

TITLE Riverside Neighbourhood Plan

AUTHOR Planning & Development Services

City of Medicine Hat

STATUS Approved Bylaw 4502

December 17, 2018

ADDITIONAL COPIES City Clerks Office

City of Medicine Hat 580 First Street SE

Medicine Hat, AB T1A 8E6

403.529.8220



contents

				OVERVIEW	<i>I</i>	1
	2	VISION AN	D (OBJECTIVES	5	15
		3	3	LAND USE	i	19
4	OPE	N SPACE / R	ECI	REATIONAL		39
	5	PUBLIC INF	RAS	TRUCTURE	Ē	59
	6	PLAN IMPL	.EN	IENTATION	1	71



overview

aerial photos



FIGURE 1 - 2017 Riverside aerial photo.







1.1 INTRODUCTION

Riverside is one of the oldest and most diverse residential neighbourhoods within the City of Medicine Hat. Situated along the northern bank of the South Saskatchewan River, this primarily residential neighbourhood consists of a diverse blend of single family homes ranging in styles from the early 1900s to more recent contemporary builds and small concentrations of multi-family developments. It also contains numerous local amenities including a popular neighbourhood commercial area, two religious establishments, an outdoor ice rink, parks, natural areas and leisure trails. Since the neighbourhood is located in the historical floodplain below the coulee wall of Crescent Heights, it has a particularly strong connection to the South Saskatchewan River and the Downtown.

At the time of writing, Riverside is facing some significant changes (see *Figure 2*, page 4) that will present residents and City Council with both challenges and opportunities. Some of these changes include:

- A new major sanitary sewer transmission;
- Closure and redevelopment of the Riverside School site;
- Relocation of the outdoor ice rink;
- Closure of the Heald Park outdoor pool;
- Berm completion along the northern bank of the South Saskatchewan River;
- Construction completion of a new fire hall;
- New development in the northwest portion of the Plan area;
- New infill development;
- A neighbourhood-wide servicing infrastructure renewal program.

Plan structure

The Riverside Neighbourhood Plan is divided into six sections:

- Section One provides an overview of the challenges facing the neighbourhood, the planning process and the authority of the Plan;
- Section Two outlines the overarching Plan vision and several broad objectives;
- Section Three summarizes the various land use concepts found throughout the Plan area and outlines the respective policies associated with each district;
- Section Four discusses the park and recreation spaces, opportunities for improvements and outlines policies that would optimize the existing park spaces;
- Section Five provides discussion into the public realm and infrastructure in the neighbourhood; and,
- Section Six provides information regarding Plan implementation.



significant changes

FIGURE 2 - Significant changes in Riverside in 2018.

- 1 New major sanitary sewer transmission line
- (2) Closure and redevelopment of the Riverside School site
- **3** Relocation of the outdoor ice rink
- (4) Closure of the Heald Park outdoor pool
- **5** Berm completion along the northern bank of the South Saskatchewan River
- **6** Construction completion of a new fire hall
- **7** New development in the northwest portion of the Plan area
- **8** New infill development (throughout Plan area)
- **9** A neighbourhood-wide servicing infrastructure renewal program

PURPOSE

The purpose of the Riverside Neighbourhood Plan (the "Plan") is to assist all residents and stakeholders in adapting to the challenges facing the neighbourhood. It will also help to inform the public of potential opportunities in Riverside. The Plan provides a land use framework, several key objectives, illustrated concepts, and policies to guide redevelopment in the Plan area. The intent of the Plan is that it will influence redevelopment decisions with the aim of achieving the vision set out in this Plan.

Authority of the Plan

The Riverside Neighbourhood Plan is an Area Redevelopment Plan (ARP). An ARP is a statutory plan that guides the redevelopment, preservation and rehabilitation of existing

neighbourhoods within a City. The *Municipal Government Act (MGA)* is the legislative framework under which all municipalities in the Province of Alberta must operate. The authority for a municipality and a Council to prepare and adopt an ARP is provided through sections 634 and 635 of the *MGA*. This plan has been prepared in accordance with the requirements of the *MGA*. Although contemplated by section 635, a redevelopment levy is not proposed by this Plan.



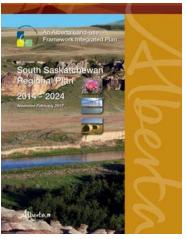
Recreational trail in Riverside.

This plan is to be used by City Council, City Administration, the Municipal Planning Commission, the Subdivision and Development Appeal Board, developers, and residents of the neighbourhood with respect to submission and evaluation of development proposals and public infrastructure projects.

South Saskatchewan Regional Plan

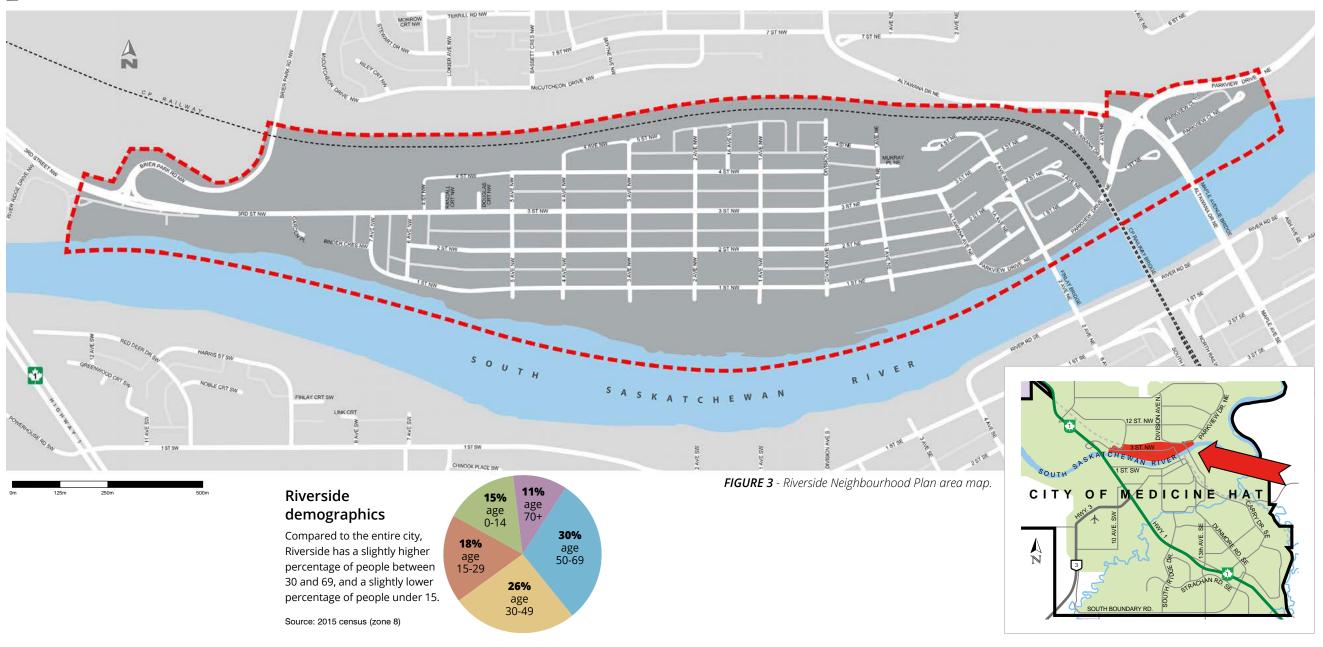
The South Saskatchewan Regional Plan (SSRP) is a statutory document that provides guidance to provincial and local decision-makers regarding land use management for the region. This plan has been prepared in accordance with several of the outcomes and the strategic direction that helped to form the vision of the SSRP. The Plan reinforces the following

outcomes of the SSRP: the efficient use of land; providing recreation and nature-based tourism through the regions unique cultural and natural heritage; and that community development needs are anticipated and accommodated.



South Saskatchewan Regional Plan.

plan area



1.3 PLAN AREA

The Plan area consists of an established residential community of approximately 130 hectares as shown on *Figure 3 – Riverside*Neighbourhood Plan area map ("Plan area"). It can be described as being generally located:

- West of the Medicine Hat Golf and Country Club;
- East of the River Ridge condominium development;
- North of the South Saskatchewan River; and,
- South of the Canadian Pacific Railway line.

Neighbourhood history

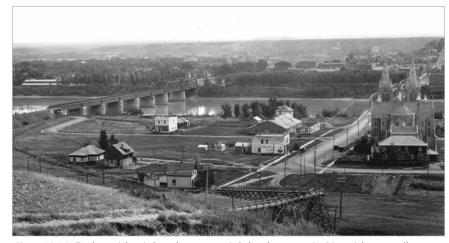
The development of Riverside started out over one hundred years ago as ranchland. Predominantly, the area remained as such until the construction of Finlay Bridge in 1908 which substantially improved the access to the north side of the river. Prior to this, the area to the North of the river was isolated and sparsely populated as the only crossing was a ferry or the Canadian Pacific railway bridge. With this new access, the neighbourhood underwent a construction boom with many new houses being built, as well as St. Patrick's Church (1914), and Riverside School (1917). At the time of writing, approximately 70 homes still remain that were constructed during the early boom days of Riverside.

In 1929 the world economy faltered and the "Great Depression" began, which essentially halted the majority of development in Medicine Hat. Following World War II, the "baby boom" era caused a rapid increase in development in Riverside and across the entire city. Numerous houses were constructed, St. Joseph's Home opened on 3rd Street NE, and

continued page 9



1886 post card showing Canadian Pacific Railway train bridge and grazing land in Riverside. There is some development on the south side of the river (upper part of photo), but Finlay Bridge is not yet constructed. (U of A Libraries).



Circa 1914. Early residential and commercial development in Riverside, as well as beginnings of the urban forest. Finlay Bridge and St. Patrick's Church seen on right. (Esplanade Archives).



GENERATIONS OF HOUSING IN RIVERSIDE

With the first homes being built in the 1800's and development continuing today, Riverside is one of the few districts in Medicine Hat with homes from every stage of the city's existence. As a result, the neighbourhood exhibits a wide range of architectural styles, from neoclassical to mid-century to contemporary.

pre-1920



The construction of Finlay Bridge in 1908 allowed more opportunities for development in Riverside and housing boomed. Many of these homes still exist.

