



*riverbend  
point*

*riverbendpoint  
area structure plan*

*Regional Municipality of Wood Buffalo  
September 2011*



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## **1 Introduction**

The plan area includes the north plateau of the lands west of the Horse River, and south of the Athabasca River. The plan area is outside, but immediately adjacent to the Fort McMurray Urban Service Area. The plan area is currently isolated from the built-up portion of the Urban Service Area, by the river valleys. The plan area is considered a new development node referred to as 'North of the Horse River' in the 2007 *Fringe Area Development Assessment Urban Service Area* study and is shown as being part of the Urban Expansion Area in the current Land Use Bylaw in Map 6.

Figure 1 shows the plan area in its regional context.

## **2 Background**

The purpose of this Area Structure Plan (ASP) is to provide further direction regarding future development in the area than that provided in the Municipal Development Plan.

An ASP is a long term living document with a time horizon of approximately 20 years. It is anticipated that as variables change this plan will evolve as amendments. The plan may be amended in the future but, the broad intent of the plan should remain consistent.

### **2.1 Vision**

The vision for the area is to be a safe, vibrant, self contained, highly urban community providing open space, retail, office, and school sites, as well as numerous residential dwelling options. Riverbend Point is anchored by its dynamic mixed use core which exhibits a strong sense of place and pedestrian atmosphere.

Riverbend Point is a compact community which efficiently utilizes land and provides the foundation for alternative transportation options. The community is easily walkable because of its modified grid system and pedestrian corridors. The community's recreation and social interaction needs are accommodated through the open space and facilities within the community.

Riverbend Point is an inclusive community that offers a wide diversity of housing options. This allows a broad economic and demographic spectrum to reside in the community. In addition, the housing options allow residents to move up or down within the housing market while remaining within the community.

The community recognizes the importance of sustainability. Riverbend Point strives to incorporate environmentally sensitive elements from the macro community's design through to the development of individual dwelling units.

### **2.2 Objectives**

This plan has the following objectives:

- Provide a plan that creates a walkable community.
- Provide a variety of housing options.
- Provide a context sensitive plan that recognizes a young rapidly growing community.
- Protect those areas that have been identified as environmentally or historically significant.
- Ensure that the development is consistent with statutory plans, regulations, and standards.

- Provide the framework to establish aesthetically appealing streetscapes.
- Provide an efficient use of the land.
- Provide appropriate sites for recreational opportunities.
- Accommodate a variety of transportation modes.
- Establish a distinct sense of community with a significant compact core.
- Provide a safe environment for residents.
- Provide an efficient and economical servicing concept.
- Provide the framework to allow for elements of environmentally sensitive design.
- Provide an efficient community for the provision and delivery of municipal services (i.e. waste and snow removal, emergency services, park maintenance, etc).



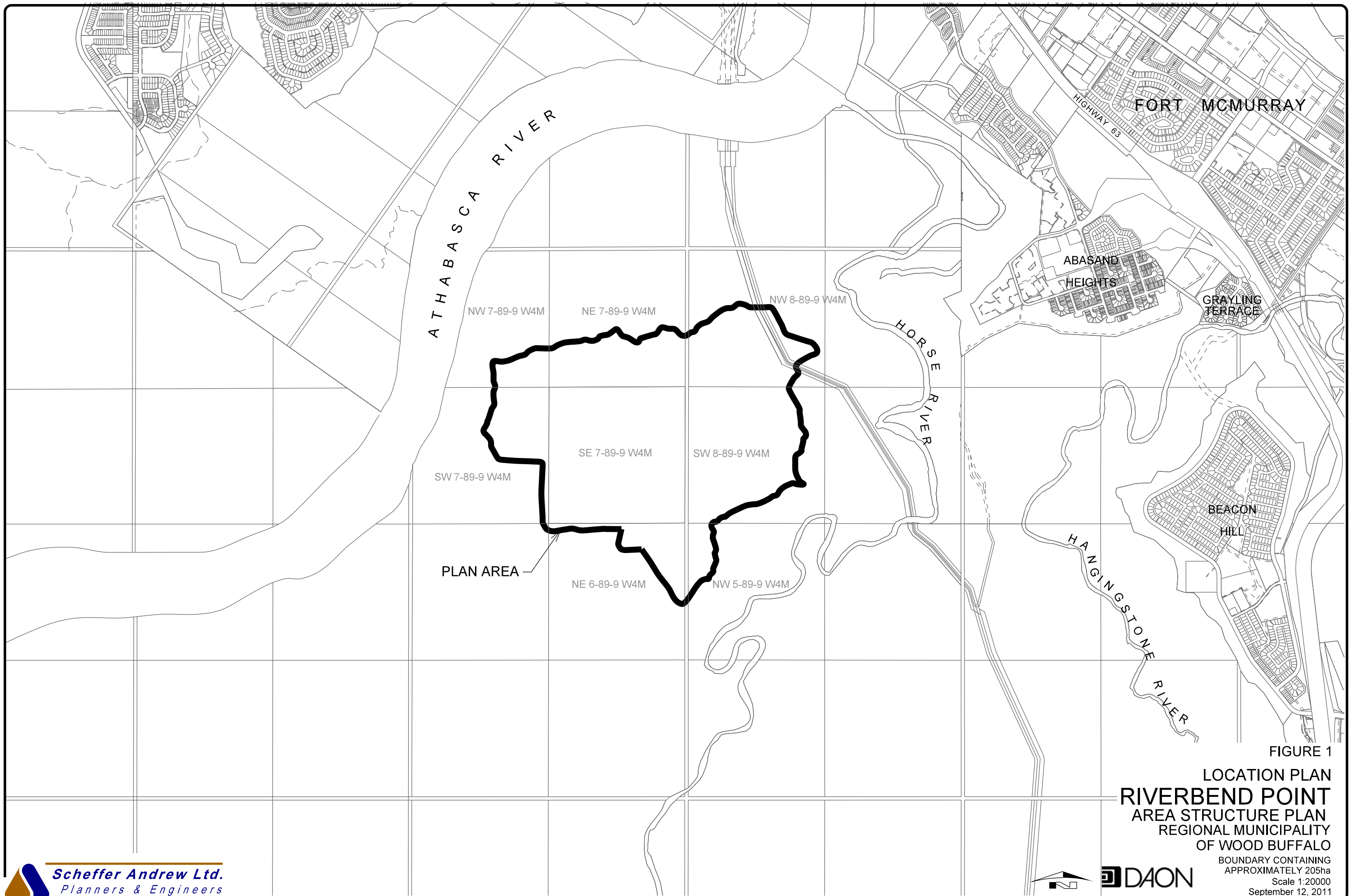


FIGURE 1  
 LOCATION PLAN  
**RIVERBEND POINT**  
 AREA STRUCTURE PLAN  
 REGIONAL MUNICIPALITY  
 OF WOOD BUFFALO

BOUNDARY CONTAINING  
 APPROXIMATELY 205ha  
 Scale 1:20000  
 September 12, 2011



### **3 Policy Context**

#### **3.1 Municipal Government Act**

This ASP meets the requirements set out by the Municipal Government Act. An ASP as defined by the Municipal Government Act Section 633 must address the following:

- The sequence of development for the plan area;
- land uses;
- population density;
- transportation network and location of public utilities;
- establishing guidance for future subdivision and development; and
- other matters established by the municipal Council.

#### **3.2 Municipal Development Plan**

The current Municipal Development Plan (MDP), Bylaw # 00/005, was adopted in 2000. The MDP is currently undergoing a major review. The draft MDP identifies the subject area as 'New Neighbourhood'.

#### **3.3 Land Use Bylaw**

The current Land Use Bylaw, Bylaw # 99/059, was adopted in 1999. Provisions in this ASP will be implemented through the Land Use Bylaw. An amendment to the Land Use Bylaw is required to establish appropriate districts for development.

## **4 Community & Vested Interest Consultation**

The community consultation consisted of three public open houses in the community of Abasand Heights.

The first open house was held on January 28, 2009. This open house was advertised in the local newspaper and flyers were delivered to all households, businesses, and institutions in the Abasand Heights and Grayling Terrace communities by Canada Post. The attendance at the open house was approximately 15 participants, whom generally gave a positive response to the proposed ASP.

The second and third open houses were held on September 6<sup>th</sup>, 2011 and September 7<sup>th</sup>, 2011. These open houses were advertised in the local newspaper and heavily on local radio and social media sites as a result of a media release. The attendance over the two open houses was strong with approximately 55 participants attending. The public response to the ASP and Abasand Drive corridor improvements was overwhelmingly positive. Additionally, after the second and third open houses an information package was delivered by Canada Post to all households, businesses, and institutions in the Abasand Heights and Grayling Terrace communities. The information package highlighted the material presented at the September 2011 open houses and provided contact information for residents to seek clarification or provide comments if they desired.

In addition to community consultation, it has been determined that Notification and possibly consultation with five Aboriginal Groups and one Métis Federation would be beneficial. These groups were informed by email with follow-up by registered mail in May 2008. No input was received in regards to the ASP and the formal notification and consultation process is considered complete.

## 5 Influencing Factors

### 5.1 Plan Boundary

The plan area is bordered by:

- The Horse River valley on the east and south;
- the Athabasca River valley on the north and part of the west; and
- the remaining plateau on the southwest.

The Plan area  
encompasses 205 ha.

### 5.2 Access

Currently there is no access to the plan area. The primary initial access will be via an extension of Abasand Drive. Additional access from Highway 63 via the plateau known as 'between the Hangingstone and Horse Rivers' is required before the development of Phases Two and Three.

### 5.3 Ownership

The majority of the plan area is owned by the Province. The land which is not owned by the Province is the SE ¼ Section 7-89-9-4, which is owned by a private corporation. The land owners are listed in Table 1 and shown in Figure 2.

**Table 1 Major Land Owners**

|                           | Area<br>(ha) | %           |
|---------------------------|--------------|-------------|
| Queen Province            | 75.7         | 37%         |
| Daon Property Corporation | 65.0         | 32%         |
| Crown Land (non-titled)   | 64.0         | 31%         |
| <b>Total</b>              | <b>204.7</b> | <b>100%</b> |

### 5.4 Environmental Constraints

The environmental constraints are displayed in Figure 3.

#### 5.4.1 Topography

The plan encompasses a large bench area that is formed by the river valleys of the Athabasca and the Horse Rivers. The land on top of this plateau is generally flat with relief of approximately 10 m between the highest and lowest points. The highest point at 365 m is on the west side of the plan area and the lowest area of 355 m is in the east. This relatively flat terrain is in contrast to the steep river valley escarpments adjacent to the plan area making it ideally suited for residential development.

#### 5.4.2 Biophysical

An Environmental Impact Assessment (EIA) was completed in 2007 by *Pioneer Land and Environmental Services*. During the wildlife survey no sign of Federal, or Provincially designated special status species were discovered. Additionally, the EIA assessment noted that no rare or threatened plant species were found.

The bulk of the plan area is comprised of patches of grassland and mixed-wood boreal forest. One major stand of trees is near the centre of the plan area in the NE ¼ Section 6-89-9-4 and the other major stand of trees is located in the north eastern part of the plan area on SW ¼ Section 8-89-9-4. The tree cover is made up of white spruce, alder, birch and aspen poplar species. There are two areas which were comprised of muskeg.

No substantial surface water exists within the plan area.

The EIA concluded that development of the plateau, within the plan area, will have a minimal impact to the overall biophysical realm.

#### 5.5 Geology

The Clearwater Formation is the dominant formation under the SE ¼ Section 7-89-9-4. This formation is characterized by dark grey silty shale, fine-grained cherty sandstone and laminated siltstone. This formation can also include glauconitic sandstone.

