

Drumheller Municipal Development Plan

Bylaw 17.20 | December 7, 2020

Consolidated to include amendments to March 2023



BYLAW NO.	DATE (THIRD READING)	DESCRIPTION
17.22	MARCH 6, 2023	Amendments to typical berm design – Effects all reference to conveyance capacity within plan. Includes; • Changes to freeboard limits from 0.75m to 0.50m • Changes to minimum berm design width from 6.0m to 4.0m • Clerical errors Design Flood Event to 1,850 cms

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ACKNOWLEDGEMENT

The lands on which the Town of Drumheller is situated are on Treaty 7 territory and within Métis Nation of Alberta Region 3.

PART I Vision and Context

1 INTRODUCTION

Drumheller provides an experience unlike any other. Located along the banks of the Red Deer and Rosebud Rivers in southern Alberta, the town captivates with its breathtaking badlands landscape, unique neighbourhoods, and vast layers of natural and human history. Drumheller is home to 8,000 residents and draws nearly 500,000 visitors each year.

The intent of this Municipal Development Plan (MDP) is to protect, enhance, and leverage Drumheller's assets to harness its full potential as a place of resilience, growth, and discovery.

1.1 PURPOSE

The Municipal Development Plan sets the vision and direction for the growth of The Town of Drumheller over the next 30 years. Its policies set out priorities for the future land use, infrastructure, community services, and the physical development of the town.

The Plan weaves together the unique elements that form the Drumheller experience, ensuring protection and support for these elements while also enabling continued growth, adaptation, and change. The MDP supports a land use planning framework that ensures future development is resilient and responsive to a changing climate.

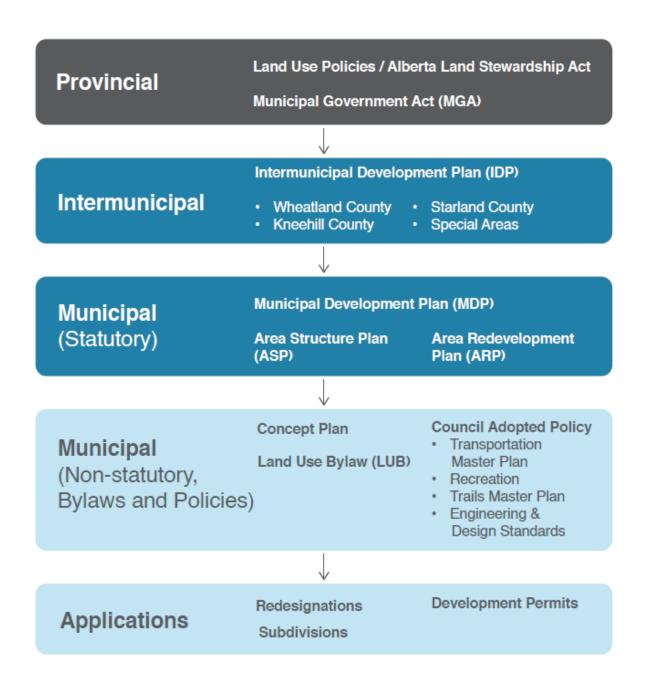
1.2 AUTHORITY

The authority of this MDP is provided by the Municipal Government Act. The following section provides an overview of the legislative context and planning framework for all of Alberta, as well as guidance for interpreting the policies within the MDP.

1.3 PLANNING FRAMEWORK

The Planning Framework, as shown below, outlines the authority and hierarchy of legislation, regulation, and other planning documents that guides land use and planning in Alberta.

PLANNING FRAMEWORK



MUNICIPAL GOVERNMENT ACT

The Municipal Government Act (MGA) provides the legislative framework under which all municipalities must operate. The MGA states that the purpose of a municipality is to:

- provide good government;
- foster the well-being of the environment;
- provide services, facilities or other things that, in the opinion of Council, are necessary or desirable for all or a part of the municipality;
- · develop and maintain safe and viable communities; and
- work collaboratively with neighbouring municipalities to plan, deliver, and fund intermunicipal services.

Part 17 of the Municipal Government Act regulates planning and development and empowers municipalities to prepare plans:

- To achieve the orderly, economical and beneficial development, use of land and patterns of human settlement; and
- To maintain and improve the quality of the physical environment within which
 patterns of human settlement are situated in Alberta, without infringing on the rights
 of individuals for any public interest except to the extent that is necessary for the
 overall greater public interest.

The MGA requires municipalities to ensure that all statutory plans, land use bylaws and any action undertaken under Part 17 is consistent with the provincial land use policies or regional plan prepared pursuant to the Alberta Land Stewardship Act.

INTERMUNICIPAL DEVELOPMENT PLANS

Intermunicipal Development Plans (IDP) provide coordinating policies to guide land use and growth management between the Town and the municipalities it shares a border with. These plans may include how the municipalities will work together, develop joint lands, and/or coordinate parks, open space, recreation, transportation, water, utilities, and other municipal services across boundaries. IDPs must be approved by each Council in partnering municipalities.

The Town has IDPs with Wheatland County, Kneehill County, Starland County, and Special Areas.

MUNICIPAL DEVELOPMENT PLAN

The Municipal Development Plan (MDP) directs future growth, priorities, and management of the Town of Drumheller. It must be consistent with all IDPs, and provide policy direction for the following key items:

Future land use within the town and how it is intended to be developed;

- Coordination of land use, growth, and infrastructure with adjoining municipalities;
- Policies regarding provision of transportation systems and municipal servicing;
- Guidance on land-use compatibility and regulation near sour gas facilities;
- · Policies regarding municipal and school reserve; and
- Policies respecting the protection of agricultural operations.

Municipal Development Plans may additionally address environmental matters, development constraints, financing of municipal infrastructure, municipal programs, financial resources, economic development, conservation reserve, and other programs or matters relating to the physical, social, or economic development of the municipality.

AREA STRUCTURE PLANS AND AREA REDEVELOPMENT PLANS

As part of the municipal planning process, the Town may develop or require Area Structure Plans (ASP) and Area Redevelopment Plans (ARP) to provide detailed direction for smaller areas within the town. ASPs and ARPs contain maps, goals, and policies that set out general locations for major land uses, major roadways, utility servicing, recreation areas, and development phasing. These ASPs and ARPs are subsidiary to the MDP and must be consistent with its policies.

LAND USE BYLAW

The Land Use Bylaw (LUB) is a regulatory bylaw of the Town, required by the MGA, that implements the land use direction provided in the Municipal Development Plan. Every parcel of land in the Town has a land use district, which specifies which uses are permitted and discretionary and how buildings and land can be developed in the Town.

CONCEPT PLAN

A Concept Plan, referred to as a Conceptual Scheme in the MGA, may be adopted by bylaw or Council resolution. Concept Plans are a non-statutory planning document that provides a framework for future multi-parcel subdivision and development of land, and how it relates to the future subdivision and development of adjacent lands. Concept Plans may be required to be prepared where an Area Structure Plan is deemed unnecessary, such as smaller areas of land, or between the ASP and subdivision/land use application stage. A Concept Plan provides an overview of the location of proposed parcels, roads, parks, utilities and other amenities.

1.4 PLAN INTERPRETATION

The MDP's vision, goals, and objectives will be achieved by implementation of the policies within this Plan. The policies provide direction for decision making within the Valley and how it will grow and develop over the next 30 years.

The following language is used to determine interpretation of the plan:

Shall/will: Shall/will means that a policy is mandatory and must be complied with, without discretion, by administration, developers, Council, Municipal Planning Commission, and any other authority involved in land use and development approvals.

Should: Should is used when a policy is considered best practice that is only waived if there is a significant rationale for an exception being made.

May: May is discretionary, indicating that the Town could enforce the policy given specific circumstances.

1.5 PREPARING THIS MDP

In August 2020, a Master Engineering Design and Assessment of Planning Impact was prepared as part of the Drumheller Flood Mitigation and Climate Adaptation System (DFMCAS) project. The assessment identified the need for modernization of the Town's two key planning documents: the Municipal Development Plan (MDP) and the Land Use Bylaw (LUB). The assessment determined that the existing plans were out of date, not aligned with the Town's flood resilience priorities, and lacked a clear vision for the future of Drumheller. To address these concerns, Town Council initiated the modernization of the MDP and LUB from summer to winter 2020.

Modernization of the MDP and LUB involved engagement with the public as well as internal and external stakeholders. The project team was guided by a Technical Advisory Committee, made up of community experts, Council representatives, Flood Resiliency and Mitigation Office Representatives, and Town staff. To ensure the new planning documents reflected community aspirations, the project team conducted eight public neighbourhood information sessions, and six targeted stakeholder meetings in fall 2020. Feedback was collected on the first reading draft planning documents and the public hearing was held on October 26, 2020. Additional comments were received by the Town throughout November, and were incorporated into the third reading version of the documents. In total, the project team heard from over 500 people.

In 2025, a significant update to the MDP was undertaken to update the background, vision, goals and policies related to flooding and parks/trails in the MDP recognizing the successes, challenges and changing context since the MDP was adopted in 2020.

1.6 HOW TO USE THE MUNICIPAL DEVELOPMENT PLAN

The Drumheller Municipal Development Plan is made up of two main parts:

Part I – Vison and Context provides the overall introduction, vision, and context for the Valley. It describes the current understanding of our community, where we have come from, and where we want to be in 30 years. Part II- Policies contains the statutory policies of the MDP. It directs municipal priorities relating to land use, transportation, servicing, flood mitigation, open space, and other important Town functions. These policies provide the framework for achieving the vision for the Valley.

VIEW SOUTHEAST OF RAYMOND HILL, AUGUST 2020



2 DRUMHELLER'S VISION

The vision sets out the aspirations for future growth and development in Drumheller. The goals, objectives, and policies in this MDP work towards achieving this vision.

2.1 VISION

Drumheller is a place to grow and a place to discover.

A PLACE TO GROW

Drumheller will draw new residents, enterprise, and investment, enriching the region and unearthing its remarkable potential. Drumheller's river, landscape, and unique neighbourhoods will anchor future growth, providing a wide range of choices and ensuring Drumheller retains a dynamic connection to its history.

A PLACE TO DISCOVER

Drumheller will leverage its dramatic river landscape, deep history, and unique neighbourhoods to become an unmissable part of the Albertan Experience. Drumheller's unique amenities will prompt exploration and unlock a world of unscripted adventure. Visitors will be drawn to the immersive badlands landscape to explore, exercise, play, create, shop, and relax.

As further described in Sections 3 through 6 of this MDP, the future of Drumheller's will be shaped by four key influences: rivers, badlands, existing neighbourhoods, and opportunity. By understanding, respecting, and purposefully shaping these influences, Drumheller's next chapter will be more prosperous, connected, and resilient.

2.2 GOALS AND OBJECTIVES

The MDP goals and objectives provide direction on how Drumheller will achieve the vision of being a place to grow and a place to discover. There are six MDP goals which set out at a high level the priorities for the life of this Plan. The objectives provide further detail on how to achieve each of the Plan goals. The policies in Part II of the Plan are strategies to implement these goals and objectives.

1. Support the growth of complete, sustainable neighbourhoods that enhance the diversity and livability of Drumheller.

There are growing demands for neighbourhoods and homes that are sustainable, affordable, and support a wide range of residents. Drumheller has a strong opportunity to provide innovative responses to these demands that stand out from conventional approaches.

- A. Support a diverse mix of housing forms and compatible commercial and employment uses within all neighbourhoods.
- B. Ensure the fiscally responsible provision and expansion of municipal services and minimize infrastructure life-cycle costs.

C. Implement clear land use regulation and engineering standards to support growth.

2. Conserve and enhance the uniqueness of neighbourhoods in Drumheller as an integral part of Drumheller experience.

Drumheller Valley's unique neighbourhoods are a tremendous asset. They have the capacity to provide a network of diverse options, experiences, and histories.

- A. Enhance Downtown Drumheller's role as the centre of public life and visitor experience in Drumheller.
- B. Establish tools and mechanisms to support the unique character and sense of place within Drumheller's neighbourhoods.
- C. Establish mechanisms for the conservation and celebration of historic resources.
- D. Showcase the unique character of neighbourhoods through the design and programming of public spaces and the Drumheller Badlands Parks Trail System.

3. Maintain and enhance an effective flood mitigation strategy.

Continuing to build on Drumheller's successful implementation of a comprehensive flood mitigation strategy will help protect people and development in Drumheller to be safer from flood hazards and attractive to future investment.

- A. Prepare and maintain flood emergency response plans to protect critical Town assets and development and to respond to a changing climate.
- B. Implement a flood hazard overlay within the Land Use Bylaw to protect development.
- Prepare clear design standards to promote flood-resilient development.

4. Develop a world-class open space and trails system throughout Drumheller that links landscapes, neighbourhoods, amenities, and major destinations, setting the stage for unscripted adventure.

