

# Stage 2 Neighbourhood Plan











Throughout this document the grey and teal boxes are used to highlight where the Stage 2 Neighbourhood Plan aligns with the Rocky View County County Plan and the Harmony Conceptual Scheme.



RVC County Plan Conformance



Conceptual Scheme Conformance Harmony Stage 2 Neighbourhood Plan

## HARMONY°

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Prepared by



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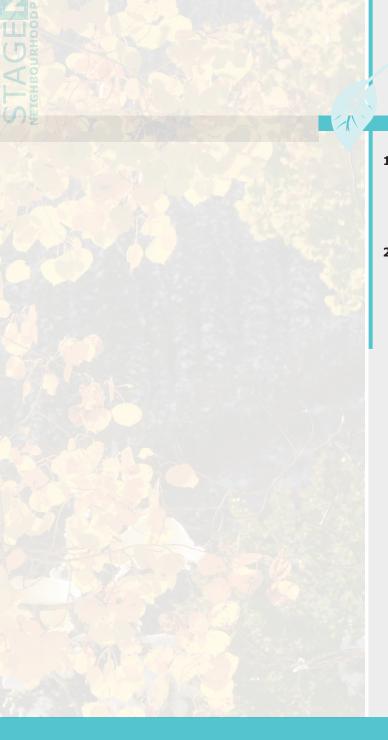


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## Location and Ownership

#### LOCATION

Harmony is situated in the western portion of Rocky View County. This area is in close proximity to a regional business node, country residential communities, ranching operations, and a variety of other land uses. The overall Harmony lands are bounded by:

- Springbank Airport and associated businesses to the southeast
- Existing country residential subdivisions to the east and northeast
- Historic Old Banff Coach Trail to the north
- Ranch and farm operations to the north, west, and southwest

#### **OWNERSHIP**

The entire Harmony community will occupy approximately 707 hectares (1,748 acres) of ranch country, which was largely owned by the Copithorne family for over 60 years. All lands within the approved Harmony Conceptual Scheme (Bylaw C-6411-2007) boundary, are currently owned by Harmony Developments Inc., a joint venture between Harmony Limited Partnership (a group of investors led by Bordeaux Developments and Qualico Communities) and Elbow River Land Corporation (owned by the children of Bill and Harriette Copithorne).

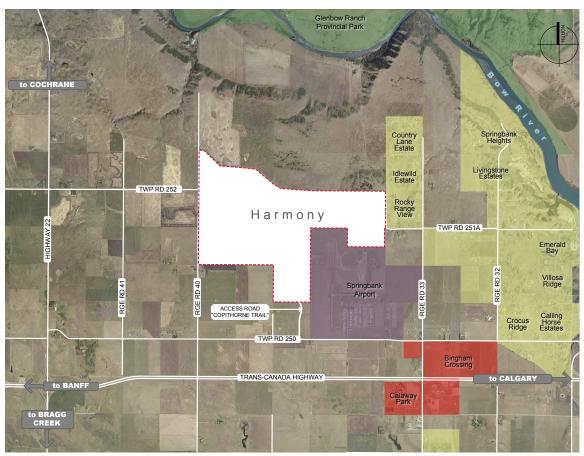


Figure 1: Regional Context and Location

#### **STAGE 2 CONTEXT**

The approved Harmony Conceptual Scheme divides the lands into development stages. The Stage 2 lands comprise approximately ±21.50 hectares (±53.13 acres). The subject lands were previously unimproved, low quality pastureland, but have since formed part of Harmony's approved stripping and grading plan (Stage 1 Development Plan), and as such have been prepared for future development. These Stage 2 lands are adjacent to Stage 1 development, making them a logical extension of Harmony's nearby existing infrastructure system.

Conceptual Scheme Conformance: Section 8.2.1 The Conceptual Scheme states that:

"Other than Stage 1 and Stage 6, the staging numbers do not necessarily correlate to the sequence of development and staging progression will take into account infrastructure, amenities, and market conditions."

Stage 2 offers a logical extension of infrastructure and offers an extensive amount of amenities for residents.

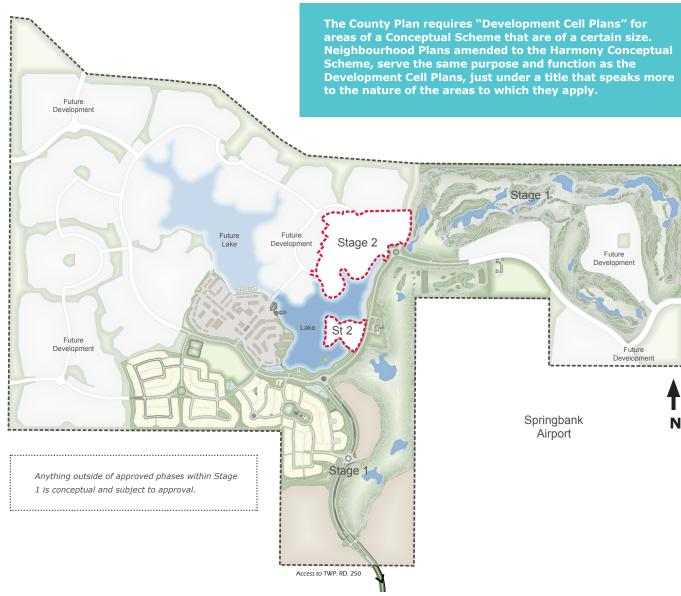


Figure 2: Stage 2 Lands



## Built to Date (Stage 1)



BORGER

Construction of Stage 1, as envisioned by the Stage 1 Neighbourhood Plan, is underway. Fifteen show homes expressing the unique and eclectic architecture of Harmony are open now, and mark an important milestone for the Harmony community. Paintbrush Park, a central community hub, has been constructed along with the initial stages of the greenway to demonstrate how the extensive open space throughout Harmony will provide a variety of active and passive recreational opportunities for the region. Shaping of the Mickleson National Golf Course of Canada has also begun, with the signature course set to open in 2018, offering an amenity for the County within Harmony.



In concert with this, Harmony's innovative Water Management Strategy and water practices are currently being implemented. Construction of the sanitary treatment plant and the first stage of the Lake is underway, and commissioning of the water treatment plant began in November 2016. The Lake serves numerous purposes, including acting as a reservoir, aiding in flood management, and forming an integral part of the recreation areas for the community.