Soil on this parcel of land is from the Dover and Kenzie soil groups. The Dover soil group is classified as an Orthic Grey Luvisol and the Kenzie soil group is classified as a Terric Mesisol which exists in the low, poorly drained lands.

This information on geology is only relevant to the SE ¼ Section 7-89-9-4 and the road alignment. For the whole plan area it is likely that the same soils and formations would be found. When development occurs outside of the SE 1/4 Section 7-89-9-4 further investigation will be required.

##### 5.5.1 Geotechnical

A geotechnical investigation was completed in 2007 by *Terracon Geotechnique Ltd*. The investigation was completed for the SE ¼ Section 7-89-9-4 and the proposed route of the road connecting Riverbend Point to Abasand Drive. Additional geotechnical studies for the access routes were carried out by Thurber Engineering Ltd in 2009 and 2010. Further geotechnical investigations will be required at the outline plan stage for those areas not included in this initial investigation.

The investigation determined that muskeg is present in the southwest portion of the plan area. It has been determined that the muskeg lands, which are 2.5 m in depth can be converted to accommodate residential development.

The plan area contains the breaks of the Athabasca and Horse Rivers at its edges. As these are steep and abrupt, development that occurs near these breaks will require attention and management. Geotechnical investigations will be conducted at the outline plan stage to determine a safe geotechnical setback boundary from the adjacent river valley slopes.

### 5.5.2 Phase 1 Environmental Site Assessment

In April of 2006 a Phase 1 Environmental Site Assessment (ESA) was completed for SE ¼ Section 7-89-9-4. The ESA was prepared by Precedent Environmental Management Incorporated.

*There is no contamination concerns associated with Plan area.*

The assessment found no contamination, and there is no record of any kind of storage tanks on the property and or any foreign materials.

These findings apply only to the parcel of land mentioned above and not the entire plan area. While it would be expected that similar findings would appear in the rest of the plan area, any further development (other than on SE ¼ Sec. 7-89-9-4) in the plan area would be subject to a Phase 1 ESA as well.

### 5.5.3 History/Archaeology

A substantial portion of the plan area will require a historical resources impact assessment (HRIA). In letters dated May 18, 2007 and May 25, 2007 Alberta Culture and Community Spirit stated that an HRIA is required for the entire plan area with the exception of the SE ¼ Sec. 7-89-9-W4, which is the first phase of development.

An HRIA was completed by The Archaeology Group in 2010. The HRIA included the entire plan area and the stage 1 access route through the Horse River valley. The HRIA did not find any historical resources sites within the plan area, but five sites were recorded in the vicinity of the stage 1 access road. The stage 1 access road has been placed to avoid the disturbance of the historical resources sites identified in the HRIA.

### 5.5.4 Wildfire Setbacks

Development that is adjacent to wooded areas has a higher risk of being destroyed in the event of a wildfire.

In order to limit the risk of wildfire destroying structures and compromising safety the Regional Municipality of Wood Buffalo (RMWB) has regulations that specify the required setbacks for subdivisions from adjacent woodlands. These setbacks as well as other measures to prevent fire in the woodland/urban interface are recommended in the RMWB *FireSmart: Protecting Your Community from Wildfire* manual. These recommendations will be implemented at the Outline Plan stage.

*Historically the area around Fort McMurray has had a significant number of wildfires.*

## **5.6 Man Made Constraints**

The man-made constraints are displayed in Figure 3.

### **5.6.1 Land Use**

Currently the land in the plan area has no man-made uses associated with it, other than in the far northeast corner, where there is a pipeline corridor. The pipeline corridor right-of-way is 55.5 m.

### **5.6.2 Resource Extraction**

In the past there were a large number of wells drilled near the plan area, specifically in SW ¼ Section 8-89-9-4. However, these wells have long been abandoned and pose a minor constraint to development. The Energy Resources Conservation Board (ERCB) has recommended setbacks from abandoned wells.

While at one time there were a number of wells drilled in Section 8 adjacent to the plan area, only one is actually in the plan area and it has been abandoned. There are no active resource extraction wells in the plan area.

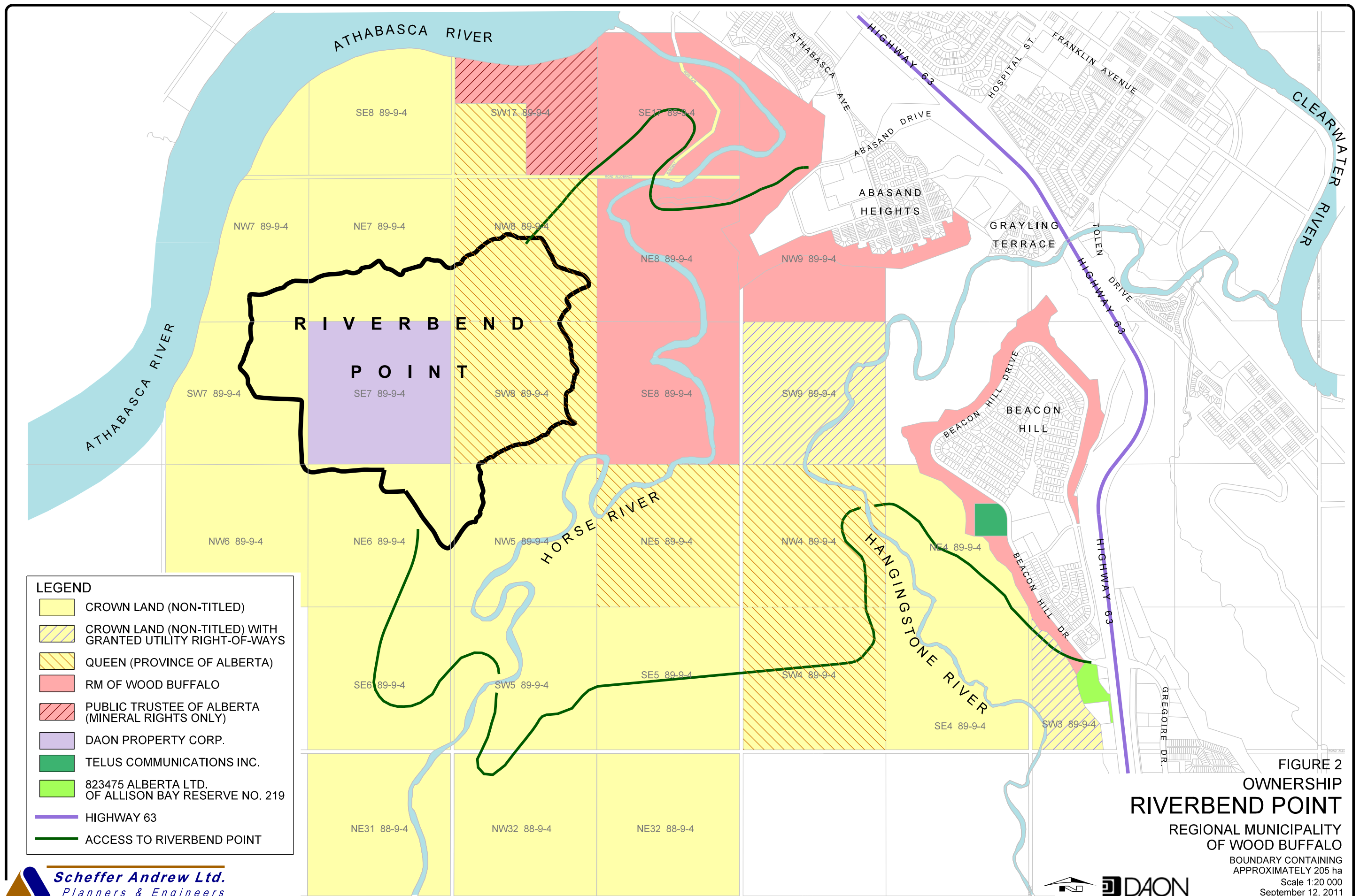
The northeast pipeline corridor currently contains the following:

- 10" sweet natural gas Suncor pipeline.
- 16" crude oil Suncor pipeline.
- 30" crude oil Enbridge pipeline.
- 30" crude oil Enbridge pipeline (planned).

No sour gas is transported via the subject pipelines.

The recommended ERCB setbacks from these wells and pipelines have been incorporated into this ASP.









## **6 Community Character**

This plan aims to create a community that is unique and distinguishable from other neighbourhoods. It will contribute to a high quality of life for the residents by providing a living space that has an attractive streetscape, and that establishes a sense of community, which contributes to a high quality of life. The endeavour is to present landscapes that encourage, rather than discourage, social and community interaction.

Due to the location of the plan area, the intent is to create a highly urban community that provides for the immediate needs of the residents. This will include a village centre which will function and resemble an urban core with commercial uses, mixed use (residential and commercial), medium density residential, and a strong pedestrian component. This village core will establish a central node that will provide the foundation for a strong community identity.

## 7 Urban Ecology

### 7.1 Environmentally Sensitive Building

Building using green design, materials, and methods reduces the energy required to construct and operate a home. Building an energy efficient home is in the long term best interest of the home owners and the community, in terms of financial costs and overall resource management.

The standard in which this plan utilizes as a guideline is the Leadership in Energy and Environmental Design (LEED) as established by the Canada Green Building Council.

Objectives:

- Increase the awareness and importance of sustainable building practices.

The following policies apply to public and private buildings:

*7.1.1 Builders will be strongly encouraged to build to a LEED certified standard.*

### 7.2 Environmentally Sensitive Design

The design of the community provides the working component of the community fabric, which can establish a sustainable framework. Designing a sustainable community can be accomplished with the design of the overarching systems, but also through small site specific design elements, which together can reduce the impact of urban development.

*Stormwater infiltration sites and reducing light pollution are examples of environmentally sensitive design.*

Objectives:

- Provide the underlying foundation of the community to reduce impact on the natural environment through design.

The following policies apply to the detailed design of the community:

*7.2.1 Where possible the detailed design for the subsequent subdivisions will implement elements of green design.*

*7.2.2 The offsite servicing infrastructure required will be designed and constructed to mitigate negative environmental consequences of urban development.*

### **7.3 Environmentally Sensitive Landscaping**

Xeriscaping is the practice of utilising sustainable landscaping which can thrive in local conditions with little maintenance. Sustainable landscaping will reduce the financial and resource costs associated with unsuitable landscaping. In addition, sustainable landscaping focuses on naturally occurring vegetation, thus recognising the local place.

Objectives:

- Encourage the practice of sustainable landscaping.

The following policies apply to landscaping of public and private open space:

*7.3.1 Landscape designs for the public parks and open space will explore opportunities to provide a sustainable landscaped environment.*

## 8 Affordable Housing

Affordable housing is a broad issue that requires the participation of all levels of government. By establishing smart growth policies and plans for new communities the Regional Municipality of Wood Buffalo can support affordable housing. Addressing affordable housing in greenfield development is important as long-term planning policies set the local direction of development for 20 years. How a community is designed can have a tremendous impact on addressing the cost of housing, and the quality of life for the future residents.

This plan primarily addresses the provision of affordable housing by establishing a compact community. A compact community is one that provides an increased number of dwelling units within a designated area. Compact development creates an advantage with respect to affordable housing as purchasers enjoy the reduction of a portion the land cost associated with home ownership. Additionally, compact communities are more sustainable because the infrastructure and service provision is less costly to maintain. This translates into a lower tax responsibility per household to maintain the community infrastructure, which contributes to providing affordable housing.

Affordable housing will be provided in a manner that is consistent with the standards and architecture of the community. The design and exterior quality of the affordable housing developments should reflect the character of the community while attaining affordability as defined by the Canadian Mortgage and Housing Corporation. Furthermore, to create a diverse and inclusive community the affordable housing developments should be dispersed throughout the community.