Drumheller is rich in amenity but lacking in connective tissue. A comprehensive, well-connected trail system will unlock a new world of opportunity for both residents and visitors, providing new destinations, enriching growth, and supporting a new sector of enterprise.

- A. Promote pathways in Drumheller.
- B. Identify, protect, and restore the function of the rivers, riparian land, and areas with high ecological and cultural value.
- C. Expand and connect a network of recreational opportunities and valley-wide network of trails that align with key destinations and contribute to environmental protection priorities.

5. Enhance Valley-wide transportation systems to expand the reach and diversity of mobility options, providing a range of robust options for travelling within Drumheller.

Few places can rival Drumheller's dramatic sense of arrival. The descent from the prairie into the badlands provides a memorable experience of anticipation, immersion, and departure. This experience should be protected and celebrated among a broad range of modes, including better regional links.

- A. Enhance and protect the experience of a sense of arrival upon entering Drumheller at key road access points.
- B. Increase the modal share of active and alternative transportation.
- C. Support the development of regional transportation connections to Drumheller.

6. Leverage Drumheller's tourism and recreation industries and local talent to grow and diversify the economy.

Drumheller already hosts an enviable collection of attractions that draw a tremendous number of visitors every year. There is a strong opportunity to better leverage this profile to the benefit of Drumheller's residents and enterprise.

- A. Curate the overall visitor experience of Drumheller through coordinated branding, wayfinding, and storytelling.
- B. Support the continued growth of tourism, recreation, and entertainment industries.
- C. Foster local business retention and expansion by creating incentives and reducing barriers to business development.
- D. Diversify the economy by supporting the expansion of specialized manufacturing, high-tech, and other industries.

3 THE RIVERS

The Red Deer River is the primary architect of the Drumheller Valley. Its waters, and all those flowing toward it, have etched the valley over thousands of years. Each year, water and weather continue to erode and carve the gullies, coulees, and hoodoos that make up the extraordinary landscapes of the Drumheller badlands. This weathering and carving also uncovers many layers of natural and human history present here. From the times when dinosaurs walked the earth, to when the first peoples discovered the lush valley below the plains, the river has provided a place to grow and thrive. Today, it continues to serve this role, feeding the many natural and human systems within the valley and the stories that make Drumheller the incredible place it is today.

As the creator of the valley landscape, the river also has an integral part to play in our way of life today and growth of our community. Because the river is a source of water, food, and transportation, its riverbanks are an attractive place to settle and provide an immense aesthetic and recreational asset. However, throughout the year, the flow rate and level of the Red Deer River changes significantly, often within a very short period of time. In the past, this has caused the river to flood its banks. Flooding has had devastating impacts on our neighbourhoods and infrastructure. With a changing climate and increasingly severe weather events, flooding will continue to be a critical piece of Drumheller's identity, and a critical variable to which all future development must respond and adapt.

3.1 DRUMHELLER'S RIVERS

The Red Deer River is the primary waterway that flows through Drumheller. The river has many tributaries in the Drumheller region, including rivers, creeks and smaller drainage channels. This section provides an overview of the three primary waterways in Drumheller: the Red Deer River, the Rosebud River and Michichi Creek.

RED DEER RIVER

The Red Deer River is a major tributary of the South Saskatchewan River, which is part of the larger Saskatchewan-Nelson system that flows into the Hudson Bay. It originates on the eastern slopes of the Canadian Rockies and flows east, passing through the Foothills, Boreal Forest, Parkland and Grassland Natural Regions. The river supports a variety of natural systems, including vegetation and wildlife in the Northern Fescue Natural subregion in which Drumheller is situated. The total length of the river is 724 km with an effective drainage area of 32,400 km². ²

The Red Deer River flow regime can be described as a near natural condition through much of the basin because it is less developed than other rivers in the area.³ Given the size and water yield of the catchment area upstream of the Dickson Dam, the river is subject to rapid changes

¹ Alberta Parks (2015). Natural Regions and Subregions of Alberta: A Framework for Alberta's Parks. Alberta Tourism, Parks and Recreation. Edmonton, Alberta. 72pp.

² Stantec (2014). Red Deer River Basin Flood Mitigation Study.

³ Stantec (2014). Red Deer River Basin Flood Mitigation Study.

in flow upstream of the Dickson Dam.⁴ The river flows in communities downstream of the Dam, including Drumheller, are more regulated. The river channel through Drumheller is confined by low terraces, alluvial fans, or valley walls and is relatively shallow. The river is sinuous with occasional islands and side bars and areas of fragmented shrub and forest growth.⁵

The largest floods in the Red Deer River Valley generally occur between May and August.⁶ Discharge volumes peak in June and July, which is generally caused by the combination of snowmelt runoff with precipitation from major storms in the foothills region.⁷ Heavy rainfall was a major contributor to both the 2005 and 2013 floods. In addition to snowmelt and precipitation, ice jams and debris have contributed to localized flooding throughout the basin, but to a lesser degree. Creeks carrying snowmelt have also been known to flood when freshet water flows on top of the frozen surface of the Red Deer River, resulting in a back-up of water into communities along the bank.⁸

ROSEBUD RIVER

The Rosebud River flows from the west through a valley that is over 100 m deep. The river channel has a riffle and pool sequence with occasional rapids, and the area where the Rosebud meets the Red Deer River is densely vegetated with willows, grasses and shrubs. The largest floods in the Rosebud River generally occur between late-March and early-April. Flooding in the Rosebud is typically a result of high amounts of snowmelt, with ice jams occasionally contributing to high water levels and velocities along the river. The river of t

MICHICHI CREEK

Michichi Creek flows south through Starland County and discharges into the Red Deer River northwest of Downtown Drumheller. Over one kilometre of the creek was channelized in 1951 near Highway 9, while the lower portion of the creek near its mouth was channelized in 2001 as part of the berm construction. For the most part, the berm slopes in this location are densely vegetated with grass and willows.¹¹

Similar to the Rosebud, flooding in the Michichi is typically a result of spring snowmelt in late-March and early-April but the Michichi is also susceptible to back-flooding from the Red Deer River due to the flat channel slope.

3.2 A CHANGING CLIMATE

The hydrological network in and around Drumheller is a complex system, and flooding in the Red Deer River Basin is influenced by many factors. Our changing climate is one factor that presents several unknowns in relation to future flooding impacts. Studies and trends point to the

⁴ Stantec (2014) Supra note 2.

⁵ Matrix Solutions Inc (2007). Drumheller Flood Risk Mapping Study.

⁶ Matrix Solutions Inc (2007). Drumheller Flood Risk Mapping Study.

^{&#}x27; Ibid.

⁸ Stantec (2014). Red Deer River Basin Flood Mitigation Study.

⁹ Matrix Solutions Inc (2007) supra note 12.

¹⁰ Ibid.

¹¹ Ibid.

likelihood of more intense rainfall events throughout Canada due to the changing climate. While there is potential for an increased frequency of floods along the Red Deer River and its tributaries due to greater storm events, it is also likely that drought frequencies will increase in the prairies. Drumheller may see both increased water scarcity in the coming years as a result of rising temperatures and evapotranspiration and increase in flood frequency and severity. The impacts of a changing climate on Drumheller cannot be fully known.

3.3 FLOOD MITIGATION AND REGULATION

Flood mitigation in Alberta is a responsibility primarily shared between provincial and municipal governments, with the Province providing certain powers to municipalities for mitigation. The Emergency Management Act directs overall emergency management priorities and requirements in the Province, including a requirement for all municipalities to maintain a Flood Emergency Reference Manual. These plans primarily focus on emergency response and recovery. Greater preventative flood mitigation powers come from the Municipal Government Act, which enables municipalities to create plans directing future growth and land use in the interest of public safety and wellbeing.

3.3.1 PROVINCIAL FLOOD PROGRAM

The Province undertook the Drumheller Flood Study which was completed in September 2024 and updated in May 2025. Flood hazard maps define floodway and flood fringe areas for the 1:100 design flood and are used by communities for planning and to help make local land use and development decisions. Flood hazard maps also illustrate additional information, including incremental areas at risk for floods larger than the design flood, such as the 1:200 year return period and 1:500 year return period floods. In Drumheller, the flood hazard mapping identifies the flood hazard area, the floodway, the flood fringe, the high hazard flood fringe and protected flood fringe. Each of these areas on the flood hazard map represents a different level of hazard and therefore requires different strategies for addressing future land use and development. The provincial flood hazard maps are available at https://floods.alberta.ca/

3.3.2 MUNICIPAL FLOOD PROGRAM

The Town of Drumheller, working together with all levels of government, is a key player in delivering on flood mitigation in the Drumheller Valley. While risks of flood impacts can never be completely eliminated, the recent work by the Town to construct structural mitigation (berms) to protect existing development where feasible and floodway buyouts in areas where berms were not feasible, has significantly improved Drumheller's level of flood resilience for the coming decades. The MDP integrates the following flood mitigation priorities into the goals, objectives, and policies of this Plan:

18

¹² Stantec (2014). Red Deer River Basin Flood Mitigation Study.

¹³ Ibid.

MAKE EXISTING DEVELOPMENT SAFER

Existing development is made safer and more resilient to flooding through structural mitigation.

In places where there is conflict between flood hazard and existing development, the Town can increase resiliency of existing development through the provision of structural measures, including permanent berms and temporary measures, or remove development.

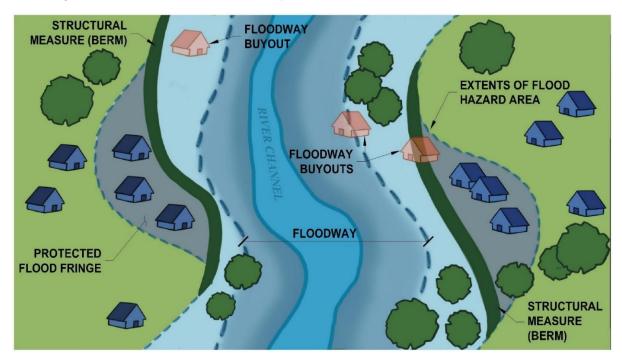
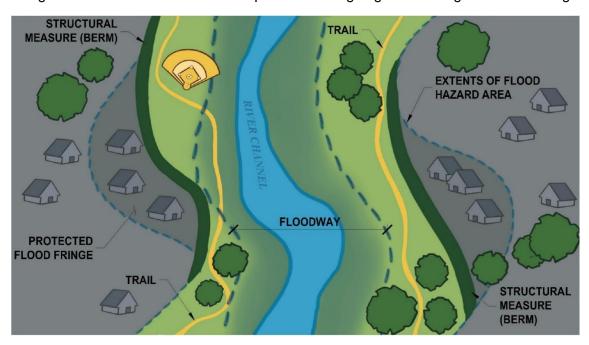


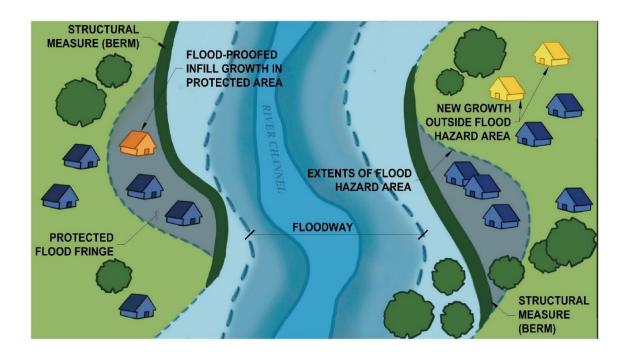
Figure 1 - Structural Measures shows at a conceptual level where berms have been or will be constructed to protect existing neighbourhoods. Protected flood fringe areas are identified on the flood hazard maps to identify areas of residual flood risk if berms fail or do not function as intended for the design flood. Temporary measures can be also deployed by the Town in advance of a flood where construction of permanent structural measures was determined not feasible for reasons such as space constraints and blocking road access.

SMART GROWTH AND DEVELOPMENT

New growth will be focused in areas that are safest from flooding hazards.

Growth in Drumheller will be encouraged to occur outside of the flood hazard area (Figures 2 to 4 - Flood Hazard Area). New development in the floodway will be limited to parks, trails and other similar low-risk uses. Development in the flood fringe, high hazard flood fringe, protected flood fringe and protected flood fringe by temporary measures will be required to meet minimum design and construction standards to protect buildings against damage due to flooding.





4 THE BADLANDS

The badlands are the secret ingredient of the Drumheller Valley. Formed over millions of years and carved over thousands of years, the majesty of the badlands landscapes is sought out by many. It serves as a backdrop to everyday life and recreational pursuits for residents, provides an out of world experience for visitor adventures, and stars in major media and film. The immersive experience of this landscape must be protected and celebrated so that they may be enjoyed now and in the future.

