26.28	(-11.3)	14.98	37.02		2.1		139
	Park – Vista View	0.40	(-0.24)	0.16	0.40		-		-
B	Tourist Commercial	0.59	(-0.1)	0.49	1.21		11.7		17
C	Residential – Low Density	0.86	(-0.1)	0.76	1.88		3.3		7
D	Residential – Low Density	2.31	(-0.4)	1.91	4.72		5.3		30
E	Tourist Commercial	9.49	(-1.6)	7.89	19.50		15.3		359
E	Residential – Low Density	4.83	(-0.4)	4.43	10.95		3.7 4.6		55
F	Residential – Low Density	24.12	(-1.4)	22.72	56.14		3.5		210
F	Tourist Commercial	0.34	(0)	0.34	0.84		6.0		5
	Park – Lariat Park	2.58	(-1.35)	1.23	3.04		-		-
H	Residential – Low Density	23.39	(-6.1)	17.29	42.72		3.9		223
I	Residential – Low Density	7.35	(-2.3)	5.05	12.48		3.5		63
I	Tourist Commercial	1.6	(-0.7)	0.9	2.22		3.8		15
	Park – Park Promontory	6.31	(-4.02)	2.29	5.66		-		-
J	Residential – Low Density	8.68	(-2.7)	5.98	14.78		2.9		62
	Park – Birdie Lake Ravine Pond	2.53	(-2.17)	0.36	0.89		-		-
	Park – Basin Pond	0.52	(-0.04)	0.48	1.19		-		-
K	Residential- Low Density – Conservation DPA	32.08	(-18.0)	14.08	34.79		0.4		33
	Park – Park Crest	4.53	(-2.74)	1.79	4.42		-		-
L	Residential – Low Density	6.11	2.7	3.41	8.43		1.9		28
M	Residential – Low Density	6.09	(-2.3)	3.79	9.37		2.2		33
N	Residential – Low Density	14.19	(-3.8)	10.39	25.67		3.2		111
N	Residential- Low Density – Conservation DPA	4.12	(-2.0)	2.12	5.24		1.3		7
	Park – Village Meadows	3.09	(-1.33)	1.76	4.35		-		-
O	Tourist Commercial	8.21	(0.3)	7.91	19.55		19.0		386
P	Residential – Low Density	19.34	(-5.1)	14.24	35.19		3.3		159
Q	Residential – Low Density	27.84	(-12.8)	15.04	37.16		2.2		154
R	Tourist Commercial	2.59	(-1.2)	1.39	3.43		3.7		24

	Resort Park	229.83	-	-	-	-	-
Total		480.20	87.19	163.18	403.23	n/a	2120

Table 2 - Neighbourhood Development Summary

Note: Total golf course parcel area is approximately 159.94 hectares. Schedule A – Land Use Plan illustrates parcel locations within the Plan area. All land use areas and yields are approximate, intended for planning purposes only. All designated areas are subject to refinement through more detailed site design and engineering at the time of subdivision. Density has been calculated based on Gross Areas (ac).

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5 DEVELOPMENT PERMIT AREAS

Development Permit Areas (DPA) address particular challenges and issues relevant to that specific area. The Predator Ridge Neighbourhood Plan area is located within Development Permit Area DPA #3 (Hillside Residential and Agricultural District) and is subject to all DPA Guidelines in accordance with OCP 2008 Section 23.0 "Development Permit Areas (All Areas)" and Section 26.0 "Development Permit Area #3 (Hillside Residential and Agricultural District)."

Section 919.1 of the Local Government Act (LGA) allows local governments to designate Development Permit Areas and guidelines within Official Community Plans. Pursuant to the LGA, Development Permit Areas shall be designated for one or more of the following purposes:

1. protection of the natural environment, its ecosystems and biological diversity;
2. protection of development from hazardous conditions;
3. protection of farming;
4. revitalization of an area in which a commercial use is permitted;
5. establishment of objectives for the form and character of intensive residential development;
6. establishment of objectives for the form and character of commercial, industrial or multi-family residential development;
7. in relation to an area in a resort region, establishment of objectives for the form and character of development in the resort region;
8. establishment of objectives to promote energy conservation;
9. establishment of objectives to promote water conservation;
- and,
10. establishment of objectives to promote the reduction of greenhouse gas emissions.

Development Permit approval is a mechanism that provides the City the opportunity to guide new development in the direction mandated by the public. Development Permit policies encourage functional and attractive development in keeping with the Guiding Principles of the OCP 2008 and City environmental requirements. Development Permit Area guidelines and policies play an integral role in the development of Predator Ridge's multiple family, commercial and institutional development areas, as well as any development in identified Low Density – Residential – Conservation areas. Supplemental DPA guidelines are detailed in the following sections.

5.1 DPA GUIDELINES:

DESIGN GUIDELINES FOR FORM AND CHARACTER

The following Design Guidelines apply to commercial, institutional and/or multiple unit residential development and have been established to achieve the following objectives:

- To ensure commercial, residential and institutional uses are thoughtfully integrated with their surroundings;
- To build a unique sense of place at Predator Ridge through enhancing the character of development; and
- To encourage a high design quality for commercial, institutional and multiple dwelling unit developments.

5.1.1 Guidelines

General Design

1. The character of development at Predator Ridge will generally:
 - a. respect the character of the surrounding neighbourhoods;
 - b. be designed to integrate into the existing topography and natural landscape;
 - c. incorporate a variety of local, natural building materials into the design of the buildings;
 - d. be designed to respond to the local climate and situated to maximize views and natural sunlight wherever feasible; and,
 - e. encourage buildings to address the street, or greenway/other public space or both, so as to create a highly permeable public realm edge.
2. Outdoor patios, landscaped commons and/or amenity areas are encouraged.

3. Street furniture, such as benches, light fixtures, bicycle racks, signage, and recycling/refuse containers, shall be incorporated in the landscape design. These shall be consistent, similar, or identical in character to the architectural character of the development.
4. Public open space and pedestrian walkway linkages to adjacent neighbourhoods (to complement recreational opportunities and reduce automobile dependence) shall be encouraged.
5. Development shall not be a separate "gated community" with walled or fenced enclaves and shall be integrated with and compatible with surrounding neighbourhoods.

Building Siting, Height, Size & Massing

6. Building placement and design shall consider setting buildings into the hillside and stepping upper storeys back to respect views from the adjacent existing residences where feasible.
7. Buildings shall be designed to avoid presenting an overly massive appearance using varying architectural massing, roof line and balcony/terrace design, window treatments, and landscaping to reduce monolithic forms and improve their aesthetic appearance.
8. Human-scaled architectural elements are required to minimize the visual impact of larger multiple dwelling housing forms.
9. Deep overhangs and/or covered balconies and patios adjacent to the primary living areas shall be provided where feasible. Shallow overhangs are suitable if combined with shading devices such as trellises or small shading structures over windows and doors.
10. Continuous weather protection over main entrances and over building facades shall be encouraged.
11. Building siting and internal spaces should be designed to promote natural ventilation, reducing reliance on mechanical means. Shading devices should be used to control solar heat gain during summer months while permitting sunlight into living space during the cold months.
12. Stepped roof lines that scale buildings from major to minor elements are strongly encouraged.

Materials & Exterior Finishes

13. The use of non-combustible building materials is encouraged.

14. Where feasible, a variety of locally produced natural building materials should be incorporated into the design without compromising the building or structure's fire resistance.
15. Authentic detailing and application of exterior finishes is strongly encouraged. Unfinished building walls, including exposed basements, are discouraged.
16. Colours shall be selected to complement the natural environment, inspired by site vegetation and vistas: earth-based warm greys, browns and umbers, and moss greens as well as cooler colours inspired from the sea and sky, such as pale blues and greys. Lighter tones can be used to provide accent trim and in base areas, projecting elements and entries. Bolder colours will be acceptable, assuming the overall palette is complementary.

Parking and Loading

17. Parking areas should be integrated with the topography where feasible consisting of a series of smaller parking areas, screened through landscape design to establish a pedestrian-friendly environment while reducing the visual impact of surface parking areas. Underground parking is preferred, where feasible
18. Where feasible, parking and loading areas shall be to the rear of the front-face of buildings.
19. Shared loading areas will be considered when compatible uses are in the same development.