The strategy for providing affordable housing may include government grants, partnerships with agencies and developers (e.g. Wood Buffalo Housing Corporation), and other opportunities. The mechanism for the provision of affordable housing will be addressed in the Outline Plan.

Objectives:

- Provide opportunities for affordable housing.
- Ensure affordable housing developments are integrated into the community.

The following policies apply to the residential areas within the plan:

- 8.1.1 *Riverbend Point shall be a compact community, which allows for the provision of affordable housing through a reduction in servicing per unit costs.*
- 8.1.2 *The building design of the affordable housing dwellings shall be consistent in terms of architecture, scale, and massing with the adjacent residential dwellings.*
- 8.1.3 *Riverbend Point is intended to be an inclusive community, and thus the affordable housing sites and dwellings should be dispersed rather than concentrated.*



## 9 Development Concept

The 2007 *Fringe Area Development Assessment Urban Service Area* study identified high density scenarios for the future growth and expansion of the Urban Service Area. This is an important consideration because it reduces servicing costs and creates a more sustainable approach to development. This plan recognises the trend and importance of sustainability and as such provides a compact community.

Riverbend Point will be an inclusive community by offering a range of housing options. Dwellings ranging from single detached to small apartment units will accommodate the various economic and demographic realities. Additionally, the diversity of housing available will allow residents to 'age in place' affording them the opportunity to remain within the community as their needs change.

The boundaries of the land use designations shown in Figure 4 are conceptual and subject to refinement at the outline plan stage.

### 9.1 Natural Area

As noted previously there are no environmentally significant areas within the plan boundary. The natural area noted in this plan incorporate areas established as a setback from the top of bank, abandoned wells, and fire break areas.

The fire break areas will initially be cleared of the vegetation considered fuel for wild fires in accordance with the RM of Wood Buffalo FireSmart Guidelines. Once the initial 'clearing' has been completed these areas will be left as natural undeveloped spaces comprised primarily of grasses in the first 10 m of separation space and well spaced pruned trees in the next 20 m of the separation space. Further separation space will be provided by incorporating top of bank walkways or single loaded roadways between the FireSmart areas and the housing.

Objectives:

- Ensure slope stability and integrity.
- Incorporate the potential for passive recreational opportunities in natural areas.
- Ensure muskeg recovery is completed according to established standards.
- Minimize the development impact on wildlife.
- Minimize the threat of wildfires encroaching into the community.

The following policies apply within the Natural Area designation:

*9.1.1 In accordance with the provisions of the Municipal Government Act, upon subdivision the Regional Municipality of Wood Buffalo will require the dedication of environmental reserve within the Natural Area.*

- 9.1.2 *Low impact passive recreational opportunities (i.e. trails) can be located within natural areas.*
- 9.1.3 *Lands that are converted to developable land from muskeg will be recovered in accordance with Alberta Environment standards.*
- 9.1.4 *The filling or draining of surface water bodies is subject to review and approval under the Water Act and Public Lands Act.*
- 9.1.5 *Environmentally sensitive construction practices should be employed to minimize the impact on the biophysical realm.*
- 9.1.6 *Safe development setbacks from slopes shall follow the provisions of the Land Use Bylaw or be in accordance with geotechnical investigations to the satisfaction of the Regional Municipality of Wood Buffalo. Safe development setbacks from slopes shall be established at the Outline Plan stage.*

## 9.2 Open Space

The parks and open space network is shown in Figure 5.

### 9.2.1 Schools

The Fort McMurray Public School District and the Fort McMurray Catholic Schools District have requested land to construct future schools. It is anticipated that the Public School District will require a K-8 school with an approximate capacity of 400 students. The Catholic School District is anticipated to develop a K-6 school with an approximate capacity of 400-500 students. The school requirements will be accommodated via a joint use site. The joint use site is located adjacent to a collector roadway to provide efficient access.

### 9.2.2 Parks and Open Space

The central square is the community focal point. This identifiable central square will help to establish community identity, provide a landmark, and create a sense of place. The square will accommodate primarily passive recreation. It will feature amenities and provide social and community interaction space. The square should cater to pedestrians and include street furniture, pedestrian lighting, benches, amenities, bike racks, kiosks, and trash receptacles. The Village Core uses should be integrated with the central square to create a seamless active node. The square is linked to the community via trails and on-street pedestrian corridors.

The neighbourhood park provides additional open space to accommodate active recreation. The neighbourhood park is larger than the tot lots and it is anticipated that it will provide a secondary focal point within the community and more substantial recreational opportunities than the smaller tot lots. The park could accommodate play fields (ball diamond, soccer pitch, basketball



courts, tennis courts), playgrounds, or splash park, or large manicured open space for informal recreation activities.

The tot lots will primarily be on the periphery of the community. These parks are intended to provide recreational opportunities within walking distance of residents. They will accommodate active and informal recreation. Typical amenities would include manicured landscaping and playgrounds or small play fields.

The trail corridors around the perimeter of the community are linked to pedestrian connections, parks/open space, and they provide extensive passive recreation opportunities.

Objectives:

- Provide an adequate joint use site for Public and Catholic schools.
- Provide active and passive recreation opportunities.
- Provide recreational opportunities within walking distance of residents.

The following policies apply within the Open Space designation:

- 9.2.1 *In accordance with the Municipal Government Act, 10% of the gross developable area will be dedicated as municipal reserve.*
- 9.2.2 *School sites will be dedicated as municipal school reserve at the time of subdivision.*
- 9.2.3 *The joint use schools site will be located on a large contiguous site adjacent to a collector roadway. The joint use site is intended to be in the order of 8 ha.*
- 9.2.4 *The central square shall be adjacent to the Village Core, and have good road access. The square shall be designed to accommodate community interaction and be a focal point within the community.*
- 9.2.5 *The neighbourhood park shall be in the order of 2 ha. The park shall be surrounded by public roads on at least 2 sides.*
- 9.2.6 *Tot lots shall be in the order of 1 ha and will be dispersed throughout the community to accommodate local recreational needs. The neighbourhood parks will have adequate visibility from adjacent public roads.*

### **9.3 Village Core**

The Village Core is the central node of the community. The intent is to create an urban environment that anchors and provides the character for the community. Essential to creating a vibrant and active core is the mixture and intensity of the uses. The Village Core will have the highest residential density of the plan area, and will be a retail and office node. It is anticipated that medium rise structures (4 to 6 stories) will dominate the core. It is expected that the

vehicular and pedestrian traffic will be at the highest in this node, which in turn will create an active and vibrant area.

The Village Core will resemble a main street streetscape with retail and office uses dominating the street level and residential units occupying the upper floors. Within the core an important consideration will be to retain a pedestrian scale while attaining the high density uses.

The design of the pedestrian streetscape should include wide sidewalks, street furniture, and street trees. The buildings should be at or near the front property line to frame the street and provide an active retail/office edge. Additionally, the appearance of the buildings should be broken up to provide relief and interest. Parking lots should be screened from the public realm to ensure a pedestrian orientated environment. The above elements will establish the Village Core as a unique focal point for the community with a strong sense of place.

To ensure the viability of the Village Core, and to address the market, development may accommodate both mixed uses and medium density residential. This flexibility will allow the market to dictate the extent of mixed use within the Village Core.

The plan area is isolated from the built-out portions of the Urban Service Area, and therefore the Village Core will serve as the node and retail/office centre for the plan area. It is anticipated that the Village Core could accommodate approximately 16,800 m<sup>2</sup> (180,000 square feet) of retail and office space. The anticipated uses include professional offices, retail (specialty or chain stores), drug store, specialty food store, barber shop, beauty salon, laundromat, dry cleaning, restaurant, coffee shop or café, travel agency, community police office, medical clinic, etc.

Objectives:

- Create a vibrant and active core area.
- Establish the area as the central focus and landmark of the community, highly identifiable throughout the Urban Service Area.
- Creating the conditions to establish a pedestrian orientated environment.
- Provide the required retail and office uses to service the community.

The following policies apply within the Village Core Commercial designation:

*9.3.1 The most intense development within the plan area will be located within the Village Core. All buildings in the core should be 4 to 6 stories in height.*

*9.3.2 Horizontally and vertically mixed uses are permissible within the core. Mixed use is the preferred development type.*

*9.3.3 Retail and office uses should be emphasised on the street level.*

- 9.3.4 *Retail uses should be clustered to achieve the synergies of retail traffic. Retail uses should be located on both sides of the street, forming a retail corridor.*
- 9.3.5 *Residential dwellings are essential and are encouraged above the street level retail/office uses.*
- 9.3.6 *Medium density uses without a retail and/or office component are permissible.*
- 9.3.7 *Building doors, windows, balconies should address the street establishing a pedestrian scale.*
- 9.3.8 *Buildings should be located at the front property line to frame the street and cater to the pedestrian.*
- 9.3.9 *Parking lots within the Village Core should be screened from the street or placed underground, emphasising the pedestrian priority.*
- 9.3.10 *On-street parking within the Village Core is encouraged.*
- 9.3.11 *In all design aspects the Village Core should cater to the pedestrian by providing wide sidewalks, street trees, street furniture, pedestrian lighting, and other elements which enhance the pedestrian environment of the core.*

#### **9.4 Medium Density Residential**

The plan includes 8 ha of medium density residential, which primarily is located around the Village Core. The medium density residential is clustered to ensure that the residents will support the Village Core and add to the vibrancy and activity of the core. Also, centralising the medium density residential places a substantial number of residents closer to the larger capacity roads and potential transit stops.

*Medium density residential includes townhouse/row housing, and low rise apartments.*

##### **Objectives:**

- Ensure that the buildings enhance the community atmosphere.
- Ensure that the project sites interface appropriately with public spaces.
- Ensure that the medium density supports the Village Core.

The following policies apply within the Medium Density Residential designation:

- 9.4.1 *The medium density residential will be clustered around the Village Core.*
- 9.4.2 *Townhouse, row housing, and low rise apartments are permissible.*
- 9.4.3 *All buildings should be between 2 to 4 stories in height.*

- 9.4.4 *Street oriented buildings are encouraged, with the placement of doors, windows, and balconies addressing the street, and with vehicular access in the rear.*
- 9.4.5 *Buildings should be located at or near the front property line to frame the street and cater to the pedestrian.*
- 9.4.6 *Comprehensive residential project sites should not be fenced off from public streets, and dwelling units should address public streets wherever possible.*
- 9.4.7 *The parking lots should be screened from public spaces or placed underground.*
- 9.4.8 *Apartment sites should be integrated visually with community. The ground level should be oriented to the street to give the appearance of row housing.*
- 9.4.9 *The road network within the medium density residential shall provide multiple navigation routes to accommodate pedestrian and vehicular accessibility.*

## 9.5 Low Density Residential

The plan includes a substantial area that is dedicated to low density residential. The low density residential is generally located on the periphery of the community.

*Low density residential includes single detached and semi-detached units.*

Objectives:

- Provide a variety of lot sizes.
- Increase community identity by clustering uses with a similar intensity of development.

The following policies apply within the Low Density Residential designation:

- 9.5.1 *The low density residential designation includes single detached and semi-detached dwelling units.*
- 9.5.2 *Semi-detached units should be clustered to reduce negative impacts, address market preferences, and improve the streetscape.*
- 9.5.3 *Rear lanes serving individual dwelling units are permissible.*
- 9.5.4 *Lots abutting pedestrian corridor streets require rear lanes and shallow front yards to ensure the integrity of the pedestrian streetscape.*
- 9.5.5 *Local roads should be aligned to allow for dwellings to benefit from solar orientation.*

## **9.6 Multi Use Municipal Site**

A multi use municipal site is located at the southern edge of the plan area adjacent to Abasand Drive. The site is ideally situated to serve Riverbend Point and the anticipated future communities located on the Hangingstone Plateau.