Today, the banks and riparian areas flanking the river have an abundance of vegetation due to the rich floodplain soils, including several riparian forests. These are made up of cottonwood, poplar, willows and various species of shrubs. These areas provide habitat that is crucial to many birds, mammals, reptiles and amphibians in what is an otherwise dry area of the province. The dryer areas in the Drumheller Valley include mixed-grass prairie dominated by blue gama grass and June grass. Many slopes are also dominated by silver sagebrush, prickly pear cactus and various grasses and shrubs (Figure 5 - Existing Landscape Conditions).

4.1 SIGNIFICANCE OF THE BADLANDS

The badlands are the essence of the Drumheller Valley. The dynamic landscapes and many archaeological and palaeontological resources have ecological and human significance and are integral to future growth and discovery in Drumheller.

The badlands are a critical element of Drumheller's tourism industry. People are drawn to the sense of isolation and immersion that being within the landscape provides. There is a marked change in the landscape when you descend into the Drumheller Valley, as though you are travelling back in time. This sense of arrival harkens to many adventurers, seeking unscripted exploration and discovery. What draws even more visitors is what can be found within the layers of the badlands. The Royal Tyrrell Museum of Palaeontology attracts nearly 500,000 people annually to Drumheller. Drumheller's association with dinosaurs and palaeontology is recognized world-wide. The expansion of the Drumheller Badlands Parks Trail System will serve to further integrate and increase access to the badlands, tying together points of interest through the landscape and encouraging visitors of the area's most popular destinations stay to enjoy all that Drumheller has to offer.

The natural grasslands, riparian areas, and river itself provide opportunities for adventurous outdoor pursuits, including hiking, biking, kayaking, fishing, and bird watching. Taking part in these types of activities is far from mundane when surrounded by the spectacular Valley walls, with their vibrant colours and layers. Access to this abundance of recreation opportunities, and the innate appreciation for the land this fosters, positions Drumheller well for the expansion of eco-tourism operations, sustainable industries (such as renewable energy), and eco-communities that are embedded in the landscape and cater to those who wish to reduce their environmental footprint while enhancing their quality of life. The beauty and rugged quality of Drumheller's landscapes also feed the inspiration and creativity of growing arts, film, and manufacturing communities in the region.

The significance of the badlands to the quality of life of residents, experience of visitors, and overall growth and prosperity of Drumheller cannot be overlooked. It is essential that these landscapes and historic resources are protected and enhanced as the Town continues to grow.

WAYNE VALLEY, LOOKING EAST FROM EXCELSIOR HILL



5 UNIQUE PLACES AND NEIGHBOURHOODS

Beyond the stunning river carved badlands, Drumheller is layered with unique places and historic neighbourhoods that tell the story of resilience, discovery, and opportunity. From the natural history of the landscapes and dinosaur fossil beds, to the human histories of Indigenous peoples, European arrival, and the coal industry, these stories make up Drumheller's past and contribute to its future. Understanding the history of Drumheller, its people, and neighbourhoods, helps us to understand it better today, and imagine what it can be tomorrow.

5.1 SIGNIFICANT PLACES

Drumheller is home to unique places, each with their own character and history. The town has grown over time to encompass several independent settlements, and today these settlements form Drumheller's distinctive neighbourhoods. In addition to these neighbourhoods, Drumheller's diverse attractions represent a wealth of history in the region, and draw people from all walks of life. These unique places and neighbourhoods are reflected in Figure 6 - Significant Places.

The following section provides a brief history of some of these significant places, and their current value as part of the overall Drumheller experience. The stories of these places should be shared so that future growth and development respects and enhances neighbourhood identity and character.

NACMINE

The neighbourhood of Nacmine is located along South Dinosaur Trail west of Downtown Drumheller. Once a booming coal mining town, the neighbourhood was named after its mine developers, North American Collieries ('NAC' and 'mine'). In addition to its significance as a mining community, the neighbourhood is significant as one of the first ranching locations in the valley, and a key river crossing.

Since the beginning of European arrival in Drumheller, ranching has been an important part of the local economy. In 1896 James Russell entered the Red Deer River Valley in search of ranch lands. At the present location of Nacmine he discovered unbroken grassland extending from the flat land above Drumheller all the way down to the river. Russell decided to make the area the location of his Lyon Cross Ranch, which he operated on 10,000 acres until 1907. The land was then surveyed and subdivided for homesteads.

The Red Deer River has played an integral part for the way of life and growth within Drumheller. Its riverbanks have historically been an attractive place to settle because of access to water and a means of transportation. Nacmine was no exception; however, in the early days of Nacmine the river was also a barrier to movement. No bridges existed and people had to rely on hazardous fords to cross the river. The fords were located where the river was slower and the banks were solid and not too steep, but these would become treacherous in the spring. To make the dangerous task of crossing the river easier, early settlers began to make homemade rafts and ferries and operate them privately.

Today, Nacmine is primarily a residential community, with some houses dating back to the early 1900s, and some small scale commercial uses. The neighbourhood has local parks and playground areas, an outdoor hockey rink, and an active community centre. The popular Badlands Campground is located next to the neighbourhood along the Red Deer River.

NEWCASTLE

Named after Newcastle Mine Company, the neighbourhood of Newcastle is situated on the southern shore of the Red Deer River, separated from the western tip of Downtown Drumheller by a bend in the river. Similar to Nacmine, Newcastle owes its existence to the presence of coal. Drumheller Valley coal is sub-bituminous and was a popular energy product prior to the 1960's for heating houses, cooking, and powering locomotives. It also was used to create power for the settlements and coal mines.

The Newcastle Mine was the first registered coal mine in the Drumheller Valley. It was registered as the Newcastle Coal Company Limited in 1911, but was simply called the Newcastle Mine. The mine began operations in 1912 and the first carloads of coal were sent out of Drumheller by rail that year. One of the mine's founders, Jesse Gouge, had learned of the whereabouts of the sizeable coalfield from a chance meeting with a local resident. He was crossing the river at the Greentree Ferry and met a man with a load of coal dug out from a riverbank in the Newcastle area. Gouge was so impressed with the quality of coal, he hurried to the land office in Calgary and secured a lease in Drumheller.

With the decline in the importance of coal, recreation became a key component of Newcastle's history. Newcastle Beach was developed as a recreational hotspot in the 1960's. It included a sandy beach, campgrounds, mini golf and refreshment booths, and for a time a small train called the Oopland Express. The train had been a small diesel engine that hauled coal from one of the mines. When the mines closed the engine and 10 coal cars were purchased by some residents of Newcastle and was put into service to transport visitors and residents around the beach area. Three baseball diamonds were later built in the park, and it is still a popular recreational and tourist area with a beach, boat launch, picnic area and fenced off-leash dog park.

The Badlands Amphitheatre, an outdoor theatre and music venue, is located near the former site of the Newcastle Mine. Boasting spectacular scenery and excellent acoustics, the Badlands Amphitheatre has been home of the award-winning Canadian Badlands Passion Play for 25 years. Every August the Amphitheatre hosts the "Canadian Icons" concert series which showcases the very best in Canadian talent. Previous guests have included legends like Tom Cochrane, Blue Rodeo, Paul Brandt, Corb Lund, and Randy Bachman.

DOWNTOWN DRUMHELLER

The area now known as Downtown Drumheller was the site of the original Drumheller settlement named after Sam Drumheller. The downtown area borders a bend in Red Deer River north of the former rail line. Downtown Drumheller is the historical, cultural and civic heart of Drumheller, and the historic structures within the downtown are important community assets that contribute to the community's identity.

The 1920's were Drumheller's booming years and most of the now historic downtown buildings were constructed during this time. Buildings for rent were in high demand because of the numerous coal mines that were being opened up throughout Drumheller and the influx of miners to operate them. Along with the miners came clothing shops, hardware stores, and drug stores to supply them. The buildings were primarily constructed of brick, and often featured a boomtown façade (when the front wall of the building extends higher up than the rest of the building so that the building looked larger than it actually was). Roland Langford, a local mason, was the builder of many of the brick buildings in the town. He developed a particular simple but attractive cornice design below the roof line that can be seen on several historic downtown buildings.

Flooding of the Red Deer River has been an ongoing problem for neighbourhoods throughout Drumheller. Following a large flood in 1915 downtown residents living near the river built a stone flood wall to protect their properties. The wall ran from the west side of what is now Highway 9 near the Gordon Taylor Bridge, east along Riverside Drive west and through the residential area south of Riverside Drive. It continued on the edge of the higher land to at least the area near the park on Riverside. The intention of the wall was that residential areas and important industrial infrastructure would not be developed in the lowlands along the river below the wall. Although much of the wall has been removed, sloped for landscaping or replaced with concrete walls, remnants of the original wall can still be seen along Riverside Drive west and in alleyways between 1st St. and 5th St. East.

A prominent feature of the downtown is its riverfront parks, community recreation facilities (Badlands Community Facility, public library, Memorial Arena, Aquaplex), and the World's Largest Dinosaur and Visitor Information Centre. In the past however, the area was home to Drumheller's first power plant. Proximity to coal from the Drumheller mines and water from the river made this a prime location. The power plant expanded over the years and was still in operation in the mid 1970's, but after the coal mines closed the power plant ceased operations and the infrastructure was removed. In 1928 the Drumheller Rotary Club was instrumental in building and operating the first swimming pool in Drumheller near the power plant in what is now Centennial Park. Excess heat from the plant was used to heat the pool. This pool was eventually replaced with the current outdoor pool by the City of Drumheller in the 1950s. Then in the early 1970s the Kinsmen led a number of service clubs got together to raise money and in 1975 the indoor pool at the Aquaplex opened to the public. The area is still a hub for community events, recreation, and visitor information.

The Centennial Park Plaza has the potential to become the beating heart of the Drumheller experience, a place where locals, tourists, badlands and the river meet. This base-camp for Drumheller will host events and become a launching point for valley-wide adventures. Creation of a new plaza and supporting flood mitigation infrastructure will open up opportunities to connect and animate this amazing gathering place within Downtown Drumheller.

WAYNE

Approximately 10 km southeast of Downtown Drumheller, the neighbourhood of Wayne is located within the Rosebud River valley. Accessed via Highway 10X from Rosedale to the north

through a 150 m deep canyon in the badlands, visitors travel along a winding road across 11 bridges that span the Rosebud River.

A hundred years ago, Wayne was a coal mining boomtown of more than 2,500 people working the six mines and the valley's first hospital. In the mid-1950s however, its population began to plummet and its business count dropped to three: a hotel, a garage and a grocery store. By 1970, the town's school had closed and today it has a population of about 25 people. Today Wayne is famous for the Last Chance Saloon and is a popular tourist attraction for motorcyclists and tourists.

Over the years, highways and bridges were built in Drumheller to improve mobility and provide greater access to communities. It is estimated that as many as 67 bridges (road and rail) were built between Rosedale and Wayne across the Rosebud River but many were removed as the road was straightened out over time. Wooden timbers floated down the river from Red Deer were used to build many of these bridges. The famous 11 bridges road to Wayne remains an important tourist attraction in Drumheller.

ROSEDALE / CAMBRIA

The neighbourhoods of Rosedale and Cambria are located 5 to 10 kms east of Downtown Drumheller at the convergence of the Rosebud and Red Deer Rivers. As with many other Drumheller neighbourhoods, the areas were first settled because of coal.

The Rosedale Mine began operations in 1912 and in 1913 the mine was considered one of the most valuable and reliable properties in the domestic coal field in Alberta. A number of miner's families moved into the community, and a school was built. Concerts and other events were held at the mine's big cookhouse and hall. The first masquerade ball was a memorable event with costumes hired from Beaumonts in Calgary.

Coal mining was a difficult process, so areas that were most likely to produce the greatest amount of quality product with the least amount of expense and effort were sought. Access to transportation was also important so most of the mines were built near the river and later, the railway. A suspension bridge serviced the Star Mine which operated from 1913-1929 across the river from Rosedale. Coal was mined underground and carried across the river in small coal cars suspended from an aerial cable system. It was sorted and loaded into rail box cars. The cable was also used to shuttle miners in Rosedale back and forth across the river to the mine. In 1930 a railroad bridge was laid across the river to the mine, however, the miners still needed to move across the river to work so the cable system was replaced with a suspension bridge. The current 117 metre long bridge is an upgraded and improved version of the original bridge, and along with remnants of the mine are a popular Valley attraction.

Today, Rosedale and Cambria are residential neighbourhoods with a small commercial centre. The neighbourhoods act as a crossroads, providing access to the Star mine Suspension Bridge, the neighbourhood of Wayne, and is situated approximately halfway between Downtown Drumheller and East Coulee. The neighbourhood is home to the Rosedale Community Hall, playground and baseball field, three campgrounds, and a number of businesses.

