



SOUTHEAST BENTLEY AREA STRUCTURE PLAN

BYLAW NO. 1397/23

ADOPTED NOVEMBER 23, 2023





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acknowledging

land and people

Lacombe County acknowledges that our municipality is situated on Treaty 6 lands, the traditional and ancestral territory of the people's of the Cree, Dene, Blackfoot, Saulteaux and Nakota Sioux, as well as the Métis.

We acknowledge the many First Nations, Métis and Inuit and all First Peoples of Canada whose footsteps have marked these lands for generations. We respect the histories, languages, and cultures of Indigenous peoples whose presence continues to enrich our vibrant community.

We make this acknowledgement as an act of reconciliation and gratitude to those whose territory we reside on.



THANK YOU

Lacombe County recognizes the creation of the *Southeast Bentley Area Structure Plan* to be a joint economic development initiative with the Town of Bentley to facilitate future commercial and industrial development in the lands southeast of Bentley, within Lacombe County. As such, we would like to thank and acknowledge the Town of Bentley for leading, organizing, and championing this intermunicipal initiative.

We acknowledge that this project would not be possible without grant funding from the Government of Alberta through the Alberta Community Partnership (ACP).

We extend gratitude to Parkland Community Planning Services (PCPS) for acting as the consultant for this project, and their staff for their skills, expertise, and resources. We also thank Stantec Consulting Ltd. and Paragon Soil and Environmental Consulting Inc. for completing the technical studies required to inform the Plan.

We thank all residents, landowners, and businesses who assisted in fine-tuning the Plan through the public meetings and surveys.

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1.0

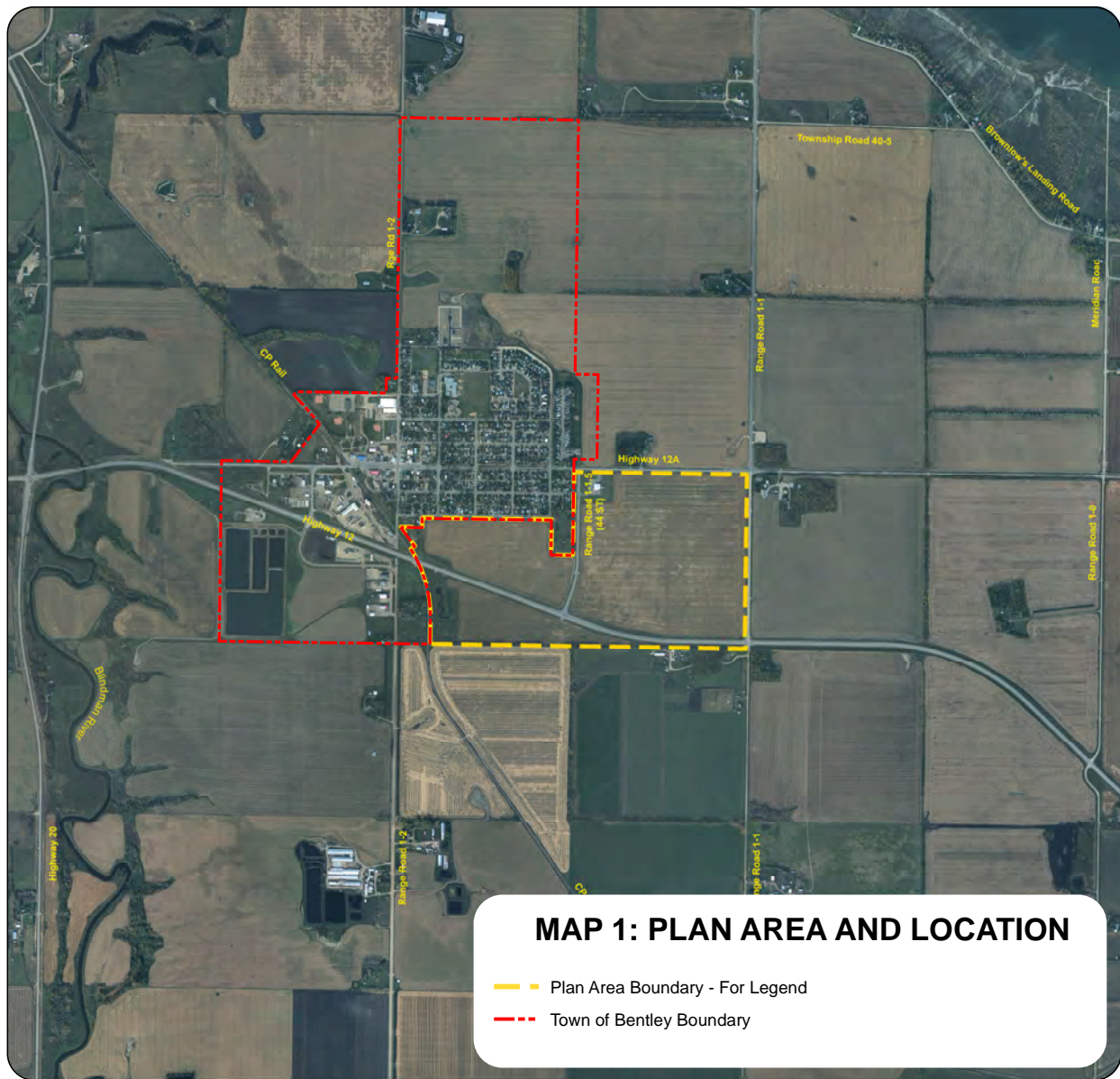
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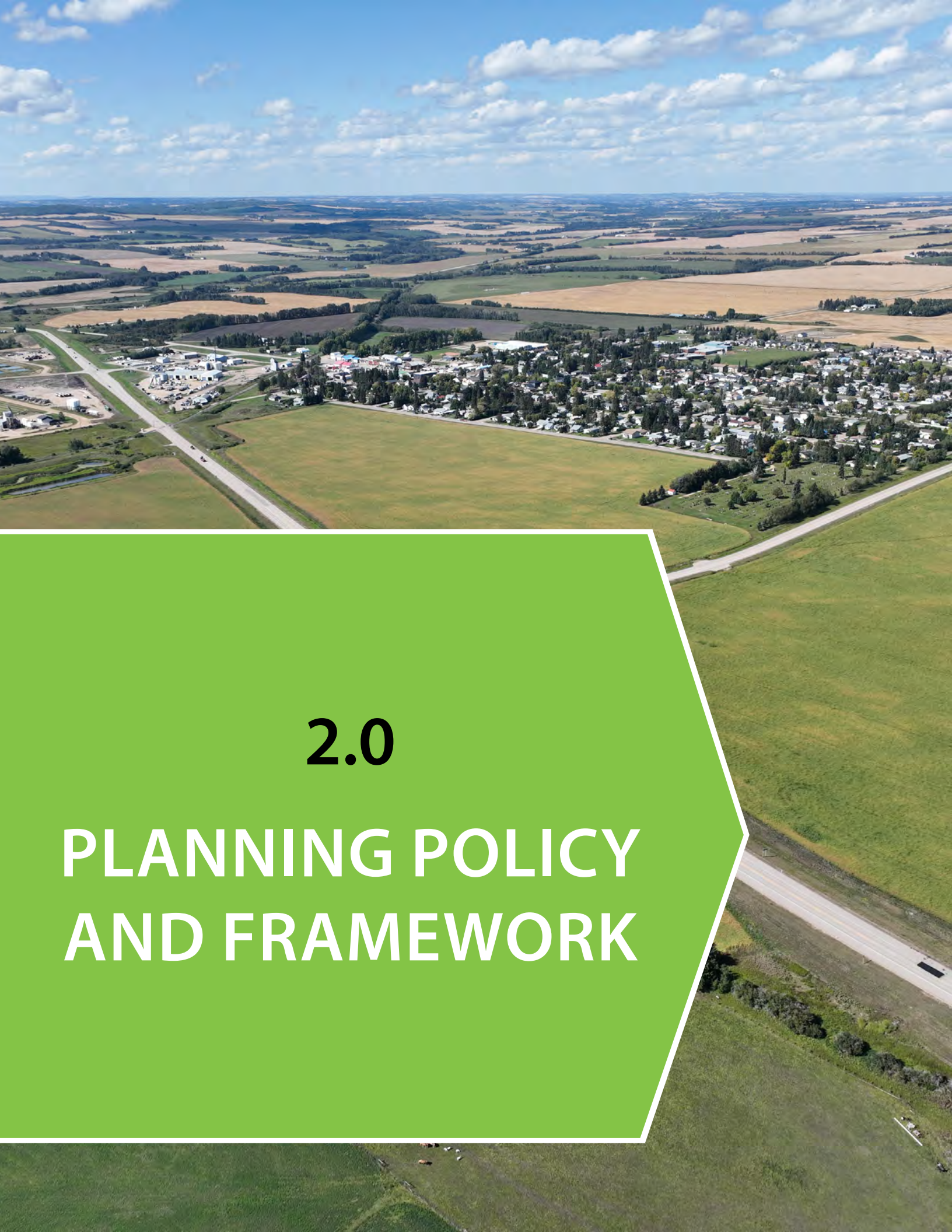
1.1 LOCATION

The Plan Area consists of approximately 103 hectares of land southeast of the Town of Bentley. It includes all or part of the following quarter sections:

NW 23-40-1-W5M NE 23-40-1-W5M

These lands (Plan Area) are illustrated by the “Plan Area Boundary” shown on [Map 1: Plan Area and Location](#). The subject area is largely bound by the Town boundary and Highway 12A to the north, by Range Road 1-1 to the east, by agricultural land to the south, and by Range Road 1-2 and a Canadian Pacific Railway line to the west.