The 2.0 ha site may accommodate emergency services (i.e. fire hall), municipal facilities, a snow dump, and municipal maintenance facilities.

## **9.7 Utility Infrastructure**

There is a 0.5 ha site that is designated to accommodate utility infrastructure in the northeast portion of the plan area. This area is required to accommodate a potable water reservoir, and the existing resource extraction pipelines.

All of the areas identified as utility infrastructure, including the stormwater management facilities, will be dedicated as public utility lots at the time of subdivision.

The servicing of Riverbend Point is discussed in detail in Section 10.

## **9.8 Pedestrian Corridors**

The pedestrian corridors are shown in Figure 6.

An important part of this plan is the creation of pedestrian corridors. These corridors are located in strategic areas which will link landmarks, parks, gateways, and the Village Core. These corridors will provide a safe route for residents to access destinations within the community. Directing pedestrian traffic to street corridors will create the potential for vibrant areas while providing opportunities for social interaction, and will enhance security with many 'eyes on the street'.

This plan includes school sites, and thus a concerted effort was made to address pedestrian safety (especially school aged children) as they move through the community to the joint use site.

The major corridors connect the Village Core to the gateways located on the edges of the community, and serve the mixed use core. The minor corridors generally connect the parks and surrounding residential to the Village Core. The pedestrian corridors will receive special street treatment (i.e. separate sidewalks with street trees in the boulevards) to enhance the pedestrian attractiveness and safety.

Together these corridors and the trails, which are discussed further in Section 9, provide a comprehensive pedestrian network.

Objectives:

- Ensure pedestrian safety.
- Provide appealing streetscape.
- Create efficient pedestrian routes.
- Link landmarks and nodes.
- Provide a walkable community.

The following policies apply to the Pedestrian Corridors:

- 9.8.1 *The pedestrian corridors shall link the landmarks, parks, and gateways.*
- 9.8.2 *The pedestrian corridors will include sidewalks separated from the street by a boulevard featuring street trees.*
- 9.8.3 *The pedestrian corridors are permissible on arterial, collector, and local roadways.*
- 9.8.4 *No front garage or driveways are allowed along a pedestrian corridor. This will eliminate vehicular traffic crossing the pedestrian corridor and provide an appealing streetscape.*
- 9.8.5 *Shallow front setbacks shall be incorporated to create a streetscape that is based on a pedestrian scale. This will further orientate the street to the pedestrian, and provide additional length behind the dwelling units to accommodate rear garages and driveways.*
- 9.8.6 *Intersections within the pedestrian corridor will receive traffic calming measures. Potential strategies include bump-outs and roundabouts to improve pedestrian safety while crossing public roads.*

## 9.9 Land Use Distribution

The land use statistics are displayed in Table 2, and the unit and population estimates are displayed in Table 3. The plan area is divided into several different land uses. Residential is the most extensive use, comprising 104 ha.

*Residential composes  
56% of the Plan area.*

When all identified residential lands are fully developed, it is estimated that there will be 3,500 residential dwelling units with a population of 10,500.

*Projected net density is  
32 units/ha.*

The projected net people per ha (ppha) is 95. The density target within the *Fringe Area Assessment* for new developments is 95 ppha. Riverbend Point is estimated to achieve the desired goal, and thus this plan is consistent with the *Fringe Area Assessment* in terms of density and sustainable development.

**Table 2 Land Use Statistics**

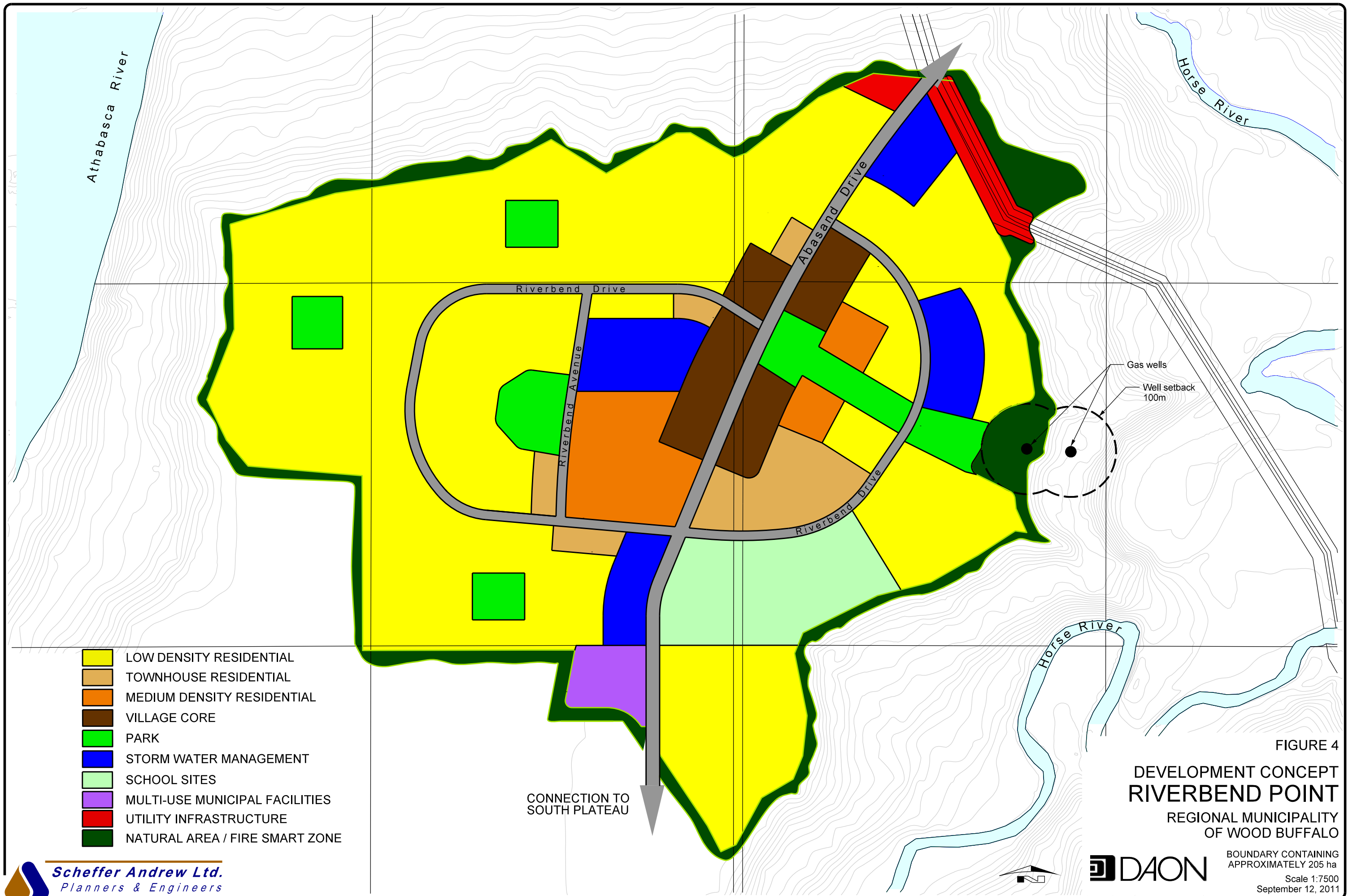
|                               | Area<br>(ha) | % GDA       |
|-------------------------------|--------------|-------------|
| Gross Developable Area        | 204.7        | 100%        |
| <i>Natural Area</i>           | 18.6         |             |
| Net Developable Area          | 186.1        |             |
| Reserve Credit                |              |             |
| <i>Schools</i>                | 9.6          | 5%          |
| <i>Dispersed Parks</i>        | 9.0          | 5%          |
| Total                         | 18.6         | 10%         |
| Public Dedication             |              |             |
| <i>SWM Facility</i>           | 10.0         | 5%          |
| <i>Circulation</i>            | 42.0         | 23%         |
| <i>Utility Infrastructure</i> | 3.1          | 2%          |
| Total                         | 55.1         | 30%         |
| Village Core                  | 6.7          | 4%          |
| Multi Use Municipal Site      | 2.0          | 1%          |
| Residential                   |              |             |
| <i>Low Density</i>            | 88.6         | 48%         |
| <i>Townhouse/Row Housing</i>  | 7.1          | 4%          |
| <i>Medium Density</i>         | 8.0          | 4%          |
| Total                         | 103.7        | 56%         |
| <b>Total Developable Area</b> | <b>186.1</b> | <b>100%</b> |

**Table 3 Unit & Population Projections**

|                       | Area (ha)    | Units/ha | # of Units   | Pop/ha | Projected Population |
|-----------------------|--------------|----------|--------------|--------|----------------------|
| Low Density           | 88.6         | 20       | 1,772        | 3.50   | 6,202                |
| Townhouse/Row Housing | 7.1          | 45       | 320          | 2.50   | 799                  |
| Medium Density        | 8.0          | 100      | 800          | 2.50   | 2,000                |
| Village Core          | 6.7          | 90       | 603          | 2.50   | 1,508                |
| <b>Total</b>          | <b>110.4</b> |          | <b>3,495</b> |        | <b>10,508</b>        |

Units/ha (excluding parks, roads, PUL) 31.7  
People/ha (excluding parks, roads, PUL) 95.2







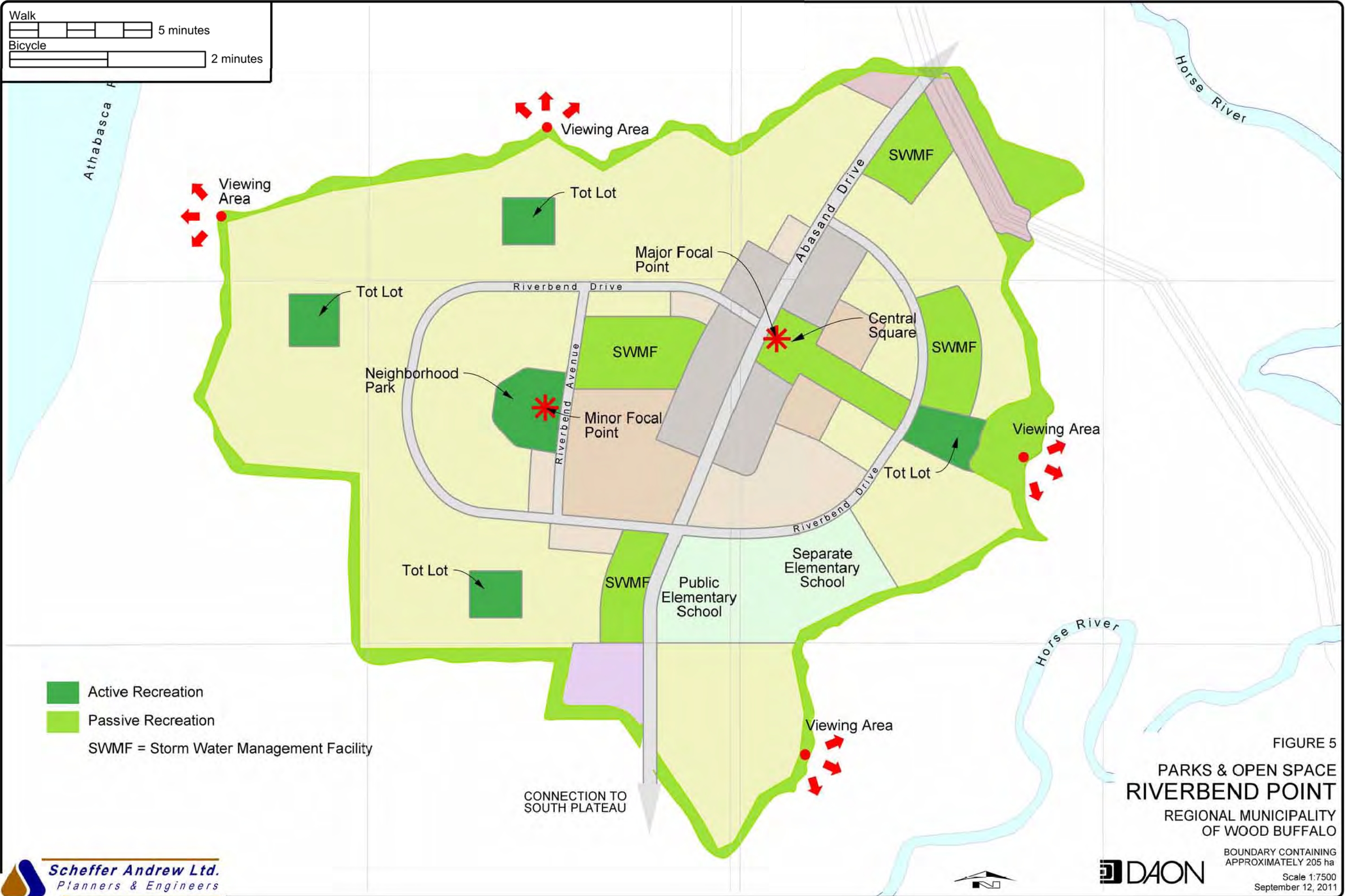
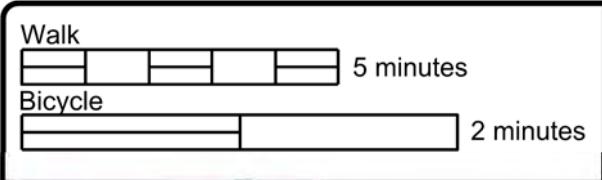