Landscaping and Screening

20. Landscape Plans shall satisfy the following objectives:
 - a. to use a variety of native or similarly hardy, drought tolerant deciduous and evergreen plant

- species, perennials and grasses that are best suited to the site specific growing conditions;
 - b. to minimize water consumption through means such as micro-irrigation and xeriscaping;
 - c. to provide visual separation from and compatibility with surrounding single family dwelling uses;
 - d. to improve the aesthetic appeal of the development;
 - e. to assist in the safe movement of pedestrians throughout the site while limiting access to sensitive areas;
 - f. to reduce the amount of impervious surfaces on the site;
 - g. to complement the development and surrounding uses;
 - h. to preserve natural character and delineate between amenity space and natural areas; and,
 - i. to establish or enhance habitat values on the development site where appropriate.
21. Retention of natural vegetation is encouraged wherever possible both during construction and throughout the life of the development.
22. Plant species used in replanting, restoration and enhancement shall be selected to suit the soil, light and groundwater conditions of the site with temporary irrigation required, should be native to the area, and be selected for erosion control and/or habitat values as needed.
23. Low impact stormwater control measures shall be integrated into paving treatments and landscape design to encourage detention and improve water quality.

24. Where appropriate, establish landscape buffers that create a natural transition between the public, semi-public and private uses through the use of hard and soft landscaping, such as areas containing layers of shrubs, trees and low walls where required.
25. Garbage recycling containers (bear/animal proof), utilities, service kiosks, meters, elevator housing, exhaust elements, satellite dishes, etc. shall be screened or enclosed with a combination of landscaping, trees, fencing and gates to a minimum height of 2.0 metres. Any outside storage areas shall be located to the rear of buildings unless adequately screened.
26. Chain link fencing shall be used only when screened by landscaping. Decorative fences are encouraged.
27. Exposed foundation walls should match the exterior finish of the building – including parkade structures and/or exposed basements.
28. Landscaping at intersections shall protect visual triangles.

Pedestrian and Cyclist Considerations

29. Pedestrian sidewalks and pathways should provide direct/convenient connections between building entrances, parking areas and sidewalks/pathways of adjacent streets.
30. Sidewalks and parking areas designed according to barrier free access standards are required.
31. Walls, fences, landscaping, grade changes or other site features should not obscure vehicle driver vision of pedestrian or bicycle routes or provide for concealment.
32. Where appropriate, pedestrian facilities shall be provided to separate pedestrian and traffic circulation on a site and minimize vehicle/pedestrian conflicts.

33. Public and private street designs shall provide pedestrian amenities such as benches, human-scaled lighting, street trees, and recycling/refuse receptacles where appropriate.
34. Safe pedestrian routes shall be provided to link commercial and multi-unit residential developments to and through existing neighbourhoods, parks and neighbourhood destinations.
35. All internal pedestrian walkways shall be distinguished from driving surfaces through the use of attractive clearly delineated pathway or durable, low maintenance surface materials such as pavers, bricks, or concrete with consideration of pedestrian safety, abilities and comfort.

Site Illumination and Signage

36. Signage shall complement the design of buildings and structures and be grouped, where possible, in multiple business development sites. The use of natural materials is encouraged.
37. The size, location and design of freestanding signage shall be architecturally integrated with the overall design of the buildings and landscaping. The design of fascia signs containing individual business signage shall be integrated into the design of the building.
38. No roof top signs shall be permitted. Multi-tenant buildings shall provide combined tenant signage.
39. Signage should be visually unobtrusive; signage should be designed to be aesthetically pleasing and require a minimal amount of lighting or boldness to be effective.
40. The use of indirect and/or accent lighting on signage is encouraged.
41. Lighting should be designed, both outside and inside developments, in accordance with “dark sky” guidelines to improve safety, minimize glare and preserve the ambiance of the night sky. The use of back-lit signage and LED or video signage is not permitted..
42. All new, replacement and upgraded exterior lighting in existing and proposed developments shall use Full-Cut Off/Flat Lens (FCO/FL) luminaries as required for roads, parking, loading and pedestrian areas. Exterior building lighting will also be required to use FCO lighting fixtures.

5.2 DPA GUIDELINES:

RESIDENTIAL – LOW DENSITY – CONSERVATION

The following Development Permit Guidelines apply to areas designated as Residential – Low Density – Conservation and are considered in addition to the existing DPA (All Areas) and DPA3 Development Permit Area Guidelines as mentioned above.

Developed in accordance with the findings of the Environmental Management Plan and recommendations of Registered Professional Biologists, the following Residential – Low Density – Conservation DPA guidelines were established to, preserve landscape character, habitat value and wildlife connectivity. The Residential - Low Density – Conservation DPA is subject to a set of strict guidelines and serves to:

- Facilitate development within the identified Residential – Low Density – Conservation Development Permit Areas;
- Reduce overall unit density (from 12 upa to 1 upa – equivalent to rural residential zoning);
- Prescribe a process through which to determine most appropriate homesites (which include Hillside Guidelines, the Environmental Management Areas Strategy and guidelines for fire protection) in consultation with a Qualified Environmental Professional (QEP) and other professionals as appropriate;
- Restrict the physical extents of residential development (i.e. minimize footprint);
- Clearly identify and delineate the boundaries of conservation areas proposed; and,
- Ensure greater performance measures with respect to landscape preservation, site sensitive design and green building.

In addition to a significant reduction of permitted density from 12 upa to 1 upa (equivalent to rural residential zoning), specific development areas within lands designated within the Residential – Low Density – Conservation DPA will be managed through the following structure:

Development Area

The Development Area is the limited portion of a lot where improvements are permitted, outside of the designated Conservation Area. Buildings, structures, indoor and outdoor living spaces, driveways, utilities, vegetation clearing and general landscaping are examples of improvements to be contained within the Development Area, restricted to a maximum of 25% of the total lot area (exclusive of common driveways and/or pathways).

Conservation Area

The Conservation Area is the portion or percentage of a Lot where Improvements are not permitted. Conservation Areas are established – based on field surveys of natural features, such as rock outcrops, significant vegetation and watercourses – to protect environmentally sensitive areas in accordance with City of Vernon policies, Best Management Practices and covenants registered on title and required at a minimum 75% of the total lot area (inclusive of common driveways and/or pathways). The benefits of these designations, beyond environmental protection, are in maintaining the beauty of the natural landscape and enhancing values of residential sites. Scenic areas, sensitive plant communities, and feature landforms are preserved in perpetuity through the development of covenanted conservation areas and maintain contiguous conservation habitat areas.

The following guidelines provide further detail in regard to Sensitive Habitats, Landscaping/Irrigation, Storm Water Management, Fire Protection, Invasive Species/Biocide Restrictions and Green Building Objectives:

Sensitive Habitat. Avoid rock outcrops, talus slopes, grasslands, vegetated draws, woodlands, wildlife trees, and other sensitive habitats wherever possible. A habitat assessment at the scale

of 1:750 is to be completed by a Qualified Environmental Professional prior to development permit as defined by City of Vernon permitting requirements. Sensitive areas within the designated Conservation Area are to be protected with a 219 Conservation Covenant registered on title at the time of development permit.

Landscaping / Irrigation. Landscaping should emphasize native, non- invasive, and drought tolerant plants (xeriscaping) plants. Plants should be grouped together with similar water requirements and the irrigation system designed and controlled specific to each plant zone. Overwatering into native areas must be avoided as this changes the hydrology and will change the ecology, weakening the native plants and encouraging establishment of invasive species.

Storm Water Management. Storm water should be directed to ground with as many input points as possible, to mimic the original storm water infiltration pattern. Around structures and roads, use vegetated swales, splash pads, bioretention areas, infiltration trenches, foundation planters, rain gardens, permeable paving wherever possible to mimic the original storm water pattern. Encourage green roofs and the capture and reuse of rainwater in irrigation.

Invasive Species / Biocide Restrictions. Invasive plants must be controlled by hand, mechanical or biological controls. Biocides (fertilizers, pesticides, herbicides and fungicides) are not permitted. Invasive horticultural plants should not be planted (e.g. english ivy, bishops weed, bachelor's button, virginia creeper, trumpet vine, etc.).

Green Building Objectives. The neighbourhood and individual structures are encouraged to be built using green building technology and targets. Green technology for energy and water use are encouraged, such as water and energy efficient fixtures and appliances and green energy solutions (e.g. solar

hot water, solar heating or geothermal, as appropriate), programmable thermostats. Local building materials should be used as much as possible.

5.2.1 Guidelines

1. A development permit is required for the following activities unless specifically exempt:
 - a. removal, alteration, disruption or destruction of natural features, including mature and native vegetation;
 - b. disturbance of soils, including grubbing, scraping, and removal of top soils;
 - c. construction or erection of buildings and structures;
 - d. creation of non-structural impervious or semi-pervious surfaces; and,
 - e. subdivision as defined in the Land Title Act or the Strata Property Act.