Other components of Harmony's water management strategy that facilitate water conservation, such as irrigating the golf course and open spaces with reclaimed and raw water, are also under construction.

Access from Stage 1 is being provided through the construction of the primary access road, Copithorne Trail, to Township Road 250.

Conceptual Scheme Conformance: Policy 8.2.2.1

Demonstrate the provision of supporting infrastructure, housing product mix and provision of community amenities at each stage of development.







## Public Engagement Activities

Being a good neighbor is at the core of Harmony's public engagement activities. For more than a decade, Harmony has actively sought input from a wide range of stakeholders. Local community members, industry thought leaders and County representatives have all contributed to Harmony's community vision. Harmony's Stage 2 Neighbourhood Plan builds upon the existing inclusive philosophy and the extensive Stage 1 public engagement activities that have led to the overall community vision.

## Public Engagement activities for Stage 2 have included:

- · Individual and group meetings;
- Formal Open House and Information Session Events; and
- Information dissemination via project website, local news articles, and targeted email correspondence.





## Stage 2 & 3 Open House

On January 21, 2016, Harmony hosted a Stage 2 & 3 Public Open House at the Edge School. The Open House was advertised in the Rocky View Weekly leading up to the event, with a Bold Sign that was placed alongside Range Road 33, and through direct email invitations to interested stakeholder groups (such as neighbours of the development). With Stage 1 of the community under construction and continual dialogue ongoing with stakeholders, there was a noticeable decrease in the number of visitors this time - approximately 20 groups attended. Most questions received focused on:

- Development timelines for: Stages 2 and 3 overall, lake-front lots, Mickelson National Golf Course, and the Village Centre;
- How pathways around and throughout Harmony would be used and their timing;
- Multi-family and seniors housing options and their timing; and
- What upgrades would be made to surrounding roads- and timing of upgrades.



## Airport Interface

Springbank Airport is an important neighbour for Harmony. Many of the design decisions for the community were made specifically with the airport in mind, which reflects years of collaboration with the Airport Authority. During the planning process, a detailed review of Harmony's plan as it relates to Springbank Airport was conducted by LPS Avia Consulting, the Calgary Airport Authority, NAV Canada and Transportation Canada, which concluded "Bordeaux Developments was found to be an industry leader in Canada in terms of developing an aviation compatible community in close proximity to an airport."

The design of Harmony does not permit the development of residential building envelopes within areas around Sprinkbank Airport that have a Noise Exposure Forecast higher than 25 decibles. This is in excess of Transport Canada's 30 NEF requirement. Harmony remains committed to developing a complete community with considerate and compatible transitions to neighbouring properties and operations.

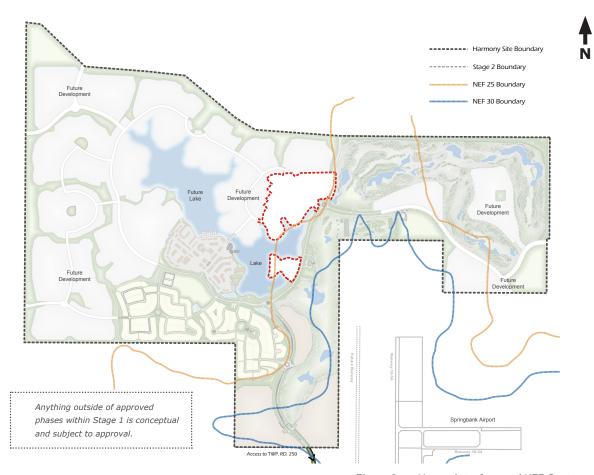


Figure 3: Airport Interface and NEF Contours



## Purpose and Intent

The purpose of the Neighbourhood Plan is to provide a bridge between the community vision and principles articulated within the approved Conceptual Scheme, and the more detailed development construction approval process (e.g. subdivision, development agreements, permits) within the Stage 2 boundary. The Stage 2 Neighbourhood Plan illustrates how this application aligns with the principles and policies of the approved Harmony Conceptual Scheme (Bylaw C-6411-2007) and the County Plan.

## RVC County Plan Conformance: Section 9.7

Given the size of the area encompassed by the Harmony Conceptual Scheme, Neighbourhood Plans (known as Development Cell Plans in the County Plan) are required to guide more detailed development.

This Stage 2 Neighbourhood Plan provides this level of detail in preparation of development of a mixed-use, multi-lot neighbourhood.





## Harmony Vision

RVC County Plan Conformance: Section 24.

The County's vision for the future includes seeing Harmony develop as an attractive community that provides services for area residents and the region.

## Conceptual Scheme Conformance: Section 4.1

The Conceptual Scheme refers to building Harmony on the idea of a robust and holistic sense of community. As the Conceptual Scheme points out:

"In short, this community will be about people – all people. It will be configured to facilitate and enhance human values and the gathering of people together. It will honour the history and refine the balance between home life and workplace, marketplace, and green space, private life, and public involvement."

Stage 2 builds on this vision, which has already begun to develop in Stage 1. Acting as a link between the first and future stages of Harmony, Stage 2 embodies the underlying values of the community.

For over a decade, Harmony Developments Inc. has worked extensively with our neighbours, various levels of government, and industry thought leaders to design the community as a whole. This unprecedented community consultation and collaboration has resulted in a thoughtful community vision that complements the existing communities in the area, while also considering the needs and wants of future generations.

Harmony strives to honour the history of the land and refine the balance between home life and workplace, marketplace and open space, private life and public involvement to build a better, more meaningful, complete community that enriches the lives and wellbeing of our residents and those of the greater regional area. Harmony embraces the ideals of a traditional village: a tapestry of diverse and distinctive homes; walkable-extensive pathways that are landscaped to fit with the prairie setting; neighbourhood stores, a balance of offices, schools and parks and a host of active and passive recreational activities.





Harmony is designed to enhance and integrate with the surrounding communities and landscapes, provide exceptional amenities and implement sustainable development practices. Harmony reflects the desire for a comprehensive and complete community that supports those who live, learn, work, play, create, nourish, connect and sustain within it.

### Arts Master Plan

Harmony is currently preparing an Arts Master Plan with the vision to be sensitive, thoughtful, and dynamic in our approach to integrating arts into the Harmony community. The Art Plan will respond to the natural setting and draw on best practices to guide the implementation of public art throughout the community.