1920's-1930's



Less prosperous times resulted in decreased development and more modest housing throughout the city.

1940's-1950's



The post-WWII "baby boom" created another upturn in housing construction. Hundreds of these houses, mostly bungalows, still exist in Riverside.

1960's-1970's



New residential development continued to push to the western region of Riverside, some infill began to happen, and more apartment buildings were built.

1980's-1990's



Partially due to a trend of homeowners buying mature lots and building larger homes on these sites, almost 100 new residences appeared in Riverside. post-2000



With Riverside remaining an appealing area to home buyers, there continues to be a moderate amount of infill development.

St. Patrick's School (Riverside location) became the second school in Riverside. In addition, four new churches began practicing: Riverside Presbyterian Church, Dutch Reformed Church, Jehovah's Witness Hall, and Riverside Church of God.

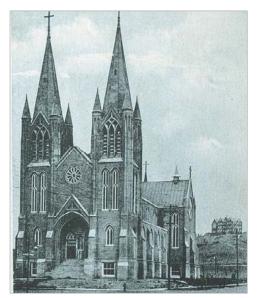
Finlay Bridge remained the primary river crossing point until the 1954 opening of the Trans Canada Bridge, 3 km to the west. In 1960, Heald Park was officially designated as park space and the neighbourhood's outdoor pool opened. Maple Avenue Bridge opened in 1974, creating the city's third vehicle/pedestrian river crossing. Development in Riverside continued to the west until the recession of the early 1980's slowed new growth. In 1986, due to low enrollment, St. Patrick's School was closed and was relocated to a site in then-new South Ridge.

continued page 11



Built c.1906 and demolished c.1956, James Hargrave's house was one of the first homes in Riverside.

(Esplanade Archives)



The current St. Patrick's Church was constructed in 1912-1914. St. Theresa's Academy is seen in background. (U of A Libraries)



Circa 1930's. Early development in Riverside. (Esplanade Archives)



1936. Grades 5 & 6 students and presumably, their teacher, pose outside of Riverside School. (Esplanade Archives)

1984 TRAIN DISASTER

Compiled from articles from Medicine Hat News archive.

At 9:45 a.m. on Saturday, January 7, 1984, a Canadian Pacific Railway eastbound freight train derailed catastrophically as it travelled through Medicine Hat's core. The 73-car train included 10 sulphur tankers and two fertilizer cars.

There were two accidents, which happened almost simultaneously. Picking up speed as it entered the city on an incline, the train missed the sharp bend north of the South Saskatchewan River and 62 of the 73 cars derailed in Riverside. As the mid-section of the train fell over, the three engines and five cars behind them broke loose from the train and careened at a high speed over the railway bridge. This section then collided head-on with an engine and 12 cars waiting in the station yard in the city's downtown, causing a second derailment and spreading debris in the yard.

The most severe derailment occurred in Riverside, just north of the railway bridge entrance, resulting in a scene of 62 rail cars buckled up, overturned and piled on top of each other. Lumber strewn from one of the train's cars damaged the building and vehicles at Parkview Autobody. The derailment also severed a pole carrying high tension electrical power, prompting the city to temporarily cut power in the area.

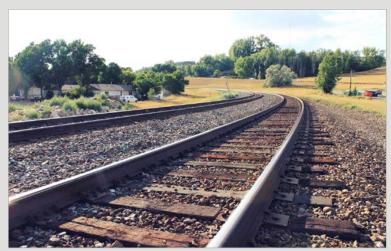
Due to safety concerns from fires and sulphur dioxide fumes, about 250 Riverside residents were quickly evacuated from their homes.

The cause of the disaster was attributed to brake failure on the train due to a crimped air brake hose. Investigation indicated that the engineer, who was the sole casualty, did everything possible to halt the train before the derailment. The body of CP Rail engineer Mike Kulikoski, 55, was not found until Sunday evening under the wreckage on the north side of the bridge.

There were other minor injuries to a handful of CP employees, but no residents were reportedly injured.



Sulphur dioxide gas spews from the site after a train carrying ten sulphur tankers derails in Riverside on January 7, 1984. (Esplanade Archives)



The location of the 1984 accident, showing the sharp turn in the railway line and the nearby residences. (2018)

A trend which gained momentum in the 1990's saw homeowners continuing to purchase older housing on mature lots and redeveloping the properties with larger modern homes. Several apartment buildings were also built during this time period which started to diversify the housing stock of the neighbourhood. This gentrification trend continues, as the neighbourhood is in a highly desirable location across the river from Downtown.

At the time of writing, significant changes have occurred in Riverside that will impact the neighbourhood's future. The installation of the flood mitigation berms between Finlay Bridge and 1st Avenue NE after the significant flood of 2013 has provided some protection from the areas most susceptible to flooding. The closure of both Riverside School and Heald Park pool has removed two neighbourhood assets. The construction of Fire Station #1, north of the South Saskatchewan River, will allow for better fire response to neighbourhoods in the North sector of the city as well as emergency services should the city ever be threatened by flooding again.



Riverside homes affected by flooding of the South Saskatchewan River in 1952. Finlay bridge seen in background. (Esplanade Archives)



1974. Altawana Drive was extended and Maple Avenue Bridge was constructed. (Esplanade Archives)



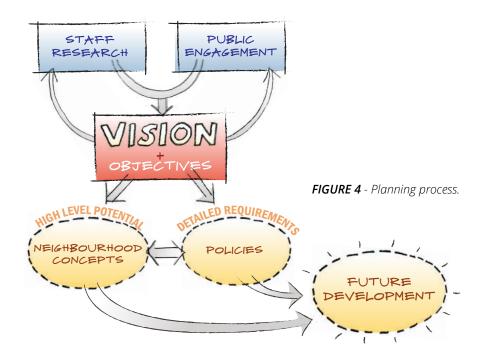
Circa 1950. The post-WWII building boom brought increased development to Riverside. (Esplanade Archives)

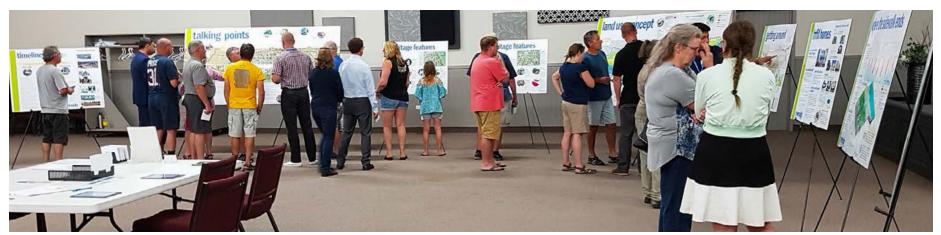


An infill residence in Riverside built in 2008 on a street among homes constructed in the 1960's.

1.4 PLANNING PROCESS

The framework for the Plan consists of an overall vision for Riverside, a series of high level objectives, neighbourhood concepts and policies to guide development. The vision and objectives were developed through a series of public engagement sessions and staff research. The concepts included in this plan were created to help illustrate the redevelopment potential of the neighbourhood. Concepts include both easily attainable near term improvements and longer term "blue-sky" concepts that would affect more significant transformations. Complementing the concepts are detailed policies relating to each section of the Plan to ensure development proposals are consistent with the objectives, and thus, the vision for the Plan. The purpose of this framework is to establish the parameters under which redevelopment within the Riverside neighbourhood will occur. *Figure 4* provides a visual representation of the planning process utilized to establish the Plan framework.





Second public engagement, held July 14, 2017.

Public consultation

Public consultation was vital in the drafting of the Plan. Three open houses were conducted throughout the process, garnering input that impacted the overall direction of the Plan. At the first two open houses, hundreds of attendees participated in a survey that included several interactive questions. City staff from various operations departments were consulted regularly, in order to provide technical input into each respective area of the Plan.

Hundreds show for Riverside open house

Residents keen on finding out what the future holds

COLLIN GALLANT opallant@medicinehatnews.co Twitter: CollinGallant

Hundreds of Riverside residents showed up to an open house Tuesday to discuss the future of their community.

The mature, tree-lined community nestled across the river from downtown suffered two blows this winter with the announced closure of both Riverside elementary school and the city-run Heald outdoor pool.

door poot.

In response, the planning department launched an "Area Redevelopment Plan" process in the community, touted as a "blueprint for the neighbourhood into the far reaching future" to guide potential development."

About 40 residents were

waiting when the doors opened at 4 p.m. By 7 p.m., more than 150 had viewed poster boards drawn up by five city departments with projects slated for the area.

Officials from the parks planning offices, fire services, environmental utilities department and the land and properties office were on hand.

"It's a first point of engagement,"said planning superintendent Robert Sissons. "We



NEWS PHOTO EMMA BENNETT

Janico Andreas, a resident of Riverside, adds a comment to a display board at the Riverside Neighbourhood Plan Open House held Tuesday evening. More than 200 people attended the open house hosted by the City of Medicine Hat to discuss future plans for the neighbourhood, as both the school and pool will close this year.

wanted to introduce the project and outline some of the issues that the neighbourhood is facing, and what the responses could be."

The plan, due this summer

after followup consultations, would also determine future land use, not only of the school site, but also throughout the community. asked to rate their preferences for residential use, from singlefamily homes to condos, town houses or a seniors' complex. "I'm quite encouraged,"

lived on Third Street NW for the past 44 years, "It's very sad to see the school go but you can understand it."

See Change, Page A2

Front page article after first public engagement. (Medicine Hat News, March 15, 2017)



First public engagement held March 16, 2017.



Comment board from Riverside public engagement.