2.0

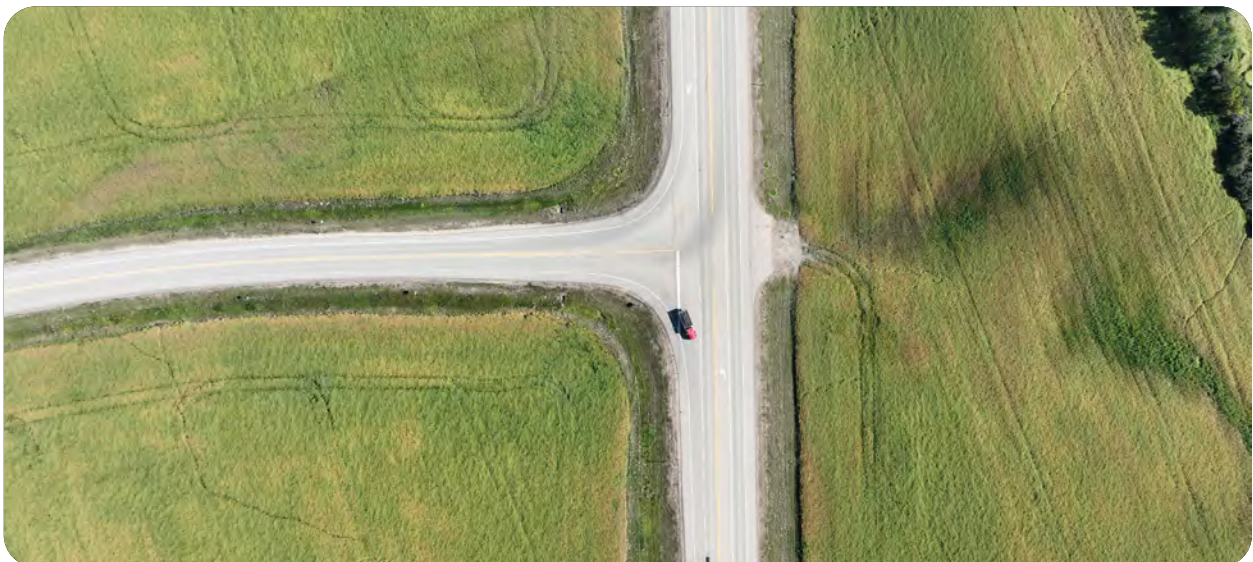
**PLANNING POLICY
AND FRAMEWORK**

This section provides a high level summary of planning related legislation and Town and County plans that have a bearing on the contents of the *Southeast Bentley Area Structure Plan*. It is critical to remain aware of the changing nature of legislation and other plans while reviewing this document. The exact wording of the most current statute or approved plan should be consulted prior to the implementation of the directions of the *Southeast Bentley Area Structure Plan*.

2.1 ENABLING LEGISLATION - MUNICIPAL GOVERNMENT ACT

The *Southeast Bentley Area Structure Plan* is in effect as a statutory plan within the boundaries of Lacombe County. This plan is considered an area structure plan under Part 17 of the *Municipal Government Act*. Part 17 requires that an area structure plan:

- Describe the sequence of development proposed for the area;
- Describe the land uses proposed for the area, either generally or with respect to specific parts of the area;
- Describe the density of population proposed for the area either generally or with respect to specific parts of the area;
- Describe the general location of major transportation routes and public utilities;
- Be consistent with any intermunicipal development plan in respect of land that is identified in both the area structure plan and the intermunicipal development plan;
- Be consistent with the County's *Municipal Development Plan*;
- Be consistent with the *Alberta Land Use Policies* or, where available, a regional plan under the *Alberta Land Stewardship Act*.



2.2 ALBERTA LAND USE POLICIES AND REGIONAL LAND USE PLAN

The purpose of the *Alberta Land Use Policies* is to manage growth and to sustain the Province's growing economy while balancing growth with Alberta's social and environmental goals. These policies provide a framework for statutory plans and planning decisions so that local land use planning is supportive of provincial land use goals.

The following policies relate to the establishment of land use patterns as an example of the type of guidance provided by the document specific to a future commercial or industrial area:

- *Municipalities are encouraged to establish, on a municipal and on an intermunicipal basis, land use patterns which provide an appropriate mix of agricultural, residential, commercial, industrial, institutional, public and recreational land uses developed in an orderly, efficient, compatible, safe and economical manner [...].*
- *Municipalities are encouraged to establish land use patterns which embody the principles of sustainable development, thereby contributing to a healthy environment, a healthy economy and a high quality of life.*
- *Municipalities are encouraged to establish land use patterns which contribute to the provision of a wide range of economic development opportunities, thereby enhancing local employment possibilities and promoting a healthy and stable economy. In carrying out land use planning, municipalities are encouraged to complement and support provincial economic development initiatives.*
- *Municipalities are encouraged to establish land use patterns which accommodate natural resource extraction or harvesting and processing, manufacturing and other industrial development while, at the same time, minimizing potential conflict with nearby land uses and any negative environmental impact.*
- *Municipalities are encouraged to establish land use patterns commensurate with the level of infrastructure and services which can be provided, regardless of whether the infrastructure and services are provided municipally, communally, individually, or by a utility company. Municipalities are encouraged to coordinate the provision of infrastructure and services with neighbouring municipalities.*
- *Municipalities, within legislative limits, are encouraged to establish land use patterns which complement their municipal financial management strategies, thereby contributing to the financial health and viability of the municipality.*

The 1996 *Land Use Policies* also address the topics of natural environment, resource conservation, transportation and residential development.

Until such time as a regional plan for the Red Deer Region under the *Alberta Land Stewardship Act* and the *Alberta Land Use Framework* is created, or any other legislation comes into place stating otherwise, the 1996 *Land Use Policy* document is in effect.

There are various other pieces of legislation that need to be considered and applied when developing land. These include, but are not limited to, the *Migratory Birds Act*, the *Public Lands Act*, the *Surveys Act*, the *Pipeline Act*, the *Water Act*, and the *Highways Development and Protection Act*.

2.3 TOWN OF BENTLEY / LACOMBE COUNTY INTERMUNICIPAL DEVELOPMENT PLAN

The entirety of the Plan Area is located within the *Town of Bentley / Lacombe County Intermunicipal Development Plan*, which was adopted by Town of Bentley Bylaw No. 203/2018 and Lacombe County Bylaw No. 1288/18.

The *Town of Bentley / Lacombe County Intermunicipal Development Plan* adopted by the Town of Bentley and Lacombe County in December 2018 seeks to improve intermunicipal communication and cooperation, and strives to avoid potential land use conflicts that result from incompatible land use patterns. The *Town of Bentley / Lacombe County Intermunicipal Development Plan* provides more certainty around land uses allowed within the urban fringe, and provides certainty around the type of development standards being applied.

As recognized in the *Town of Bentley / Lacombe County Intermunicipal Development Plan's* goals, the most prominent land use planning issues for these two municipalities include the conflicts between urban and rural land uses that are located in proximity to one another, and the coordination of infrastructure and service provision.

The Future Land Use Concept of the *Town of Bentley / Lacombe County Intermunicipal Development Plan* provides a high level conceptual framework intended to guide future land use patterns. The *Town of Bentley / Lacombe County Intermunicipal Development Plan* expects more detailed planning to occur prior to development of land. This includes the preparation and adoption of area structure plans prior to, or in concurrence with changes in land use designation.

The *Town of Bentley / Lacombe County Intermunicipal Development Plan* identifies the area covered within the *Southeast Bentley Area Structure Plan* for four primary uses: residential, commercial, industrial, and municipal.

Residential use is identified to occur adjacent to the portion of the Town's existing residential area that is located directly north of the Plan Area. Commercial use is identified along the Highway 12 corridor and wrapping around the existing Town boundary. Land for industrial use is identified to be east of the existing Town boundary, buffered by commercial uses that are to be located closer to the Town boundary. Lastly, the *Town of Bentley / Lacombe County Intermunicipal Development Plan* also identifies municipal lands within the Plan Area. These include the existing Fire Department building on the NE 23's northwest corner, as well as an expansion area for the Town's cemetery, immediately south of its existing location.