## Stage 2 Settlement Pattern

#### **PLAN OVERVIEW**

Harmony is envisioned as a collection of 10 villages, each with unique characteristics that link together to realize the larger goals and objectives of the community. These villages reflect a hamlet community containing residential, a variety of recreational amenities as well as local and regional commercial, employment, and institutional uses. This supports the overall vision for Harmony as a complete community.

In alignment with the Conceptual Scheme and to facilitate clear reference to the phases of development, the villages that comprise Harmony have been labelled sequencially (shown in Figure 4). Stage 2 supports the development of Village C, which connects previous phases of development to future phases on the north side of the Lake.

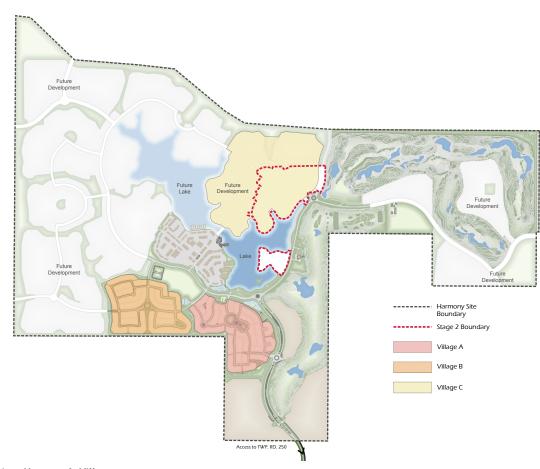


Figure 4: Harmony's Villages



Section 5.2.1

around open space focal point.





Stage 2 enables the ongoing realization of the Harmony vision and the development of a complete community that supports unique, balanced lifestyles for residents and visitors. It will offer access to a variety of amenities, open spaces, uses, housing types, and neighbourhood connections that seamlessly link the entrance and Stage 1 of Harmony to future areas.

#### Stage 2 will include:

- Continuity of the village concept settlement pattern initiated in Stage 1, incorporating a variety of housing types
- Between +/- 150 and 220 homes
- Connections to the open space and regional pathway networks
- An organic grid network that supports many modes of transportation
- A unique recreation amenity to support residential uses: the Harmony Beach Club
- A strong interface with the Lake and the golf courses to the east
- A logical extension of existing servicing capacity and infrastructure





#### RVC County Plan Conformance: Section 5.1

Harmony is identified as a full service hamlet within Rocky View County. The County supports its development as such, and encourages a range of complementary uses that meet the needs of its residents and the region.

Stage 2 contains a mix of uses, including a residential village, recreation hub to support the residential villages, and a network of open spaces.

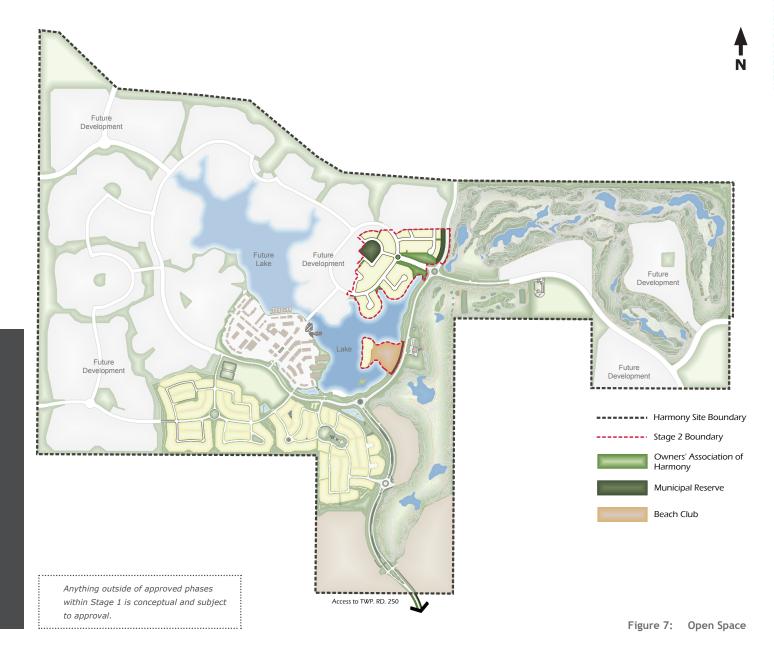
Anything outside of approved phases within Stage 1 is conceptual and subject to approval.



Figure 6: Neighbourhood Plan - Detail







#### RVC County Plan Conformance: Section 12

The County Plan requires hamlets to include well-designed and interesting open spaces that are connected by a network of multi-use paths and trails. The design of these spaces should be guided by a comprehensive plan that outlines details for their appearance and function. Harmony's open spaces are comprehensively designed as a network that supports the overall well-being of residents and visitors.



## RVC County Plan Conformance: Section 6

Financial sustainability is an important component of development in the County Plan, and the Plan states that development costs are primarily the responsibility of the developer.

A unique mechanism, the Owner's Association of Harmony is designed to establish a formal structure to help ensure that these costs are not fully borne by the County.

### Stage 2 Open Space Layout

Stage 2 broadens and builds on the significant open space system within Harmony. Central Park will provide a vital focal point and gathering area for residents, while greenway connections will provide recreational opportunities, natural elements and links to many of Harmony's amenities such as the Lake, golf course, and the residential villages of Stage 1.