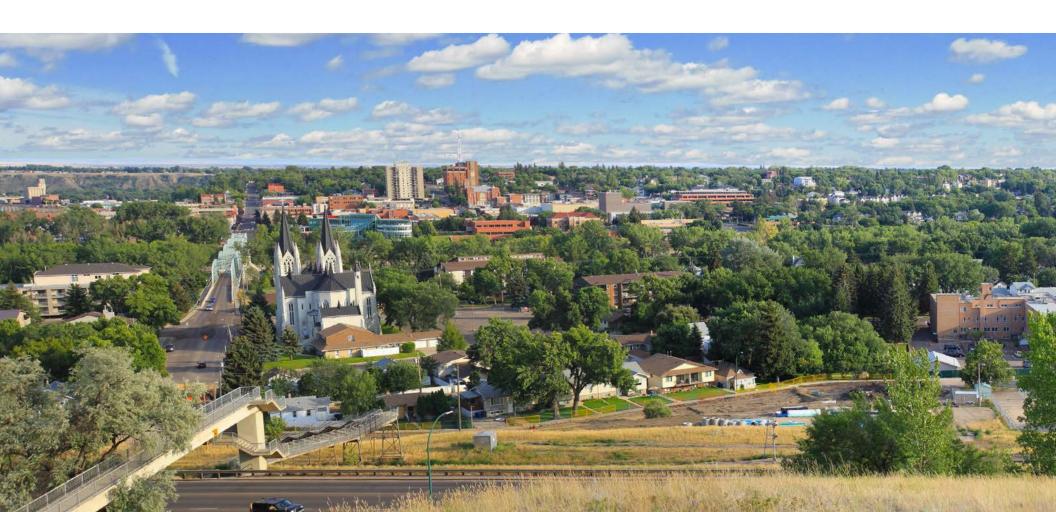
vision and objectives

2.1 VISION



The vision for the Riverside Neighbourhood Plan is:

A thriving neighbourhood that supports residential intensification while maintaining the unique character elements and amenities that make it a desirable place to live, work, and play.



OBJECTIVES

The Plan further defines its vision by establishing overarching objectives. The objectives address the core challenges of a mature neighbourhood and provide a strategic direction for the Plan. These objectives are discussed below in a broad sense and will guide policy implementation that will endeavour to achieve the vision of the Plan over the next twenty years.



A - Create a blueprint for strategic intensification.

Allow for the planned contextual intensification of the neighbourhood with various built forms in the proper locations.



B - Provide guidance for the design characteristics of future redevelopment.

A clear and flexible infill redevelopment approach that supports quality design and innovation while being sensitive to minimize impacts on existing homes and businesses.



C - Build on existing community character through selective public realm enhancements.

Celebrate key neighbourhood landmarks and locations by making them focal points with improved urban design elements.



D - Manage the transition of Heald Park and the former Riverside School site.

Minimize the impact of these changes on the neighbourhood by creatively re-designing the park and controlling future redevelopment.



E - Connect and enhance the recreational and natural landscape of the river's edge.

Encourage residents to utilize the river's edge through improved trail connections, additional access points and enriched riverfront amenities.



F - Identify intensification and public realm improvements to be considered within the City's Asset Management Program.

Provide guidance and inform the City's Asset Management Program as opportunities arise.

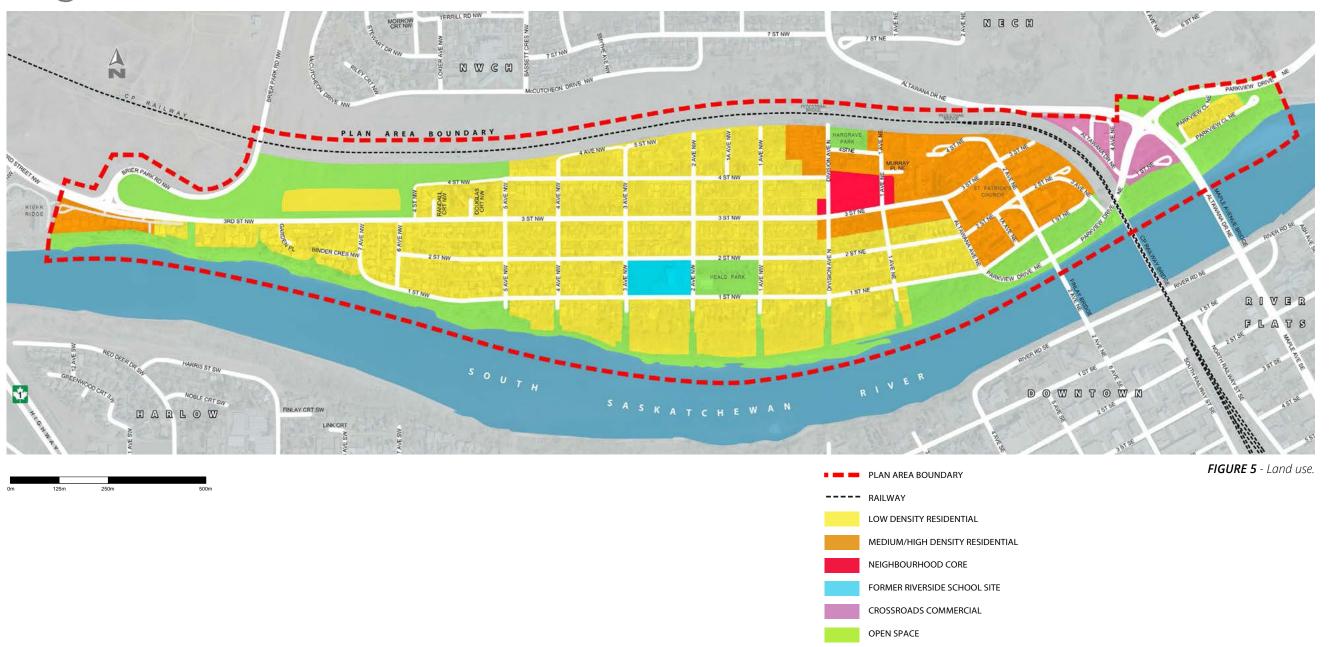


Throughout this plan, each policy references the above objectives to show their purpose and intent of supporting implementation of the Plan.



land use

neighbourhood districts



3.1 LAND USE OVERVIEW

The Land Use Concept contains several distinct areas as indicated in *Figure 5.*

These land use areas are identified as follows:

- the Low Density Residential Area, which makes up the majority of the centre and western portion of the neighbourhood;
- the Medium/High Density Residential Area, which is currently comprised of a mixture of single family homes, townhouses, apartments and institutional uses;
- the Neighbourhood Core Area, which is a small commercial area comprised of local businesses;
- the Former Riverside School Site, which is located at the centre of the neighbourhood;
- the Crossroads Commercial Area, which is located along the eastern gateway to the neighbourhood; and,
- the **Open Space Area**, which contains several natural areas and parks.

It is important to note that the Land Use Concept does not represent zoning districts contained in the Land Use Bylaw. Rather it acts as a guide for establishing a long-term land use pattern. Policies will be established throughout the Plan that will help guide the future of the Riverside neighbourhood and to prevent land-use conflicts.

Key outcomes that would be beneficial to the neighbourhood include:



Maintain desired development patterns and guide strategic growth.

Ensure desirable elements of the established traditional grid street pattern and low density residential character will be preserved, while allowing for opportunities for growth to occur in strategic locations.



Encourage infill development and amenity improvements to the neighbourhood core.

Create an environment that encourages a vibrant and integrated neighbourhood core with local businesses that meet daily needs, gathering places for residents, and infill development over underutilized parking areas.



Preserve and enhance community identity and heritage. Preserve community identity through protection, recognition and integration of heritage resources into the fabric of the

community.

INFILL DEVELOPMENT

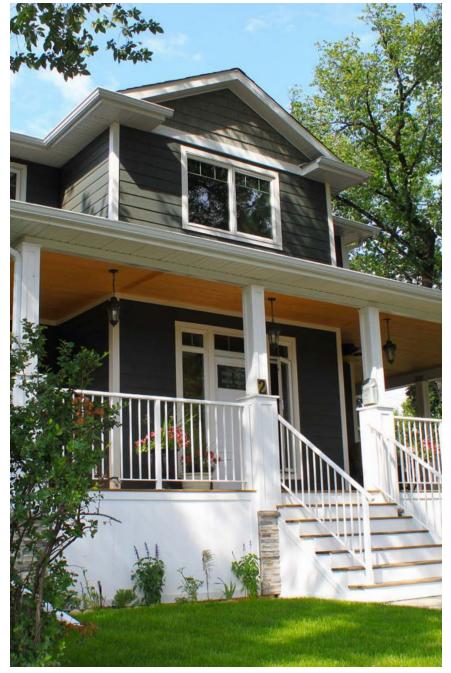
Infill development is the process of developing vacant or underutilized parcels within existing urban areas that are already largely developed. The beauty of the traditional streetscape, mature boulevard trees, and central location make Riverside highly appealing for gentrification. It is important that redevelopment within the neighbourhood occurs in a orderly fashion and does not compromise the existing feel of the neighbourhood. Policies have been included in the Plan to ensure that potential impacts of redevelopment on the neighbourhood are minimized.

For the purposes of the Plan and to help guide future development, **infill development** is defined as the following:

- Building a new residential or non-residential development where a building previously existed;
- Development of a vacant site; or,
- A major addition to an existing building, including but not limited to an increase in floor area of the building by more than 65 square meters; the addition of an attached garage; adding an additional storey; and a new secondary suite or backyard suite.

Infill development approval

Any infill development within the Plan area should be considered as a Discretionary Use within the Land Use Bylaw. This will allow the Development Authority the flexibility to allow innovative development to occur within an established area, but also provide a means to create the best 'fit' possible through negotiations with the developer and the use



The architectural style of this 2015 infill home on 1st Street NW integrates well with the existing neighbourhood.

of development approval conditions to ensure minimal impact on adjacent properties. When considering a Development Permit application for an infill development, the Development Authority should consider the following built form elements in their decision:





- Building massing which refers to the general shape, form and size of a building.
- 2 **Building architecture** which refers to the detailed design elements and materials of a building.
- 3 **Site design -** which refers to the position of the building and any other improvements on the lot and its overall shape.
- 4 **Site landscaping** which refers to the use of features of both soft landscaping (trees, shrubs, etc.), and hard landscaping (concrete, pavers etc.).
- 5 **Parking -** which refers to where vehicle parking occurs on site and whether it is enclosed or surface parking.
- 6 **Context -** which refers to the existing built form of nearby developments and the public realm.

continued page 25











Some of the many infill homes in Riverside. Although 1st Street has the most infill homes, there are newer developments throughout the neighbourhood.

Diversity of built form in Low-Density Residential Area of Riverside.



Backyard suite on 2nd Street NE.