The *Town of Bentley / Lacombe County Intermunicipal Development Plan* strives to promote well planned commercial and industrial uses that support the creation of a strong and diversified economy to expand the availability of employment opportunities and to contribute to a balanced municipal assessment base. The *Town of Bentley / Lacombe County Intermunicipal Development Plan* emphasizes the need for municipal collaboration to maximize the commercial and industrial opportunities that the ease of access and visibility of the Highway 12 and Highway 20 corridors allow. This collaboration is to be undertaken through appropriate land use planning and infrastructure planning.

2.4 LACOMBE COUNTY MUNICIPAL DEVELOPMENT PLAN

The Lacombe County *Municipal Development Plan* provides a comprehensive framework for long-term development and growth.

The *Municipal Development Plan* directs the County to encourage the clustering of industrial and commercial parks to reduce scattered development throughout the County. It directs such development to be adjacent to or near major transportation routes and nodes, to areas compatible with adjacent land uses, within agreed upon *Intermunicipal Development Plan* urban fringe areas, and within planned areas of area structure plans.

2.5 LACOMBE COUNTY LAND USE BYLAW

The Lacombe County *Land Use Bylaw* provides development standards for development within commercial and industrial districts. This includes guidance for parcel area, parcel coverage, setbacks, density levels, and servicing.

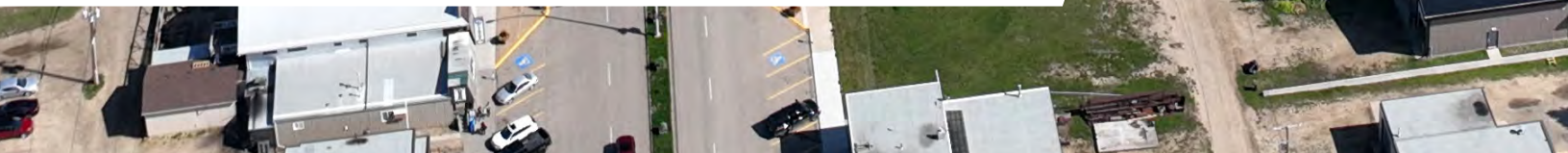
The *Land Use Bylaw* includes a General Commercial ‘C-GC’ District, a Highway Commercial ‘C-HC’ District, and a Hamlet Commercial ‘C-H’ District. For the purpose of this area structure plan, the Highway Commercial ‘C-HC’ District is the most applicable commercial district of the *Land Use Bylaw*. The *Land Use Bylaw* does not contain a set minimum parcel size within this district. It stipulates the minimum parcel area to be all the land within the existing titled area unless otherwise approved by the subdivision authority. The Highway Commercial ‘C-HC’ District accommodates “a diversity of commercial, recreational and tourist uses largely intended for highway travelers”.

To accommodate industrial development, the *Land Use Bylaw* contains a Business Industrial ‘I-BI’ District and a Hamlet Industrial ‘I-H’ District. For the purpose of this area structure plan, the Business Industrial ‘I-BI’ District is the most applicable industrial district within the *Land Use Bylaw*.

The Business Industrial ‘I-BI’ District is similar to the Highway Commercial ‘C-HC’ District in that it does not set a minimum size for parcels within the district. However, there is a maximum parcel size for parcels adjacent to provincial highways and county main roads. The maximum is 4 hectares (10 acres); however, this requirement may be relaxed by the subdivision authority if deemed appropriate. This district is meant to accommodate a broad range of “commercial and industrial uses in business and industrial parks, some of which may have outdoor storage or work activities”.



3.0
ANNEXATION



Since the subject lands are within Lacombe County, this Area Structure Plan has been prepared in accordance with Lacombe County's planning framework, and is in broad alignment with the *Town of Bentley / Lacombe County Intermunicipal Development Plan*, the *Lacombe County Municipal Development Plan*, and the *Lacombe County Land Use Bylaw*. It is anticipated that the Town of Bentley will seek to annex the subject lands in the future to provide for additional commercial and industrial development opportunities within the Town's boundary. If an annexation application is successful, the Town may adopt this Plan as their own area structure plan, subject to amendments to align with the Town's planning framework.





4.0

**PLAN AREA
CONTEXT**

This section provides an overview of the Plan Area as of the time that this Plan was written. [Map 1: Plan Area and Location](#), [Map 2A: Natural Features](#); and [Map 2B: Built Features](#) show the Plan Area and highlight key features that need to be considered in the layout and future development of the area. Some of the implications and expectations in association with development surrounding these features are also discussed.

4.1 EXISTING LAND USES

The air photo contained in [Map 1: Plan Area and Location](#) provides an indication of the land uses within and around the Plan Area as of 2019. Most of the land within the Plan Area is currently used for agricultural purposes and consists of cultivated crop land. The following sections provide a breakdown of the uses within each quarter section and highlights some of the surrounding uses.

THE NW 23

The portion of the NW 23 within the Plan Area contains all lands within the quarter section that are not already part of the Town. The northern boundary of the NW 23 abuts existing residential development, with an existing cemetery located along the northeast corner of the NW 23. Additionally, a Canadian Pacific Railway borders the Plan Area to the west. The land west of the Canadian Pacific Railway is used for industrial purposes. The Town's sewage lagoon and the Lacombe Regional Solid Waste Transfer Station are also located west of the NW 23.

Highway 12 runs diagonally from the southeast corner of the quarter section to its northwest corner.

The NW 23 contains Town owned land within its western portion. The Town owned portion north of Highway 12 is currently used for stockpiling and to accommodate run-off through ditching, while the portion south of Highway 12 contains a storm pond. The remaining portions of the NW 23 are in private ownership and are cultivated crop land.

THE NE 23

The NE 23 abuts Highway 12A to the north and Range Road 1-1 to the east, both of which are adjacent to two quarter sections that each contain an acreage. Highway 12 is located to the south, and Range Road 1-1.5 / 44th Street to the west. The Bentley District Fire Department is located within the northwest corner of the NE 23. West of the Fire Department hall, in the adjacent quarter, is a residential land use district, with the Town's cemetery located south of the residential district. The remainder of the quarter section is in private ownership and is used for agricultural purposes. The NE 23 is adjacent to a 3.4 km trail that connects the Town to Aspen Beach at Gull Lake. This trail follows Highway 12A.

4.2 TOPOGRAPHY

[Map 2A: Natural Features](#) shows the topographic contours and general drainage direction of the Plan Area. The terrain is characterized as gently sloping from the northeast corner of the Plan Area to its southwest corner. Slopes within the Plan Area reach a grade of up to 9%, but the

average is far less. The change in elevation is approximately 42 metres from the lowest point being the southwest corner of the NW 23 at approximately 902 metres above sea level, and the highest point at approximately 944 metres above sea level being the northeast corner of the NE 23.

The Plan Area and surrounding lands are naturally sloped to direct drainage towards the Blindman River, which is located approximately 1.3 kilometres west of the Plan Area.

4.3 BODIES OF WATER, WETLANDS, AND WATER COURSES

The *Biophysical and Wetland Assessment* for the Plan, completed by Paragon Soil and Environmental Consulting Inc. included the SW 23 and the SE 23 south of Highway 12. These quarter sections contain several wetlands that are located to the south of Highway 12. These wetlands are spread out across the SE 23 and the SW 23 and account for about 0.5% of the area of those quarter sections, and are illustrated on [Map 2A: Natural Features](#).

The wetlands are considered temporary marsh wetlands. These are classified as Class II wetlands which are typically flooded for a short period of time after snowmelt or heavy rain events. During dry years, these wetlands can be difficult to spot. The assessment provided the results of the *Alberta Wetland Rapid Evaluation Tool* estimates (ABWRET-E), which state that the wetlands are expected to have a wetland value of “D”, which is the lowest relative wetland value. Due to the lack of permanence of these wetlands, Crown ownership may not be a concern as the Crown typically claims wetlands that are permanent and naturally occurring bodies of water.

The SW 23 and SE 23 have been removed from the Plan Area. However, if development of these areas is planned in the future, field verification of wetland classes and the delineation of the wetlands should occur prior to development. Any wetlands that require removal will need to have their value and area assessed and compensated for using the *Alberta Wetland Mitigation Directive* (GOA 2018).

There are no bodies of water or watercourses observed within the revised Plan Area.

4.4 TREE COVER

[Map 2A: Natural Features](#) also indicates the tree cover within the Plan Area and adjacent properties. The Plan Area is largely cleared of trees as the land is currently used for agricultural purposes. Tree cover is mainly observed in the form of shelter belts or small treed pockets around existing development.