Implementation: Defining the Development Area and Conservation Area

2. At the time of subdivision application (to include detailed extents of proposed conservation areas, development areas, road/driveway and trail alignments and the location of all services), a habitat assessment at the scale of 1:750 is to be completed by QEP and shall include the following site-specific natural features, functions, and conditions that support wildlife and unique ecosystems:
 - a. location of vegetation, trees, snags, and root systems;
 - b. location of rare, protected and uncommon species and plant communities;
 - c. soils and soil conditions (moisture, nutrients and permeability);
 - d. location of bird and other wildlife and their habitats, such as nesting and breeding areas;
 - e. maintenance of an effective visual and sound (natural vegetated) buffer around eagle and heron nesting sites or the sensitive ecosystem;

- f. demonstrate wildlife corridor connectivity and promote a contiguous conservation area between properties to minimize fragmentation
 - g. location of all ponds, wetlands, streams and ephemeral waterbodies;
 - h. topography and relative location of features on neighbouring properties; and,
 - i. hydrology and impacts to adjacent areas with respect to post-development drainage regimes.
- 3. The report prepared by a QEP shall include recommendations to lessen impacts and will include candidate areas for conservation covenants and lot specific procedures for covenant monitoring which address specific areas of sensitivity as determined at the time of subdivision and Development Permit.
- 4. Establish the Development Area based on the recommendations of the habitat assessment as described above, restricted to a maximum of 25% of the total lot area (exclusive of common driveways and/or pathways).
- 5. Establish the Conservation Area based on the recommendations of the habitat assessment as described above, required at a minimum 75% of the total lot area (inclusive of common driveways and/or pathways).
- 6. Through acceptable transition landscaping, staking and/or other approved means, demonstrate the extent of the Development Area, to clearly demarcate the Conservation Areas (for management and monitoring purposes).
- 7. Require conservation covenants (under Section 219 of the Land Title Act, registered against title to the land and in favor of the City of Vernon) to ensure no disturbance within the designated Conservation Area and to establish requirements for monitoring (to be managed by the strata association and undertaken by an established third party monitoring body approved by the City of Vernon).

Implementation: General Design & Construction

8. All development proposals should be designed in substantial compliance with the guidelines contained in Section 3 (Site Development & Management) of the document: "Develop with Care: Environmental Guidelines for Urban and Rural Land Development in British Columbia" published in March 2006 by the Ministry of Environment, taking into account provisions which have been applied at the Neighbourhood Plan level.
9. Should the Riparian Areas Regulation apply, all development within the Development Permit Area must be in compliance with the Riparian Areas Regulation and a QEP must be retained at the expense of the applicant for the purpose of preparing a report pursuant to Section 4(2) of the Riparian Areas Regulation (RAR) and the RAR Assessment Methodology Guidebook. The report must be electronically submitted to the Ministry of Environment (MOE) Fisheries and Oceans Canada (DFO), and a hard copy must be provided to the City of Vernon.
10. Development or subdivision of land is to be designed to:
 - a. replicate the function of a naturally vegetated watershed;
 - b. retain and protect, with a buffer of 5m, all ponds, wetlands and ephemeral streams in the Development Permit Area;
 - c. maintain the hydraulic regime of surface and groundwater and pre-development flow rates; and,
 - d. not introduce or remove materials where it would cause erosion of or the filling in of natural watercourses or the shoreline.

11. All new development should be designed to conserve water by:
 - a. minimizing impervious surfaces;
 - b. maintaining the hydraulic regime of surface and groundwater and pre-development flow rates at the watershed scale; and
 - c. not introducing or removing materials where it would cause erosion of or the filling in of natural watercourses and/or wetlands.
12. Design sites and buildings to use best practice rain water management and water conservation techniques, and encourage the use of rainfall capture for landscape irrigation through the use of rain barrels or other residential scale devices;
13. Encourage the use of green rooftops, balconies, patios and courtyards as to moderate effects of building temperature (heat island effect);
14. The use of energy efficient building materials, techniques, heating and cooling systems (geo-exchange systems) and practices that reduce the amount of energy consumption shall be encouraged;
15. Comprehensive development proposals that consider the full life cycle of input materials and process by-products as well as seek to minimize energy and raw materials use, minimize waste, shall be encouraged.
16. To the extent feasible, development should be designed to take advantage of sun exposure to reduce winter heating and natural ventilation to reduce summer cooling.
17. Conduct a pre-construction plant species at risk survey by a qualified vegetation ecologist/botanist to identify plants that can salvaged from the homesite at time of construction.
18. Establish a clear boundary (using temporary construction fencing) to limit construction activities within the Development

Area and avoid impacts to the Conservation Area, as identified on each lot.

Management, Monitoring and Stewardship

19. Provide an Environmental Homeowner's Manual, detailing best practices for living in wildlife interface areas, including but not limited to: neighbourhood specific sensitive plant communities and landscaping standards, wildlife and associated migration patterns; and safety techniques for living with wildlife (including garbage management and domestic pet care).
20. Landscaping plants are to be North Okanagan native and non-invasive species.
21. Landowners are to use integrated pest management practices for landscape planning and maintenance of all non-covenanted common lands (such as trails and shared driveways) following environmentally friendly practices to control pests without the use of pesticides (which will negatively impact native, non-pest species) and under the direction of a certified Integrated Pest Management specialist.
22. All trails within the Conservation DPA shall be designated as on-leash only.
23. Perimeter fencing and/or wildlife fencing of the Conservation Area is not permitted.
24. Retention of natural vegetation is encouraged and introduced landscaping shall use native plantings, drought tolerant species, and xeriscaping standards, where feasible.
25. Predetermined fire protection areas are to be maintained, but not exceeded, to ensure threat of fire is reduced without impacting the Conservation Areas of each lot;
26. The strata association shall be required to retain the services of an established third party monitoring body approved by the City of Vernon to conduct a monitoring assessment on a regular basis and provide the results to the City of Vernon.

27. An appropriate instrument shall be utilized to inform landowners that all domestic pets are to be kept indoors or on a leash when outside for the dual protection of the domestic pet(s) and wildlife in the area.

Fees and Non-Compliance

28. Establish an environmental management amenity charge / strata fee dedicated to the ongoing management, maintenance, enhancement and/or restoration of sensitive habitat, as prescribed by a QEP, where appropriate.
29. Prior to completion of the development of the neighbourhood, Predator Ridge is to provide funding for the establishment and initial monitoring responsibilities, until such a time as strata fees are sufficient to cover the costs.
30. Fines for non-compliance are to be approved by the City of Vernon and established within the strata bylaw of the affected properties.

5.1.2 Exemptions

Where an owner is proposing to alter the land, commence a subdivision, construct or alter a building or structure within this Development Permit Area, the following activities are exempt from requiring a development permit:

1. Development outside of the Streamside Protection and Enhancement Area (SPEA) where notification of an assessment report prepared in accordance with Section 4(2)(a)(i)(ii) of the Riparian Areas Regulation (RAR) and the RAR Schedule of Assessment Methods has been received by the City of Vernon and electronically submitted to the Ministry of Environment;
2. Maintenance of existing landscaping and planting native trees, shrubs, or ground cover and the maintenance or repair of buildings and structures within the existing footprint (Building Permit may be required).