Small apartment building on 2nd Street NE.



Manufactured housing on Division Avenue N.



Duplex on 4th Street NW.



Heritage home on 2nd Street NE.



Bungalow on 4th Street NW, with open space to the west.



Infill home on 2nd Street NW.



Former Dutch Reformed Church on 4th Street NW.



Home with front walkout on Parkview Close NE.

LOW DENSITY RESIDENTIAL AREA

The Riverside neighbourhood is one of the oldest neighbourhoods in Medicine Hat. Comprised mostly of single family homes, Riverside consists of a wide range of building styles; from turn of the century estate homes, to mid-century housing, to contemporary designs. Over the past decade a number of infill developments have occurred, including the construction of duplexes, secondary suites and large estate homes. The traditionally planned streetscape with mature boulevard trees makes Riverside one of the most preferred neighbourhoods in Medicine Hat.

While the intent of this Plan is that the Low Density Residential Area remains primarily single family in character, infill development in the form of duplexes,



secondary suites and backyard suites is encouraged provided they are well designed and integrate with the existing housing.



Post-World War II homes on 4th Avenue NW.



Mature house on 1st Street NE next to a 2-storey infill home.



Mack Higdon was a rancher and the first president of the "Medicine Hat Stampede Company". This distinctive heritage home was built in 1943 as his family residence.



FIGURE 6 - Location of future low-density residential development.

Upcoming greenfield development

The City of Medicine Hat owns approximately 7 hectares of land in the northwest portion of the Plan area, shown in *Figure 6*. Surrounding sites are



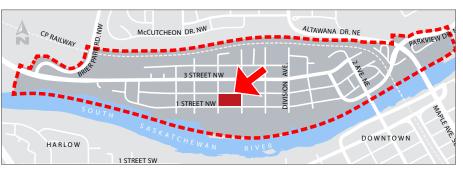
predominantly developed with smaller mid-century bungalows and accompanying detached garages. The subdivision of the land for residential and park use provides an opportunity to complete the full build-out of the neighbourhood. Future assessments of environmental, geotechnical, slope and railway considerations of the area should be incorporated into the design of the subdivision and will be required during regulatory application.



Greenfield area in the west region of Riverside, between 3rd Street NW and the railway (view toward west).

FORMER RIVERSIDE SCHOOL SITE

Centrally located in the neighbourhood is the former Riverside School site. The school was opened in 1916 and remained in operation until its closure in 2017. The site spans one full block and is approximately 1.2 hectares in area. The site currently contains the Riverside School (closed), a high-board ice rink, a playground, baseball diamond, and a soccer field. Many residents in the neighbourhood have a strong connection to the school and site as the facilities have been in use for more than 100 years. In the fall of 2017, the school property and facility were purchased by a private owner for redevelopment.



Location of former Riverside School site.





Built between 1916 and 1917 for \$22,457, the two-storey Riverside School was designed in the Edwardian Classic style by Architect Walter H. Bourne, who also designed Earl Kitchener School in the Herald neighbourhood.



The site formerly belonging to Riverside School is anticipated to be redeveloped.



Schoolyard of Riverside School (2016).

Future development of the site should be considered an infill development. Public consultation between the purchaser and the nearby property owners is strongly encouraged prior to proceeding with Development Permit applications. Rezoning of the entire site to Direct Control district in the Land Use Bylaw would be an appropriate way to ensure that the public is consulted and the final design meets City Council's expectations for a redevelopment of a major site in an established neighbourhood.











Preservation of historic elements of Riverside School building (left) and the brick mural by sculptor James Marshall (above) should be taken into consideration in redevelopment design of the site.

MEDIUM/HIGH DENSITY RESIDENTIAL AREA

The medium/high density residential area has evolved over many decades to include various built forms and land uses ranging from duplexes to midrise apartments interweaved among older single family homes. Both a direct connection to the Downtown via Finlay Bridge as well as the proximity to shops along 3rd Street NE has helped to support the incremental intensification of this area over the years.

The Plan will focus the majority of future neighbourhood intensification of residential units within this area to help support local businesses of the Riverside neighbourhood core and the Downtown. Over time it is anticipated that most low density buildings will be replaced by townhouses and low rise apartments. Increased population through



Four storey apartment building on 1st Street NE.



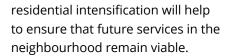
Four storey apartment building on 1st Street NE.



For over a century, Finlay Bridge has provided Riverside residents with convenient access to the Downtown core.



Townhouses on 3rd Street NE, constructed in 1998 on a former commercial site.



All sites within this area will be considered infill development. This will help to ensure that there is a proper transition between this area and the adjacent low density residential area.





It will also assist the Development Authority in mitigating any negative external impacts such as noise from traffic or proximity to the railway.

Most sites will be appropriate for various forms of medium density development such as townhouses or low-rise apartments. Prominent sites near the river may be suitable for a more substantial higher density development, such as mid or high-rise apartment, provided that considerations for infill developments can be reasonably accommodated. Particular attention should be paid to shadow impacts on adjacent properties and provision for adequate parking.



3-storey apartment building on 2nd Street NE, adjacent to historic St. Patrick's Church.



Built in 1912 on 2nd Street NE, this is the oldest "commercial" building still existing in Riverside (now residential).



Multi-unit building constructed in 1980 on 3rd Street NW, which overlooks the river.



St. Joseph's Home was opened by the Carmelite Sisters in 1951. The current hospice facility, on 3rd Street NE, was built in 1956.

NEIGHBOURHOOD CORE AREA

The neighbourhood core area offers a variety of commercial and institutional uses for residents including retail stores, restaurants and cafés, offices and personal services, a church and a daycare. The neighbourhood core area is a character defining element to the Riverside neighbourhood. The popularity of this area is evident with some of the shops obtaining "destination commercial" status within the city.

As one of the unique components of Riverside, the neighbourhood core area contributes to fostering "sense of place" for residents. Residents feel the intrinsic character of an area when they spend time walking to a favourite neighbourhood shop or café. Sense of place is built through memorable experiences offered by unique commercial areas within established neighbourhoods. A distinct neighbourhood core composed of a compatible and complementary mix of uses is a key component of fostering and enhancing Riverside's identity for its residents.

Infill development opportunities

The neighbourhood core area contains a significant amount of underutilized off-street parking within the centre of the site. This may provide opportunities for infill development to increase the intensity of usage of the area. Appropriate infill development would include commercial buildings either in a stand-alone configuration or in a row along the perimeter (similar to what exists along 3rd Street NE). Additions to existing buildings through the construction of additional storeys would increase the density and number of businesses available. Adding residential units above existing commercial uses in a mixed use building format would also be appropriate, however first storey residential uses should be restricted.

GUIDED



Businesses with updated frontages along 3rd Street NE.



Built in 1957, the former Riverside Presbyterian Church on 3rd Street NE has been re-purposed as a private business in the neighbourhood core area.





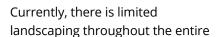
Compatibility of land uses

To increase the viability of this area as a neighbourhood commercial centre, consideration should be placed on attracting businesses that are highly compatible and would encourage a customer to make multiple stops. These types of land uses are generally convenience retail, restaurants or cafés, and personal services. Redevelopment of historical light industrial land uses to those more compatible with the neighbourhood should be encouraged.

NEIGHBOURHOOD

CHARACTER

Improved site landscaping



area. Converting some of the asphalt and concrete into soft landscaping would improve the attractiveness of the area as a destination without compromising the availability of parking. It would also help to screen and better define parking areas making it more functional, as well as provide pedestrians places to informally gather.



Storage facilities, and other light industrial land uses, are not compatible developments for within Riverside's neighbourhood core area.



Much of the neighbourhood core would benefit from improved landscaping. Tree and shrub beds add a welcoming element to visitors, provide shade and help to better delineate pedestrian accesses from parking areas.

3.7

CROSSROADS COMMERCIAL

Situated at the "gateway" to the Riverside Neighbourhood Plan area is 1.58 ha of underutilized commercial land. Currently the area contains a number of different land uses, ranging from commercial to light industrial. The southerly portion of the site is the location of Fire Station #1. The northerly portion of the site is utilized for a City operated recycling centre, an automotive repair shop, and a fitness facility. Due to the highly visible location and ideal transportation crossroad, the area is a prime location for businesses that benefit from high visibility and traffic. There is a 0.25 ha parcel of land directly to the east of the existing development that would be well suited for commercial use with these requirements.

"Crossroads commercial area". Intersection of Parkview Drive NE and Altawana Drive NE. Maple Avenue Bridge shown on left.



FIGURE 8 - Location of Crossroads Commercial area.

The redevelopment of the area should consider the highest and best uses for the site and incompatible industrial uses should be discouraged as Riverside is predominantly a residential neighbourhood. To maximize the use of this area, the fragmented parcels of land throughout this area would be



consolidated along with an existing road closure. The redevelopment of the crossroads commercial area should include enhanced landscaping and screening features to enhance the visual quality of the site from adjacent arterial roads and as the "gateway" to the Riverside area.





(2018). Shown above, there is a 0.25 hectare parcel of underutilized commercial land situated east of the existing businesses, within direct visibility of a major intersection.





Existing bottled water business and bottle depot.



Existing automotive repair shop and fitness facility.



Existing martial arts and fitness facility.



land use policies

General

- 3 (A) Future land use should be consistent with the Land Use Concept.
- 3 (B) The expansion of the commercial neighbourhood core Area or the medium/high density residential area may be appropriate if it is contiguous and does not negatively impact the low density residential area.
- 3 (C) All infill development within the Plan area should be considered a Discretionary Use in the Land Use Bylaw.
- 3 (D) The Development Authority should include, but not be limited by, the following considerations when making a decision about an infill development: building massing; building architecture; site design; site landscaping; parking and context.
- 3 (E) The City should consider the implementation of incentives to encourage redevelopment and intensification in the neighbourhood core area and the medium/high density residential area.
- 3 (F) A substantial increase in density within the medium/high density area in close proximity to the river is encouraged.
- 3 (G) Development within close proximity to the railway should follow the Federation of Canadian Municipalities (FCM) and the Railway Association of Canada (RAC) Guidelines for New Development in Proximity to Railway Operations.