Mature shelter belts can be found along the quarter section boundaries between the NE 23 and the SE 23, between the SE 23 and the SW 23, and between the NW 23 and the SW 23. The SW 23 also has mature shelterbelts located along its eastern and western boundaries. There are several pockets of treed areas within proximity of the northern and western boundaries of the Plan Area.

4.5 HISTORICAL RESOURCES

A search of the Listing of Historic Resources that is maintained by the Alberta Historic Resources Management Branch resulted in no search results for the Plan Area. No parts of the Plan Area are identified on the listing.

4.6 CANADIAN PACIFIC RAILWAY

A Canadian Pacific Railway line crosses the NW 23 at the westerly boundary of the Plan Area. It connects Homeglen and Rimbey to the main Canadian Pacific Railway line that runs north-south through the Province. There are a number of existing culverts under the railway tracks that allow drainage flow from east of the railway to the west of the railway.

4.7 PROVINCIAL HIGHWAYS

Highway 12A borders the Plan Area along the northern boundary of the NE 23. It provides direct access to the Fire Department site that is located within NE 23. Highway 12A connects to Range Road 1-1.5 / 44th Street and Range Road 1-1.

Highway 12 crosses east-west through the northern and southern portion of the Plan Area and connects to Highway 20, which is located approximately 1.7 kilometres west of the Plan Area. Highway 20 runs north-south along the Blindman River.

Highway 12 is presently a two lane highway with a speed limit of 100 km/h throughout the stretch that is located within the Plan Area. Two at-grade highway intersections are located within the Plan Area, this includes the intersection of Highway 12 and Range Road 1-1.5 / 44th Street (which meets the highway with a speed limit of 60 km/h) as well as the intersection of Highway 12 and Range Road 1-1 (where the speed limit is unposted, but is 80 km/h as a municipal roadway within a rural municipality).

The intersection along Range Road 1-1.5 / 44th Street is located within the approximate centre of the two quarter section boundaries. This intersection contains designated turning lanes off the highway from both the east and west directions. A designated merging lane / acceleration lane is located for traffic merging east onto Highway 12 from Range Road 1-1.5 / 44th Street, as well as for traffic merging west onto Highway 12. There is a stop sign located for traffic approaching Highway 12 from Range Road 1-1.5 / 44th Street. The intersection of Highway 12 and Range Road 1-1.5 / 44th Street is one of the major access points to the Plan Area. A farm approach leading straight south from Range Road 1-1.5 / 44th Street is currently located at this intersection that allows farm equipment to enter the NW 23 off Highway 12.

The second at-grade highway intersection that affects the Plan Area is the Highway 12 – Range Road 1-1 intersection along the Plan Area's eastern boundary. This intersection contains no designated turning lanes. Stop signs for both the north and the south side approaches of Range Road 1-1 entering Highway 12 are in place.

4.8 MUNICIPAL ROADS

The existing municipal roads providing access to the Plan Area are:

- Range Road 1-1 to the east, which has existing farmstead approaches into the SE 23;
- Range Road 1-1.5 / 44th Street in the centre of the Plan Area, which provides access to the NW 23 and the NE 23 via existing farm approaches;
- 48th Street to the north of the Plan Area, which has an existing farm approach into the NW 23; and
- Range Road 1-2, which provides access to the SW 23.

Except for Range Road 1-1.5 / 44th Street and 48th Avenue, the municipal roads providing access to the Plan Area are currently gravel roads.

4.9 PIPELINES AND INFRASTRUCTURE RIGHTS-OF-WAY

[Map 2B: Built Features](#) shows three major rights-of-way running through or skirting the Plan Area. Two are Gull Lake Natural Gas Co-op low pressure gas pipelines running north-south through the eastern portion of the SE 23. One of these is abandoned and enters the Plan Area, continuing diagonally through the NE 23 before exiting its northern boundary east of the Fire Department. The other pipeline is active and follows the NE 23's eastern and northern boundaries.

Two high pressure gas lines are found in the SE and SW 23, south of the Plan Area.

There are several towers carrying power transmission lines to properties within and around the Plan Area. The corresponding lines run north of the NE 23, along the entire eastern boundary of the NE 23, and to the west of the Plan Area along the western boundary of NW 23.

There is one sour gas well located approximately 1.5 kilometres west of the western boundary of the Plan Area. Any development within the Plan Area is beyond the setbacks to this sour gas well.

An abandoned well (J0006991E) is located along the NE 23's northern boundary, about 250 metres west of Range Road 1-1.

4.10 OTHER ENVIRONMENTAL CONSIDERATIONS

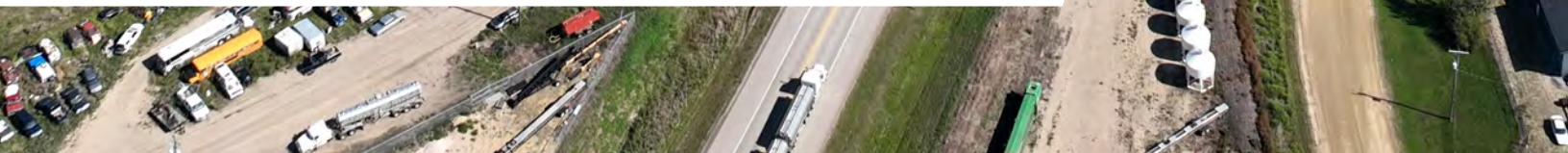
A search of the Alberta Conservation Information Management System conducted during the preparation of the *Biophysical and Wetland Assessment* identified that there is no occurrence of rare or sensitive species or communities within the Plan Area. The Plan Area was also identified to have a relatively low portion of wildlife habitat as the portions of wetlands and upland woodlands contained within the Plan Area were identified as comparatively small – at 1% and 3% of the pre-development Plan Area.

A search of the Environmental Site Assessment Repository that is maintained by Alberta Environment and Parks resulted in no search results for the Plan Area. No environmental incidents are recorded for the Plan Area.



5.0

SERVICING CONTEXT AND CAPACITIES



This section reviews the current issues, opportunities and capacities relating to municipal infrastructure and the future development of the Plan Area.

5.1 WATER SYSTEM

The design basis chosen for the development area is 0.05 litres per second per hectare. For a development on a 1 hectare parcel, this assumes monthly water consumption of approximately 133 cubic metres. This is lower than what would be expected with residential development, but reasonable for a mix of commercial and industrial uses, many of which would be low water users, and some which may be high water users. Over-estimating water demand creates a risk of water becoming stagnant in the system.

The Town's existing system of three wells is expected to accommodate approximately 3% growth for 21 years. Beyond this, the Town will need to consider expansion of its well system. There appears to be significant aquifer potential in the area with high groundwater yield rates and good groundwater quality.

In the proposed 0.05 L/s/ha scenario, 300 mm water mains are sufficient for servicing future development, with distribution pumps required.

5.2 SANITARY SEWER SYSTEM

The Town's existing sanitary treatment capacity is sufficient for more than 20 years at 3% growth. For ultimate build out of the initial Plan Area and other land planned for residential development, the lagoon volume would require expansion from 217 036 cubic metres to 666 125 cubic metres for the 0.05 L/s/ha scenario, which would require a 28 hectare expansion to the west of the existing lagoons.

Removal of the SW 23 and the SE 23 (approximately 130 ha) from the Plan Area effectively reduces the volume of water used at build out by an estimated 205 000 cubic metres per year. However, build out of the Plan Area even without these southerly quarter sections will eventually require expansion of wastewater treatment capacity.





5.3 STORM DRAINAGE SYSTEM

Stantec Consulting Ltd. prepared the *Southeast Bentley Area Structure Plan Stormwater Servicing Study* to inform storm drainage within the Plan Area. The Plan Area is naturally sloped to direct storm water from the northeast towards the southwest, to enter the Blindman River, which is located to the west of the Town.

Currently, storm swales are located along the NW 23's northern and western boundaries abutting the Town. These swales are located north of Highway 12. Storm water from the swales is directed through a culvert under Highway 12 into the existing storm water pond that is located south of Highway 12, within the NW 23. This storm pond is located on Town land and maintained by the Town.

The gently sloping terrain combined with the man-made features such as Highway 12 and the Canadian Pacific Railway, natural drainage flow within the Plan Area is restricted. As the Plan Area is developed, multiple storm water management facilities will be required to properly divert water towards the Blindman River without overwhelming the Town's existing storm water management facilities.

The NW 23 and NE 23 currently drain northeast to southwest through three existing Canadian Pacific Railway culverts within the NW 23 that direct water from the Plan Area through a culvert under Range Road 1-2. A culvert located just north of the existing storm water management pond also directs storm water from the northern Plan Area directly south into the existing storm pond.

The existing Canadian Pacific Railway and Range Road 1-2 culverts have sufficient conveyance capacity to facilitate development within the Plan Area. Drainage easements to provide routes to the west of the Plan Area, towards the Blindman River, should be obtained from private landowners.