FIGURE 5  
 PARKS & OPEN SPACE  
 RIVERBEND POINT  
 REGIONAL MUNICIPALITY  
 OF WOOD BUFFALO

BOUNDARY CONTAINING  
 APPROXIMATELY 205 ha  
 Scale 1:7500  
 September 12, 2011

## **10 Transportation Network**

The transportation network and the links that Riverbend Point provides are a substantial benefit to the larger community. Once fully developed the Riverbend Point transportation network will provide a secondary link between downtown and the airport which could be utilized during emergency situations and congestion on Highway 63 as the highway climbs out of the valley in the vicinity of Beacon Hill.

The schematic roadway network is shown on Figure 7.

### **10.1 Access**

#### **10.1.1 Phase One Access**

Access to the first phase will be accommodated by the extension of Abasand Drive through the Horse River Valley to the plan area. Abasand Drive from Hwy 63 to the plan area will be upgraded and developed as a four lane roadway. Figure 8 displays the anticipated cross sections for the Phase 1 access.

A Traffic Impact Assessment completed in 2011 shows that the Abasand Drive corridor can readily accommodate the first phase of development if several community sensitive upgrades to the roadway are completed. The most significant upgrades include:

- widening Abasand Drive to a four lane divided arterial;
- adding turning bays at the intersections;
- the signalization of Abasand Drive and Athabasca Avenue intersection;
- reconfiguring the Ecole Boreal School access to improve safety for school users and emergency services by adding a student drop off lane for vehicles and a school bus loading lane; and
- reconfiguring the southwest portion of the Hwy 63 interchange and adding ramps.

All of the corridor improvements will be designed to enhance the Abasand Heights and Grayling Terrace communities by providing:

- efficient traffic flows consistent with RMWB standards;
- increased pedestrian and vehicular safety;
- an enhanced streetscape with street trees and landscaped medians and boulevards; and
- improved pedestrian connectivity and circulation with new trails and wider sidewalks.

The extension of Abasand Drive through the Horse River Valley will include four lanes, a centre median, safety pullout areas, and a maximum road grade of 6%. Design parameters and

grading requirements presently indicate that the approximate alignment provides for the best combination of capital cost, design functionality, operation and maintenance, while minimizing environmental impact. Further detailed analysis will be undertaken at later stages of design to establish the alignment more accurately.

A multi-use trail will link and provide a safe and attractive pedestrian and bike route between the Abasand Heights/Grayling Terrace and Riverbend Point communities.

Additionally, the Phase One access road through the valley provides the opportunity for safe vehicular access to potential future recreational/historical site developments in the valley.

#### **10.1.2 Phase Two and Three Access**

To accommodate the remaining development phases a second access is required at the time the second phase of development is initiated. The second access will exit the south end of Riverbend Point and proceed to cross the Horse and Hangingstone River valleys and connect to Highway 63 in the vicinity of Beacon Hill Drive. If in the future a bypass road is constructed west of the Fort McMurray Urban Service Area then the second access route could be linked into the west bypass as well.

Further detailed analysis of the second access route will occur prior to the development of Phases Two and Three.

### **10.2 Internal Roadway Network**

The transportation network within the plan area includes three collector roadways which will efficiently accommodate the expected vehicular traffic. A series of local roads will route traffic to the collectors and arterials. Pedestrian and bicycle needs will be accommodated primarily via the pedestrian pathways along roadways, and on separate trails. The trails shown are primarily routed to provide passive recreation opportunities at the boundary of the natural and built environments. All roadways and trails will conform to the current design standards of the RMWB.

The density of the Village Core will allow for the provision of an effective transit system in Riverbend Point. Transit stops and/or stations within the core will be near many residents.

Objectives:

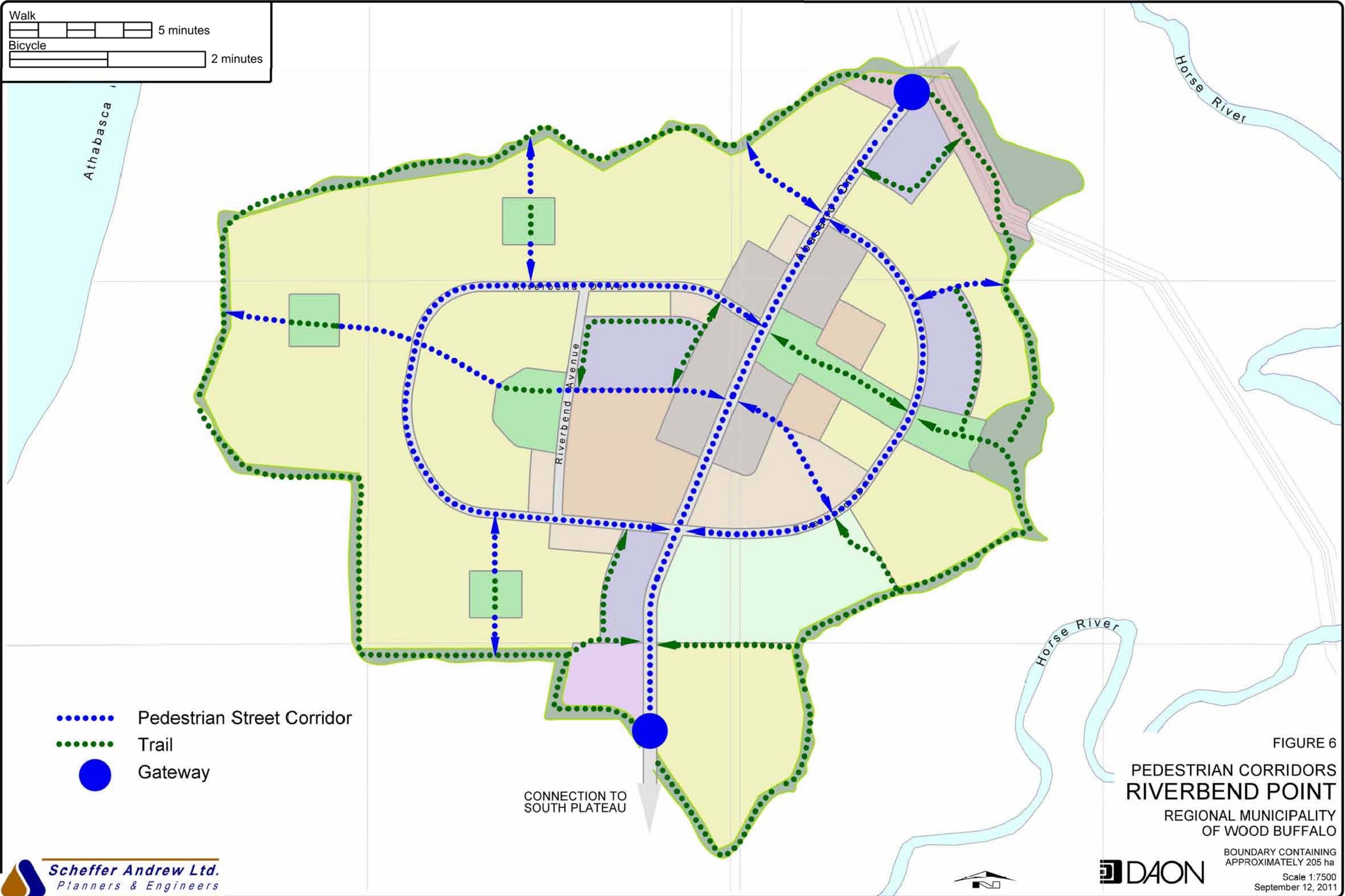
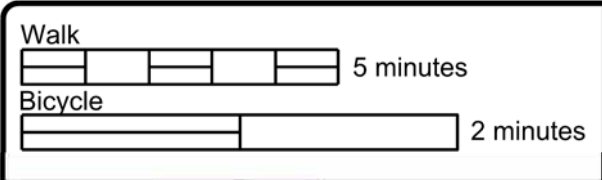
- Ensure that the community is well connected to existing and future developments within the Fort McMurray Urban Service Area.
- Ensure that collector roadways bear the majority of the vehicular traffic.
- Provide local roads to serve individual lots.
- Ensure the community has access to a variety of transportation modes.



- Ensure that the plan area can be efficiently serviced by public transit.

The following policies apply to the Transportation Network in the plan area:

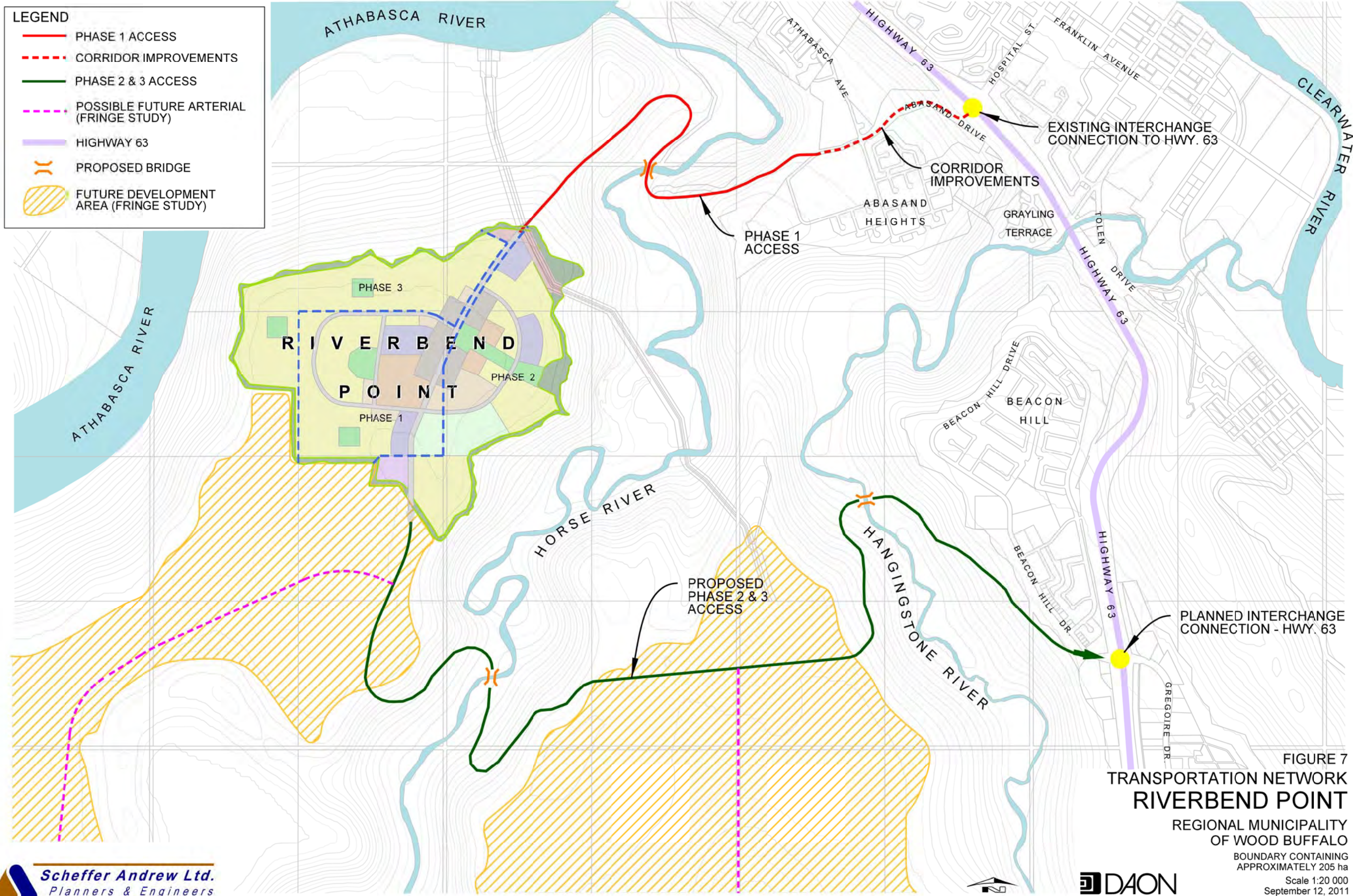
- 10.2.1 The Phase One access to the existing built-up area in the vicinity of Abasand Heights shall be provided to ensure proper initial access to the plan area.*
- 10.2.2 The community sensitive road upgrades to the existing Abasand Drive corridor shall be completed in conjunction with the development of Phase One.*
- 10.2.3 A second access shall be constructed prior to the development of Phases Two and Three.*
- 10.2.4 Local roads shall be developed to accommodate the primary lot access.*
- 10.2.5 Lots fronting onto pedestrian corridors will require lanes to accommodate rear vehicular access rather than front driveways or garages.*
- 10.2.6 The local road system should allow for a number of vehicular and pedestrian route alternatives linking community destinations.*
- 10.2.7 Transit stops shall be placed in accordance with the standards of the RMWB so that transit adequately serves residents and provides a convenient alternative to vehicular use.*





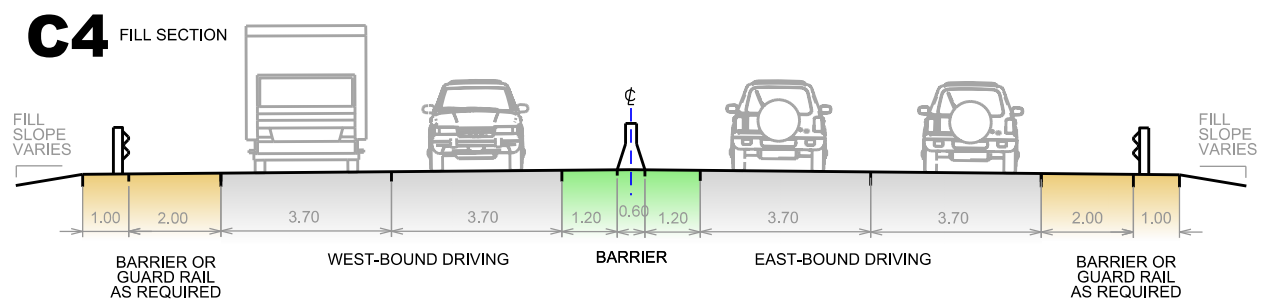
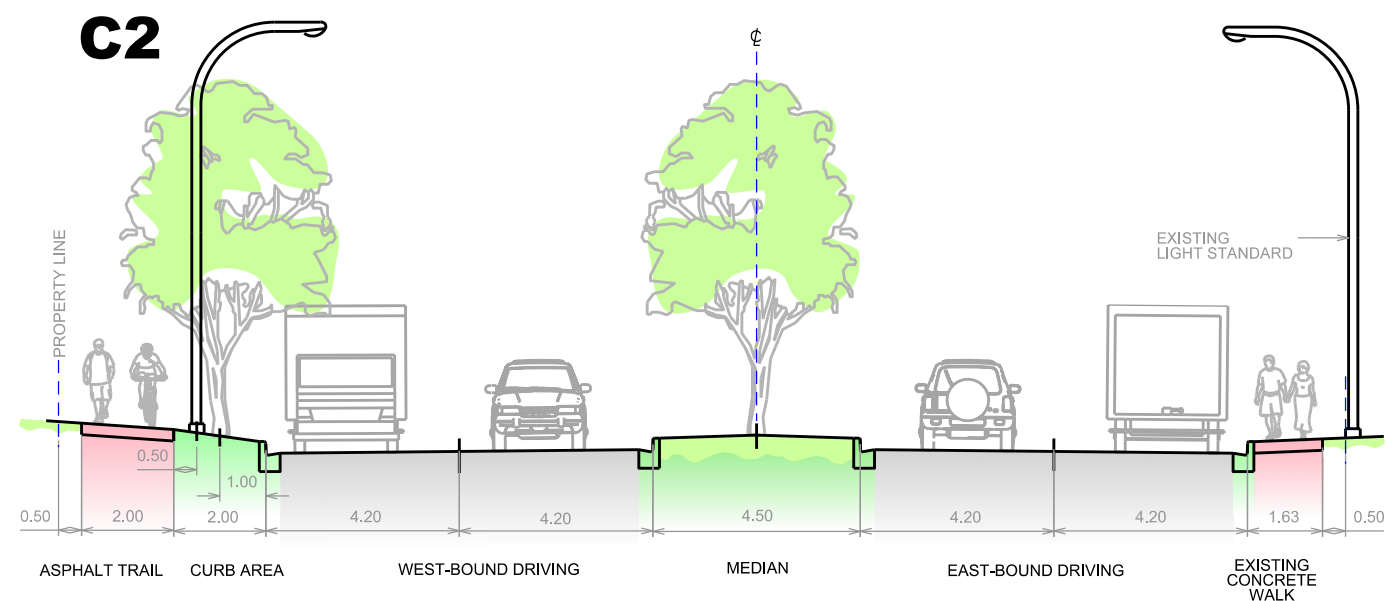
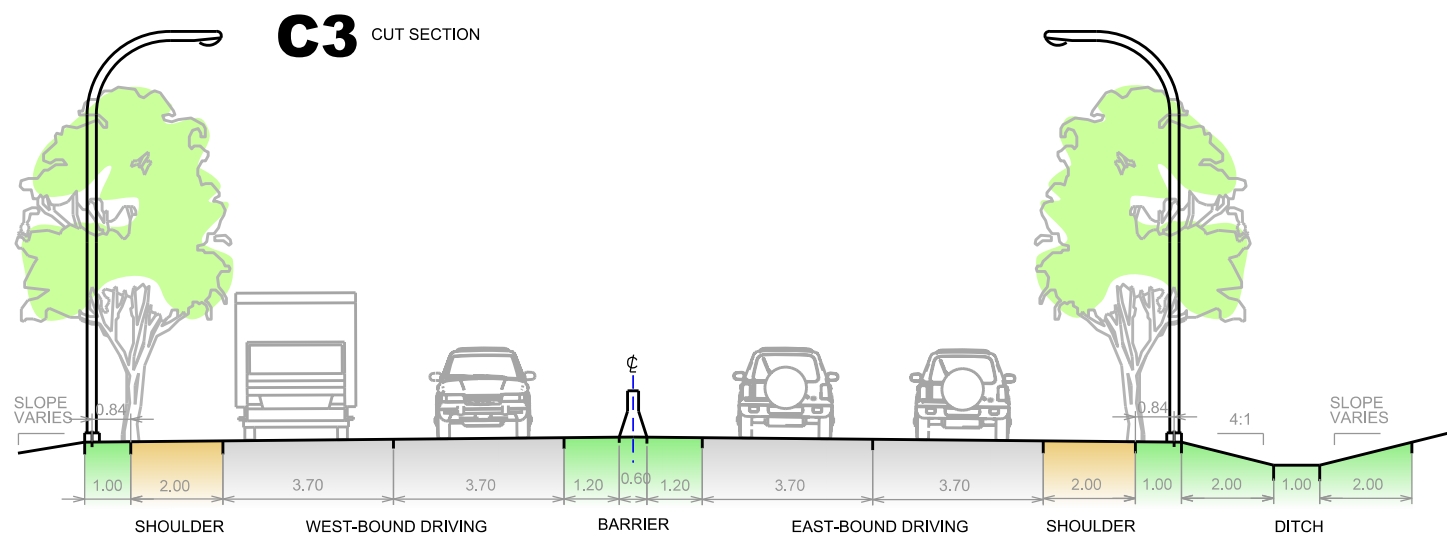
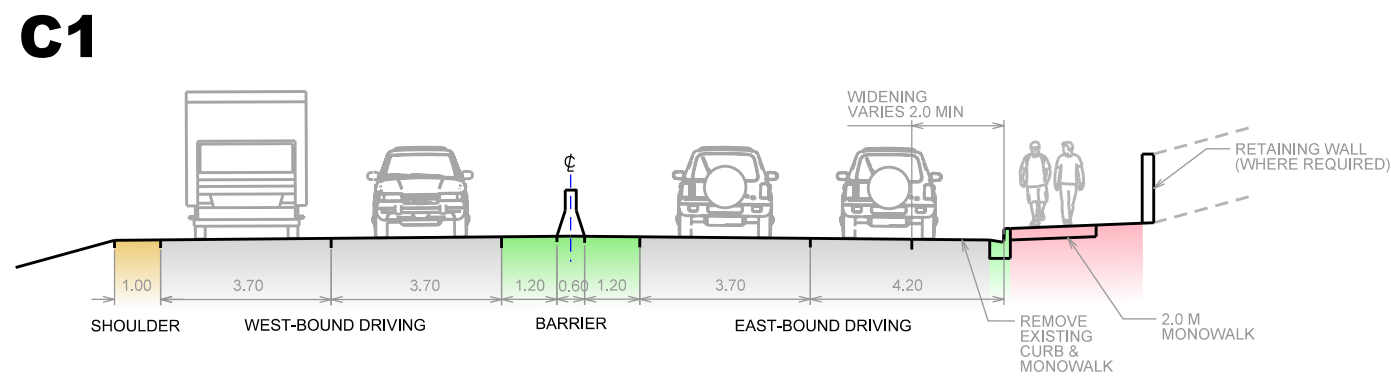
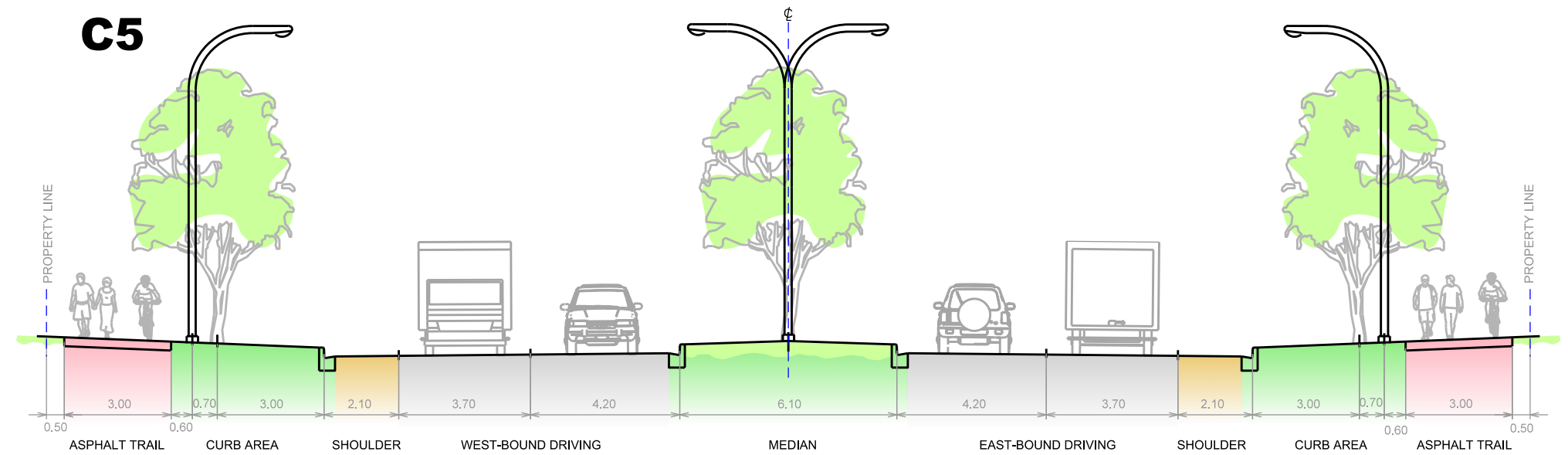
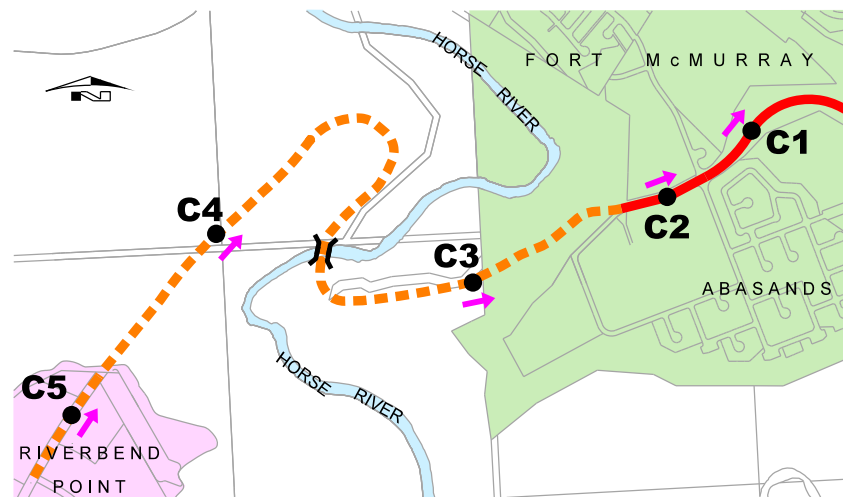
**LEGEND**