Rosedale and Cambria has the potential to become a major node in the center of Drumheller, connecting Nacmine, Wayne and East Coulee where the Rosebud meets the Red Deer River. It can act as a starting point for valley-wide recreation, including floating, fishing, cycling, hiking, or relaxing by the river and as a gathering place in Drumheller.

HOODOOS

Located between Rosedale and East Coulee near Willow Creek on the north side of the Red Deer River, the hoodoos are stunning natural features of the badlands landscape. For Canada's 125th year celebration, the Alberta coin was the hoodoos.

Composed of sand and clay from the Horseshoe Canyon Formation (deposited between 67-73 million years ago), the hoodoos were created from glacial meltwater and subsequent erosion. They are formed when rocks more resistant to erosion are situated above sediments that more easily erode from wind and rain. The Drumheller hoodoos formed because they have erosion-resistant cap rocks that contain calcium carbonate and iron cements. These cap rocks protect the underlying columns of softer rocks. Erosion of the hoodoos continues today and eventually the existing ones will disappear and will be replaced by new ones as the surrounding outcrop continues to erode.

The protected Hoodoos site has a 0.5 km looped trail for visitors to explore the 5 to 7 metre tall hoodoo formations. Smaller hoodoos can also be found at other sites throughout Drumheller. The Hoodoos are a must-see stop in Drumheller experience. There is opportunity to expand and improve existing facilities, increasing viewing opportunities and trail connections from this node of activity. This would invite visitors to pause and admire the backdrop of the extraordinary badlands landscape, or continue their adventure, learning about Drumheller's natural, cultural and geological heritage along a series of interpretive trails.

EAST COULEE

Located 21 km east of Downtown Drumheller, the neighbourhood of East Coulee is on the north bank of the Red Deer River. Originally a mining community, it is now predominantly a commuter community with a small commercial centre.

From 1911 to 1950 more than 130 mines operated in the Drumheller Valley and a number of boomtowns popped up. East Coulee, one of the boomtowns, developed in the 1930s and 1940s as a local service centre and home for miners and their families. A railyard and stockyard served the area mines on the northeast side of the community. Local services in the settlement included the Whitlock Lumber Company, a bank, the East Coulee Hotel, a drug store, City Café, Sam Dragon's Pool Hall, a barber shop, Thomas Shoe Repair, Miller's Bakery and Café, and a grocery and confectionary. The Star Theatre, built in 1930 in East Coulee, was the favourite entertainment spot in town, showing movies twice a week. In the early years of the community the theatre held popular 'Hard Times Dances' with the (locally) famous Si Hopkins and His Old Timers. Tragically, fire destroyed the building in the 1950s and it was never rebuilt.

The Atlas Coal Mine was the most successful coal mining operation in Drumheller and consisted of several different mines over the years. The Atlas Mine #3, across the river from East Coulee, was active for almost 50 years between 1936-1979. Coal was mined from an underground network that covered more than 2,500 acres and extended back from the valley

edge for more than 10 km. Today the Atlas Coal Mine is a nationally recognized historic site that describes coal mining history of the valley. Many of the original buildings, and other infrastructure have been preserved.

Today, the neighbourhood has approximately 200 residents living in a tranquil setting along the Red Deer River. The East Coulee Community Hall hosts events and dances, including the annual SpringFest, and holds a pancake breakfast every month. East Coulee's 1930s schoolhouse operates today as the East Coulee School Museum. The museum features a restored 1930's classroom, miners' artifacts, and hundreds of photos of the East Coulee miners, their families and cultural lives.

LEHIGH

Located 18 km east of downtown Drumheller, the community of Lehigh was home to a number of residential properties. Due to the porous sandy subsoils and risk of flooding via percolation, engineering studies demonstrated that it was infeasible to protect Lehigh from flooding via earth berms or temporary measures. As a result, The Town of Drumheller received funding from the Government of Alberta to purchase property within the former community of Lehigh.

As of fall 2024, the Town is in the process of restoring the land to its natural state and transforming it into an Environmental Reserve. This includes removing old roadways, utilities, and planting additional trees. The conversion of this area to Environmental Reserve will ensure that no future development in the area will be authorized, however it allows the land to be utilized for public enjoyment for non-intrusive recreational activities such as hiking and birdwatching.

THE ROYAL TYRRELL MUSEUM OF PALAEONTOLOGY

The Royal Tyrrell Museum of Palaeontology is located on North Dinosaur Trail at Midland Provincial Park northwest of Downtown Drumheller. The Museum is located in the middle of the fossil rich layers of rock of the Late Cretaceous Horseshoe Canyon Formation. The Badlands Interpretive Trail, a popular 1.4-kilometre hiking trail, is located northeast to the Museum building.

After the collapse of the coal industry, Drumheller's community leaders began talks with provincial government officials in the 1970's looking for ways to bolster the local economy. The government of the time supported the building of a research facility that was then called the Provincial Museum Research Institute somewhere in southern Alberta but there was no plan at that time for a public museum. In 1979 Drumheller was chosen as the site for this facility which was announced the following year. The original plan was soon changed to include a large public museum. Construction began in 1982 and on September 25, 1985 then premier Peter Lougheed officially opened the Tyrrell Museum of Palaeontology. The Royal appellation was added in 1992.

The Royal Tyrrell Museum of Palaeontology is one of the world's leading research and educational facilities in the field of palaeontology. It has welcomed over 10 million visitors since opening in 1985 and is a major economic driver in Drumheller. As of 2020, the Museum houses thirteen exhibits that display approximately 800 fossils on permanent display.

The Royal Tyrrell Museum is connected by a portion of the Rails-to-Trails pathway to the Rosedale suspension bridge and the downtown that offers stunning scenic views and access to other historical sites.

6 OPPORTUNITY

Drumheller is embarking on a bold new chapter. It is a moment of reflection – reading the story again from the beginning to ensure it makes sense. It is a moment of challenge – accepting into the story unfamiliar new characters and settings. And ultimately, it is a moment of excitement – at the immense opportunity that lies in Drumheller's future. Drumheller's residents share a sense of the untapped potential of their place, though it is not always clearly rendered. It is part of the responsibility of this Plan to shine a light on this potential.

Much of the success of this Plan will emerge from a shift in the process of planning and building in Drumheller. Where previous planning documents and authorities have been characterized by constraint and restriction, the new documents and authorities should be encouraging and inviting. Equipped with the vision and policies in this document, development can be more easily assessed – and modified – in support of the Town's goals.

This plan underlines the opportunity in front of Drumheller. Residents, administrators, decision-makers, and investors all have a role to play in bringing this opportunity to life. This will be achieved by seeking out common ground, rallying around the Plan's goals, and keeping open the lines of communication and debate.

TOP OF NACMINE LOOKING NORTH FROM MONARCH HILL



PART II Policies

Part II of the MDP sets out the policies of the plan, building from the context provided in Part I. The policies establish direction on how to achieve the vision, goals, and objectives of the Plan.

PART I - VISION AND CONTEXT

FOUR FORCES

- Rivers
- Badlands
- Neighbourhoods
- Opportunity

Drumheller's Vision

A PLACE TO GROW AND A PLACE TO DISCOVER



and supporting objectives

COMPLETE SUSTAINABLE COMMUNITIES

Diverse housing & mix of uses Fiscally responsible municipal services Clear land use and engineering to support growth

TRAILS AND PARKS SYSTEM

Promote pathways and parks
Protect river and riparian function
Trail network to key destinations

UNIQUE NEIGHBOURHOODS

Downtown as centre of public life
Unique form and uses in neighbourhoods
Conservation and historic resources
Showcase through open space

owcase inrough open space

VALLEY-WIDE TRANSPORTATION

Sense of arrival Multi-modal mix Regional Connections

5

6

EFFECTIVE FLOOD MITIGATION STRATEGY

Emergency response plans

Land use regulation to protect development

Design standards to promote flood-resilience

3

DIVERSE ECONOMY

Coordinated visitor experience Growth of tourism, recreation & entertainment Support existing local businesses Expand into emerging sectors

PART II - POLICIES



TRAILS, PARKS & NATURAL AREAS



GROWTH





TRANSPORTATION & INFRASTRUCTURE



CULTURAL & COMMUNITY SERVICES



IMPLEMENTATION

7 DELETED

8 TRAILS, PARKS AND NATURAL AREAS

The Drumheller Badlands Parks Trail System is comprised of key components: trails, parks and natural areas. Access into Drumheller will be balanced with the preservation and restoration of natural areas for the long-term health of the region's ecological network. This will help to ensure future generations can delight in the discovery of Drumheller and experience the wonder of exploring its inscription on the landscape.

8.1 GENERAL POLICIES

- a) Parks, trails and natural areas will be planned and managed by the Town in accordance with the Parks and Recreation Master Plan (2023).
- **b)** The Town will encourage opportunities to improve the Drumheller Badlands Parks Trail System to:
 - i. protect the integrity of significant badlands landscapes; and
 - ii. increase public access to and enjoyment of open space, trails, and amenities.
- c) The design and management of the Drumheller Badlands Parks Trail System will include the following principles:
 - i. to provide sustainable and inclusive design, construction, maintenance, and operation of the components for all ages and abilities;
 - ii. to provide an adequate supply, quality, diversity and distribution of parks, open spaces, pathways, trails and associated amenities throughout Drumheller;
 - iii. to preserve significant views, ecological features/corridors, cultural sites, and sensitive landscapes for monitoring, and/or restoration;
 - iv. to provide suitable river access points; and
 - v. to respect unique neighbourhood identity and needs.
- d) The Drumheller Badlands Parks Trail System should integrate key entry points that announce visitors' arrival into Drumheller and protect views of the badlands landscape and the rivers. These key entry points should integrate wayfinding elements to connect people to the open space, park and trail network.

8.1.1 COMMERCIAL USES

a) Allow commercial activities within the Drumheller Badlands Parks Trail System, prioritizing commercial activities that support recreational services (e.g. equipment outfitters, watercraft and bicycle rental shops, food and beverage kiosks). Commercial uses and facilities should reflect the character and identity of Drumheller and should be sensitive to the landscape context.

b) Locate new or expanded commercial services in disturbed areas where they will have the least impact to ecological and trail connectivity.

8.2 DELETED

KAYAKER ON THE RED DEER RIVER



8.3 TRAILS

Connecting a network of land trails provides multi-modal access throughout the Drumheller Valley. Plazas and pavilions will provide access, amenity, and legibility to the trail network. Plazas will be larger nodes along the trail system, serving as venues for larger events or gatherings. Pavilions will be smaller nodes located at intervals along the trail system, at key trail intersections and in neighbourhood parks.

- a) A system of trails should be established in Drumheller that connect parks, the badlands, neighbourhoods, and the river. The system should include:
 - i. A continuous, accessible regional trail that connects the length of Drumheller;
 - ii. A network of local trails which serve as neighbourhood-level paths, designed to be universally accessible; and
 - iii. natural or adventure trails, which facilitate lower-impact access in natural areas with higher sensitivity.
- b) Where a key trail or pathway connection is required through private land, the Town may pursue land acquisition, easements or partnerships to promote pedestrian connectivity throughout Drumheller.
- c) Encourage the placement of plazas and pavilions at key trail connections and points of interest to act as gathering areas, resting points and trailheads, including:
 - i. Sites or structures with historical or cultural significance;
 - ii. Significant environmental, geological or hydrological features;
 - iii. Important archaeological or palaeontological discoveries;
 - iv. Areas of significance to communities and neighbourhoods in Drumheller.
- **d)** Plazas should be located near major landmarks or in regional parks. Plazas should be supported by amenities and infrastructure to support larger gatherings, such as parking lots, buildings/structures and washrooms.
- e) Pavilions should be provided as rest areas along a trail or at local trailheads. Pavilions may be supported by amenities such as signage, seating, waste receptacles, and bicycle amenities.

8.4 PARKS

Parks are open spaces for people – expressions of the Drumheller's landscape that invite people to play, rest, celebrate and reflect. Drumheller's existing leisure parks offer many recreational and open space amenities for residents to enjoy, such as splash pads, sports fields,

playgrounds and gardens. At a local level, new growth areas will introduce additional neighbourhood parks and local open space connections.

- a) Where parks are proposed as part of a development, the developer shall assume all costs associated with developing the park.
- **b)** River parks should accommodate activities appropriate to the site context. River parks should be designed to:
 - i. provide space for people to gather and celebrate the river valley;
 - ii. accommodate active and passive uses appropriate to the site with a focus on river activities; and
 - iii. minimize impacts to riparian areas.
- c) Neighbourhood parks should be within or adjacent to existing neighbourhoods and future growth areas. Neighbourhood parks should be informed by a provision analysis based on present and future needs and be designed to:
 - i. provide recreational opportunities and access to nature focused on the needs of existing and future residents;
 - ii. include accessible connections to the regional pathway system; and
 - iii. reflect the character of unique places and neighbourhoods in Drumheller.
- d) All parks should be located throughout Drumheller with consideration for existing infrastructure and environmental sensitivity. Parks should be designed to:
 - i. support both high-intensity and passive recreation uses;
 - ii. contribute to a greater understanding and appreciation of the history and natural character of Drumheller; and
 - iii. provide buffers between high-intensity activities and residential areas or areas of higher environmental sensitivity.