5.4 MUNICIPAL ROADS AND HIGHWAY CONNECTIONS

Despite no existing road connection of the Plan Area directly into the Town, a connection from the Town can be made by extending Railway Avenue southeast into the Plan Area.

The Plan Area also abuts 48th Avenue to the north, which is located south of one of the Town's existing residential areas. 48th Avenue connects to several north-south road segments that provide access towards the Town. A farm approach off 48th Avenue and west of the existing cemetery is located within the NW 23's northeast portion.

Range Road 1-1.5 / 44th Street has existing farm approaches leading into the NE 23 and NW 23. The location of the approaches is set back approximately 170 metres from the Highway 12 intersection and currently allows the most direct access to and from the north portion of the Plan Area to the highway.

Range Road 1-2 to the west of the NW 23 already provides direct access to multiple of the Town's industrial parcels west of the Plan Area. This County road right-of-way is approximately 30 metres wide for the majority of its length abutting the eastern boundary of the SW 23. It is presently a gravel road.

Range Road 1-1.5 / 44th Street is a paved two lane road. Range Road 1-1.5 / 44th Street provides access to both, the Town to the north and Highway 12 to the south. It also connects to Highway 12A, which provides additional access to and from Lacombe County. This road right-of-way is approximately 40 metres wide.

Range Road 1-1 services two farmsteads within the SE 23. This County road right-of-way is approximately 30 metres wide along the eastern boundary of the NE 23, and it is approximately 20 metres wide for the majority of its length abutting the eastern boundary of the SE 23.



6.0

PLANNING FACTORS

A number of factors and issues influence land use planning within the Plan Area. These include potential constraints on the ability to develop as well as potential opportunities that could contribute to an attractive development and natural progression of the Plan Area.

Key planning factors that influence land use planning within the Plan Area include:

PLANNING FACTORS

- Creating opportunities to attract commercial and industrial development to grow the Town's and the County's employment and assessment bases;
- Maintain existing major drainage corridors leading to the Blindman River and managing the increasing volume and rate of stormwater run-off as the Plan Area develops;
- Opportunities to preserve natural areas such as major tree stands and wetland complexes that are located within and adjacent to the Plan Area;
- Providing trails to connect the Plan Area to surrounding areas, and expanding the overall trail network of the Town and County; and
- Incorporating existing built infrastructure including Highway 12, the Canadian Pacific Railway, and the telecommunication tower into the overall concept of the Plan Area.





7.0

**GOAL AND KEY
PRINCIPLES**

7.1 GOAL

To provide a planning framework for industrial and commercial subdivision and development decisions to support long-term economic growth and development.

7.2 KEY PRINCIPLES

The *Southeast Bentley Area Structure Plan* has been guided by the following key principles:

KEY PRINCIPLES

- Maintaining consistency with the Town and County's overall plans for future industrial and commercial growth along the Highway 12 corridor;
- Ensuring a competitive supply of land for future commercial and industrial development;
- Providing flexible parcel sizes and configurations to allow a broad range of industrial and commercial opportunities;
- Ensuring that subdivision and development decisions do not prejudice or negatively impact the future development of the Plan Area or adjacent lands;
- Minimizing potential land use incompatibilities and conflicts; and,
- Balancing the concerns of residents with the overall interest of the community-at-large to attract commercial and industrial land to support long-term growth and sustainability.





8.0

**LAND USE
CONCEPT AND
LAND USE
POLICIES**

8.1 GENERAL

This section explores and communicates the overall land use concept of the *Southeast Bentley Area Structure Plan*. [Map 3: Land Use Concept](#) shows the overall land use patterns and key features within the Plan Area. [Table 1: Land Use Statistics and Development Impact](#) provides a breakdown of the approximate area devoted to each land use category and components of the land use concept map.

Table 1: Land Use Statistics and Development Impact

Land Use Category/Component	Area (ha)	Share of Plan Area
Plan Area	103.11	100%
Commercial	19.08	18.5%
Business Industrial	42.31	41.04%
Public Institutional	3.86	3.74%
Public Utility Lots (PUL)	10.84	10.52%
Municipal Reserve (MR)	2.35	2.27%
Highway	12.25	11.88%
Local Road	12.14	11.78%
Possible Road Connections	0.53	0.51%
Railway	0.00	0.00%

Notes for Table 1:

The figures presented in Table 1 are approximate and subject to more detailed calculations at the time of subdivision (some rounding error may have occurred).

POLICIES

8.1.1 Lands Subject to Plan Policies

The policies of this Plan will only be applied to planning and approval decisions involving lands shown within the Plan Area Boundary on [Map 1: Plan Area](#).

8.1.2 Meaning of Key Words

This Plan contains policy statements using the words “will”, “must”, “should” and “may”. These words are interpreted as follows:

- “will” or “must” means the policy is to be complied with;
- “should” means compliance in principle but subject to the discretion of the applicable authority on a case by case basis; and
- “may” means the applicable authority determines the level of compliance that is required.

8.2 AGRICULTURAL USES

The protection of Lacombe County’s strong agricultural community is an important objective of the *Municipal Development Plan*.

The lands within the Plan Area are presently used for the cultivation of field crops. Existing agricultural uses may continue unless a landowner proposes to convert these lands to another opportunity supported by the policies of this Area Structure Plan.

The impact of any development proposal on adjacent agricultural uses needs to be considered. Further, the County wishes to protect existing agricultural subdivision opportunities provided by the *Municipal Development Plan*.

POLICIES

8.2.1 Agricultural Uses May Continue

Continued use of the lands within the Plan Area for agricultural use is encouraged, until a landowner proposes to convert these lands to another land use supported by the policies of this Plan.

8.2.2 Protection for Adjacent Agricultural Uses

When making decisions on development, the County shall consider the impact of the development on adjacent agricultural uses.

8.2.3 Existing Agricultural Subdivision Opportunities

As long as the lands remain designated Agricultural ‘A’ District as per the County’s *Land Use Bylaw*, landowners may continue to apply to subdivide land within the Plan Area, consistent with the provisions of Policy 3.3 of the Lacombe County *Municipal Development Plan*.

8.3 COMMERCIAL USES

The portion of the Plan Area north of Highway 12, along the existing Town boundaries is identified for future commercial uses. The commercial development within the NW 23 and part of the NE 23 is easily accessible via Highway 12 and can be accessed through the Town via a planned road connection from the Plan Area to Railway Avenue. Commercial development within this area will greatly benefit from the high visibility from Highway 12 and the close access off the highway. The commercial area will be able to accommodate small-scale convenience style commercial development, as well as larger commercial developments that require larger footprints. The Town currently has a commercial district within its downtown, but no large scale commercial development or vacant land for such use exists within Town boundaries.

An additional commercial parcel was identified just south of Highway 12, within the NW 23's southeast portion. The commercial use was chosen due to the parcel's high visibility from the highway and its possibility to accommodate a more traffic oriented in-and-out commercial use (such as a gas station) without requiring users to enter the larger and potentially busier commercial area to the north of Highway 12. This will also provide a conveniently placed commercial use to cater to the occupants of the future industrial development located to the south of Highway 12.

8.0

POLICIES

8.3.1 Location of Future Commercial

Future commercial land use will be directed to the areas shown as commercial on [Map 3: Land Use Concept](#).

8.3.2 Nature of Commercial Uses

The future commercial areas will accommodate a range of activities such as retail, restaurants, hotels and motels, vehicle sales and services and similar commercial uses that require access to highly visible and highly accessible locations to succeed. The designations within the *Land Use Bylaw* will determine the nature of commercial uses that are allowed in a particular area.

8.3.3 Commercial adjacent to Residential Areas

Where commercial use is shown next to a future residential area, the commercial uses that are allowed should be convenience oriented and compatible with a residential setting. Sites identified for commercial uses should be developed in a manner that minimizes the potential impact on adjacent properties. This may include factors such as points of vehicle access and egress, lighting design, building orientation, openings and placement to alleviate privacy/noise concerns, architectural treatment of buildings, landscaping and screen fencing to reduce visual impact.

8.3.4 Appearance Requirements near Major Entrance Routes

To the standard directed by Policy 10.2.3 of this Plan and Lacombe County's *Land Use Bylaw*, commercial development in the areas along Highway 12, Highway 12A and Range Road 1-1 will be subject to additional landscaping and appearance requirements to ensure that the view of these areas from these major roadways is aesthetically pleasing. The roadway-facing sides of all buildings should be finished to the satisfaction of the Development Authority and all exterior finishes should complement other buildings on the lot and buildings on adjacent lots. Landscaping on all highway-facing sides of parcels will provide screening of outdoor storage areas and create visual interest.

8.4 INDUSTRIAL USES

The NE 23 is primarily identified for business industrial land uses. The industrial area will be buffered from the existing residential area of the Town by commercial development. This area will benefit from high visibility along the highway corridor, and easy access off Highway 12. The industrial area within the NE 23 is divided to include general industrial areas within its centre, surrounded by light industrial uses to reduce possible off-site impacts to non-industrial uses.