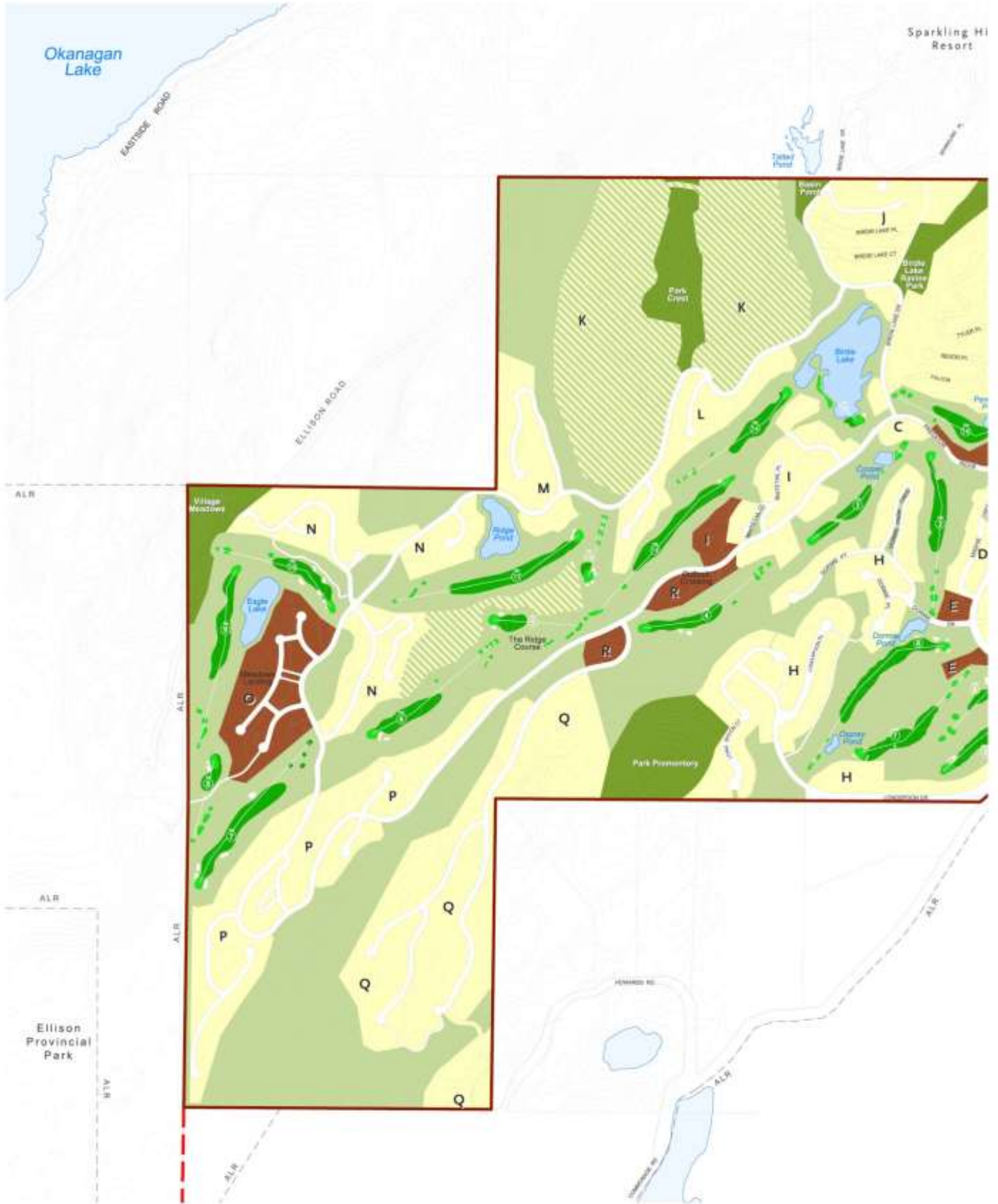
3. Removal of invasive plants or noxious weeds to be undertaken regularly following removal directions provided by weed removal specialists within the Development Permit Area.
4. Minor additions to existing buildings and structures to a maximum of 25% of the total floor area of the existing building or structure, provided that the proposed addition is not situated closer to the conservation area established identified, than the existing building or structure.
5. Construction of a single trail per subdivision subject to the following:
 - a. the physical trail must be no greater than a maximum 1.5 metres in width;
 - b. the trail's surface must be pervious but may be constructed with materials that limit erosion and bank destabilization (certain structures may require a building permit);
 - c. the trail provides the most direct route of feasible passage through the Development Permit Area;
 - d. sensitive habitat will not be impacted by the presence of the trail;
 - e. the ground must be stable, i.e. erodible banks or other erosion prone areas must be avoided;
 - f. no trees, greater than 5 metres in height and 10 centimetres in diameter, are to be removed. If limbing, pruning and topping of trees must occur, a minimum of 60% of the original crown of any tree should be retained to maintain tree health and vigour; and,
 - g. no vehicles are permitted.
6. Emergency procedures to prevent, control, or reduce erosion, or other immediate threats to life and property including:
 - a. emergency actions for flood protection and erosion protection;

- b. clearing of an obstruction from bridge, culvert, or drainage flow; repairs to bridges and safety fences in accordance with the Federal Fisheries Act and Wildlife Act; and,
- c. removal of hazardous trees that present a danger to the safety of persons or are likely to damage public or private property.
- d. Restoration works under the supervision of a qualified professional. Any activity within the Development Permit Area, requires compliance with Provincial and Federal legislation, and notification to the City of Vernon.

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6 SCHEDULES

- SCHEDULE A : LAND USE PLAN
- SCHEDULE B : ENVIRONMENTAL NETWORK PLAN
- SCHEDULE C : PARKS & TRAILS PLAN
- SCHEDULE D : STREET HIERARCHY PLAN
- SCHEDULE E : WATER DISTRIBUTION MASTER PLAN
- SCHEDULE F : DRAINAGE MASTER PLAN
- SCHEDULE G : SANITARY MASTER PLAN



PREDATOR RIDGE
NEIGHBOURHOOD PLAN

Schedule A
LAND USE PLAN

AUGUST 2018

LEGEND

- City of Vernon Boundary
- Neighbourhood Plan Area
- Existing & Future Roads
- Existing & Future Strata Roads
- ALR Boundary
- Parcel Designation

LAND USE *

- Tourist Commercial
- Residential - Low Density
- Resort Park
- Public Park

SPECIAL CONSERVATION DPA **

- Development Permit Area
(Residential - Low Density - Conservation)

Note: All land use areas are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of subdivision.

* Refer to Section 4.7 Neighbourhood Plan Land Use Summary

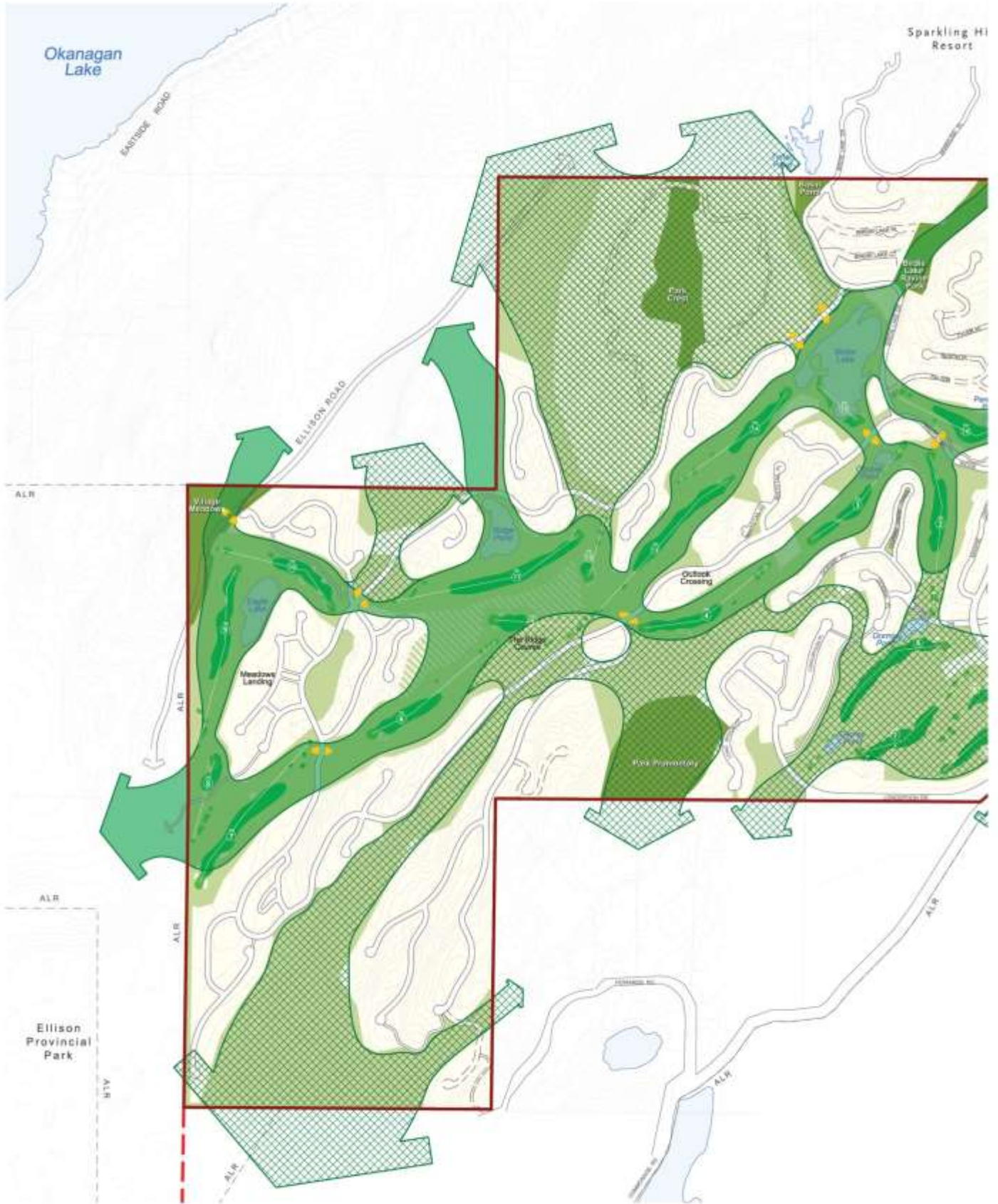
** Refer to Section 5.1 DPA Guidelines: Residential - Low Density - Conservation

Table 2 - Neighbourhood Development Summary lists the individual Parcel land use and development metrics.