- PHASE 1 ACCESS
- CORRIDOR IMPROVEMENTS
- PHASE 2 & 3 ACCESS
- POSSIBLE FUTURE ARTERIAL (FRINGE STUDY)
- HIGHWAY 63
- PROPOSED BRIDGE
- FUTURE DEVELOPMENT AREA (FRINGE STUDY)



**FIGURE 7**  
**TRANSPORTATION NETWORK**  
**RIVERBEND POINT**  
 REGIONAL MUNICIPALITY  
 OF WOOD BUFFALO  
 BOUNDARY CONTAINING  
 APPROXIMATELY 205 ha  
 Scale 1:20 000  
 September 12, 2011





**FIGURE 8**  
**ABASAND DRIVE CONCEPTUAL CROSS SECTIONS**  
**RIVERBEND POINT**  
**AREA STRUCTURE PLAN**  
**REGIONAL MUNICIPALITY OF WOOD BUFFALO**

## 11 Servicing

Riverbend Point is a new growth area, and thus this greenfield development will require the extension and construction of major utilities and facilities to service future development. All servicing will conform to the current design standards of the RMWB.

The servicing concept is displayed in Figure 9.

### 11.1 Water

Consistent with the preliminary plans shown in the *Fringe Area Development Assessment*, a new water trunk will be extended from the treatment plant north of the Athabasca River to serve the plan area. Booster pumps will likely be required south of the Athabasca River to pump the water to a new water reservoir on the plateau in the plan area. From the water reservoir, water main trunks will be constructed to serve the plan area. These trunks will be oversized to serve the proposed development area to the south. A 300 mm watermain loop will likely be sufficient to serve the entire area, but this will be confirmed by a detailed water network analysis as further engineering work proceeds.

### 11.2 Sanitary

The conceptual sanitary sewer system conforms to the preliminary plans shown in the *Fringe Area Development Assessment* completed by the RMWB in March of 2007.

The sanitary sewage will flow by gravity to a lift station located on the north side of the Athabasca River. From the lift station, the sanitary sewage will be pumped through a forcemain to the RMWB's treatment facility.

The trunk main system will be oversized to provide service to the proposed development to the south. Sizing of the gravity mains, lift station, and forcemain will be determined through more detailed analysis as design progresses on the project.

### 11.3 Storm

The storm system also requires a substantial offsite component. Within the plan boundary the storm flows will be directed to four stormwater management facilities (SWMF). The four facilities will discharge storm flows via an outfall trunk to a new stormwater outfall at the Horse River. The SWMF will be designed to reduce nutrient loading and to reduce flows to predevelopment conditions.

Internal to the development area, the underground storm system will be designed to accommodate the 1:5 year storm event. Major flows in excess of the 1:5 year event will be carried overland by surface routing on the roadway system or public utility lots, with trapped lows no deeper than 300 mm. Overland flows can be accommodated with minimal re-grading within the plan area.

## 11.4 Shallow Utilities

Shallow utilities will be provided by private companies. Telephone, cable, electricity, and gas providers have all indicated that they would provide the necessary infrastructure to service the plan area.

## 11.5 Objectives and Policies

### Objectives

- Ensure the community has adequate and reliable servicing infrastructure.
- Ensure that the servicing systems meet the standards of the Regional Municipality of Wood Buffalo and Alberta Environment.
- Provide the servicing infrastructure in an economically efficient manner.

The following policies apply to the Servicing concept in the plan area:

*11.5.1 All developments shall construct the servicing infrastructure to the standards of the*

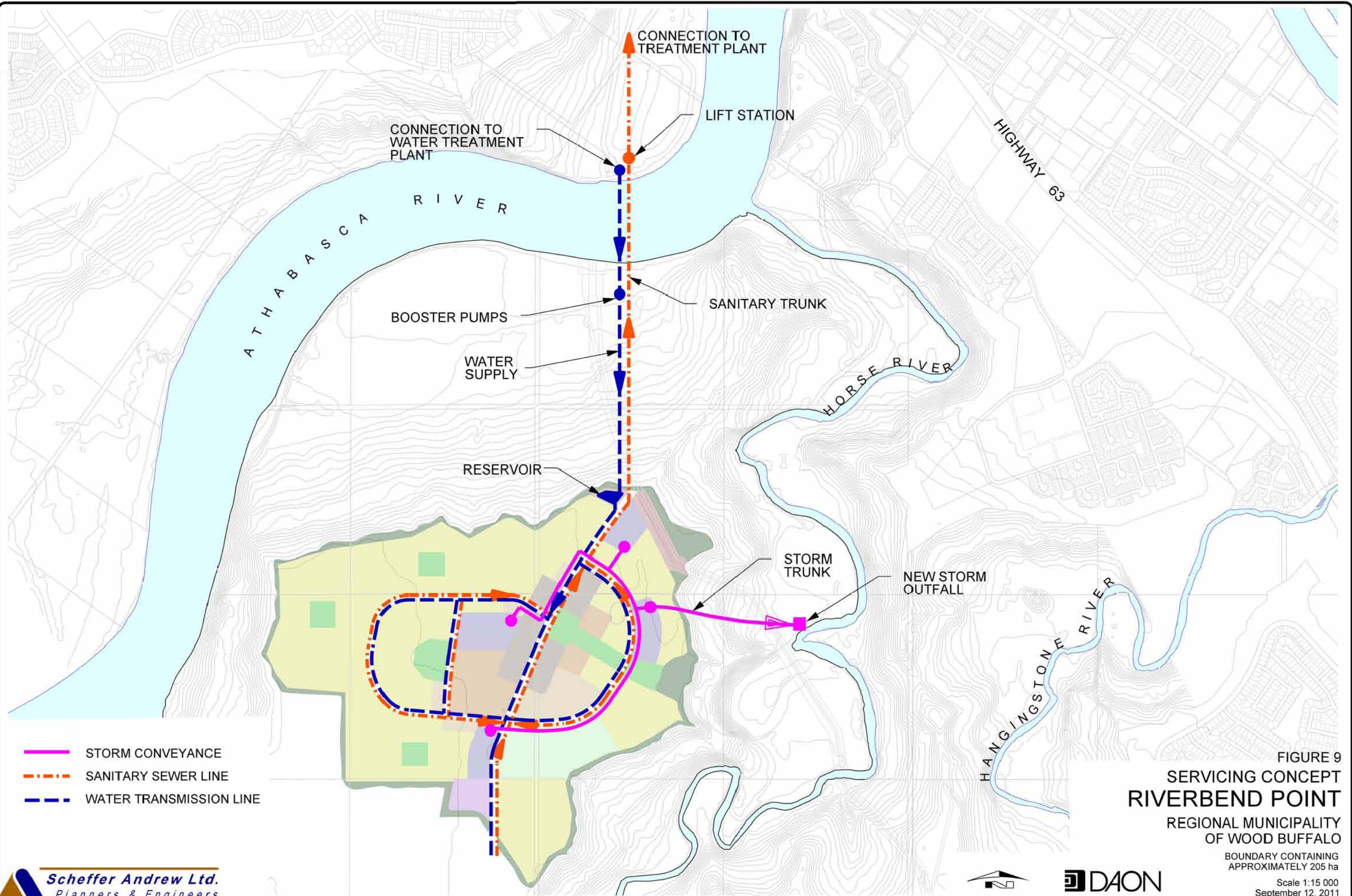
*11.5.2 Regional Municipality of Wood Buffalo and Alberta Environment.*

*11.5.3 The developers are encouraged to explore the most cost efficient servicing options available, taking into account the long term maintenance cost to the municipality, when evaluating servicing options.*

*11.5.4 The detailed design should explore design elements which are likely to reduce the environmental impact of the urban development.*

*11.5.5 Where possible, servicing facilities should accommodate passive recreation opportunities (i.e. stormwater management facilities).*







## 12 Protective & Emergency Services

The local police service has indicated that emergency response time would not be an issue for Riverbend Point as it is relatively close to existing facilities.

Emergency services (Fire and EMS) have indicated that the response rate for the first phase of development is likely within a 10 minute response time, and thus it is anticipated that Phase 1 can be adequately served from existing facilities. As Riverbend Point develops Phases 2 and 3 are anticipated to be beyond the 10 minute response time, and therefore additional fire protection elements to buildings will be required consistent with the Alberta's Building and Fire Codes. In the future a fire hall may be constructed at the multi use municipal site to service Phases 2 and 3 of Riverbend Point and the anticipated development on the Hangingstone Plateau.

An important component of protective and emergency services is prevention. Wildfire in the region is a serious concern and therefore this plan implements the recognised fire setbacks as a preventative measure. Designs for appropriate spatial separation from the community and undeveloped forest lands will be consistent with the *Fire Smart Manual*. The majority of the lands adjacent to steep slopes should include a public road at the top of bank. This will provide spatial separation and will allow emergency services the ability to access the area in emergencies.