All industrial parcels within [Map 3: Land Use Concept](#) that are adjacent to Highway 12 are less than 4 hectares in size, with the largest parcel being 3.98 ha in size. This is in compliance with the Lacombe County *Land Use Bylaw* provisions for industrial parcels abutting highway corridors.

POLICIES

8.4.1 Location of Future Industrial

Future industrial land use will be directed to the areas shown as industrial on [Map 3: Land Use Concept](#).

8.4.2 Nature of Industrial Uses

The future industrial areas will accommodate a range of activities such as manufacturing, processing, warehousing and outdoor storage, truck and freight terminals, distribution centres and similar industrial uses. The designations under the *Land Use Bylaw* will determine the precise nature of industrial uses that are allowed in a particular area, with consideration given to restrictions on outside storage, appearance and compatibility with nearby land uses.

8.4.3 Industrial adjacent Residential Areas and Major Roads

Industrial properties will be developed in a fashion that does not negatively impact on surrounding residential areas or cause unsightly development along arterial roads and highways. Means of ensuring industrial development does not impact roads and other properties may include the use of landscaping, earthen berms, architectural treatment, screen fencing, distance separation or a combination of these measures.

8.4.4 Appearance Requirements near Major Entrance Routes

To the standard directed by Policy 10.2.3 of this Plan and Lacombe County's *Land Use Bylaw*, industrial development in the areas along Highway 12, Highway 12A and Range Road 1-1 are subject to additional landscaping and appearance requirements to ensure that the view of these areas from these roadways is aesthetically pleasing. The road-facing sides of all buildings should be finished to the satisfaction of the Development Authority and all exterior finishes should complement other buildings on the lot and buildings on adjacent lots. Landscaping on all highway-facing sides of parcels will provide screening of outdoor storage areas and create visual interest.

8.4.5 Potential Lot Lines and Road Patterns

Possible lot lines for future parcels throughout the areas identified for industrial are shown on [Map 3: Land Use Concept](#). These lines are conceptual and are not mandatory. They are provided to give a sense of the possible range of future lot sizes that is possible in the various areas.

In general, the road pattern facilitates the creation of larger industrial parcels with a size of 2 hectares or greater. In many cases, the exact size of parcel may not be known until a tenant or prospective purchaser expresses interest. Smaller parcels may be created on the ends of blocks. More roads may also be added to divide the blocks to create more small lot options if necessary. Finally, the alignment of the roads shown may be altered provided the connections to adjacent lands, which may be owned by another party, are maintained.

The adjustments to lot sizes, lot lines and addition of roads described above will not require a formal amendment of this Plan.

8.5 INSTITUTIONAL LAND USE & CEMETERY EXPANSION

The Plan Area abuts the existing Bentley Cemetery which has an area of 2.02 hectares. To accommodate future expansion of the cemetery, the Plan Area identifies a 1.37 hectare area for future cemetery expansion immediately west of the Bentley Cemetery, allowing ample land for the addition of shelterbelts and landscaping. This parcel abuts a 15 metre wide Municipal Reserve (MR) parcel that will provide additional buffering from the adjacent commercial uses to the west.

POLICIES

8.5.1 Location of Institutional Uses

Institutional uses may be allowed to locate within the parts of the Plan Area shown as institutional and commercial on [Map 3: Land Use Concept](#).

8.5.2 Nature of Institutional Uses

The types of institutional uses that may be allowed include such uses as places of worship, schools, community service facilities, emergency service facilities, public recreation facilities, and similar uses that are considered compatible with other permitted uses.

8.5.3 Cemetery Site

The area in the NW 23 that is identified as institutional on [Map 3: Land Use Concept](#) may be used to expand the future Town cemetery.

If this site is developed as a cemetery, then development abutting the site must take into account the privacy needs of the cemetery. A landscaping and fence combination that screens residential, commercial and industrial properties from the cemetery will be required at the time of subdivision to the satisfaction of the Subdivision Authority.

Additional measures that may be considered include a requirement for additional lot depth and requirements relating to setback of residential buildings from the boundaries of the cemetery property. If the site is developed as a cemetery prior to development of the surrounding lands, in particular prior to the surrounding commercial lands, surface water run-off from the cemetery will be contained and managed on-site. If it is determined that the site will not be used for a future cemetery, then the site may be used for some other public use that is compatible with a residential setting.

8.6 MUNICIPAL RESERVE AND PUBLIC UTILITY LOTS

Municipal Reserve (MR) and Public Utility Lots (PUL) within the Plan Area are dedicated to incorporating stormwater servicing, recreational opportunities and trail connections, and buffers between land uses.

The NW 23 contains a 5 metre wide strip of land dedicated as PUL that accommodates the existing drainage ditch that abuts 48th Avenue. This allows maintenance of the existing drainage channel. The PUL continues south along the western portion of the Plan Area to accommodate the continuation of the ditch towards the stormwater management pond that is located south of Highway 12 on the NW 23.

Immediately south and east of this PUL are MR parcels that are 20 metres and 15 metres wide respectively. Another 15 metre MR strip is located immediately west of the cemetery expansion area. These MR parcels can accommodate a trail corridor that allows a multi-use path as well as landscaping to provide walkability through trail connections from the existing residential areas of the Town to the commercial areas on the NW 23 and the NE 23. The trail connections incorporated within the Plan Area also provide connectivity to the regional trail system that connects the Town to Aspen Beach and to Sandy Point Resort.

The 20 metre MR parcel will also allow for a wider buffer to create a visual barrier from the existing residential uses to the commercial uses. This barrier may come in the form of effective landscaping and fencing. The combined width of the PUL and MR parcel provide an overall buffer of 25 metres between the commercial parcels and 48th Avenue. These parcels also provide land for water and sanitary line connections that will link up to the road rights-of-way to the south, for further dispersion and expansion throughout the entire Plan Area.

Two additional MR parcels are dedicated along the northern and eastern boundaries of the NE 23. These are narrower buffers of 7.5 metres. They are intended to allow for the construction of a landscaped berm. The expectation is that a portion of the berm would be located within the industrial parcels and would become part of the landscaping requirements of those developments. There are currently residential uses on both the quarter section to the north (the SE 26) and the quarter section to the west (the NW 24) of the NE 23. Furthermore, the Town and County's land use planning documents identify the lands on the SE 26 as future residential development. The 7.5 metre wide MR parcels will provide an additional physical and visual buffer to positively enhance the appearance of the industrial area that will be located near future and existing residential uses of the SE 26 and the NW 24.

The remaining PUL parcels demonstrated on [Map 3: Land Use Concept](#) allow for the location of a future water reservoir and the accommodation of storm water management ponds. All parcels will be municipally owned and maintained. The water reservoir will be located on a 0.44 hectare parcel on the NE 23's northeastern corner, which constitutes the Plan Area's highest elevation. The stormwater management ponds are located throughout the Plan Area, with the pond located on the NE 23 also providing a walking trail.

Additionally, the *Town of Bentley Parks and Open Space Plan*, adopted in 2008 identifies attractive, safe and well-maintained public parks, open spaces and recreation facilities as essential elements of the community's image and quality of life. It specifically encourages combining

and protecting natural areas within a connected system, creating opportunities for public access and enjoyment, and incorporating compatible recreation and trail uses within open space areas.

Finally, the policy language of this Plan supports further discussions regarding the establishment of a community park for outdoor sports facilities within the Plan Area.

POLICIES

8.6.1 Municipal Reserve in the Form of Land

Municipal reserve will be dedicated as land within the areas shown on [Map 3: Land Use Concept](#). All municipal reserve parcels will be landscaped and developed to the satisfaction of the County. Municipal reserve dedication will be allocated and designed to achieve an inter-connected park and open space system that links the future residential area to major community facilities and recreational areas within the Town and surrounding area.

8.6.2 Municipal Reserve as Cash-in-Lieu

Municipal reserve will be dedicated as cash-in-lieu when subdivision occurs in areas not including Municipal Reserve as shown on [Map 3: Land Use Concept](#). Alternatively, municipal reserve dedications from these areas may be deferred to other lands owned by the same developer within the Plan Area. Proposals for deferral of municipal reserve may be submitted to the County for their consideration at the time of subdivision application.

8.6.3 Municipal Reserve Dedication

The amount of municipal reserve dedication will be at least ten (10) percent of the gross developable area contained within the proposed subdivision. The gross developable area includes all land minus the area to be dedicated as environmental reserve.

Municipal reserve dedication of more than ten (10) percent of the gross developable area will be accepted as a voluntary over-dedication.