PPEN SPACE ALLOCATION  Stage 2 hectares (acres)	
Gross Developable Area	21.50 (53.13)
Environmental Reserve	0.00 (0.00)
Net Developable Area	21.50 (53.13)
OPEN SPACE	
Municipal Reserve	1.66 (4.09)
Owners Association of Harmony	1.58 (3.90)
Beach Club	2.36 (5.84)
Harmony Lake	0.07 (0.17)
Golf Courses	0.00 (0.00)
Total Open Space	5.60 (13.83)

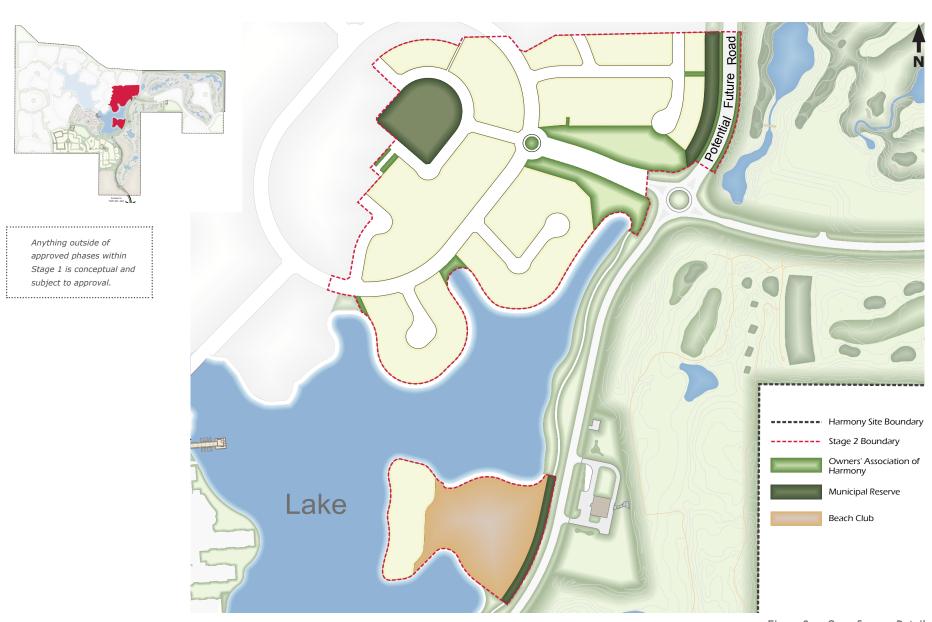


Figure 8: Open Space - Detail







The Conceptual Scheme points to open space as a key component of the Harmony vision, and requires that a combination of active and passive spaces be provided to meet the needs of all residents.

The residential village of Stage 2 is centered on a focal open space, which contains a mix of active and passive recreational spaces including a playground, minor soccer field, interpretive signage, art installations, and part benches. Green connections link residents to the broader trails network, and act as a demarcation of arrival, fostering a greater sense of community and village identity.



#### **Central Park**

Central Park in Stage 2 is designed as a gathering space and focal point for the residential village. The park will provide amenities for both active and passive recreation, and include a minor soccer field, playgrounds for a variety of age groups, and open spaces for casual gathering and relaxation. The orientation of homes with street frontage around the park creates an active park interface that will make it a safe and vibrant space for community interaction. The park's placement at the centre of the village establishes a strong neighbourhood identity and sense of arrival for those entering into the village in addition to having a passive traffic calming purpose.

The park will be accessible by walking, bicycling, and vehicle. Vehicle parking will be provided on street directly adjacent to the park's amenities.





Anything outside of approved phases within Stage 1 is conceptual and subject to approval.

The name "Central Park" is conceptual, and is subject to change in later stages of the approval process.

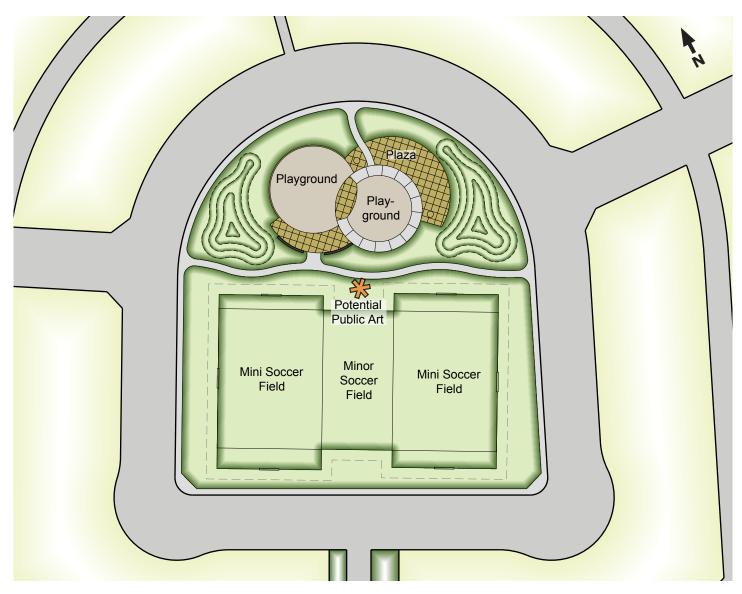


Figure 9: Central Park Concept





### Major Open Space Amenities

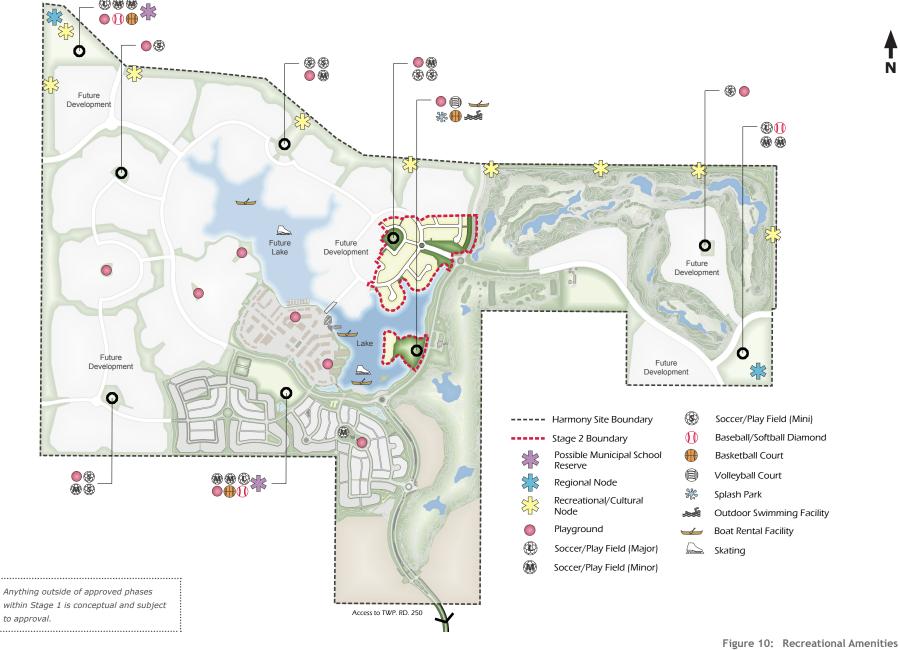
The Stage 2 area will provide a strong foundation for both ongoing and future development of major open space facilities, including the Lake, a Beach Club, active play areas, and the extensive trail system. Central Park is designed to include spaces for active recreation such as a playground and minor soccer field or two mini soccer fields. As with Paintbrush Park in Stage 1, connections between Central Park and the other major open space facilities enhance the overall open space network and realize the vision of Harmony's focus on health and well being.