Neighbourhood Core area

- 3 (H) Desirable commercial land uses include: a wide variety of businesses that provide goods and services for the neighbourhood such as retail; restaurants; health and professional offices; and mixed-use development that incorporates at-grade commercial land uses with residential apartments on upper storeys.
- 3 (I) Building frontages should be inviting, attractive, and active by incorporating windows, window awnings, articulation of building façades and at-grade patios and gathering spaces in order to create visual interest and encourage pedestrian traffic.
- 3 (J) Buildings should be oriented to the street. Primary entrances are encouraged adjacent to the public sidewalk. Secondary entrances and pedestrian walkways adjacent to parking areas are encouraged.
- 3 (K) Off-street parking should be restricted to the interior of the area. No new parking should be located between any buildings and the street.
- 3 (L) No new vehicle access points to the streets should be allowed. All access to the interior of the area should be from the existing lanes.

Former Riverside School site area

- 3 (M) The former Riverside School site should be rezoned to Direct Control in the Land Use Bylaw to allow City Council the opportunity to exercise control over future development.
- 3 (N) Public engagement endeavours by the developer should be a requirement for a Development Permit application for the former Riverside School site to ensure transparency and an opportunity for public input on any proposal.
- 3 (O) Development Permit applications should take into consideration the requirements of infill development. In addition to the considerations under infill development, the preservation of the historical and character elements of former school building and site should be a priority in any redevelopment design. Specific elements to be considered include: the original school building; all existing trees on the site; including the memorial tree; and the James Marshall brick mural.

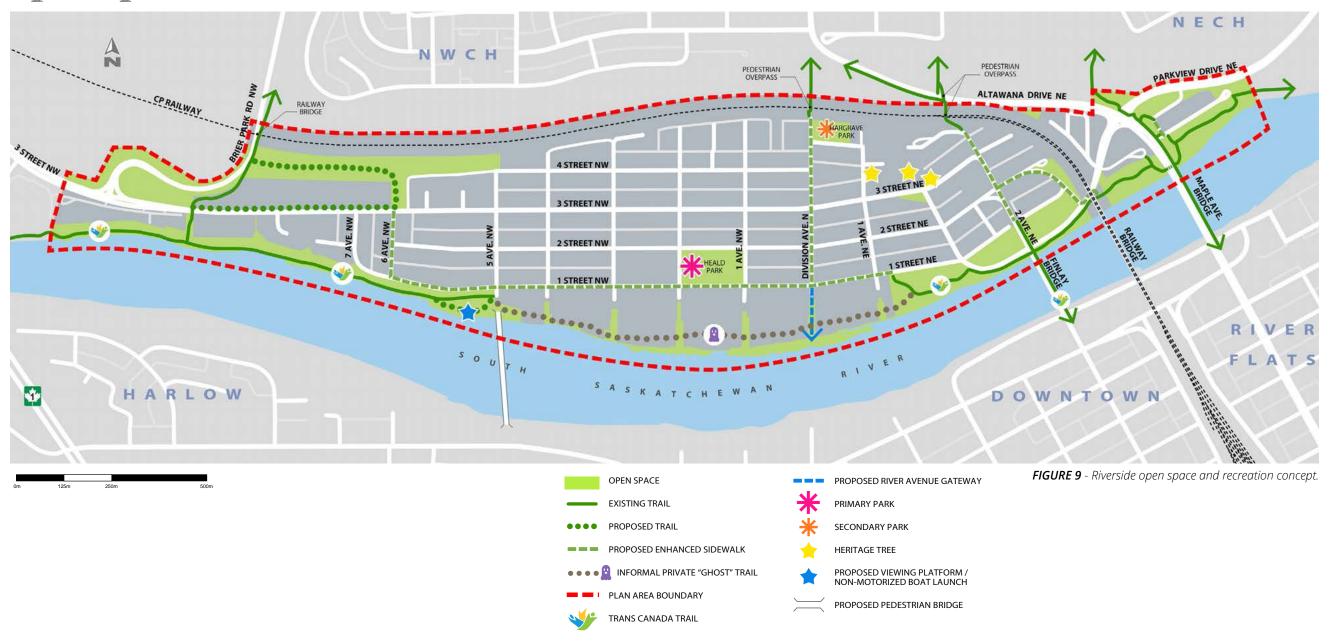
Crossroads commercial area policies

- 3 (P) The crossroads commercial area is highly visible from both Altawana Drive NE and Parkview Drive NE. Future infill development should place particular emphasis on quality architectural design and site landscaping.
- 3 (Q) Site access to the crossroads commercial area should only be allowed from 4th Avenue NE. Access should not be permitted from either Altawana Drive NE or Parkview Drive NE.



open space and recreation

open space and recreation



4.1 OVERVIEW

Parks and natural areas are a crucial component of complete communities for many reasons. They provide space for local residents to be social, to meet and interact with each other in an enjoyable public place; they provide opportunities for physical activity, both active and passive; they provide opportunities for storm water collection and infiltration; and a connected system of parks and natural spaces allows for a healthy urban ecosystem. In mature neighbourhoods like Riverside it is important to encourage the revitalization of existing parks



The bridge over the railway and Altawana Drive provides residents pedestrian access between Crescent Heights and Riverside, along with impressive views and an opportunity for exercise. It is likely that the original walkway was built about 1912, to allow nuns to travel by foot between St. Patrick's Church and St. Theresa's Academy, which was situated on the hilltop in NE Crescent Heights.

and the protection of environmentally sensitive lands. Riverside has approximately one quarter of the park space that would be allocated to a modern neighbourhood due to the fact that there were no mechanisms in place when the neighbourhood developed for a subdivision authority to require Municipal Reserve. However, to compensate for the lack of formal park space, the neighbourhood includes an abundance of natural areas adjacent to both the river and the coulee wall to the north.

Incorporating opportunities for recreation within a neighbourhood encourages activity and healthy living. Recreation infrastructure within the neighbourhood is mostly limited to some existing trails on the periphery of the neighbourhood, two small playgrounds within each park, and the highboard ice rink.

Key outcomes that would be beneficial to the neighbourhood include:



Revitalized Heald Park. Refresh the design of Heald Park and provide a neighbourhood focal point.



Enhanced interface with river. Facilitate public access and enjoyment of the South Saskatchewan River through trail connections, gathering places and opportunities for recreation within the river valley.



Passive and active recreation opportunities. Promote healthy lifestyles through a complete network of leisure trails and walkable streets that connect residents to adjacent neighbourhoods and provides access to local amenities.



4.2

HEALD PARK



Ernest Heald (1876-1960), the City's first Parks Superintendent, to whom Heald Park was dedicated in 1960.

Context

Centrally located in Riverside is a small rectangular park called Heald Park. The park, approximately 1.2 ha in area, is rich in mature trees, shrubs, greenery, and includes a small playground. Since 1960, Heald Park was the location of the neighbourhood's popular public pool. However in 2016, due to the operational cost, upcoming required capital upgrades, and low attendance, the City permanently closed the pool. Heald Park is and will continue to be the primary neighbourhood park of Riverside.



The pool in Heald Park, opened in 1960, was closed permanently after the summer of 2016.





Conceptual design - short term

The largest immediate impact on Heald Park would include the demolition

and removal of the former pool structure and ancillary buildings, which will create a substantial open space in the southwest quadrant of the park. With the impending (as of this writing) redevelopment of the Riverside School site, the relocation of the high board ice rink will be necessary. Public consultation identified Heald Park as the first choice for a relocated rink. A reconstructed multipurpose high board rink could be located on the park's west side, as shown in *Figure 10* (page 44). During summer months the multipurpose ice rink could be used for a variety of outdoor activities. Additional short term improvements include adding several trails throughout the park that connect each quadrant. A focal point in the centre of the park, such as a picnic shelter and benches, would provide opportunities for increased use. Enhancements to the edge of the park, such as wider sidewalks, new boulevard trees, and general boulevard rehabilitation should be considered.



Outdoor ice rink, on the site of the former Riverside School (seen in background).

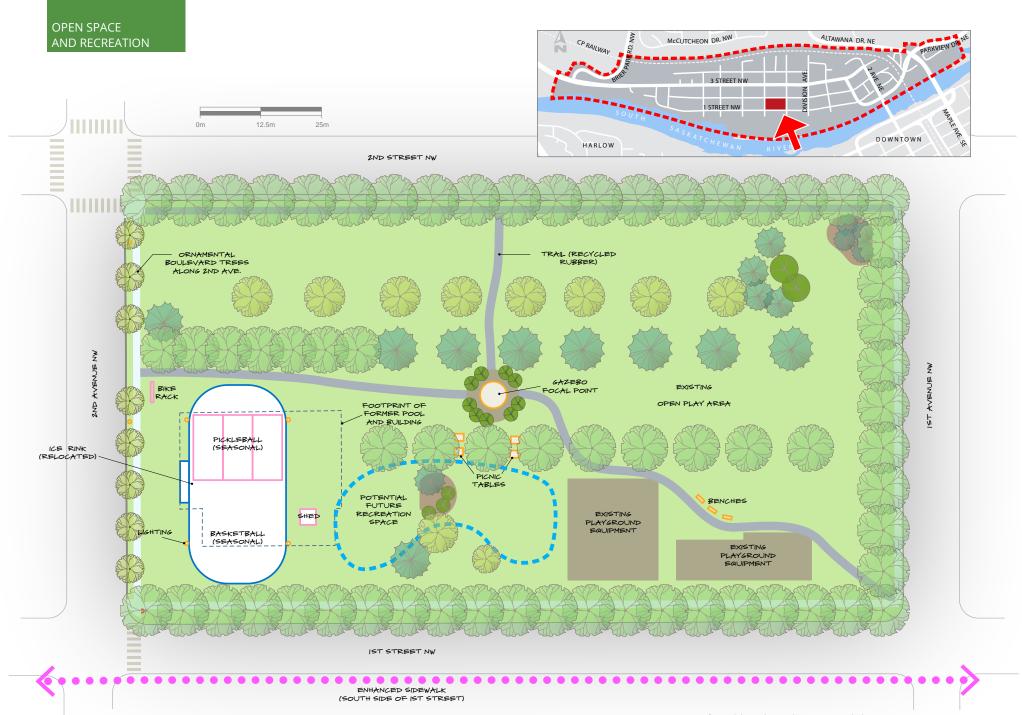


FIGURE 10 - Location of Heald Park, and conceptual drawing.