8.6.4 Major Trail Connections and Alignments

The Town's trail system will be extended into the Plan Area as subdivision and development occurs. Potential major trail alignments are shown on [Map 3: Land Use Concept](#) and include:

- a trail along the MR corridor south of 48th Avenue
- a trail along the Railway Street extension
- a trail along 44th Street and Highway 12A
- a trail around the stormwater management pond at 44th Street and Highway 12.

8.6.5 Additional Trail Connections and Pedestrian Facilities

In addition to the major trails shown on [Map 3: Land Use Concept](#), local trails, sidewalks and pedestrian short cuts will be incorporated into the design of subdivisions to provide links between the major trails, parks and residential areas.

8.6.6 Design of Trails

The detailed planning and design of trails will be consistent with County development standards. This includes alignment with Lacombe County's *Guide to Crime Prevention Through Environmental Design*.

8.6.7 Community Park

Up to 4 hectares of suitable land within the NE 23 may be designated as a Community Park, subject to discussions between the County, the Town of Bentley, and the landowner or developer. It is anticipated that this dedication would fall within the 10% Municipal Reserve dedication.



8.7 TRANSPORTATION NETWORK

[Map 3: Land Use Concept](#) shows land uses in relation to future and existing roads and trail routes. All proposed municipal roads within the Plan Area provide a 30 metre road right-of-way. The 30 metre right-of-way can accommodate both rural and urban cross sections.

The main access to the Plan Area is provided through the Highway 12 and Range Road 1-1.5 / 44th Street intersection. The concept includes an expansion of the existing three-legged intersection to create a four-legged intersection to connect the Plan Area south of Highway 12 to the highway and to create a connection from the northern Plan Area to the southern.

Alberta Transportation has indicated that the stretch of Highway 12 located within the Plan Area has not been identified for upgrading in the near future. Despite no imminent or future plans for highway widening, the [Map 3: Land Use Concept](#) incorporates 10 metres for highway widening via right-of-way along the north and south side of the existing Highway 12 right-of-way to create an 80 metre wide future highway right-of-way. In discussions with Alberta Transportation, a 10 metre preferred development setback from the highway was also incorporated into the concept – as seen in [Map 3: Land Use Concept](#) – which would restrict development in proximity to the highway right-of-way.

The highway connections within the concept also provide 30 metre by 30 metre corner cuts that will be able to accommodate roundabout construction, if deemed necessary by Alberta Transportation in the future. These highway expansion considerations provide certainty to developers when proposing development. It mitigates potential future conflicts that can occur when faced with highway expansion plans.

During the construction of Highway 12, the southwest corner of the NE 23 was acquired by the Province as part of the Highway 12 right-of-way. [Map 3: Land Use Concept](#) provides an illustration of this area after the proposed 10 metre highway widening is taken. The remaining area is measured at 1.14 hectares. It is recommended that this area be considered for sale by Alberta Transportation to the abutting landowner and utilized for industrial purposes within the Plan Area.

[Map 3: Land Use Concept](#) incorporates the extension of Railway Avenue throughout the NW 23 to serve Town residents and visitors as they enter or exit the commercial area. This extension is intended to draw shoppers to the downtown commercial area through the ease of access from the commercial portion of the Plan Area. A grid of industrial and commercial collector roads links the sections of the Plan Area. The land use concept contains a “Possible Road Connection” segment within the northeast portion of the Plan Area, to allow direct access from the NE 23 to Highway 12A. This potential road segment would accommodate additional traffic flow and provide for additional parcel configurations.

POLICIES

8.7.1 Highways - Alignment and Cross Section

The design and requirements for the Provincial highway in the Plan Area will be determined by Alberta Transportation.

8.7.2 Highways - Widening and Access

Land needed for the widening of a Provincial highway will be acquired by Alberta Transportation. Access onto Highway 12 will be restricted to the collector roads shown on [Map 3: Land Use Concept](#) and will be designed to meet Alberta Transportation requirements.

8.7.3 Arterial Roads - Alignment and Cross Section

Arterial road alignments will be based on those shown on [Map 3: Land Use Concept](#). The width and cross section used for each arterial road will be determined by Lacombe County's *Standards Manual*.

8.7.4 Arterial Roads - Widening and Access

Road widening will be provided along all arterial roadways at the time of subdivision. The amount of road widening to be required will be determined by Lacombe County's *Standards Manual*. Where possible, road dedication for widening purposes will be balanced between landowners on both sides of the existing road allowance. Access to arterial roads will be restricted to collector roads shown on [Map 3: Land Use Concept](#). The design of intersection improvements on arterial roads will be determined by Lacombe County's *Standards Manual*.

8.7.5 Arterial Roads - Direct Access to Parcels

Direct access to individual parcels from an arterial road should not be permitted where access off a collector road is possible.

8.7.6 Noise and Visual Attenuation

Sufficient noise and visual attenuation features will be provided as lands adjacent to arterial roadways and Highway 12 are subdivided and developed. These measures may consist of earthen berms, fences, landscaping, distance separation or a combination of these measures to the satisfaction of the County at the developer's expense. Detailed description of noise and visual attenuation measures is to be included as part of the subdivision application. Noise and visual attenuation features will not be permitted in the

Highway 12 right-of-way.

8.7.7 Collector Roads - Alignment and Cross Sections

Collector road alignments will be based on those shown on [Map 3: Land Use Concept](#). The width and cross section used for each collector road will be determined by Lacombe County's *Standards Manual*.

8.7.8 Local Roads

Local roads will extend from the collector road alignments shown on [Map 3: Land Use Concept](#). The number of local road intersections along collector roads will be kept to a minimum. The width and cross section used for each local road will be determined by Lacombe County's *Standards Manual*.



8.8 NATURAL FEATURES

There are several wetlands south of Highway 12. The removal of the SW 23 and SE 23 from the Plan Area means that these wetlands will be unaffected, except for an existing small wetland that is classified as a possible Class II wetland (graminoid marsh) and has an approximate size of 0.16 hectares. The extension of 44 Street will terminate just north of this wetland, and ensuring no negative impacts on this wetland will be part of the roadway design criteria.

POLICIES

8.8.1 Crown Ownership of Wetlands

There is a wetland immediately south of the Plan Area which has not been assessed under the *Alberta Wetland Policy*. This wetland, along with others to the south, may be claimed for Crown (Province) ownership if the development area is enlarged and subdivision occurs in the future. However, this particular wetland lies in the path of a potential road alignment, which will need to be considered if any action is taken. Where the Crown (Province) claims ownership of a wetland classified as permanent or semi-permanent under the *Alberta Wetland Policy*, the wetland will be treated as a water body. Environmental Reserve dedication will be provided abutting the water body in accordance with this Plan.



8.9 STORM DRAINAGE

The gently sloped topography of the Plan Area directs storm drainage from the northeast corner of the Plan Area to its southwest corner. To accommodate run-off from development within the Plan Area, additional storm water management ponds are proposed within the concept. The location and configurations of the ponds are illustrated on [Map 3: Land Use Concept](#). To reduce construction costs and create viable storm water management ponds, the lowest elevation above sea level and the overall flattest areas within each quarter section were identified to accommodate the ponds.

Based on the stormwater servicing study, a pre-development release rate of 3.0 L/s/ha (litres per second per hectare) was proposed for the future stormwater ponds within the Plan Area. The existing stormwater management pond within the NW 23 was approved in 2010 at a pre-development release rate of 4.0 L/s/ha. This pond was configured to accommodate its expansion within the current parcel size.

For commercial and industrial uses that typically occupy larger sized parcels, the study recommends onsite short duration storage of stormwater. The storage is to meet a maximum discharge rate of approximately 100 L/s/ha.

The public utility lot on the NW 23 that contains the existing storm water management pond is located within the quarter section's southwest corner. The pond accommodates drainage from the entire quarter section and directs run-off through the culvert underneath the railway and further to the west. A 15 metre drainage easement is recommended for the parcel immediately southwest of the pond. This pond was constructed in 2010 and has expansion capacity within its parcel boundaries.

A PUL for the pond on the NE 23 was also located at the quarter section's southwest corner. The parcel size is larger than the parcel footprint recommended by the storm water drainage assessment. This allows for the accommodation of a walking trail and contributes to the overall trail network within the Town and surrounding area.

POLICIES

8.9.1 Purpose of Lands

The areas shown on [Map 3: Land Use Concept](#) as storm pond and drainage corridor are intended to accommodate storm water management facilities and critical surface drainage routes as part of the overall storm water management system for the area. These lands will be dedicated as public utility lot at the time of subdivision.

8.9.2 Size and Design of Facilities

Each of the areas shown on [Map 3: Land Use Concept](#) will accommodate a storm water management facility in the form of a constructed wetland, designed to meet Alberta Environment and Protected Areas' guidelines and the County *Land Use Bylaw*. The exact size and alignment of each facility may be modified to account for a final more detailed design without requiring an amendment to this Plan.