## RVC County Plan Conformance: Section 12.7b

Diverse and multi-functional open spaces are encouraged by the County Plan as part of a comprehensively-planned open space network. Harmony's multitude of open spaces serve a variety of purposes for a diversity of people.

Open space provided within Stage 2 includes both passive and active uses, such as soccer fields and playgrounds, to meet this goal.











### RVC County Plan Conformance: Section 12.9

The County Plan states that open spaces should be connected by paths and trails to provide recreational opportunities and increase pedestrian and cyclist connectivity within the community. As part of the broad vision for Harmony, which promotes a well-connected and health-supportive community, an extensive trail network is planned to connect major open space facilities and the diverse range of parks and green spaces in each village or neighbourhood.

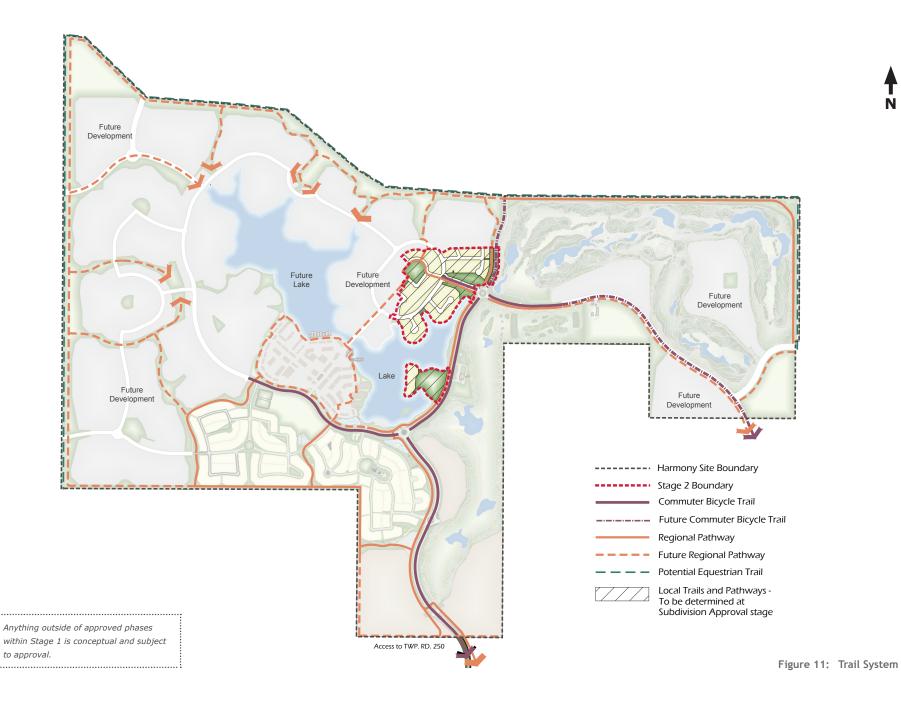
Stage 2 includes significant contributions to this network and facilitates connections between Stage 1 and future areas of development.

### Trails System

Building from the connectivity and mobility established by the trails system in the Stage 1 Neighbourhood Plan, Stage 2 plays a primary role in facilitating connections between existing and future parks, open spaces, greenways, and pathways throughout Harmony. The trails system is designed to encourage activity, social interaction, and reduce reliance on the automobile. Trail designs will consider all age groups and physical abilities and include:

- A regional multi-use pathway and trails system
- Connector sidewalks
- A commuter bikeway connection to Harmony's major corridors
- Greenways or natural corridors









## Conceptual Scheme Conformance Section 5.1.1

The Conceptual Scheme states that a recreational lake consisting of 1-3 water bodies and comprised of approximately 120 acres in surface area will form an important focal point for community activities.

Stage 2 supports the completion of the interface with Phase 1 of the Lake and the establishment of the Lake as the primary recreational amenity for the community.



### The Lake

Harmony includes a significant recreational lake ( $\pm 120$  acres), which will be a remarkable amenity. The Lake will offer various non-motorized recreational activities such as rowing, sailing, and other water activities. The Lake will also function as an off-stream water reservoir. This will be a critical component of the community's infrastructure system and provide potential educational elements for residents and visitors.

Harmony Lake will be built in two phases. The first phase of the Lake was included within the Harmony Stage 1 Neighbourhood Plan. Development of Stage 2 will help define the Phase 1 lake edge, and provide managed access to this substantial amenity for Harmony and the region.

Shoreline access will vary from public to private dependent on the adjacent land use. Much of the shoreline within Stage 1 would be considered public access as adjacent lands are owned by the Owner's Association of Harmony. Most of Stage 2 and 3 will be considered private shoreline access as the Lake is adjacent to private lots. Paid public access to the Lake will be provided through specific controlled access points to ensure the integrity of the Lake remains intact.



to approval.

Figure 12: The Lake



### Conceptual Scheme Conformance:

Section 5.2.2

The Conceptual Scheme requires that a variety of housing forms be provided in line with the broader community goals of neighbourhood diversity and residential lifestyle choice.

Stage 2 provides a mix of housing types, and strategically locates and integrates them to ensure that residents have access to numerous housing options and that neighbourhoods are comprised of interesting and diverse residential product types.

#### RESIDENTIAL VILLAGE

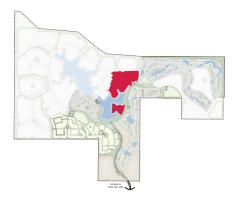
Stage 2 will contain a diversity of housing types, including single-family detached, villas, semi-detached, and townhouses to support residents through various life stages.