8.4.1 MUNICIPAL RESERVE

- a) Require that 10 percent of the gross developable land being subdivided, less the land required to be dedicated as environmental reserve or environmental reserve easement, be dedicated as Municipal Reserve in accordance with the provisions of the Municipal Government Act.
- **b)** Municipal Reserve dedication may be provided in the form of land, cash-in-lieu, or a combination of land and cash as determined by the Town.

c) Reserve lands, or cash-in-lieu, may be used for school sites, parks or recreational facilities in accordance with the provisions of the Municipal Government Act.

8.5 NATURAL AREAS

Existing natural areas encapsulate many of the intrinsic qualities of Drumheller and its landscape. These areas include steep slopes, coulees, significant geologic features and areas of native vegetation, including grasslands, shrubland and forests. Many of the most recognizable views and iconic images associated with the Town of Drumheller are within its natural areas, which include the river and the badlands. These natural areas present many opportunities for adventure and exploration as well as the protection of sensitive landscapes.

8.5.1 DELETED

- a) Deleted
- b) Natural areas shall:
 - i. contribute to a connected ecological network through the entire Drumheller Valley;
 - ii. protect and preserve sensitive features in the badlands landscape, including steep slopes, coulees, significant geologic features and areas of native vegetation;
 - iii. Preserve important natural viewsheds from transportation corridors; and
 - iv. Provide interpretation to tell the story of Drumheller for present and future generations.
- c) Natural areas in the floodway should:
 - i. act as the primary ecological corridor in Drumheller;
 - ii. provide opportunities for trail use, passive recreation, nature appreciation and river access, among other (mainly passive) uses appropriate to the setting; and
 - iii. contribute to the protection and enhancement of water quality, fish habitat and riparian health.
- **d)** Empower residents and visitors to become active participants and stewards in planning, sustaining and using the Drumheller Badlands Parks Trail System.
- **e)** Work with Indigenous communities, senior governments, and organizations to protect, manage, and steward natural areas.
- f) Encourage development to retain and reintroduce native vegetation.

8.5.2 SENSITIVE LANDS

a) Identify and protect sensitive lands, such as:

- i. Significant native grasslands;
- ii. Intact forests and shrubland;
- iii. Steep slopes and significant landforms;
- iv. Sites with archaeological, palaeontological or cultural significance;
- v. Areas identified as key wildlife corridors; and
- vi. Significant wetlands, riparian areas and fish habitat.
- **b)** Support the integration of low-impact, sustainable recreation in natural areas where appropriate and without adversely affecting environmentally sensitive lands.
- c) Wherever possible, seek public ownership of designated environmentally sensitive lands.
- d) Wherever possible, connect sensitive lands to parks and other natural areas.
- e) Identify and pursue opportunities to reclaim areas that have been disturbed to enhance ecological linkages, improve bank stability and restore wildlife habitat.

8.5.3 ENVIRONMENTAL RESERVE

- a) All lands that are unsuitable for development shall be dedicated as environmental reserve through the subdivision process, in accordance with the Municipal Government Act.
- **b)** Any subdivision proposal adjacent to a water body or water course shall dedicate a minimum 30 metre buffer from the water body/ course as environmental reserve to protect riparian areas and provide public access.
- c) An environmental reserve easement may be allowed in place of environmental reserve dedication where there is no public access required or likely to be desired in the future.
- **d)** Environmental reserve lands may be used to extend the public trail system, if the ecological integrity of the land is retained or enhanced.
- e) Consider the use of land purchases, land swaps, leasing agreements, conservation agreements and easements to protect important natural features that do not qualify as environmental reserve land.

8.6 DELETED

9 GROWTH

This MDP provides direction on how and where growth and future land uses should occur in Drumheller.

In general, growth will occur in two main forms: through infill within existing neighbourhoods, and through the development of new neighbourhoods.

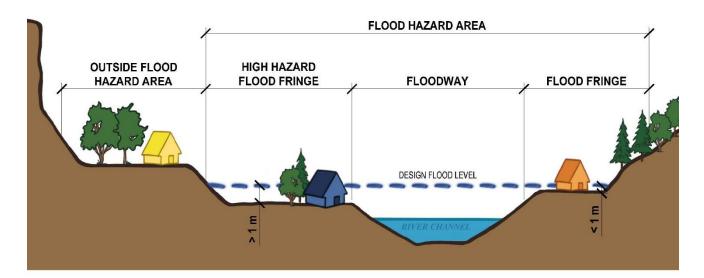
9.1 DEVELOPMENT HAZARDS AND CONSTRAINTS

9.1.1 FLOOD RESILIENCE

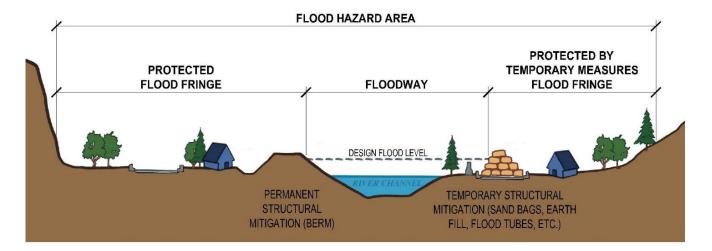
To minimize social, environmental and economic impacts, the appropriate balance must be found between the preservation of the floodway, the construction of flood mitigation structures and managing risk in the flood fringe areas.

- a) The design flood within Drumheller is the 1:100 year return period flood as determined by the Province of Alberta Flood Hazard Study.
- b) The flood hazard area in Drumheller includes the floodway, flood fringe, high hazard flood fringe, protected flood fringe and protected flood fringe by temporary measures as shown in Figures 2 to 4 Flood Hazard Map. (Note: the Flood Hazard Map can be viewed in detail online at gis.palliserwebmap.ca/view.aspx)

FLOOD WAY, FLOOD FRINGE AND HIGH HAZARD FLOOD FRINGE



FLOOD WAY, PROTECTED FLOOD FRINGE AND PROTECTED FLOOD FRINGE BY TEMPORARY MEASURES



- c) The flood hazard mapping should be adjusted in the future to reflect changes in Provincial flood hazard mapping, river morphology, and berm construction.
- d) Where physically and economically feasible, the Town will construct additional structural measures (berms) to protect existing development from the design flood.
- **e)** Flood protection structural measures shall be constructed on lands owned by the Town of Drumheller.
- f) The deployment of temporary measures for flood protection should be outlined in the Town's Flood Emergency Reference Manual.
- g) In the absence of Provincial regulations, the Town will regulate flood hazards through the Land Use Bylaw and engineering design standards in accordance with the following:
 - Development within the floodway will be limited to uses such as natural parks, trails and essential utilities that do not materially impede the natural function of the floodway.
 - ii. Development within the areas identified as flood fringe, high hazard flood fringe, protected flood fringe, and protected flood fringe by temporary measures shall be designed to protect buildings and habitable spaces, such as establishing a minimum flood construction level and raising the level of electrical and mechanical equipment.

9.1.2 EROSION CONTROL AND BANK STABILITY

Even with the regulating influence of the Dickson Dam, erosion and bank stability is a concern along the waterways in the Town of Drumheller, particularly during high flow and ice jam events. Excessive erosion negatively impacts water quality and can pose a risk to human life, property,

and the environment. Erosion control and bank stabilization are critical components of a resilient flood mitigation strategy.

- a) The Town should identify and monitor potential and existing risk areas for erosion and scour along the waterways and develop a method for prioritizing bank stabilization projects.
- b) Where the potential for localized bank erosion along a waterway exists, the Town may require the submission of a report prepared by a qualified professional that evaluates the hazard of bank stability and erosion and the risk to the development, and propose mitigation to reduce the risk to an acceptable level.

9.1.3 OTHER HAZARDS AND DEVELOPMENT CONSTRAINTS

In addition to the hazard risk from flooding, there are several additional constraints that impact development in Drumheller, as indicated in Figure 7 – Development Constraints. The following policies address the specific requirements of the Municipal Government Act and identify additional Provincially established setbacks required from several uses, including Sour Gas Facilities and waste treatment/management facilities. They also provide direction for development in areas with steep slopes and where there has been undermining to ensure adequate studies and mitigation are or have been conducted to reduce risk.

- a) Refer all relevant development and subdivision applications to the Provincial Energy Regulator, in accordance with the Municipal Government Act.
- **b)** Consult with the Provincial Energy Regulator on proposed Sour Gas Facilities to ensure they do not impact existing residential neighbourhoods.
- c) Prohibit any development that does not conform to provincial Sour Gas setbacks, unless given official written direction from the Province authorizing a setback reduction.
- d) Do not approve any subdivision or development proposals for schools, hospitals, food establishments, or residential use within 300 metres of the Town's wastewater treatment plant or landfill, as per the Alberta Subdivision and Development Regulation, unless a waiver is obtained from the Province.
- e) Require technical studies and updates to determine hazard risk for any proposed development with potential undermining. The study shall be conducted by a professional engineer and address:
 - i. Slumping or subsidence risk;
 - ii. Estimated level of risk to public safety; and
 - iii. the appropriateness of the proposed development with respect to the undermining conditions.

- f) Any proposed development in proximity to or containing a steep slope, defined as any slope over 15% grade, shall conduct a geotechnical engineering assessment to establish required development setbacks from the steep slopes.
- g) Discourage new pipeline development in designated growth areas and ensure routing adequately considers impacts on landscapes, natural features, and planned development to ensure land is not unnecessarily fragmented, scarred, or impacted.
- h) Encourage the Province and industry to efficiently and effectively remediate abandoned well sites and pipelines.

9.2 LANDSCAPE SENSITIVE DEVELOPMENT

The badlands are the essence of the Drumheller Valley. These dynamic landscapes are a major draw for residents and visitors alike, creating an immersive experience like no other. Understanding their immense significance to economic development, recreation, tourism, and overall aesthetic of the Town, it is essential that critical views of these landscapes are considered and protected as the Town grows. Figure 8 – Significant Views identifies important badlands views at a high level from major transportation routes within the Valley. These are areas where future development could have a significant impact on the overall experience and views of the badlands landscapes, and where these impacts will need to be mitigated.

- a) Ensure that all new buildings and structures located above the Valley escarpment are not visible from the major highways within the Valley.
- **b)** Ensure that new roads and parking areas are set back from the escarpment edge so that vehicles are not visible from the major highways within the Valley.
- c) Where possible, development on the first bench should be designed to enhance the existing badlands landscapes, such as nesting development within existing hills to protect views from main transportation corridors.
- **d)** Work with adjacent municipalities to identify and protect significant views of the badlands outside of but visible from the Town of Drumheller, through Intermunicipal Development Plans.

9.3 RESIDENTIAL NEIGHBOURHOODS

Residential neighbourhoods are where the majority of Drumhellerites live. Currently, these areas are made up of predominantly single-family housing. The MDP enables the continued development of this type of housing, while also fostering flexibility to encourage a wider range of ground-oriented, infill, secondary, and multi-family housing options. Additionally, the MDP promotes greater mixing of non-residential uses within neighbourhoods and the establishment of neighbourhood commercial nodes. This will allow residents to access more services, institutional uses, recreation, and employment opportunities within walking or cycling distance from home, creating more 'complete' and walkable communities.

9.3.1 GENERAL

General residential neighbourhood policies apply to both infill neighbourhoods and new neighbourhoods in Drumheller.

- a) Direct future residential development to the Residential Neighbourhood areas identified in Figure 9 Land Use Map.
- b) Encourage a mix of uses in all residential neighbourhoods.
- c) Enable and encourage 'live-work' and home-based business and services in all residential neighbourhoods.
- d) Through the Land Use Bylaw, support the development of a wide variety of housing forms and densities scaled to fit within traditional single-unit areas, such as cottages, courtyard housing, row housing, duplexes, triplexes, and stacked flats.
- e) Encourage the development of attached and detached secondary residences.
- f) Encourage the development of small flex units. Monitor unit design and implications for neighbourhood livability and affordability.
- g) Support the development of mixed-use local commercial nodes in neighbourhoods to provide walkable amenities, services, employment opportunities, and multi-family housing.
- h) Local commercial nodes in residential neighbourhoods shall be designed as pedestrianfocused environments, integrated with the public realm and streetscape.
- Local commercial nodes should be sited in central locations within residential neighbourhoods with access from collector roads and connections to active transportation networks and trails. Consideration should be given for potential future transit connectivity.
- j) Support the development of seniors' housing and age-in-place facilities.
- **k)** Encourage the use of Crime Prevention Through Environmental Design (CPTED) principles in site planning for private properties and neighbourhood design, as a means of enhancing security and safety in the community.
- Remove minimum parking requirements in the Land Use Bylaw for new residential development.
- **m)** Encourage the provision of bicycle parking in multi-family and mixed-use developments, including local commercial nodes.
- n) Ensure the location, design, and scale of residential development is sensitively integrated with adjacent parks, open space, pathways and trails in a comprehensive and supporting manner.