SCALE: 1:25000



EKISTICS





PREDATOR RIDGE NEIGHBOURHOOD PLAN

Schedule B ENVIRONMENTAL NETWORK PLAN

AUGUST 2018

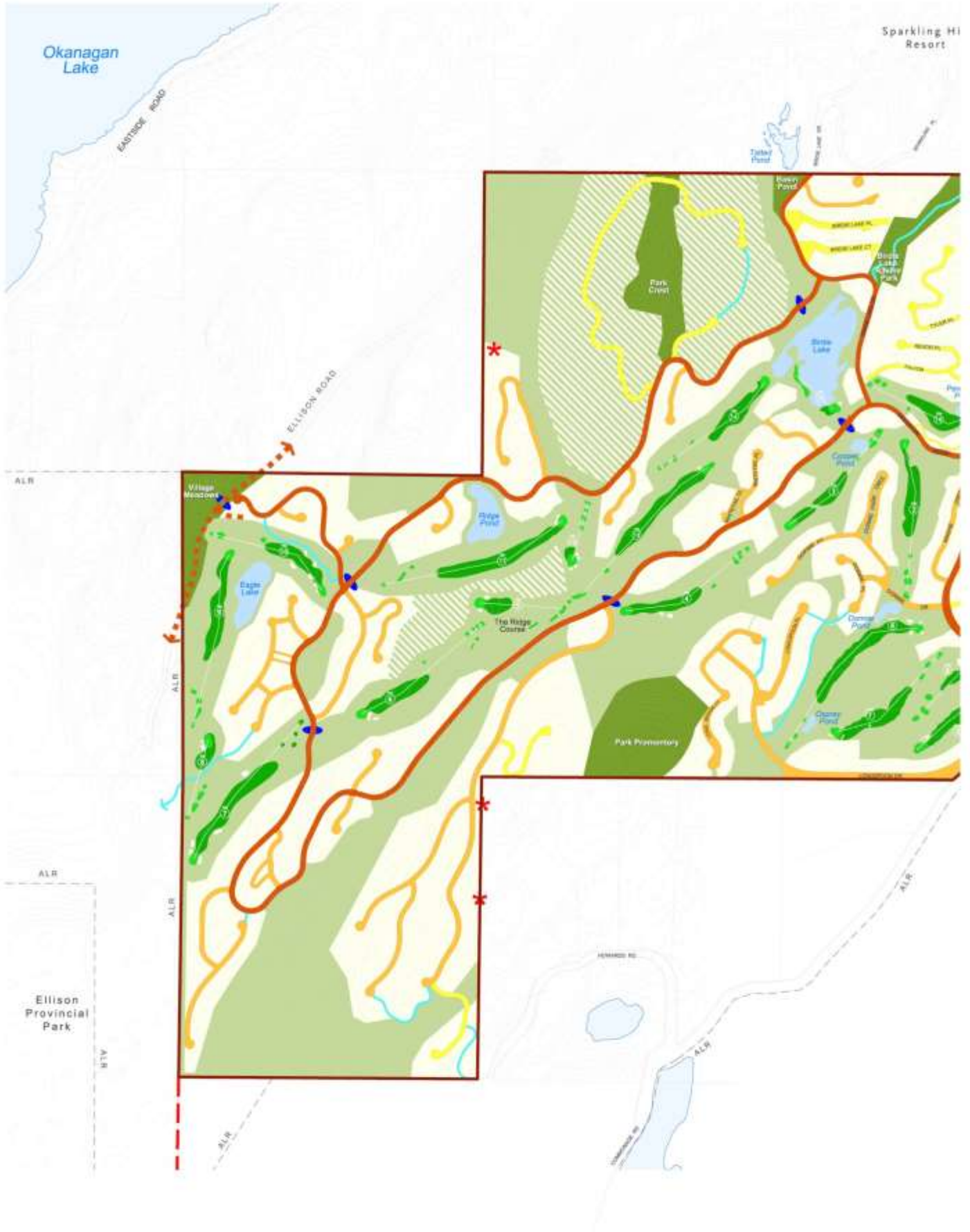
LEGEND

- City of Vernon Boundary
- Neighbourhood Plan Area
- Existing & Future Roads
- Existing & Future Strata Roads
- Development Areas
- Resort Park
- Public Park
- Lakes & Wetlands
- Valley Wildlife Movement Corridor
- Ridge Wildlife Movement Corridor
- Wildlife Underpass

SCALE 1:5000



EKISTICS





PREDATOR RIDGE NEIGHBOURHOOD PLAN

Schedule D STREET HIERARCHY PLAN

AUGUST 2016

LEGEND

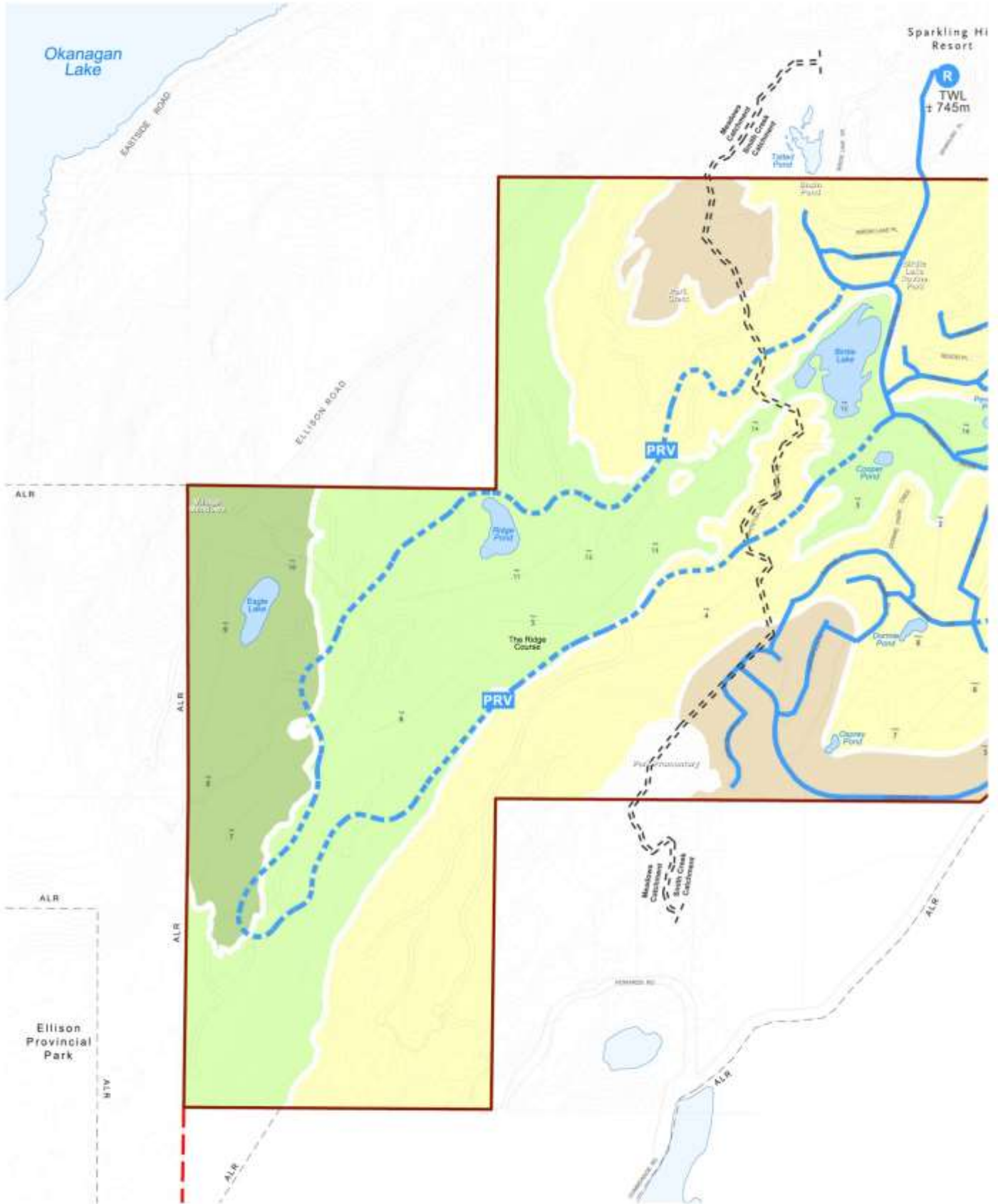
- City of Vernon Boundary
- Neighbourhood Plan Area
- Existing & Future Roads
- Existing & Future Strata Roads
- Development Areas
- Resort Park
- Public Park
- Hillside Collector
- Hillside Minor Collector
- Hillside Local
- Hillside Strata
- Emergency Access
- <--> Pedestrian Crossing
- * Where required and where feasible, access to lands beyond to be secured via future road reserve or other agreed upon method of corridor protection, to be provided at time of subdivision approval.