Approximately 150-220 homes will be carefully integrated to establish diverse streetscapes and support the development of a complete community. As envisioned by the Conceptual Scheme, a variety of housing forms are included to provide residential options that will support people in all stages of life. Diverse housing types, including attached housing types, will frame and activate Central Park, and create a strong connection between Stage 2, the North Village, and the Village Centre on the south side of the Lake. Moving from the center of Stage 2 towards the neighbourhood edges, housing types will gradually transition to a more traditional residential area that respects the interface with passive open spaces and naturalized amenities. Architectural controls will align with both local village and community character to incorporate unique product forms and define each village within the community.

## Strategic greenspace extensions have been designed and incorporated to ensure a number of specific objectives, including that:

- the number of houses that directly back onto roads will be limited,
- the interfaces with the Lake and golf course enable the integrated co-existence of recreational and residential areas in close proximity,
- there is a clear sense of entry into the residential village, with defined edges,
- connections from the Stage 2 residential village to the broader open space network and other neighbourhoods in the community are facilitated.





#### RVC County Plan Conformance: Section 4

The County Plan supports the development of hamlets and residential communities that maintain a strong sense of community and rural character, and provide amenities such as parks, open spaces, and gathering areas.

Harmony's residential neighbourhoods, including Stage 2 residential villages, are designed to function like a traditional village that is built upon and celebrates the area's rich history. These neighbourhoods are designed to be attractive and distinct, but integrated as part of the broader community.



Figure 13: Residential Layout

NUMBER OF UNITS	GROSS DEVELOPABLE AREA (hectares/acres)	NET DEVELOPABLE AREA (hectares/acres)	UNITS PER HECTARE (UNITS PER ACRE)
150-220*	21.50/53.13	21.50/53.13	7.0-10.2 (2.8-4.1)

<sup>\*</sup> Number of units to be confirmed at subdivision.



## RESIDENTIAL & RECREATION PENINSULA

The peninsula on the eastern side of the Lake will contain a pocket of residential units to the west of Harmony's Beach Clubone of the community's major amenities-offering a unique residential experience within Harmony. The residential units will activate the Lake edge and create a strong connection between the beach club and the Village Core to the west.

Inclusion of both residential and recreational uses on the peninsula creates a vibrant mixed-use hub and aligns with the health and wellness goals of the community.

The arrangement of the uses on the peninsula is precise and intentional, and serves to ensure that residential building envelopes are located outside areas with a Noise Exposure Forecast (NEF) higher than 25 decibles associated with the operations of the Springbank Airport. This is part of an ongoing commitment to the Springbank Airport. The western portion of the peninsula, however, is outside of the contour and will contain residential homes that define and activate the Lake edge.

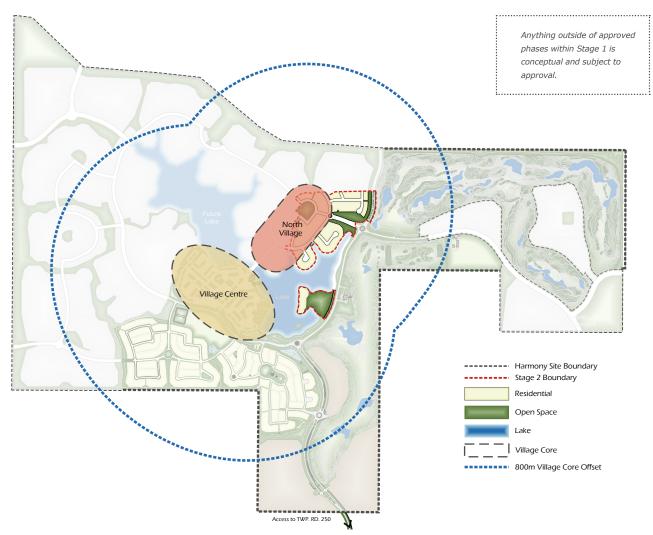


Figure 14: Units Proximal to Village Core

Harmony is built on the concept of a collection of integrated but distinct villages, each centered on and connected to open space and amenities. The arrangement of these villages is intended to locate up to 75% of the residential units within a 400 metre distance to the Village Core, and up to 90% within an 800 metre distance. Stage 2 supports alignment with this intent.

#### --- 25 NEF



Anything outside of approved phases within Stage 1 is conceptual and subject to approval.



Figure 15: Residential & Recreation Peninsula



#### Beach Club

The beach club will be a community hub that embodies Harmony's values of health and well-being. It will function as a key destination in close proximity to the Village Core, creating a recreational node that anchors the east side of the Lake.

Concept only. Subject to change.



---- 25 NEF

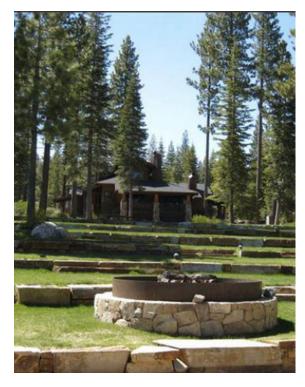


Figure 16: Beach Club Concept









As a central feature of the community, the beach club will be easily accessible from the villages within Harmony, and the greater region. It is designed to be an all-season recreational hub, and may include uses such as active open spaces, a swimming area, sport courts, complementary retail and food uses, and both indoor and outdoor community gathering spaces. Situated at the Lake's edge, the beach club provides access for other recreational water activities. Detailed design of the facilities and site will be determined at the development permit stage.

### Conceptual Scheme Conformance: Section 5.4.2

As Figure 5 in the Conceptual Scheme demonstrates, the peninsula has been envisioned as part of the residential areas of Harmony.

However, given the restrictions of the Noise Exposure Forecast boundaries, only the most westerly portion of the peninsula can contain residential units. As such, the remainder of the area has been envisioned as a recreational hub that will support the vibrancy of the community, complement the residential nature of the area, and enhance access to unique, significant amenities for residents and the region. Location of the beach club on the peninsula aligns with the health and wellness principles envisioned through the Conceptual Scheme.







# 3. Development Practices



## Sustainability Strategy

From the early planning stages, Harmony has been designed to promote sustainable living through a compact and mixed-use development form. In support of Harmony coming to life, a Sustainability Committee - comprised of company leaders involved in the creation of Harmony - has been created to ensure sustainability practices are implemented throughout the design and construction phases.

#### Some of the key sustainability initiatives include:



Harmony has been designed to include a network of constructed and preserved wetlands that provide natural stormwater treatment, guide water through the site and offer habitat for wildlife and residents to enjoy.