9.3.2 INFILL NEIGHBOURHOODS

Infill areas allow future development to capitalize upon the assets and amenities in Drumheller's existing neighbourhoods. The following provides direction on how infill areas may be developed to compliment existing neighbourhoods and character.

- a) Deleted
- **b)** Ensure infill development within existing neighbourhoods is compatible with existing development, including consideration for:
 - i. Compatibility in height and scale;
 - ii. Continuity with existing lot patterns, laneways, and streetscapes;
 - Preservation of existing vegetation;
 - iv. Integration of buildings considered to have historical significance; and
 - v. Capacity of municipal utilities and infrastructure.
- c) Develop Area Redevelopment Plans to support community revitalization efforts or redevelopment of major sites.
- d) Consider the provision of specific neighbourhood overlays in the Land Use Bylaw, to retain and enhance the characteristics and/or built form of neighbourhoods.

9.3.3 NEW NEIGHBOURHOODS

New neighbourhoods allow for the continued growth and expansion in Drumheller, providing opportunities for diverse new housing options and lifestyles. The policies in this section ensure that all new neighbourhoods are aligned with the goals and objectives of the MDP and are developed in a logical sequence to ensure continuity and connection to the rest of Drumheller.

The MDP sets out several potential future growth areas for the development of new neighbourhoods. The potential growth areas are organized into three levels of development opportunity. Level I are the highest opportunity growth areas, given their ability to be serviced and connected efficiently to existing development. Level II present the next level of opportunity, where there are some challenges, restrictions, and servicing that would need to be addressed before growth can occur. Level III are longer term opportunities, that should be considered once the Level I and II have been developed. The identified growth areas represent development opportunities that have the capacity to enrich and grow Drumheller safely out of the river's reach.

- a) Encourage the establishment of new neighbourhoods in the potential growth areas identified in Figure 10 Growth Areas.
- **b)** Ensure all new neighbourhoods are designed to have a high level of connectivity for active modes, through the provision of street networks and pathway and trail connections.

- c) Discourage exclusively large-lot single-unit developments within new neighbourhoods.
- d) Encourage sustainable, complete community design of new neighbourhoods, including:
 - i. Water protection and conservation;
 - ii. Compact build form;
 - Resource conservation/reduction of waste;
 - iv. Protection of locally significant wildlife habitat and ecological systems;
 - v. Provision of local open space and recreation amenities;
 - vi. Energy efficient buildings and renewable/district energy systems; and
 - vii. Green roofs.
- e) Consider the use of Envision, the Public Infrastructure Engineering Vulnerability Committee (PIEVC) and National Asset Management System (NAMS) Canada to evaluate the sustainability of future large scale developments.
- f) Actively identify growth areas to developers and seek opportunities to partner in their development and servicing.
- g) Require the completion of an Area Structure Plan (ASP) for the development of all new neighbourhoods. ASPs may be led by the developer or the Town. Area Structure Plans shall be consistent with the policies of the Municipal Development Plan.
- h) Area Structure Plans must incorporate the following:
 - i. Plan area and land ownership;
 - ii. Identification and mitigation of hazard risk;
 - iii. Identification of environmentally sensitive features and wetlands, and areas to be established as Environmental Reserve:
 - iv. Identification and consideration of cultural/historical resources;
 - v. Parks and open spaces network and linkages to the Valley-wide trail network;
 - vi. Proposed land uses:
 - vii. Any lands to be designated as Municipal Reserve for school or other public uses;
 - viii. Proposed roads and streets network:

- ix. High level servicing concept;
- x. Projected population and maximum number of dwelling units;
- xi. Potential emergency shelter and supply locations and egress routes;
- xii. Conceptual phasing/sequencing of development; and
- xiii. Any additional technical studies requested by the Town.

9.4 COMMERCIAL AND INDUSTRIAL AREAS

Commercial and industrial areas facilitate the retention and expansion of critical industries and businesses in Drumheller, contributing to a diverse and prosperous economy. The majority of Drumheller's commercial and industrial development will be located within downtown and identified employment areas. The following policies direct where and how commercial and industrial areas will be developed to enable a prosperous and diverse Valley economy.

- a) Direct major commercial and industrial uses to the commercial and industrial areas indicated in **Error! Reference source not found.** Figure 9 Land Use Map.
- b) Commercial and industrial areas shall include a variety of industrial and commercial developments to provide for a range of employment and economic development opportunities in Drumheller.
- c) Encourage large-scale value-added agricultural industries and related manufacturing to develop in identified commercial and industrial areas.
- d) In existing unserviced employment areas, encourage uses that require outdoor storage and/or have limited need for municipal services.
- e) Discourage heavy employment traffic routing through residential areas.
- f) Ensure roads and parking for major employment areas are paved to handle heavy traffic.
- g) Development in commercial and industrial areas should provide:
 - i. accessible and connected pedestrian pathways, crossings, and entrances;
 - ii. paved roads and parking areas with adequate drainage;
 - iii. landscaping adjacent to roads and residential areas:
 - iv. bike parking;
 - v. screened storage areas; and
 - vi. loading areas to the side or rear of buildings.

h) Ensure the location, design, and scale commercial, and industrial development is sensitively integrated with adjacent parks, open space, pathways and trails in a comprehensive and supporting manner.

9.5 DOWNTOWN

A downtown is a highly visible and important indicator of a community's economic and social health. When downtown Drumheller thrives, the town as a whole benefits. Enhancing downtown Drumheller as a destination for retail, dining, entertainment, culture, and events will play a significant role in attracting new residents and visitors, as well as stimulating new investment, businesses, and industries throughout the town.

Successful downtowns are not just places for recreation, shopping, dining, or work; they are also places where people live. More people living downtown means more regular business for shops of all kinds, more foot traffic, and a greater sense of local vitality in the area. A diverse downtown with more residents and activities will result in a more physically, socially, and economically vibrant community that attracts visitors and investment.

The MDP reinforces downtown's role as Drumheller's heart of civic life and centre of commerce, as well as a complete and livable community. The policies direct creation and implementation of a Downtown Area Revitalization Plan, which will set out further direction for land use, programming, and actions to attract and coordinate reinvestment and promote downtown as the basecamp for all visitors to Drumheller.

- **a)** Establish, maintain, and implement a Downtown Area Revitalization Plan. The Downtown Area Revitalization Plan should:
 - i. Coordinate public and private investment;
 - ii. Provide direction on urban design and public realm improvements, including streets, parks, and other public spaces;
 - Guide land use planning and development;
 - iv. Enhance the visitor experience of downtown;
 - v. Support economic, social, cultural, and environmental prosperity in Drumheller;
 - vi. Provide measurable goals for successful implementation.
- b) Increase the number and diversity of residents living in downtown by allowing for additional residential density, incentivizing residential development (through grants and other programs), and prioritizing the development of services and amenities to support residents.
- c) Create a clear visual and pedestrian linkage between downtown, the surrounding badlands landscape, and the Red Deer River by integrating its public realm and open space concepts with Drumheller Badlands Parks Trail System.

- d) Target initiatives in downtown to revitalize and activate vacant properties and generate economic development, such as business incubation programs or temporary placemaking projects.
- e) Elevate the pedestrian experience in downtown and improve universal access through coordinated public realm and wayfinding improvements and the implementation of design guidelines.
- f) Focus Valley wide-celebrations in downtown and Centennial Park and support temporary street closures for events.
- g) Encourage private and non-profit educational institutions to locate campuses downtown.
- h) Work with the existing downtown business community to generate more evening, weekend, and year-round activity and traffic in the downtown.
- i) Communicate and promote Town-led downtown initiatives to encourage uptake of incentives and build assurance in the Town's commitment to reinvest in downtown.
- j) Prioritize the enforcement of the Community Standards Bylaw in the downtown.

9.6 RURAL DEVELOPMENT AREAS

Rural development is part of the badlands landscape and the overall Drumheller experience. Rural development areas contribute to the economy through various agricultural and resource development activities as well as recreational and cultural pursuits. Drumheller's rural development areas also provide for country living, immersed in the badlands landscape.

9.6.1 GENERAL

The general policies apply to all rural development areas.

- a) Allow country residential development in specific locations within the rural development areas identified on Figure 9 Land Use Map, where it will not adversely impact the badlands landscape, is compatible with surrounding uses, and either has adequate soil capacity for proper sewage disposal or is connected to municipal servicing.
- b) Large concentrations of large country residential lots should be discouraged.
- c) Support the development of private recreation, such as golf courses, ranches, and other uses in rural development areas provided that:
 - i. The intensity and scale of development is appropriate for the site;
 - ii. Uses are sensitive to the natural landscape on and adjacent to the site; and

iii. Potential impacts on the environment, cultural and historic resources, and adjacent uses can be mitigated appropriately, including the functionality of adjacent wildlife corridors or habitat patches.

9.6.2 AGRICULTURE

Agriculture is an important part of the local economy. The MDP encourages innovative agriculture that employs sustainability techniques and technologies to enable a food system that is adaptive to a changing climate.

- a) Allow continued agricultural operations in specific locations within the rural development areas identified on Figure 9 Land Use Map where it is compatible with surrounding land uses and supports the overall Drumheller experience.
- b) Support land use applications for new, innovative agricultural ventures that may require unique planning solutions when they support the vision and guiding principles of the MDP.
- c) Prohibit confined feeding operations within the municipal boundaries, given flood hazard risk and impacts on residential neighbourhoods.

9.6.3 RESOURCE DEVELOPMENT

Historically Drumheller's economy was entirely dependent on resource development and extraction. Today resource development remains a smaller yet still important component of the Town's economy. All resource development needs to be considered within the lens of protecting the badlands landscape and overall Drumheller experience.

- a) Allow natural resource extraction in specific locations within the rural development areas identified on Figure 9 - Land Use Map where it is compatible with surrounding land uses and does not detract from the badlands.
- b) Natural resource extraction activities shall provide appropriate buffers and screening to minimize land use conflicts and preserve the badlands landscapes.
- c) Aggregate resource extraction shall only be allowed in Drumheller when it is conducted on less visible slopes.
- **d)** Further development of oil and gas wells shall be discouraged within sight of the brink of the escarpment, or any other distance required to ensure well site structures and facilities are not visible from the valley floor.
- e) The development of new oil and gas well sites and pipelines along the valley floor and within the Town of Drumheller shall be discouraged.
- f) Support the development of renewable energy production projects to diversify Drumheller's economy where they do not detract from significant views and landscapes.

9.7 CLIMATE ADAPTATION

- a) Consider natural features as green infrastructure, recognizing the economic, social and environmental benefits that they provide to the Town.
- **b)** Apply and integrate natural capital in the municipality's Asset Management Plan to recognize the role of ecosystem services and provide for their maintenance and regular support alongside traditional capital assets.
- c) Increase the urban tree canopy and vegetated areas on Town streets and parks to reduce the urban heat island effects, decrease surface stormwater runoff, and sequester carbon. Ensure the use of species that are adapted to the climate of Drumheller.
- **d)** Retain significant mature trees whenever possible, and require replacement if removal is necessary.
- e) Encourage developers to retain existing wetlands rather than providing compensation to the Province.
- f) Naturalize stormwater management facilities whenever possible to enhance their ecological value and recreational benefits.
- **g)** Increase the use of native, low-maintenance, and low-water species in the design and maintenance of parks.
- h) Encourage the use of xeriscaping in new developments.
- i) Encourage green building techniques and energy efficiency in building design.



10TOURISM AND ECONOMIC DEVELOPMENT

Historically, Drumheller's economy was focused on resource extraction and agriculture. Many of the Town's existing neighbourhoods owe their existence to early coal mining settlements. While resource development and agricultural industries are still present, the economy has shifted over time to a wider variety of tourism and service industries that capitalize on the remarkable Drumheller experience, including the scenic badlands landscapes and the layers of natural and human stories. Today, the Drumheller Institution and the Drumheller Health Centre are the two major employers in the town.

Drumheller sees nearly 500,000 visitors annually for the Royal Tyrrell Museum of Palaeontology alone. Additional visitors come to the area for the many other attractions, recreational pursuits and events; however, many of these visitors do not stay in town for long. One of the critical tourism and economic development priorities of the MDP is to capitalize on existing visitor traffic, providing visitors with reasons to both stay longer in Drumheller and return often. With the expansion of regional trail networks and wayfinding, many opportunities will be unlocked for the expansion of recreation, adventure, and eco-tourism activities and services throughout Drumheller as well as a range of other cultural and experience-based tourism industries.