Conceptual design - long term

Longer-term, the City may explore the following enhancements to the park:

- Rehabilitating the playground equipment in the southeast quadrant.
- Addition of a recreational feature.

Future capital upgrades will be dependent on the needs of the community at the time, available resources, and future public consultation.







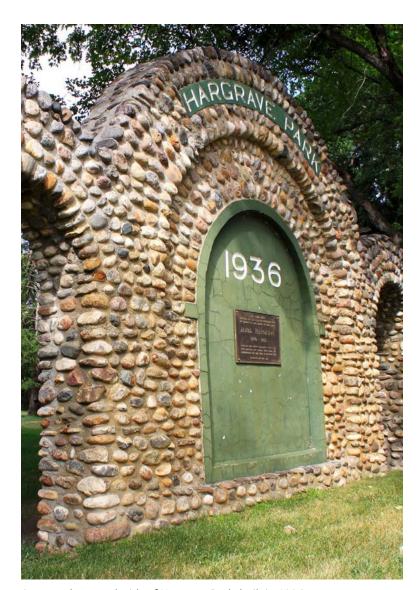
The addition of picnic areas is a feasible short-term enhancement to Heald Park. (Conceptual image).



Open green space in Heald Park. Residences on 1st Street NW and the former Riverside School shown in background.



Sidewalk on north boundary of Heald Park. The concrete was replaced with recycled rubber blocks.



Stone arch at south side of Hargrave Park, built in 1936.

4.3

HARGRAVE PARK

Context

Situated on the site which was part of a family ranch in the late 1800's, Hargrave Park is named after James Hargrave, who donated the land to the city in 1915. The commemorative stone arch on the south side of the park was dedicated to Mr. Hargrave soon after his death in 1935. With numerous mature trees and a small playground, it is a somewhat secluded park where residents can take an outdoor break and watch trains pass by on the nearby CP railway. A unique feature of the park is the adjoining pedestrian bridge which spans high above the railway and connects to a trail on the hillside leading to Crescent Heights. The intent of this park is to be secondary to Heald Park in terms of activity, so the change will be relatively minor and passive in nature.



Hargrave Park, view towards southwest.



Conceptual design - short term

Improvements to pedestrian connectivity from Riverside to the pedestrian bridge to Crescent Heights will be made by enhancing the sidewalk along Division Avenue. A grass activity area would remain in the central and eastern portion of the park for informal activities. Additional lighting should be incorporated into the refresh of the park to improve safety as it is somewhat isolated.



(Left)
Providing a second
pedestrian access
over the railway, this
walkway connects
Crescent Heights to
the Hargrave Park
area in Riverside.





Boys enjoying the playground in Hargrave Park.



4.4 RIVER VALLEY

Natural areas are essential to the healthy development of a city. They provide habitat for native plants and wildlife, they connect urban residents with the natural environment without having to leave their own neighbourhood. A city's natural spaces also provide beautiful places for people to exercise, relax and take breaks. By preserving and making natural areas accessible within neighbourhoods, future generations will continue to have the opportunity to embrace nature.

Riverside is rich in natural areas with a significant portion of the river and coulee banks undisturbed. The natural areas within Riverside generally extend along the riverbank from Parkview Close NE to the west boundary of the Plan area. The open space concept (*figure 9*, page 40) envisions the long-term protection of this natural area and the development of a connection to the river valley through an expanded network of trails, viewing points, and potentially even a pedestrian bridge. To ensure the integrity of the natural areas are protected, the City will need to identify and designate this land as Environmental Reserve. The City currently owns the majority of the natural areas within the river valley; however, many of the properties along the south side of 1st Street NW extend to the legal bank of the South Saskatchewan River. To ensure the river valley remains public, the City should pursue the acquisition of the riparian area currently located on private land as opportunities arise.

Leisure trail network

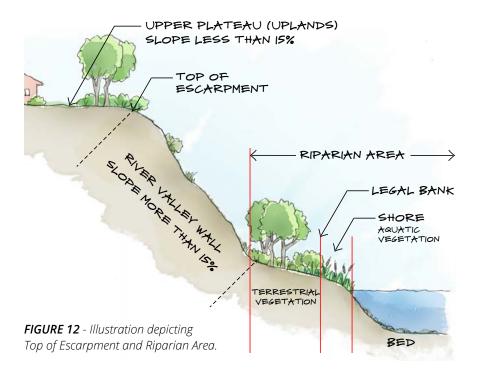
Leisure trail networks within neighbourhoods are an important part of ensuring that residents have opportunities to engage in healthy, accessible activities. They also provide pedestrian and cycling commuter corridors which reduce motor vehicle congestion.



Recreational access to the South Saskatchewan River is a valued feature of Riverside.



Natural areas adjacent to the river provide habitat for vegetation and wildlife.





Recreational trail near 3rd Street NW, looking toward Trans-Canada Highway bridge.

Riverside has some remarkable trails, but currently the trail network has significant gaps that limit the potential benefits. Currently, there is a leisure trail that leads from the neighbouring developments on both the east and west side but does not link through the Riverside Neighbourhood Plan area. There is potential to provide interim necessary linkages to bridge the east/west gap by ensuring that there are sidewalk linkages. Ideally, if the City seized upon opportunities to acquire additional land along the edge of the river, a new trail could close the gap.

There is an informal trail (nicknamed the "ghost trail" by residents) located on private properties among the natural vegetation several meters from the riverbank. A potential long-term outcome as an alternate trail linkage would be the conversion of this informal trail to an official City recreational trail.



Not a part of the City's recreational trail network, Riverside's "ghost trail" winds along the river on the southern ridge of private properties.

Trail connection on 3rd Street NW

Another opportunity to enhance leisure trail connectivity with the river valley is where there will be future development of new residential lots and an open space trail corridor just north of 3rd Street NW. This new development



area provides the possibility for a trail that could better connect the west end of Riverside with Crescent Heights. As shown in *Figure 13*, the trail alignment would be northward from 3rd Street NW and then turn westward along the coulee, to connect with the existing trail adjacent to Brier Park Road NW.



FIGURE 13 - Potential recreational trail connections between 3rd Street NW and existing trail alongside Brier Park Road NW.



Part of the Trans-Canada Trail network, near 1st Street NW.



The pedestrian bridge near Hargrave Park provides an important connection to trails in Crescent Heights. (View of railway looking east from pedestrian bridge.)



2nd Avenue NW, extending south of 1st Street towards river. (2016)



3rd Avenue NW, viewed from south, at the point the pavement ends. (2016)

Street stubs

Within the Riverside Plan area there are seven road right-of-ways that extend from 1st Street N to the legal bank of the river. These "street stubs" are typically paved to some extent but are not built to a typical street standard. They are primarily only used by the adjacent land owners for parking or access to a garage as it is unclear to the public in some situations as to whether they are public or private land. In all cases, they are underutilized by the public as a means to access the river.

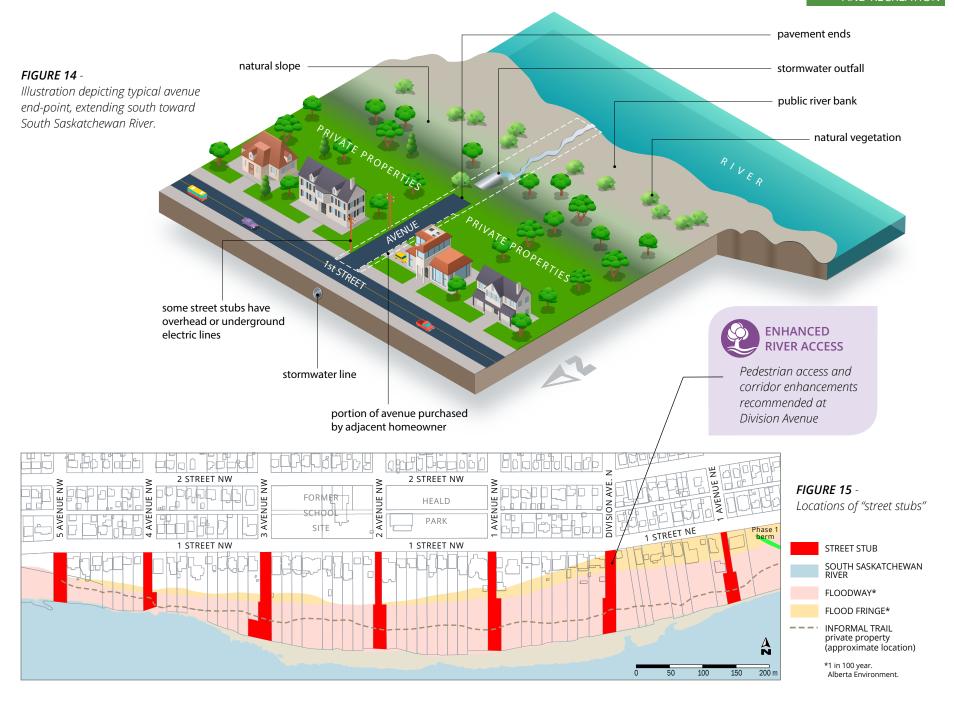
The "street stubs" provide storm water drainage for most of Riverside. They all have storm water pipes running through them to outfalls which are nearer to the river's edge. Over the years, the City has sold portions of the road right-of-way to adjacent residents to consolidate with their properties. However, public opinion is overwhelmingly in favour of maintaining these street stubs as public land. As such, these street stubs should remain as public land, essentially remaining as an extension of the river valley natural area.

Due to major overland flooding events, debris has collected in these street right-of-ways. This makes legally accessing the river from 1st Street difficult. Adjacent private landowners have generally removed such debris from their properties. The resulting situation is that the most expedient way for members of the public to access the river is to illegally trespass on private property.

To promote access to the river and to mitigate some of the trespassing that is occurring, an enhancement of the Division Avenue right-of-way should be pursued (see *figure 15*, page

53). Potential enhancements may include removing debris, wayfinding and signage, and possibly some improvements to the existing dirt trail.