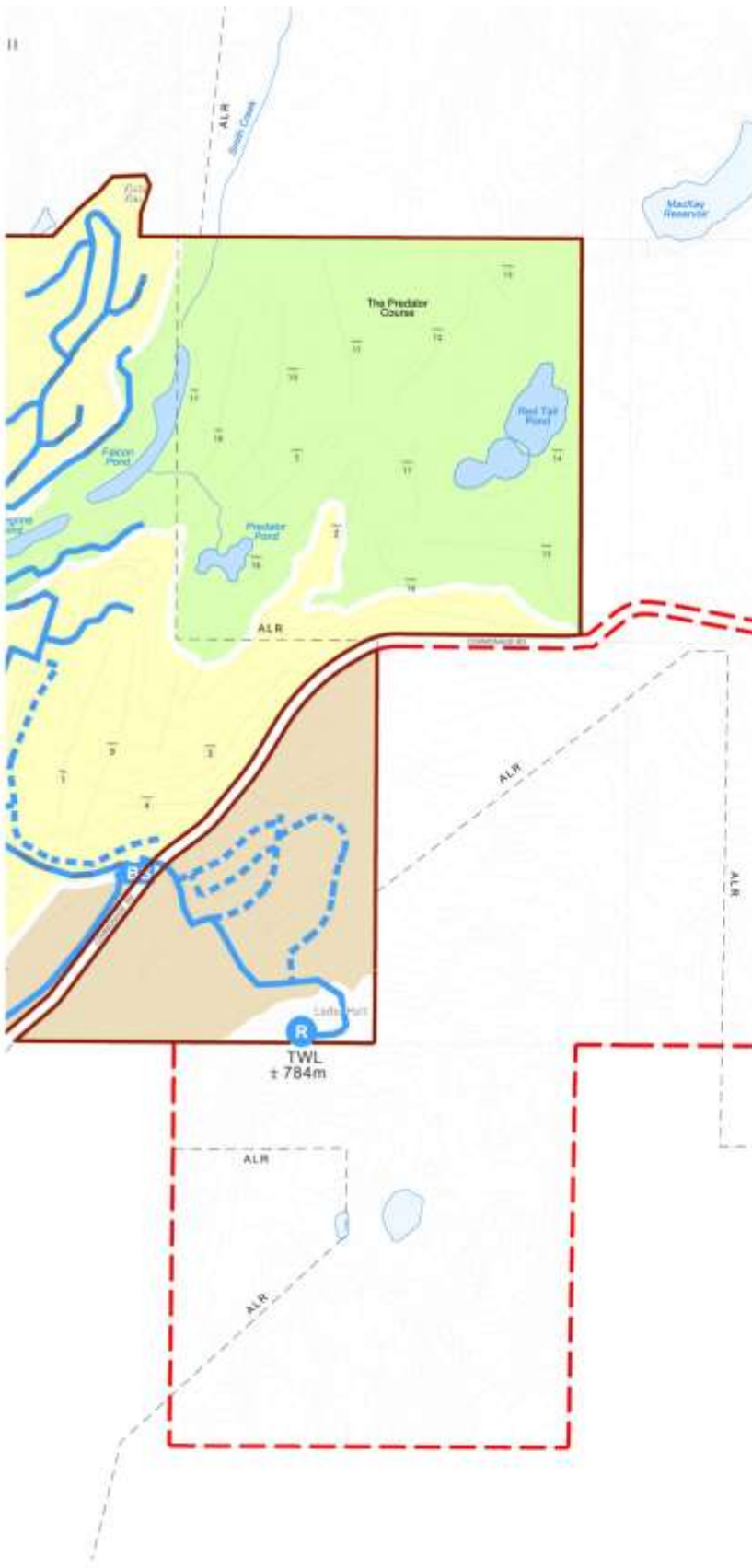
Note: Ultimate connection to Ellison Road will be provided at the time of its construction. Refer to City of Vernon OCP for additional information about Ellison Road and the City's Recommended Transportation Network (Map 6).