When appropriately integrated and leveraged, tourism provides an investment in community's social and economic wellbeing. It can also help to protect and promote the distinct culture and heritage of a place. The economic benefits of tourism include sustaining local businesses; enabling diverse food, beverage, and retail options; increasing employment opportunities; and stimulating additional economic activity. The success of established and new businesses results in more tax revenue that can be used by municipalities for infrastructure improvements, grants and support for businesses, and additional services for residents.

The Town's economic development strategy supports a diverse and prosperous economy. The MDP policies provide guidance for fostering tourism and recreation industries that enhance the Drumheller experience and Drumheller's reputation as a world class tourism destination. At the same time, the MDP supports the expansion, retention, and promotion of local, 'made-in-Drumheller' business and talent, as well as the introduction of new and innovative enterprises. The MDP seeks to remove barriers to economic development, generate more year-round and seasonal employment opportunities, and build in added flexibility that allows development to capitalize on opportunities and be more resilient to changing markets.

10.1.1 GENERAL

The general economic development policies focus on supporting existing business and industry while also diversifying economic activity in Drumheller.

- a) Create and maintain an Economic Development Strategy for Drumheller.
- **b)** Actively pursue new economic opportunities to diversify the local and regional economic base through marketing developable land to new and existing industries and businesses.

- c) Regularly review municipal processes to remove barriers to business development and expansion.
- **d)** Actively pursue the expansion of postsecondary and skills training opportunities within Drumheller and market distance learning opportunities, with a focus on retaining and attracting youth and young professionals in the Town.
- **e)** Pursue opportunities to permanently establish and support the growing film industry in Drumheller.
- f) Build capacity and market Drumheller as a destination for conferences and events.

10.1.2 TOURISM

The tourism policies contribute to retaining Drumheller's reputation and value as a world class tourism destination, while leveraging investment to improve the Drumheller experience for both visitors and residents.

- a) Maintain and regularly update a Tourism Master Plan. The Tourism Master Plan shall align with the priorities of the MDP, and should address:
 - i. Strategic leadership for Tourism in Drumheller;
 - ii. Curation of a cohesive Drumheller experience;
 - iii. Valley-wide branding and marketing:
 - iv. Town-provided tourism infrastructure and amenities;
 - v. Wayfinding strategies and initiatives;
 - vi. Monitoring of tourism and recreation industries;
 - vii. Events attraction and promotion;
 - viii. Tourism incentives and partnership opportunities; and
 - ix. Implementation strategy and rollout.
- **b)** Work with existing and potential tourism and recreation providers to enable and promote greater year-round tourism opportunities and services.
- c) Encourage the development of private recreation and adventure tourism businesses in Drumheller.
- **d)** Monitor and promote federal and provincial economic and tourism development funding and grant opportunities within the business community and seek partnership opportunities in funding applications.

- e) Consider entrance features and signage at all entrances to Drumheller to enhance the 'sense of arrival'.
- f) Support the provision of short-term rental and tourism accommodations in the Land Use Bylaw. Develop and implement guidelines for short-term rentals accommodations.

LOOKING NORTHEAST FROM MONARCH HILL OVER NACMINE



11 TRANSPORTATION AND INFRASTRUCTURE

Drumheller's transportation and infrastructure, including roads, utilities, and other municipal servicing, support growth and development. The MDP envisions a future where Drumheller begins to shift from a predominantly auto-oriented transportation model to a model that supports a higher share of alternative transportation and active modes. This approach to transportation acknowledges the need for 'complete streets' which provide connectivity for all modes as well as serve as vibrant public spaces in the community. A diverse and well-connected transportation network will reinforce the Drumheller Badlands Parks Trail System, and link Valley neighbourhoods. Sustainable municipal servicing and utilities support Drumheller's continued growth and resiliency.

11.1 DELETED

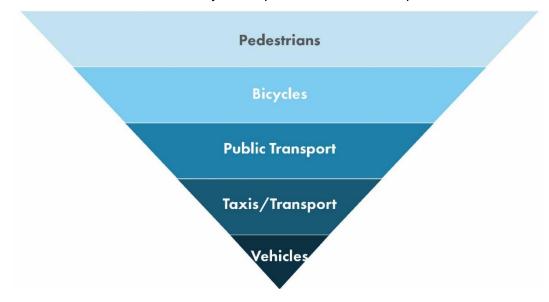
11.2 TRANSPORTATION

There are many modes in which to travel in Drumheller, each offering a different perspective and experience. From walking and cycling, to driving or boating, Drumheller's comprehensive transportation network shall ensure connectivity and ease of access for all these modes.

The transportation network is linked to the Drumheller Badlands Parks Trail System to support and enhance the overall Drumheller experience. Figure 11 - Transportation Network identifies the major transportation corridors in Drumheller.

11.2.1 GENERAL

- a) The Town shall maintain and regularly update a Transportation Master Plan to guide future improvements and additions to the Town's transportation system. The Transportation Master Plan shall:
 - i. Establish a mode hierarchy which prioritizes active transportation modes;



- ii. establish a compact, efficient street and pathway hierarchy and associated guidelines that are coordinated with the MDP Land Use Concept;
- iii. provide requirements for development of complete streets in urban areas within town, with design emphasis on compact, human scale environments such as narrowing rights of ways and turning radii;
- iv. provide direction and phasing for future street improvements and ongoing management of transportation infrastructure;
- v. ensure efficient movement of people and goods; and
- vi. ensure coordinated planning and development with provincial transportation networks.
- b) Base transportation network development and decision-making on existing development, future growth areas, Area Structure Plans, and interconnectivity with adjacent municipalities.
- c) Ensure all new development provides a high degree of road connectivity to allow for shorter travel distances between destinations for all modes of transportation.
- d) Ensure pathway and roadway connections are developed in a logical sequence throughout the implementation and phasing of Area Structure Plans and Outline Plans to ensure access and connectivity to the existing network.
- e) Ensure appropriate transportation infrastructure is provided in employment areas, to accommodate both the movement of truck traffic and the travel needs of employees and customers.
- f) Support the provision of regional transit connections.
- **g)** Work with the Province in the determination of any future river crossings, which are the responsibility of Alberta Infrastructure and Transportation.
- h) Deleted
- i) Secure and protect the CPR and CNR rail corridor for future active transportation connections within Drumheller.

11.2.2 MAJOR CORRIDORS

Drumheller is accessed by several major provincial transportation corridors (Figure 11 - Transportation Network). These corridors offer the first experience and sense of arrival for visitors to Drumheller, as well as provide the major connections between neighbourhoods.

a) Coordinate road and trail connections with the Province of Alberta and adjacent municipalities to ensure regional connectivity.

- b) Reduce/consolidate signage and other visual disturbances on the Highway 9 and 575 entrances to Drumheller to retain the experience of arrival and keep the focus on the landscape transition.
- c) Reduce/consolidate signage and other visual disturbances along the highway 10 corridor from Rosedale to East Coulee to retain the landscape experience.
- d) Protect future road rights-of-ways through building setbacks as required.

11.2.3 COMPLETE STREETS

Complete Streets ensure that there is safe right of way provided for a range of users, through the provision of infrastructure such as wide sidewalks, safe crossings, and cycling lanes.

- a) Update existing design guidelines for streets to provide for complete street features that will improve public safety, encourage alternative and active transportation, improve livability, and accommodate a range of users. Features should include but are not limited to:
 - i. Bicycle lanes;
 - ii. Bump outs;
 - iii. Wider sidewalks in urban areas;
 - iv. Safe crossings for those with mobility challenges;
 - v. Curb cuts; and
 - vi. Patterned paving.
- **b)** Consider the provision of a transit service, particularly to address the needs of youth and young adults and provide an alternative travel method for visitors to Drumheller.
- c) Ensure all new development creates linkages to the town's overall trail network.

11.3 UTILITIES AND SERVICING

Utilities, such as waste, water, and electricity, are essential to support growth and quality of life in Drumheller. Utilities should be well planned and integrated with future growth areas, as well as consider the impacts of a changing climate and economy.

11.3.1 **GENERAL**

The general utilities and servicing policies apply to utilities and services provided in Drumheller by both the Town and other providers.

- a) Provide high quality utility services, in accordance with federal and provincial standards.
- b) Ensure all utility systems are adaptive to changing technologies and a changing climate.

- c) Maintain, fund, and implement a comprehensive long- term plan for utility infrastructure and establish budget priorities in alignment with the MDP.
- **d)** Provide servicing in a logical manner to support both infill growth and growth areas.
- e) Update the Town's engineering design guidelines for the construction and maintenance of infrastructure, rights-of-way, and service connections to ensure they are consistent with the policies of the MDP.
- f) Review and update the Off-Site Levy bylaw to align with the new priorities of the MDP.

11.3.2 WASTE

Waste management is an integral service provided by the Town. This service contributes to Drumheller fulfilling its potential as the 'cleanest, friendliest, and most sought after' community.

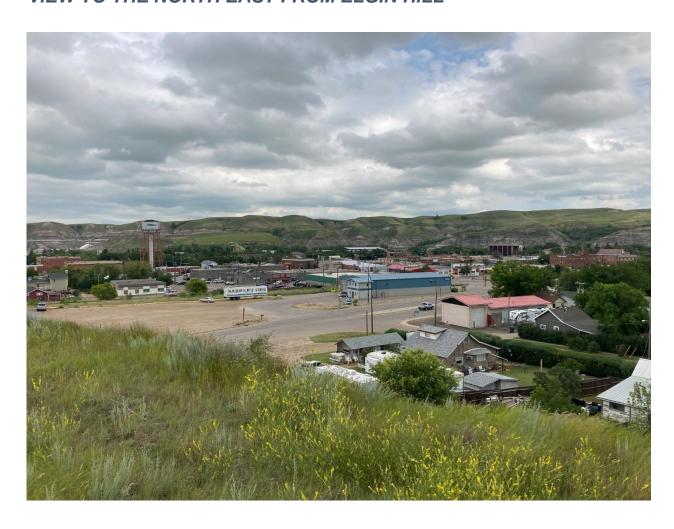
- a) Promote the principles of reducing, reusing, and recycling materials as well as efficient energy use in all Town facilities and in the broader community through outreach.
- **b)** Ensure the provision of on-site recycling facilities in all multi-family residential, commercial, and industrial areas.

11.3.3 WATER

Drumheller's main water source is the Red Deer River. The Town will continue to protect water quality and ensure that all stormwater is managed effectively in Drumheller, in coordination with flood mitigation strategies.

- a) Ensure adequate stormwater management in all development areas.
- b) The release of storm water run-off from any development area to downstream areas shall be designed and managed in accordance with Alberta Environment requirements.
- c) Encourage water conservation through implementation of community outreach programs and monitoring.
- d) Encourage the use of constructed wetlands for stormwater management and treatment.

VIEW TO THE NORTH EAST FROM ELGIN HILL



12 CULTURAL AND COMMUNITY SERVICES

In addition to hard infrastructure and utilities, the Town provides and supports a wide variety of services that contribute to the overall health, safety, and wellbeing of Valley residents. This includes recreation facilities, schools, protective services, community centres, and other social and health services. Many of these facilities and services are provided in partnership with other organizations and levels of government. These services enhance the overall Drumheller experience, providing amenities for Drumheller residents and visitors.

12.1 GENERAL

The following policies apply to all Town-owned and leased facilities.

- a) Work towards making all Town facilities barrier-free to enable use by all ages and levels of mobility.
- **b)** Where possible, incorporate environmental design considerations into all new Town facilities and the retrofit of existing facilities, including:
 - i. water conservation;
 - ii. stormwater management/low impact development (LID);
 - iii. renewable energy;
 - iv. energy efficiency;
 - v. use of recycled materials;
 - vi. reduction of waste;
 - vii. adaptive reuse; and
 - viii. green roofs.

12.2 COMMUNITY AND PROTECTIVE SERVICES

Community and protective services include fire and police services, which are essential for the safety of our community.

- a) Establish thresholds for expansion of fire services tied to growth, and ensure the Town's capital budgets reflect these increases in services.
- **b)** Ensure subdivision and development plans provide safe and efficient access for emergency service vehicles.
- c) Cooperate and partner with adjacent municipalities in the provision of emergency services.

12.3 RECREATION AND EDUCATION SERVICES AND FACILITIES

Recreation and educational services contribute to the quality of life in Drumheller and make our neighbourhoods great places to live, learn, and grow.