River viewpoint and non-motorized boat launch

A clearing between the existing trail and the river to the West of 5th Avenue NW has been identified as an opportunity for residents and visitors to explore the South Saskatchewan River with a non-motorized boat launch and viewing platform. Currently, there are three boat launches for the South Saskatchewan River within the city. However, they are all along the south shore and the separation between

each one is over five kilometres. There is a potential for improving this site and the adjoining street stub as a more formalized park space. The addition of amenities such as benches, interpretive elements, wayfinding signage, and natural landscaping would assist in making this area a destination for local residents.





Location of potential viewing platform and non-motorized boat launch.



Currently, the potential viewing point is difficult to access.



Example of boat launch for kayaks and canoes. Bollards prevent launching of motorized watercraft.

Riverside to Herald/Harlow pedestrian bridge

The Herald Neighbourhood Plan (2016) identifies the opportunity for a pedestrian bridge connection between Herald and Harlow neighbourhoods on the south side of the river to Riverside along the north side of the river. This bridge would be generally located at 5th Avenue NW, near where the river



viewpoint and non-motorized boat launch are conceptualized (see *Figure 17*). The bridge would substantially improve the pedestrian and cycling routes between the north and south side.

At the time of writing, this concept is a long-term vision and is not funded. Prior to any decision on the bridge, an evaluation of all potential pedestrian bridge options throughout the city based on location, pedestrian and cycling traffic, and suitability should be undertaken.



FIGURE 17 - Potential alignment of Herald/Harlow pedestrian bridge.



open space policies

General

- 4 (A) Parks and open space should be designed to:
 - include amenities such as lighting, waste and recycling receptacles;
 - contain universal design elements that support accessibility;
 - incorporate principles of Crime Prevention Through Environmental Design (CPTED);
 - meet community needs by providing age appropriate park amenities for residents in the area;
 - accommodate the anticipated usage without negatively impacting the neighbourhood;
 - be adaptable for use in all seasons; and
 - incorporate principles of xeriscaping into landscape design.
- 4 (B) Heald Park and Hargrave Park should be designated as Municipal Reserve (MR).

Heald Park

- 4 (C) The City should focus on making this the primary park for the Riverside neighbourhood. The revitalization of Heald Park should give consideration to:
 - the preservation and enhancement of existing trees and vegetation;
 - the relocation of the outdoor skating rink from the former Riverside School;
 - the capacity of the park to add a major recreational feature over the long-term;
 - the integration of the park to the City's trail network; and
 - the integration of public amenities such as washrooms.

River valley

- 4 (D) The natural areas adjacent to the South Saskatchewan River should be designated as Environmental Reserve (ER).
- 4 (E) The road right-of-ways that extend south of 1st Street N should be maintained as public land and enhanced, where feasible, to provide better access to the river edge.
- 4 (F) The City should pursue, as opportunities arise, the acquisition and designation as ER of any privately owned land that is located between the legal bank of the South Saskatchewan River and the edge of the 1 in 100 year floodway line.

Trail network

- 4 (G) The City should look to enhance the network of trails as identified in *Figure 9* (page 40). Consideration should be given to:
 - the potential of developing a viewing plaza and non-motorized boat launch in the open space area between 5th and 6th Avenue NW;
 - repairing and widening trails and/or sidewalks as required to meet current standard;
 - the condition and design of each trail;
 - opportunities for improved landscaping adjacent to leisure trails;
 - opportunities for civic or heritage recognition in the naming of trails;
 - wayfinding signage and interpretive elements;
 - future connections to neighbourhoods outside the Plan area;
 and
 - the potential of developing a pedestrian bridge over the South Saskatchewan River.



Riverbank erosion control using live stakes (recreational trail near Garden Place NW).

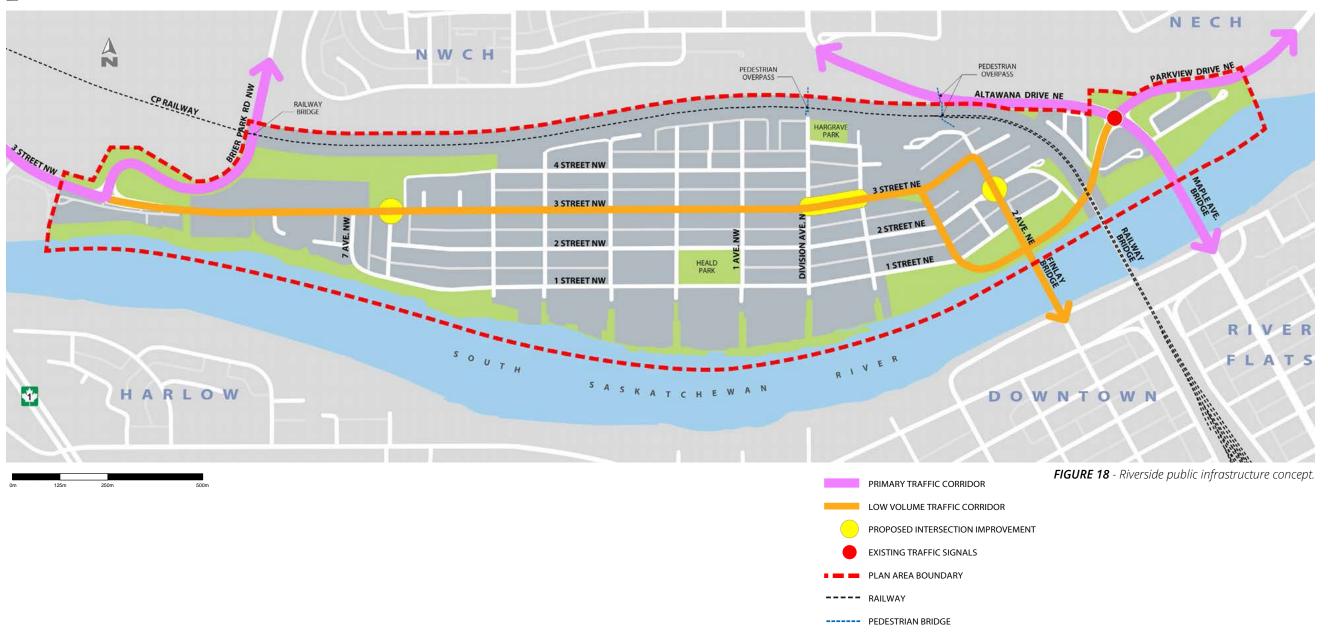


Recreational trail near Parkview Drive NE, surrounded by mature trees and shrubs.



public infrastructure

public infrastructure



5.1

OVERVIEW

Delivery and maintenance of public infrastructure in established neighbourhoods can be a challenging endeavour for municipalities. The public infrastructure concepts and policies of this Plan aim to provide clarity and guidance for future improvements.

Key outcomes that would be beneficial to the neighbourhood include:



Focused improvements in high pedestrian areas. Provide safe opportunities for pedestrian travel.



Strategic servicing replacement. Coordination and planning of servicing replacements to ensure minimal disruption to the neighbourhood.

5.2 TRANSPORTATION NETWORK

A balanced transportation network that incorporates motor vehicle, transit, bicycle and pedestrian traffic is an important component of a complete community. By creating a well-connected network that considers all types of traffic within a neighbourhood, residents will be able to maintain a healthy lifestyle with increased mobility.

Existing transportation corridors

Major transportation corridors of the Plan area include 3rd Street N, 2nd Ave NE and Parkview Drive NE. These roadways currently serve as major connections to and through the Plan area. The corridor of 3rd Street N serves as a truck route to the northwest portion of the City, while 2nd Ave NE and Parkview Drive NE serve as entry points to Riverside. Through the public consultation concerns were identified about traffic speeds and large vehicle traffic along these thoroughfares.



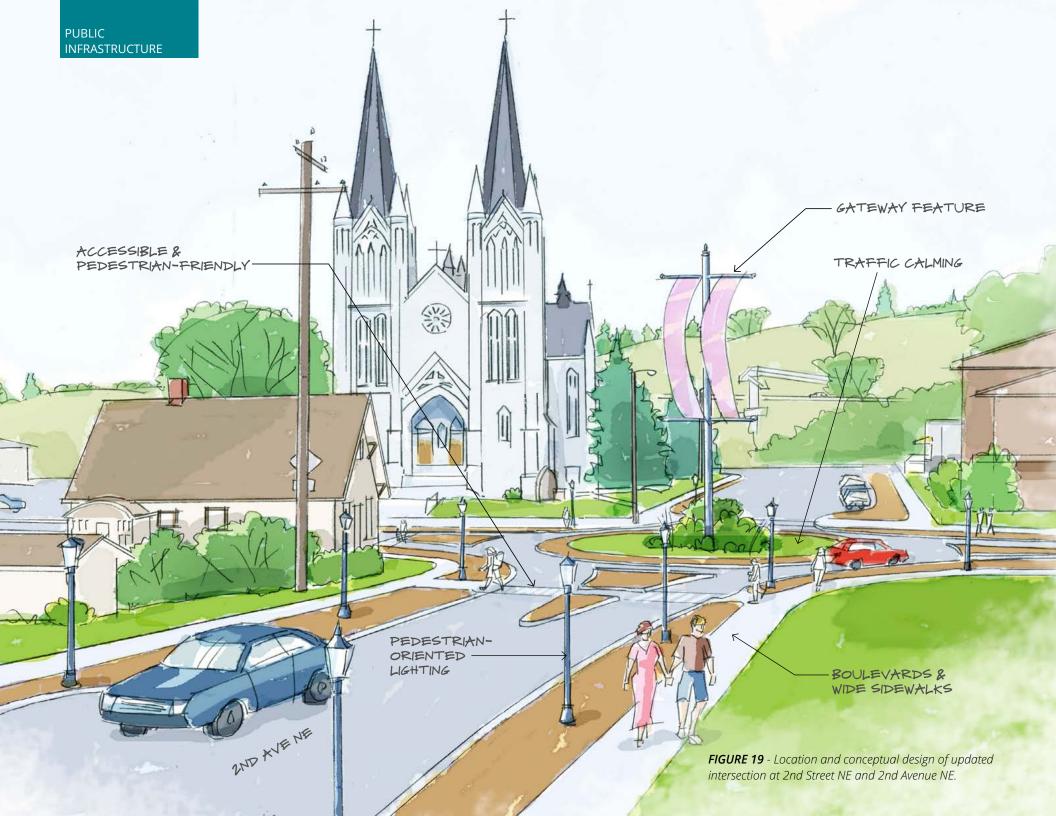
3rd Street NW, on far west side of Riverside, serves as a connector to Brier Park and the Trans-Canada Highway.