SCALE: 1:2500



EKISTICS





PREDATOR RIDGE
NEIGHBOURHOOD PLAN

Schedule E
WATER DISTRIBUTION
MASTER PLAN

AUGUST 2016

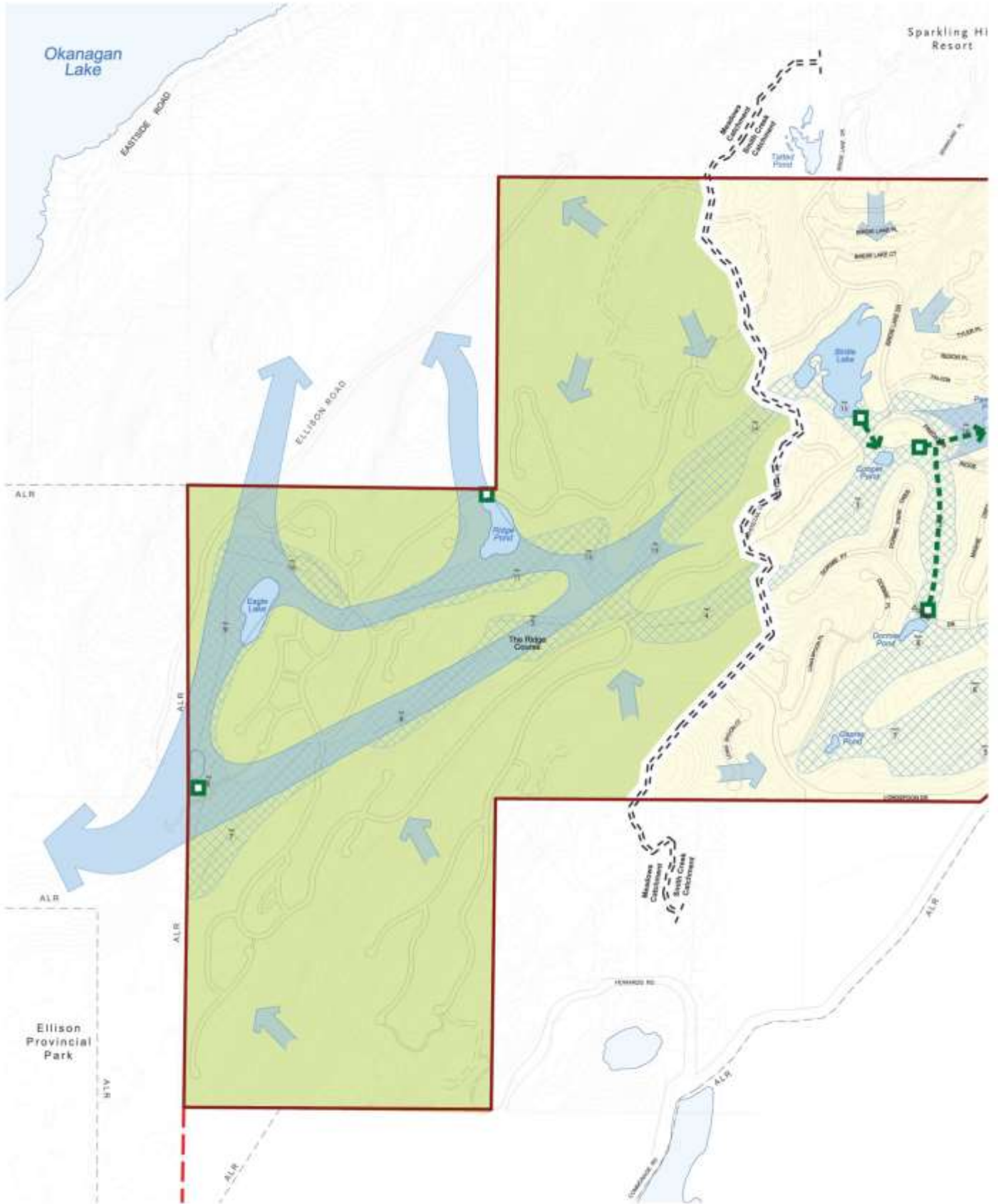
LEGEND

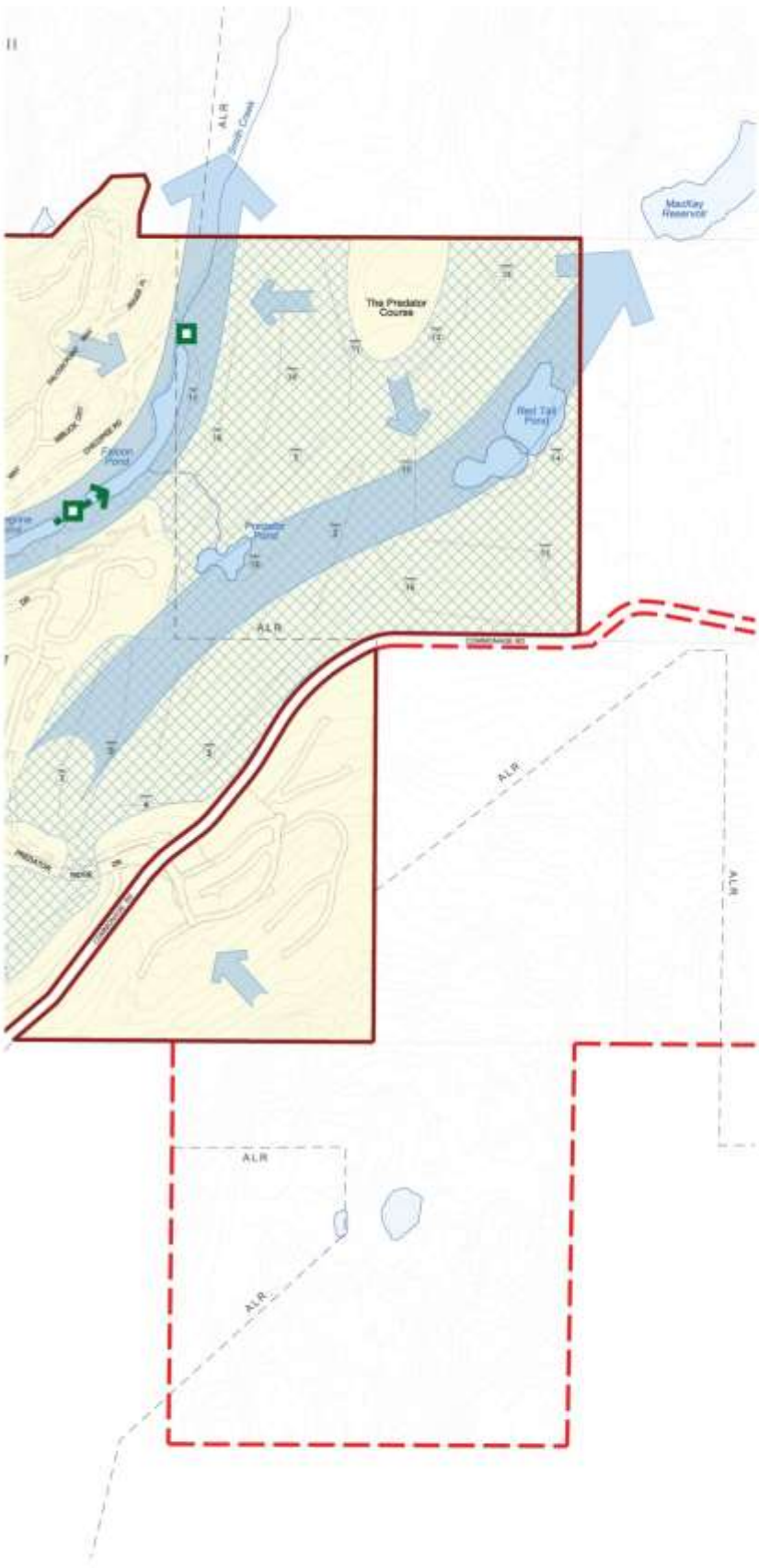
- City of Vernon Boundary
- Neighbourhood Plan Area
- Existing & Future Roads
- Existing & Future Strata Roads

- Watershed Catchment
- Pressure Zone 784
- Pressure Zone 745
- Pressure Zone 670
- Pressure Zone 570
- Existing Reservoir
- Existing Booster Station
- Existing Water Line
- Proposed Pressure Reducing Valve
- Proposed Main Water Line