- a) Work with local school boards in the planning and location of school sites.
- b) Site new schools within easy, safe walking/biking distances to neighbourhoods.
- c) Where deemed appropriate the Town may require developers to build or contribute to the building of recreation and education facilities, such as schools, playgrounds, and libraries.
- **d)** Prioritize investment in recreational infrastructure based on population, density and identified resident needs.
- **e)** Recreational and educational needs resulting from growth should be identified, as well as methods to finance those needs, in advance of new development.
- f) Update and maintain a **Parks and Recreation Master Plan**, to address the recreation and community service needs of Drumheller in accordance with the direction of the MDP.
- g) Ensure that Town facilities are flexible and multi-use to support a variety of recreation opportunities and adapt to changes in recreation services over time.
- **h)** Encourage the provision of childcare and other social services within recreation facilities through partnerships with private providers.
- i) Partner with other recreation providers to expand recreation amenities and opportunities for youth and older adults in the community.

12.4 SOCIAL, CULTURAL, AND HEALTH SERVICES

Social and cultural capital are part of what make Drumheller's unique neighbourhoods incredible places to live and visit. Drumheller also boasts significant health services, which make the town an attractive place to receive treatments or to retire.

- a) Ensure social and health services, programs, and facilities are considered within area structure plans and area redevelopment plans to ensure that these necessary services are:
 - i. provided in accessible, convenient locations along primary pedestrian routes;
 - ii. co-located with other services into service hubs:
 - iii. barrier-free; and
 - iv. integrated within the design of the community.
- b) Expand and improve community support services relative to population growth and change, recognizing the growing diversity of Drumheller including Indigenous peoples, newcomers to Canada, young families, seniors, youth, and adults.

- c) Recognize the value of culture as an economic contributor to the Town and the role it plays in quality of life for residents.
- **d)** Support and promote cultural programs, activities, and facilities that generate a sense of community pride and local identity.
- e) Work with the Health Authority to facilitate the development of long-term health care services, senior care residences, and aging-in-place facilities in the town to meet the needs of the growing older adult population.
- f) Ensure that development near and adjacent to the Drumheller Health Centre and Community Cancer Centre does not conflict or limit the current and future operations or expansion of the facilities.

12.5 HERITAGE

Heritage comes in many forms, from structures to landscapes and even more intangible features and activities. The MDP supports the conservation and adaptive reuse of heritage to both celebrate the past and make heritage relevant to the present and future.

- a) Ensure adherence to the Alberta Historic Resources Act in the identification and preservation of archaeological, geological, palaeontological, and historic resources.
- **b)** Develop and maintain an inventory identifying historically significant buildings and landscapes.
- c) Encourage the protection of identified heritage properties, features, or landscapes.
- **d)** Encourage the adaptive reuse and retrofit of existing heritage structures and support this through consideration of building code equivalencies where necessary and appropriate.
- **e)** Where adaptive reuse is not feasible, encourage the incorporation of elements of the existing structure complimentary elements into the design of new development or recognition of the heritage value through art, signage, or other interpretive elements.
- f) Collaborate with Indigenous communities, private agencies, and individuals to preserve and promote historic sites.

13 IMPLEMENTATION

Bringing the vision for Drumheller to life requires coordinated and sustained implementation and monitoring of the goals, policies, and objectives of this Plan. The following section outlines critical actions to ensure successful implementation of the MDP.

13.1 PLAN MONITORING

The MDP will be monitored and regularly reviewed based on a series of performance measures to ensure the successful implementation of Drumheller's Vision. Implementation and monitoring of the MDP will occur through a number of mechanisms and processes, including:

- Ongoing administration of the development review process and periodically reviewing and amending area structure plans and Concept Plans;
- Carrying out next steps required to implement the vision, goals, and objectives of the MDP; and
- Collaborating with neighbouring municipalities on planning and development matters, as well as activities related to major processes and plans.

The MDP may be amended or updated to reflect changing circumstances and to ensure it remains an effective tool for achieving the goals and objectives of Council and aspirations of Drumheller.

- a) Town administration will report to Council on implementation of the MDP annually.
- **b)** Administration will develop performance measures to monitor the implementation of the MDP.
- c) A comprehensive review of the MDP shall be undertaken every 5 years to consider administrative updates, emerging trends, implementation progress, and policy gaps.
- d) At the discretion of Council, the Town shall permit developer-funded area structure plans and concept plans that incorporate public and stakeholder engagement and require Administration and Council approval.
- e) The Town will monitor and report to Council annually on the rate of development within area structure plans and concept plans, including the number of new dwellings, and dwelling types.
- f) When creating or amending area structure plans and area redevelopment plans, the Town shall include a condition requiring municipal review of the plans after 10 years, and a review after 5 years if sufficient development has not been undertaken after 5 years of the plan's approval.

13.2 IMPLEMENTATION ACTIONS

The implementation actions identify internal coordination efforts and policy updates required to align with the new vision and objectives of the Municipal Development Plan. All of these implementation actions are subject to capital funding approval for implementation, and should be incorporated into the Town's asset management planning.

- a) Construct flood mitigation structural measures to protect existing development in Drumheller.
- b) Prepare and adopt Drumheller-specific engineering design and construction standards.
- c) Update existing area structure plans and concept plans to conform with the MDP.
- **d)** Update existing and draft IDPs with adjacent municipalities to reflect the new priorities of the MDP.
- e) Develop new ASPs for priority growth areas.
- f) Update the Downtown Area Revitalization Plan.
- g) Complete or amend area structure plans for employment areas to conform with the MDP.
- h) Review and update the Town's Transportation Master Plan.
- Develop an Economic Development Strategy.
- i) Deleted
- k) Update the Town's Tourism Master Plan.
- I) Deleted
- **m)** Create an asset management plan to ensure sustainable long-term financing, operations, and management of new assets directed by the MDP.

13.3 REGIONAL COOPERATION

Drumheller shares municipal borders with Wheatland County, Kneehill County, Starland County, and Special Areas. The Town will continue to partner with these municipalities to maintain Intermunicipal Development Plans and uphold the policies contained therein, to coordinate and fulfill the aspirations of the region.

- a) Work with Wheatland County, Kneehill County, Starland County, and Special Areas to maintain up to date Intermunicipal Development Plans.
- **b)** Implement all IDP policies for communication, referral, and formal dispute processes with adjacent municipalities.

- c) Work with adjacent municipalities, surrounding communities, and relevant agencies to ensure the coordinated delivery of emergency and social services in the region.
- **d)** Foster relationships of mutual trust and collaboration with First Nations and work together to advance reconciliation initiatives and mutually beneficial projects.

13.4 PUBLIC ENGAGEMENT

Citizens should be involved in decisions affecting their communities. The Town is committed to ensuring that the public is informed and has opportunity to provide feedback on major decisions in Drumheller.

- a) Strive to meaningfully involve residents, businesses, and stakeholders in decisions affecting them through transparent and accessible engagement and communications protocols.
- **b)** Ensure timely reporting on feedback received and how it was incorporated in decision-making.
- c) Require local engagement with affected parties as part of the creation of Area Structure Plans and Area Redevelopment Plans.
- d) Use a variety of engagement tactics to reach the broadest and most diverse range of feedback from the public. Consider targeted engagement to increase participation levels from groups that are underrepresented in municipal decision making and/or face barriers to participating in regular public engagement processes.
- e) Maintain an accessible and up to date Town website, that clearly communicates Town aspirations as well as functional information for future and prospective residents, developers, and businesses.

14 GLOSSARY

Active transportation: walking and cycling, as well as other forms of human powered transportation, including rollerblading, longboarding, skateboarding, jogging, among others.

Age-in-place: homes or seniors' facilities designed to allow residents to meet their changing needs (medical, mobility, etc) as they age, enabling them to stay in that location instead of needing to relocate to another home.

Changing climate: shifting global climate patterns, including increasing temperatures, rising ocean levels, and more frequent extreme weather events (droughts, floods, and forest fires) related to increased greenhouse gas emissions in the atmosphere.

Complete community/neighbourhood: a community or neighbourhood that is planned and designed with a mix of uses, within close proximity, to support everyday needs for a variety of lifestyles to live, work, shop, learn, and play. This includes a range of housing options that can accommodate a diversity of incomes and household types for all stages of life, as well as jobs, local services, schools, recreation, and open spaces.

Complete streets: streets which are designed to enable safe access for all users including pedestrians, bicyclists, motorists, and transit riders, of all ages and abilities.

Crime Prevention Through Environmental Design (CPTED): a crime prevention approach that uses the design and use of the built environment to a reduce fear and incidence of crime, and generally improve public safety and a community's quality of life.

Environmental reserve: the land designated as environmental reserve by the Town as per Section 664 of the Municipal Government Act. Environmental reserve may include natural features, land subject to flooding, water features/wetlands, steep slopes, or riparian areas for the purpose of preserving their environmental integrity, protecting public safety, or providing public access.

First bench: means the first intermediary plateau or area which occurs between the toe of a slope (valley bottom lands) and an escarpment or valley wall top (or rim). Bench-lands typically have a slope of between 1 and 15 percent and a valley edge may have more than one bench at different elevations.

Flood fringe: means the portion of the flood hazard area outside of the floodway and includes sub-zones such as high hazard flood fringe, protected flood fringe and protected flood fringe by temporary measures. Water in the flood fringe is generally shallower and flows more slowly than in the floodway.

Flood hazard area: means the area of land that will be flooded during the 1:100 year return period design flood. The flood hazard area is typically divided into two main zones, the floodway and the flood fringe, and may include flood fringe sub-zones.

Flood mitigation: the implementation of measures (physical, organizational, etc) that reduce the risk of flooding and the potential damage that could result from a flood.

Floodway: means the portion of the flood hazard area where flows are deepest, fastest and most destructive. The floodway typically includes the main channel of a stream and a portion of the adjacent overbank area.

High hazard flood fringe: means a specific sub-zone of the flood fringe which experiences deeper or faster moving flows than the rest of the flood fringe. The high hazard flood fringe is the second highest flood risk category after Floodway.

Historic resource: any work of nature or of humans that is primarily of value for its palaeontological, archaeological, prehistoric, historic, cultural, natural, scientific, or esthetic interest including, but not limited to, a palaeontological, archaeological, prehistoric, historic or natural site, structure or object.

Land Use Bylaw (LUB): the Land Use Bylaw is a regulatory bylaw of the Town, required by the Municipal Government Act, that implements the land use direction provided in the Municipal Development Plan. Every parcel of land in the Town has a land use district, which specifies which uses are permitted and discretionary and how buildings and land can be developed in the Town.

Low impact design (LID): a land development and stormwater management approach that focuses on maintaining and restoring the natural hydrology (movement of water) by managing stormwater close to its source. LID can reduce the burden on conventional infrastructure, maintain ecological functionality, and establish a cleaner and more secure water supply. LID practices include bioswales, stormwater collection and reuse, and alternative paving methods.

Mixed-use: different uses that are in close proximity to each other. This can be in the same building (e.g. residences above retail) or on the same site (e.g. offices adjacent to restaurants or other commercial activities).

Municipal Development Plan (MDP): a statutory document required by the Province of Alberta as specified by the Municipal Government Act (MGA). The MDP is intended to guide all growth and development in the Town and may provide policies on a range of other relevant matters.

Municipal reserve: the land designated as municipal reserve under Division 8 of the Municipal Government Act.

Natural area: areas that include steep slopes, coulees, significant geologic features and areas of native vegetation, including grasslands, shrubland and forests.

Protected Flood Fringe: means a sub-zone of the flood fringe area which could be flooded if berms fail or do not work as intended during the 1:100 year return period design flood.

Protected Flood Fringe by Temporary Measures: means a sub-zone of the flood fringe area that is intended to be protected by temporary measures. This sub-zone accounts for the residual risk if the temporary measures are not implemented or if the dedicated flood berms fail or do not work as designed during the 1:100 year return period design flood.

Secondary Residence: a dwelling unit that is an accessory to a single-detached dwelling and is intended for use as a separate and independent residence. The intent of this type of

development is to provide flexibility and variety in housing types, as well as increase the density without changing the overall character of the residential neighbourhood.

Stormwater Management: the practice of minimizing the strain that stormwater places on municipal infrastructure and private property; lessening overland flooding during significant weather events; and reducing the impact of polluted water flowing into waterbodies.

Sustainability: the World Commission on the Environment and Development (1987) defines sustainability as "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Temporary Measures: means measures which are temporarily implemented by the Town of Drumheller in advance of a flood to fill gaps in existing structural flood mitigation. Temporary measures are intended to be deployed in areas where permanent infrastructure was not feasible due to blocking access roads, space constraints or other factors and may include sandbags, water filled tubes, earthfill and other modular flood barriers.

Universal access: the ability of an environment, amenity, or place to be accessed, understood, and used to the greatest extent possible by all people regardless of their age, size, ability, or disability.

Xeriscaping: means a creative, natural approach for constructing low maintenance, water efficient, and sustainable landscapes. It includes designing the landscape using native plants and drought-tolerant species which require less water and chemicals.

15 FIGURES