Harmony's sanitary will be treated and reclaimed for irrigation of the golf course to a zero setback limit. This setback is the first of its kind in Alberta and will reduce the community's consumption of first use water from the Bow River, and will provide an opportunity for irrigation of other potential uses with reclaimed water.





Harmony's extensive naturalized open spaces have been designed to allow for the introduction and settlement of native plant species and the creation of habitat. In the summer of 2015, Harmony relocated two populations of Pale blue-eyed grass, a plant previously listed as a species of conservation concern in Alberta. These populations were relocated to suitable locations onsite so they can thrive.



Harmony's development team is actively involved in encouraging change to legislation that would allow for the implementation of purple pipe systems in Alberta. Purple pipe systems refer to the reuse of reclaimed water for non-potable uses (e.g. irrigation of open spaces and commercial spaces, toilet flushing, etc.). Incorporation of purple pipe systems is important for conserving water resources and minimizing potable water use. A main purple pipe distribution line has been incorporated into the designs of Harmony Stage 1, 2 & 3 in anticipation of potential changes to provincial regulation.





Harmony's customized road standards incorporate stormwater management through road side swales, and support many modes of transportation.

Harmony's community lighting program is designed to meet safety requirements, achieve compliance with dark sky principles and reduce operation and maintenance costs. To achieve this the program includes:

- Efficient lighting distribution;
- LED fixture heads;
- Low maintenance concrete light poles.





Harmony's triple stream waste collection program will implement mandatory curbside pickup for recycling, organics and waste, creating a convenient system for residents and "raising the bar" relative to programs currently seen within the region.



### Supporting Infrastructure

#### Conceptual Scheme Conformance: Section 6.2

Shown in the Conceptual Scheme, the Harmony internal road network provides an arterial spine road to link major components of the community and provide connections to the regional road network. A circulatory collector roadway facilitates traffic flow through the core residential area. Stage 2 facilitates these connections, and acts as a necessary transportation link between Stage 1 and the future stages of development by continuing the extension of the circulatory collector.



#### **MOBILITY**

Mobility is a key component of achieving the vision for Harmony. In addition to the extensive trails system and commuter bikeway, Harmony's mobility system will include a hierarchy of road infrastructure based on the following design principles:

- forming part of the regional transportation corridors within Springbank community
- connecting the diverse and broad range of uses within the community
- creating a sense of arrival into the villages
- fostering a strong sense of place by highlighting key community features such as the Lake, the open space network, golf course, and community infrastructure
- incorporating multi-modal elements such as dedicated bicycle lanes on major roadways and adjacent pathways
- managing speed control through design parameters such as roundabouts at key intersections
- incorporating low impact storm water management drainage features
- providing street lighting that incorporates dark sky principles

The Stage 2 lands will be accessed via the newly constructed Harmony internal spine road system. This includes the Copithorne Trail roadway to the south, which serves as the primary access to Harmony from County road network (TWP 250), and a portion of "Harmony Circle" roadway, which forms a central circulation loop around the Lake.

### Road Design Classifications

Internal road design parameters will be determined at the subdivision stage as per the Harmony Road Standards.

Street names for internal Harmony roads will be determined prior to the subdivision endorsement stage of the approval process.

### **Off-Site Improvements**

As per the Transportation Impact Assessment prepared in support of this application, no off-site roadway improvements are required for the development of Stage 2.





to approval.

#### STORMWATER SYSTEM

Similar to the Stage 1 lands, stormwater runoff at the lot level will be collected and conveyed by grass swales integrated within the neighbourhood streets. These swales will include overflow catch basins and underdrains. Major surface drainage will occur through laneway and street corridors. This neighbourhood system will discharge into landscaped conveyance channels and constructed wetlands within the open space system. Stage 2 lands will ultimately drain into the Lake (Lake A) for flood management and further water quality treatment.

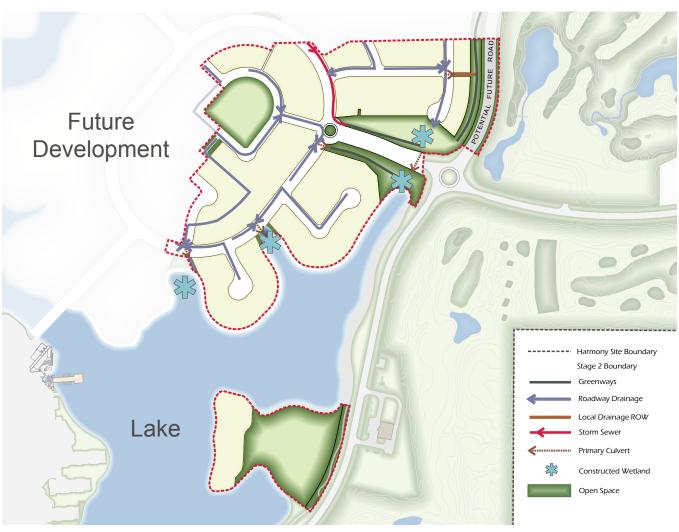


Figure 18: Stormwater System

#### **SANITARY SYSTEM**

The Stage 2 will be serviced by the existing Harmony Sanitary Treatment Facility recently constructed as part of the Stage 1 development. Sanitary will be collected via a piped system that will connect to the existing sanitary trunk located adjacent to the east side of the Stage 2 lands, where it is directed to the Sanitary Treatment Facility. Similar to Stage 1, after the sanitary is fully treated it will be used as reclaimed water to irrigate the golf course lands.

Anything outside of approved phases within Stage 1 is conceptual and subject to approval.