EKISTICS





PREDATOR RIDGE
NEIGHBOURHOOD PLAN

Schedule F
DRAINAGE
MASTER PLAN

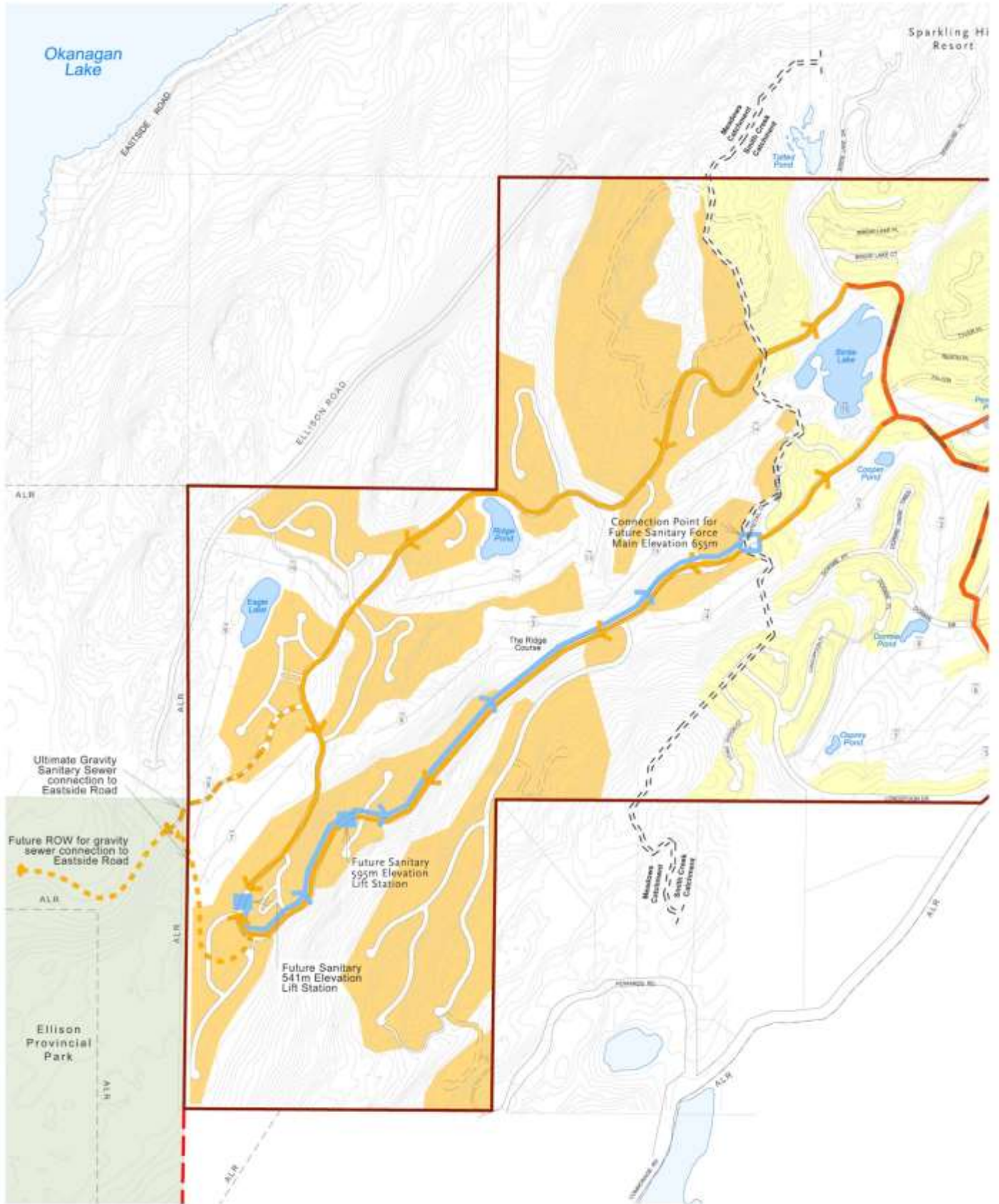
AUGUST 2018

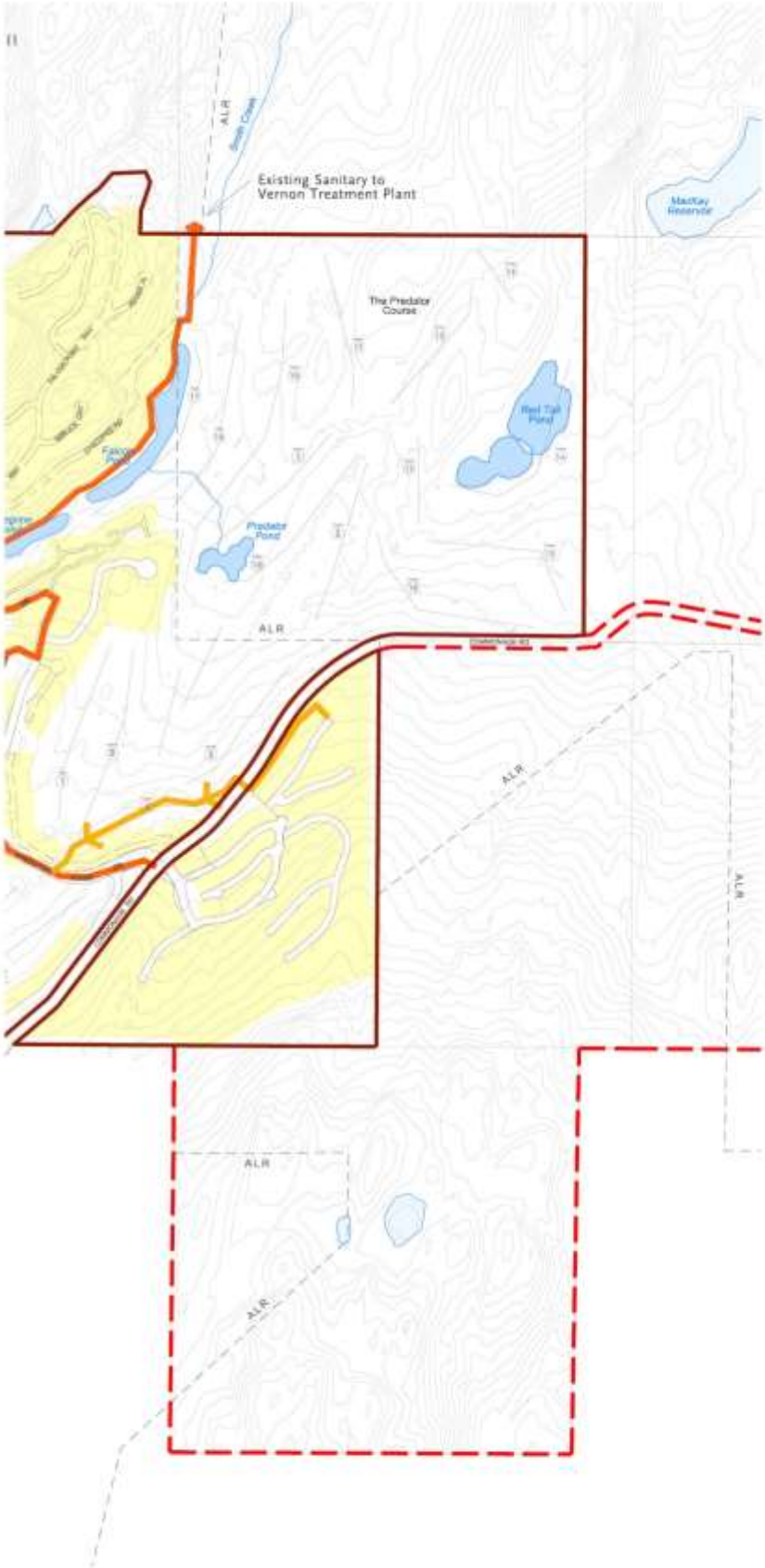
LEGEND

- City of Vernon Boundary
- Neighbourhood Plan Area
- Existing & Future Roads
- Existing & Future Strata Roads
- Meadows Catchment Area
- Smith Creek Catchment Area
- Catchment Boundary
- Existing Water Courses
- Existing Ponds
- Future Detention Ponds
- Piped Storm System
- Control Structure
- Golf Course Drainage System
- Direction of General Drainage



EKISTICS





PREDATOR RIDGE
NEIGHBOURHOOD PLAN

Schedule G
SANITARY
MASTER PLAN

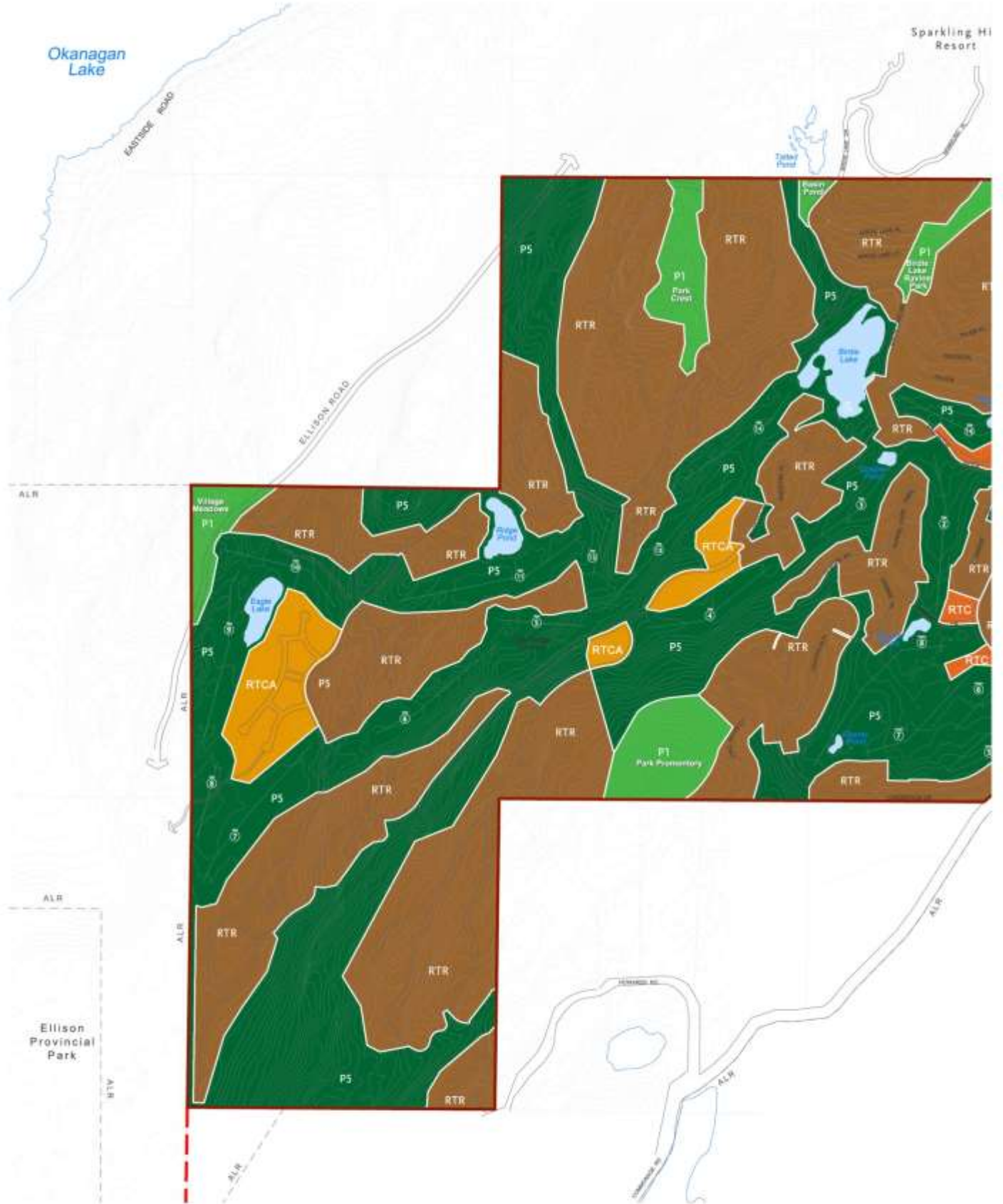
AUGUST 2018

LEGEND

- City of Vernon Boundary
- Neighbourhood Plan Area
- Existing & Future Roads
- Existing & Future Strata Roads
- Watershed Catchment
- Gravity Sanitary Zones
- Pumped Sanitary Zones
- Existing Sewer Connection
- Proposed Gravity Sewer Main
- Proposed Force Main
- Proposed Lift Station
- Proposed Force Main Connection Point



EKISTICS





PREDATOR RIDGE
NEIGHBOURHOOD PLAN

Schedule H
ZONING PLAN

AUGUST 2016

LEGEND

- City of Vernon Boundary
- Neighbourhood Plan Area
- Existing & Future Roads
- Existing & Future Strata Roads
- Resort Commercial (RTC)
- Resort Commercial & Residential (RTCA)
- Resort Residential (RTR)
- Parks & Open Space (P1)
- Private Park (P5)



EKISTICS