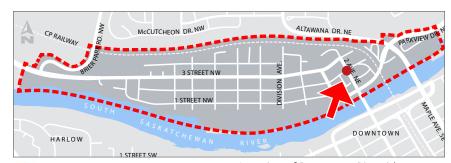


Parkview Drive NE, during 2017 construction of flood mitigation berm.



Parkview Drive NE viewed from Finlay Bridge.







Location of Downtown Riverside gateway

Downtown Riverside gateway

The primary connection to the Riverside neighbourhood from the downtown is from the historic Finlay Bridge to 2nd Avenue NE. Prior to the construction of the Trans Canada Highway bridge in 1954, the alignment of the Highway passed through



Riverside along 3rd Street N and across Finlay Bridge. As a result of this highway route, there are very wide road right-of-ways and existing street designs that are inconsistent with a residential neighbourhood.

There is opportunity to improve the functionality of the intersection at 2nd Ave NE and 2nd Street NE when servicing work is completed. The design of the intersection and 2nd Avenue NE corridor should be examined through a functional study. Consideration should be given to making an enhanced pedestrian corridor with a gateway entrance feature and support higher intensity uses proposed in this Plan. *Figure 19* is a potential concept that illustrates these additional amenities.



Current intersection configuration of 2nd Street and 2nd Avenue NE (2018).



2nd Avenue NE (view toward south) extends to Downtown across Finlay Bridge, which was constructed in 1908.



Intersection of 3rd Street NE and Division Avenue N. • 3rd Street NE, along the Neighbourhood Core, would benefit from enhanced pedestrian features.

Neighbourhood core pedestrian enhancements

The neighbourhood commercial core located on 3rd Street NW typically has high levels of pedestrian traffic. There are also many pedestrians crossing the streets to access the businesses from on-street parking in the vicinity. Speed of traffic along this street was also identified as a concern during



public engagement. This commercial area may benefit from an enhanced pedestrian street design. If the boulevards were widened, there would also be extra space for businesses to have sidewalk displays or outdoor patios. The public realm could also be improved, as it would allow more area for street trees, benches, transit infrastructure, and informal gathering places. A functional study should be undertaken to determine appropriate methods to reduce traffic speeds and to create an enhanced pedestrian commercial area. *Figure 7* (page 32) is a potential concept that illustrates these additional amenities.

5.3

SERVICING INFRASTRUCTURE

Utility replacements

The infrastructure in the Riverside neighbourhood is some of the oldest in the city. As the infrastructure in the neighbourhood reaches the end of its lifespan, many of the systems will require replacement. This plan does not propose definitive timelines for public infrastructure upgrades as those are managed through the City's Asset Management Plan. However, major infrastructure upgrades throughout the Plan area will likely be required within the 20 year horizon of this plan. It is important that the replacement of the infrastructure be planned in the most efficient way. Infrastructure projects will require coordination between operating departments to ensure minimal disruption to the neighbourhood. Future infrastructure designs should take into account the potential for increased redevelopment, particularly in the neighbourhood core Area and the medium/high density residential area.





Construction of a major sanitary sewer trunk line replacement project (2018).

Major sanitary sewer trunk line

Due to increased commercial development in the Box Springs Business Park and a redirection of some of the sewer flows from the Brier Park



Industrial, the major sanitary trunk line that runs through Riverside will no longer have adequate capacity. A new sanitary sewer trunk line will be constructed over multiple phases. During the construction period there will be significant disruption to some roads and potentially some significant excavation of local streets. This project is anticipated to be complete within the approximate timeframe of 2018 – 2025.



Construction of the first phase (2018) of a major sanitary sewer trunk line replacement project which will eventually extend east to west across all of Riverside.

5.4

OVERLAND FLOW PROTECTION STRATEGY

In response to overland flood events that occurred in 2013 and previous years, the City of Medicine Hat developed an Overland Flow Protection Strategy. The Riverside portion of this strategy (see *Figure 20*) is designed to protect the area along Parkview Drive NE and 1st Street N from overland flooding during high flow events on the South Saskatchewan River. There is a berm currently in place with response plans should a high flow event occur in the future. In order to protect the integrity of the berm, no future development, including any structures or trees, should be located on the berm. At this time, there are no future plans to extend the berm further to the west, as this land is primarily privately owned.



Riverside flood mitigation berm, shortly after construction in 2017.





Figure 20 - Plans for Riverside flood mitigation berms (2016).

Phase 1 was completed in 2017. It included approximaterly 400 m of earthen berm along 1st Street NE on City-owned land, and a demountable floodwall crossing Altawana Avenue NE. Protection level: 1 in 100 year flood.

Phase 2 is protected with temporary flood protection measures and private on-lot measures.

Source: Medicine Hat Municipal Works / Stantec

MODELED FLOODING EXTENT



100 year flood level 200 year flood level



Pre-berm: Parkview Drive NE submerged during flood event in June 2013.



Demountable flood wall at Altawana Avenue NE (2018).



Completed berm, phase 1. (2018)

5.5

STORM WATER MANAGEMENT

Stormwater management involves the collection, transportation, and treatment of rainfall and snow runoff in urban areas. Networks of pipes, pumps, and ponds make up the most common techniques for managing stormwater and keeping communities flood-free. Urban environments contain a mix of both pervious surfaces, typically landscaped areas like grass and shrub beds, and impervious surfaces such as paved roads, driveways, parking lots, and roofs. A high percentage of impervious surfaces can result in higher peak flow rates and greater volumes of stormwater runoff during a rainstorm. It is important that communities treat stormwater before it enters natural waterways. Treating stormwater helps to remove sedimentation and chemicals which can harm the environment. Provincial regulations for storm water are also becoming increasingly strict with the goal of improving water quality.

Due to the age of the Riverside neighbourhood, the existing stormwater infrastructure is relatively minimal. Currently, stormwater is collected in street gutters, catchbasins, and pipes and drains directly into the river without any detention. Opportunities to construct a typical stormwater management pond within the

neighbourhood are limited. Therefore, to help improve water quality, private homeowners and businesses can do their part by reducing the amount of impervious surfaces on their properties



to allow for as much stormwater infiltration into the ground as feasible. The City should also explore options for micro detention ponds and bioswales in boulevards as opportunities arise.



Stormwater outfall adjacent to Parkview Drive NE near railway bridge.



public infrastructure policies

General

- 5 (A) Redevelopment should be planned and designed to optimize the use of existing infrastructure capacity and services.
- 5 (B) Infrastructure renewal will be in accordance with the City's Asset Management Plan. Infrastructure designs should consider the potential for long-term redevelopment.
- 5 (C) Functional studies should be undertaken for the 3rd Street N corridor and the 2nd Ave NE corridor.
- 5 (D) No new berms will be constructed west of Phase 1.
- 5 (E) No development or activities should be allowed on City flood mitigation berms.
- 5 (F) New vehicle access points directly onto roadways designated as a primary traffic corridor should not be allowed.
- 5 (G) Where traffic calming or enhanced pedestrian crossings are required, a functional study should be undertaken to determine appropriate measures.
- 5 (H) The City should incorporate infrastructure design that promotes accessibility, where practically feasible, especially along primary traffic corridors.
- 5 (I) Planting of new street trees within the boulevards should be encouraged.
- 5 (J) Private property owners should be encouraged to reduce the amount of impervious surfaces on their properties.
- 5 (K) The City should explore options for microdetention ponds and bioswales in boulevards as opportunities arise.



5 (H) - Incorporating accessible design features in infrastructure should be a priority.



5 (I) - 2nd Street NW. Planting of street trees should be encouraged.



5 (K) - Example of drought-tolerant bioswale.



plan implementation

8.1 INTERPRETATION

Unless otherwise specified within this Plan, the boundaries and features depicted in maps or concepts are intended to be approximate and shall be interpreted as such. With regard to land use zoning, the precise location of land use boundaries will be determined through the Land Use Bylaw.

8.2 LIMITATIONS

Policies, concepts, or guidelines in this Plan are not to be interpreted as an approval for a use on a specific site. No representation is made that any particular site is suitable for a particular purpose, as detailed site conditions or constraints, including environmental constraints, must be assessed on a case-by-case basis as part of an application for Rezoning, Subdivision, or Development Permit approval. Any municipal improvements or City funded projects proposed or implied in the Plan are subject to City approval and budget, and will be evaluated in relation to the needs of city-wide spending priorities. In accordance with section 637 of the *Municipal Government Act*, the adoption of this Plan does not require the City to undertake any of the projects referred to herein.

8.3 LINKAGES

The Riverside Neighbourhood Plan has been prepared to be consistent with the *Municipal Government Act*, the South Saskatchewan Regional Plan, the City of Medicine Hat Municipal Development Plan, and adjacent Area Redevelopment Plans. This Plan will be monitored and amended as required to ensure consistency and alignment with other legislation and statutory plans.

8.4 AMENDMENTS

Area Redevelopment Plans are long-term planning documents. They promote a vision for a neighbourhood and put in place policies that work towards achieving that vision over time. Area Redevelopment Plans may be amended from time to time either in relation to a City initiative or a Re-zoning, Subdivision, or Development Permit application. New concepts and ideas may arise that are not anticipated by this Plan and are constrained by or contradictory to specific policies. When such concepts and ideas meet the intent of the Plan goals and outcomes or offer a creative solution to a particular problem, efforts may be made to allow for their implementation, including where necessary, amendments to the Plan. As the needs of the community evolve, amendments to the Plan may become necessary to ensure the policies remain current and relevant. However, the goals of the Plan should remain consistent. Amendments to this plan must be adopted by Bylaw by City Council.

8.5 IMPLEMENTATION

The Plan will be implemented passively through the redevelopment of private lands. City Council, Subdivision Authority and the Development Authority will reference the policies in their decisions. City operating departments will actively implement the public realm components of this Plan over time, through their Asset Management Plans.







www.medicinehat.ca