Objective:

- Ensure a high level of protective and emergency services for the plan area.
- Ensure adequate preventative measures addressing the threat of wildfire.

Protective services shall be provided in accordance with the following policies:

*12.1.1 All buildings outside of a 10 minute fire response time shall mitigate the additional response time by following the Alberta Fire and Building Codes requirements for high intensity residential fire.*

*12.1.2 Setbacks from the adjacent woodlands will be required in accordance with the Fire Smart Manual.*

*12.1.3 A public road at the top of bank, in areas with steep slopes, should be provided to allow for spatial separation and access for emergency services.*

## 13 Resource Extraction

There are active and abandoned gas wells and pipelines adjacent to the plan area. The active resource extraction facilities need to be protected to ensure they remain viable and efficient.

Objective:

- Minimize conflict between urban development and resource extraction infrastructure while ensuring the continued viability of resource extraction.

Resource extraction shall be provided in accordance with the following policies:

- 13.1.1 In accordance with the Alberta Subdivision and Development Regulation development shall respect the setbacks from resource extraction infrastructure (i.e. well heads)*
- 13.1.2 Development shall conform to the Energy Resources and Conservation Board recommendations for setbacks from abandoned wells.*
- 13.1.3 Pipelines and rights-of-way servicing resource extraction activities should be located so they do not unnecessarily constrain urban development.*

## 14 Phase 1 Development

As previously mentioned only a portion of Riverbend Point (Phase 1) can be developed before a second access is required. As a result this ASP considers the implications and plans for the first phase to stand alone and function until the balance of the community is developed.

Phase 1 of Riverbend Point is entirely under private ownership with the exception of the lands required to accommodate the offsite infrastructure.

It is anticipated that the first phase will contain approximately 4,300 residents. Table 4 below highlights the expected units and population for the first phase.

**Table 4 Phase 1 Unit & Population Projections**

|   | Area (ha)   | Units/ha | # of Units   | Pop./Unit | Projected Population |
|---|-------------|----------|--------------|-----------|----------------------|
| Single and Semi Detached                | 27.5        | 20       | 550          | 3.50      | 1,925                |
| Townhouse                               | 1.7         | 45       | 77           | 2.50      | 191                  |
| Apartment                               | 6.2         | 100      | 620          | 2.50      | 1,550                |
| Village Core (mixed use)                | 2.7         | 90       | 243          | 2.50      | 608                  |
| <b>Total</b>                            | <b>38.1</b> |          | <b>1,490</b> |           | <b>4,274</b>         |
| Units/ha (excluding parks, roads, PUL)  |             | 39       |              |           |                      |
| People/ha (excluding parks, roads, PUL) |             | 112      |              |           |                      |

### 14.1 Schools and Open Space

It is expected that Phase 1 will generate approximately 600 K-8 and 500 9-12 school children. Both school boards have indicated that students generated from Phase 1 will likely be bussed to existing schools, which currently have capacity. There is a 3.3 ha site, within Phase 1, that could be developed as a school if required.

Phase 1 will dedicate 10% of the gross developable area as municipal reserve, which will ensure that residents will have sufficient parks and open space to serve their recreation needs.

### 14.2 Transportation

Abasand Drive will be extended to provide access to Phase 1. Collectors and local roads within Phase 1 will be constructed to provide access to the dwelling units.

The alignment of the access road (Abasand Drive) is located on RMWB and Provincial lands. Agreements will be required to ensure the right-of-way for the road is established.



### **14.3 Emergency Services**

All emergency services will service Phase 1 from existing facilities.

### **14.4 Commercial**

There are 3.5 ha of mixed use commercial lands within Phase 1. This is expected to yield approximately 6,800 m<sup>2</sup> (70,000 sqft) of retail and office space, which will accommodate the commercial needs of Phase 1 residents.

### **14.5 Servicing**

Infrastructure for Phase 1 will be oversized to service the entire community as required.

Similar to the access road the offsite infrastructure needs to be placed on RMWB and Provincial lands. Thus, right-of-ways with these land owners will need to be established to construct the infrastructure.

## 15 Implementation Strategy

### 15.1 Implications for Other Municipal Plans and Bylaws

The implementation of this plan will require amendments to the Municipal Development Plan (MDP) and the Land Use Bylaw (LUB). A major MDP review by the RMWB is currently ongoing which when completed will accommodate the development of Riverbend Point. The amendment to the LUB will include changes to the zoning maps, and not the creation of new land use districts. The LUB amendments will occur prior to subdivision.

### 15.2 Outline Plan

This plan addresses future development in general terms. Prior to re-districting and subdivision, it will be necessary for the RMWB to approve more detailed outline plans to ensure that individual developments are properly planned.

#### Objective

- Establish a more detailed plan for a specific development area prior to re-districting and subdivision.

Outline Plans shall be provided in accordance with the following policies:

*15.2.1 Prior to the approval of re-districting or subdivision that would allow development to proceed, detailed outline plans shall be prepared by the applicant and accepted by the RMWB.*

*15.2.2 Each outline plan must include, to the satisfaction of the RMWB, a practical planning area based on natural and/or servicing boundaries and extending, if necessary, beyond the proponent's land ownership.*

*15.2.3 Each outline plan will provide the content and level of detail required by the RMWB.*

### 15.3 Development Sequence

The development sequence is displayed in Figure 10.

One of several constraints to the full development of Riverbend Point is the capacity of the transportation network. As mentioned earlier, the community cannot be fully developed until a second access has been constructed.

## Objective

- Ensure that development occurs in an efficient and economical fashion.
- Ensure that development does not significantly impact the existing transportation network in a negative fashion.

The Development Sequence shall be provided in accordance with the following policies:

*15.3.1 Before phases 2 and 3 are developed, a second access must be constructed.*

*15.3.2 The servicing infrastructure should be constructed in stages recognising that the community will not likely be fully developed in a short time frame, due to transportation network constraints.*

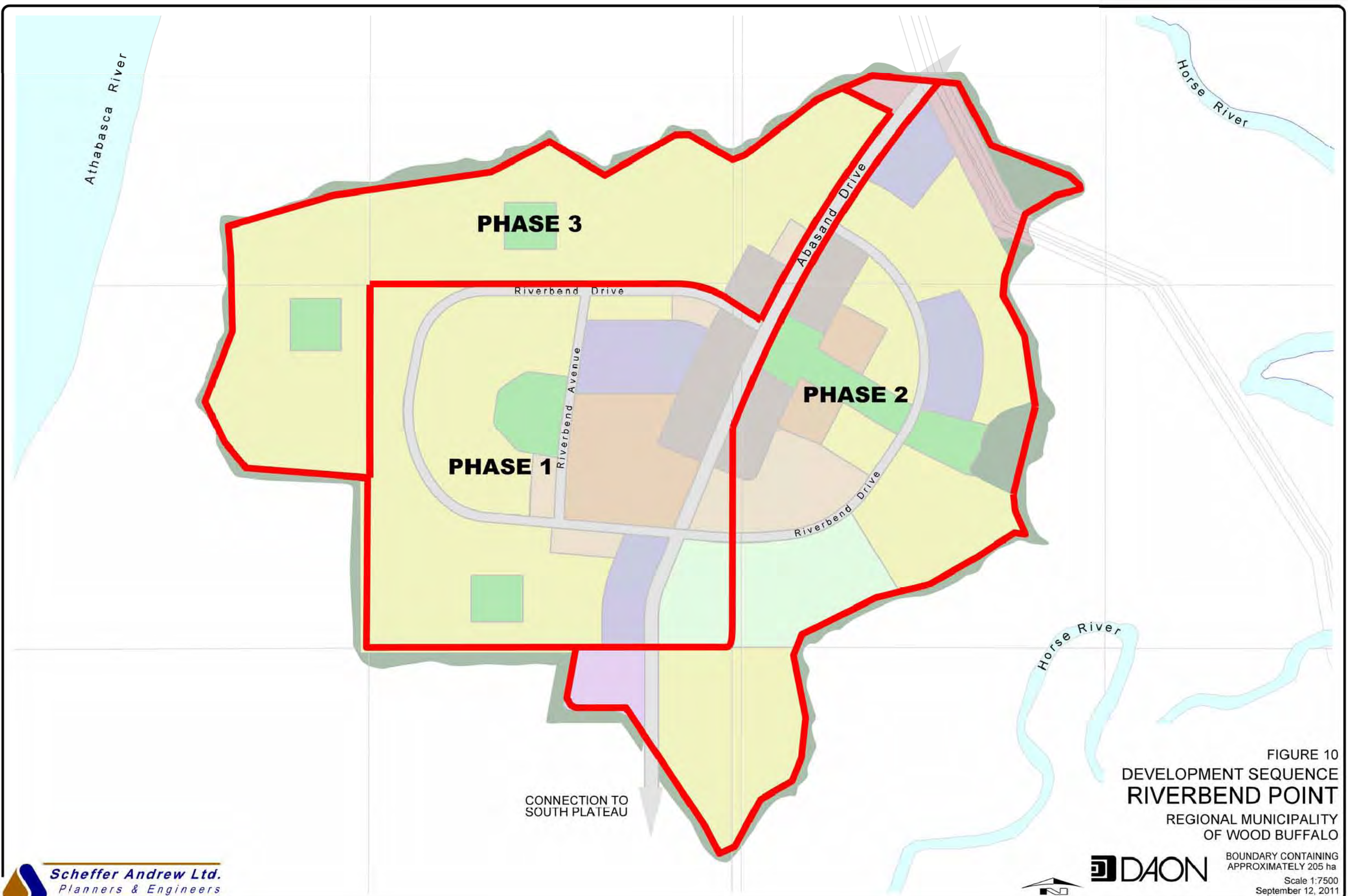


FIGURE 10  
DEVELOPMENT SEQUENCE  
**RIVERBEND POINT**  
REGIONAL MUNICIPALITY  
OF WOOD BUFFALO

BOUNDARY CONTAINING  
APPROXIMATELY 205 ha  
Scale 1:7500  
September 12, 2011

## References

- Alberta Energy and Utilities Board, Land Development Package. 2007.
- Alberta Sustainable Resource Development. FireSmart: Protecting Your Community from Wildfire, July 2003.
- McElhanney, Riverbend Point Traffic Impact Assessment, 2007.
- Pioneer Professional Services Group, Riverbend Point Residential Development Environmental Impact Assessment. 2007.
- Precedent Environmental Management Inc., Phase 1 Environmental Site Assessment for SE7-89-9-W4, April 2006.
- Province of Alberta, Alberta Land Stewardship Act. Current as of October 1, 2009.
- Province of Alberta, Municipal Government Act. Revised Statutes of Alberta 2000. Current as of May 24, 2006.
- Province of Alberta, Municipal Government Act – Subdivision and Development Regulation, Alberta Regulation 43/2002. Current as of 2005.
- Regional Municipality of Wood Buffalo, Commercial and Industrial Land Use Study. January 2010.
- Regional Municipality of Wood Buffalo, Fringe Area Development Assessment Urban Service Area. 2007.
- Regional Municipality of Wood Buffalo, Engineering Servicing Standards and Development Procedures, July 2004.
- Regional Municipality of Wood Buffalo Land Use Bylaw # 99/059, Consolidated October 6 2006.
- Regional Municipality of Wood Buffalo, Municipal Development Plan Bylaw # 00/005, Adopted February 8 2000.
- Scheffer Andrew Ltd., Riverbend Point Area Structure Plan – Traffic Impact Assessment. 2011.
- Terracon Geotechnique Ltd, Riverbend Point Development, 2007.
- The Archaeology Group, Historical Resources Impact Assessment Proposed Riverbend Area Structure Plan, 2010.