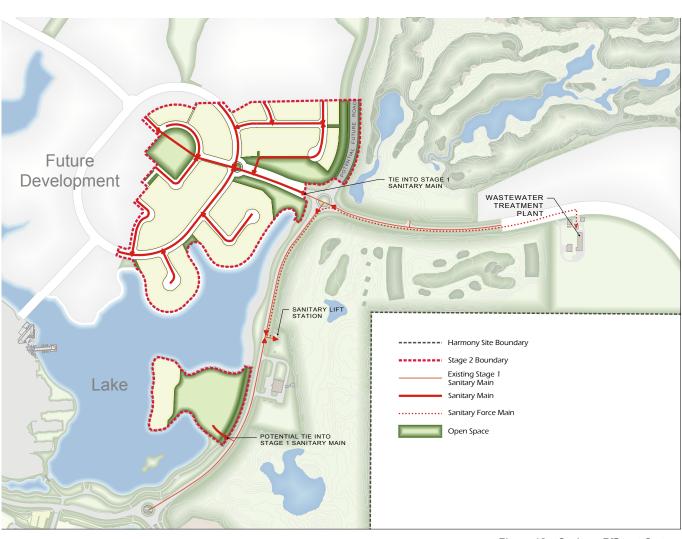


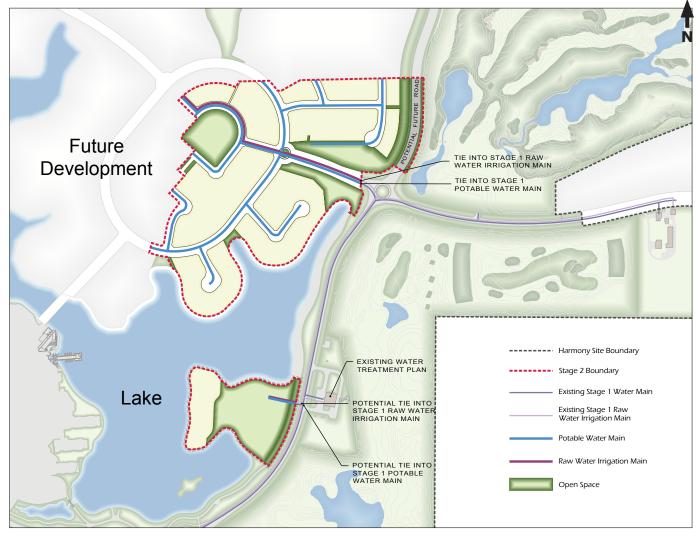
Figure 19: Sanitary Effluent System



#### **WATER SYSTEM**

Harmony's Stage 2 water systems will be an extension of the Stage 1 systems. Potable water to the homes and businesses will be distributed by the Harmony Water Treatment Plant constructed in Stage 1 via existing infrastructure. The potable water system for this stage is within one water pressure zone. Raw water will be distributed into Stage 2 for open space irrigation.





Anything outside approved phases within Stages 1 is conceptual and subject to approval.

Figure 20: Water System









## Background Assessments

#### WETLAND ASSESSMENT

In October 2014 provincial clearance for the Environmental Protection and Enhancement Act (EPEA) was received for Stage 1. The Stage 2 lands were included within the boundary for this Stage 1 EPEA Stormwater Registration, and require no additional Provincial approvals. The Stage 2 lands have been stripped and graded in preparation for future development and were included in the Stage 1 stripping and grading permit.

#### **ENVIRONMENTAL SITE ASSESSMENT**

Pinchin Environmental Ltd. was retained on April 28, 2014 to conduct a Phase I Environmental Site Assessment (ESA) for all of the Harmony lands. Based on the results of the Phase I ESA, nothing was identified that is likely to result in potential subsurface impacts, and as such, no subsurface investigation work (Phase II ESA) is required at this time.

### HISTORICAL RESOURCE IMPACT ASSESSMENT OVERVIEW

A Historical Resources Overview (HRO) was prepared for the Harmony site by Bison Historical Services Ltd. in March, 1999. The HRO indicated the need to undertake further investigations. In 2008, a Historical Resources Impact Assessment (HRIA) was completed. There were no sites identified within the Stage 2 lands and historical clearance has been received.

#### TRANSPORTATION IMPACT ASSESSMENT

In 2015, a Transportation Impact Assessment (TIA) was completed in support of the Stage 2 and 3 applications. The purpose of the TIA was to identify any off-site transportation impacts and assess internal road network needs. As requested by RVC, this study also addresses the needs and impacts of the long-term full build-out of Harmony. No off-site roadway improvements are required for the development of Stage 2.

### STORMWATER SUB CATCHMENT MASTER DRAINAGE PLAN

The Stage 1 Master Drainage Plan was completed in December 2015 by Urban Systems and includes the build out of the Stage 2 lands. Within the boundaries of Stage 2, conveyance and treatment systems will remain consistent with those in Stage 1, including the utilization of constructed wetlands for stormwater quality treatment. The Stage 1 Master Drainage Plan should be referred to in support of Stage 2 approvals.

#### WATER AND WASTEWATER

A Water Treatment Plant and a Wastewater Treatment Plant were constructed as part of the Stage 1 approvals. A Site Servicing Strategy Update was prepared for the Stage 2 and Stage 3 lands in March of 2016. This report identifies future capacity requirements for these systems and potential related improvements.





### Harmony Land Use Bylaw

Conceptual Scheme Conformance: Section 8.2.2, 8.2.3, and 8.2.4

The full Harmony community will be implemented in stages over a multiple years. The boundaries of these stages have and will continue to be defined by factors including major infrastructure extensions, market conditions, and the addition of key community features. Land use redesignation and subsequent development approvals have and will be for parts of these stages or whole stages.



The Harmony Stage 2 Neighbourhood Plan is a direct outcome of the approved Harmony Conceptual Scheme (Bylaw C-6411-2007) and is intended to be included as an appendix to the Conceptual Scheme as part of a series of implementation plans. The settlement pattern, land uses, and supporting infrastructure contained within the Harmony Stage 2 Neighbourhood Plan conform to the guiding principles and corresponding policies of the Harmony Conceptual Scheme and County Plan as demonstrated throughout this Neighbourhood Plan.

The application for the Harmony Stage 2 Neighbourhood Plan approval is supported by an accompanying land use amendment application. As demonstrated in the Stage 1 Neighbourhood Plan, the land use amendment provides a transition from broader governing policies to site specific regulations within the proposed Harmony Stage 2 Neighbourhood Plan. The Stage 2 lands are contained within the Harmony Land Use DC-129 (Bylaw C-6688-2008) and are designated as "FD- Future Development Cell", which is intended for "lands awaiting development within the Harmony community subject to further land use amendments." Consequently, the Stage 2 lands will be amended from "FD- Future Development Cell" to the following districts:

#### **GO - Golf Facilities and Open Space Cell**

For the extension of the Lake.

#### VC1 - Village Core 1 Cell

For the residential and recreation peninsula development area adjacent the Lake.

#### VR2 - Village Residential Cell

For the implementation of the residential and open space areas in Stage 2.