9.0
SERVICING
CONCEPTS AND
POLICIES

This section discusses servicing concepts for the extension of the Town's stormwater management, water, and sanitary sewer services to accommodate future development of the Plan Area.

These concepts are based on the *Southeast Bentley Area Structure Plan Servicing Study* prepared by Stantec, June 21, 2022.

The servicing information that is provided is conceptual and more detailed analysis may be required through an Outline Plan. Alternative concepts may therefore be approved as the area develops but it is crucial that any alternatives selected achieve the long term goals for the area.

9.1 STORM WATER SYSTEM

While the Plan Area's grades are moderate, averaging about 2%, the land drains from a high point in the northeast southwesterly toward the Blindman River. Conceptual Storm Water Management areas have been shown on [Map 4: Storm Water Concept](#). These are based on an understanding of the topography and proposed road alignments.

Conveyance of storm water by roadside ditches and culverts is anticipated. At the time of detailed design, the development roadway ditch/culvert system will be analyzed to ensure appropriate sizing.

POLICIES

9.1.1 Pre-development Rate for Design

A rate of 3.0 litres/s/ha will be used as the pre-development rate when completing storm water design for the Plan Area.

9.1.2 Detailed Storm Water Management Plan Required

A detailed storm water management plan will be required to confirm sizing, volumes and outlet routes prior to development and/or subdivision approval. Outlet routes for all upstream lands and storm water management ponds must be taken into account.

9.1.3 Design Requirements

The development of municipal storm drainage services and storm water management facilities will be in conformance to the most recent version of the County's *Standards Manual, Municipal Development Plan, and Land Use Bylaw* and the *Southeast Bentley Area Structure Plan Stormwater Servicing Study* (2022).

9.1.4 Use of Highway Rights of Way

A storm water management plan that proposes to direct drainage into a provincial highway right of way must obtain approval from Alberta Transportation.

9.2 WATER SYSTEM

The water system can be expanded to service commercial and industrial land uses within the Plan Area. [Map 5: Water Concept](#) shows the future water main distribution network connecting to the existing mains and the Town water treatment plant and reservoirs.

The servicing study is predicated on a design basis of 0.05 L/s/ha. This is lower than what is typical for urban development, but it is predicated on an assumption that many industrial uses will use very little water, and oversizing is unnecessarily costly and may lead to water becoming stagnant in the watermains.

POLICIES

9.2.1 Water Supply - Monitoring

The Town of Bentley has enough water capacity for 21 years of the 25 year outlook. Based on available data and current regulations, the Town should be able to supplement its water system with an additional well, provided that other groundwater users are not interfered with or are accommodated. Long term planning and allocation of capital for this eventual needed is advised.

9.2.2 Water Storage

Water storage capacity appears sufficient to meet projected needs over the next 30 years. Increasing demand should be monitored and additional reservoir storage staged appropriately.

9.2.3 Water Main Distribution Network

Water mains will be extended into and through the Plan Area as shown on [Map 5: Water Concept](#). The sizes of the mains are shown conceptually and must be confirmed and designed during time of development and prior to subdivision of individual areas.

9.2.4 Dead End and Unlooped Mains

When considering the staging of development in the Plan Area, the use of dead end and unlooped mains should be avoided.

9.2.5 Design Requirements

The development of municipal water services will be in conformance to the most recent versions of the Town's *Design Guidelines and Construction Specifications*, the County's *Standards Manual*, and the *Southeast Bentley Area Structure Plan Stormwater Servicing Study*.

9.3 SANITARY SEWER SYSTEM

The sanitary sewer collection system can be expanded to service the Plan Area as shown on [Map 6: Sanitary Concept](#).

The conceptual sanitary network has been shown on [Map 6: Sanitary Concept](#). The mains have been shown as gravity trunk mains and gravity collection mains. As the grading design is not completed line sizing has not been indicated as it will be dependent on final design of the subdivision itself, and consideration of future lands should be identified.

The present wastewater treatment system can accommodate growth for 20 years based on an increase in flows of 3% per year. At full buildout, additional lagoon cells will be needed to increase treatment capacity. However, there is significant inflow and infiltration (I&I) into the sanitary system, and the capacity of the existing system could be extended by addressing this issue.

9.0

POLICIES

9.3.1 Sanitary Sewer - Capacity

The Town will monitor sewage influent and consider an inflow and infiltration reduction program to reduce the amount of stormwater and groundwater entering the system to ensure sufficient sewage treatment capacity.

9.3.2 Sanitary Trunk and Collection Mains

The design of the sanitary trunk and collection mains will be based on [Map 6: Sanitary Concept](#).

9.3.3 Design Requirements

The development of municipal sanitary services will be in conformance to the most recent version of the Town's *Design Guidelines and Construction Specifications*, the County's *Standards Manual*, and the *Southeast Bentley Area Structure Plan Stormwater Servicing Study*.

9.4 SHALLOW OR OTHER UTILITIES

POLICIES

9.4.1 Shallow Utilities - Extensions into Plan Area

Shallow utilities (power, telecommunications, natural gas) will be extended into the Plan Area in accordance with the requirements of the individual utility provider, where applicable.

9.4.2 Shallow Utilities - Underground Installation

All shallow utilities will be installed underground.



10.0
**IMPLEMENTING
THE PLAN**

This section discusses the administrative and decision making processes that are to be used to implement the policy directions set out in the previous sections. It includes expectations for developers and landowners in preparing more detailed proposals for the subdivision and development of their lands.

10.1 PHASING OF DEVELOPMENT

POLICIES

10.1.1 General Pattern of Development

Prior to adoption of an outline plan or an amendment to the *Land Use Bylaw* to allow subdivision and development, the landowner or developer shall provide a phasing plan satisfactory to the County.

10.1.2 Transportation Connections – Secondary Access Requirement

As development progresses there is a need to ensure primary and secondary access is provided to areas containing a large number of buildings and/or workers. This accounts for safety and for flexibility in the transportation network. Prior to a *Land Use Bylaw* rezoning that could result in a concentration of industrial buildings accessed by a single road with only one way in and out, the County will require suitable arrangements for a second permanent access or a temporary access.

10.1.3 Sanitary Sewer

Prior to a *Land Use Bylaw* rezoning to allow development or subdivision, the County will require suitable arrangements that allow for the construction of a sanitary sewer infrastructure serving the proposed development area.

Where these facilities are not located on the same parcel as the proposed development area, a land acquisition agreement or easement agreement must be in place.

Temporary alternative arrangements may be accepted by the County where access to the locations shown in [Map 6: Sanitary Concept](#) cannot be obtained.

10.1.4 Water

Prior to a *Land Use Bylaw* rezoning to allow development or subdivision in the Plan Area, the County will require suitable arrangements for the extension of a looped water connection to the proposed development area or a single feed capable of providing the required water flows.

10.1.5 Storm Drainage

Most of the major existing parcels in the Plan Area are able to provide for a storm water management pond independently of another parcel. The outlet routes may cross other parcels or be shared.

Prior to a *Land Use Bylaw* rezoning to allow development or subdivision, the County will require suitable arrangements for outlet routes for all proposed storm water management ponds. This may take the form of land acquisition or easement agreement.

10.2 DETAILED SERVICING AND SUPPORTING STUDIES

10.0

POLICIES

10.2.1 Detailed Design and Supporting Studies Required

Prior to adoption of an outline plan or Prior to a *Land Use Bylaw* rezoning allowing subdivision and development, detailed design of all municipal services (water, sanitary, storm drainage) and road connections and any supporting studies needed to assess the proposed development or subdivision will be provided by the developer/landowner.

10.2.2 Information Required

The following studies are to be provided by a qualified consultant, at the County's discretion:

- a. a water network analysis containing information on operating pressures under peak hourly demand conditions, fire flow availability during maximum day demand conditions, as well as information of nodal demands, and boundary conditions;
- b. a sanitary report containing assumptions and calculations on expected effluent generation and flows and downstream capacity to accommodate the expected flows;
- c. a storm water management plan containing calculations of expected run off, storage requirements, and outfall requirements addressing Alberta Environment and Protected Areas' approval requirements;
- d. a wetland assessment and impact report meeting Alberta Environment and

Protected Areas' requirements and written confirmation of acceptance of the report by Alberta Environment and Protected Areas;

- e. a traffic impact assessment meeting Alberta Transportation requirements and written confirmation of acceptance of the assessment by Alberta Transportation;
- f. a fire protection plan to the satisfaction of the County outlining how adequate fire protection services will be provided to the proposed development, to be submitted to the County's Fire Chief for approval;
- g. a historical resource impact assessment meeting the requirements of the Historic Resources Management Branch of Alberta Culture and written confirmation of acceptance by the Historic Resources Management Branch;
- h. where use of private water wells is allowed, a groundwater supply report confirming that there are adequate ground water resources for the in-tended uses for daily needs and firefighting needs without impacting existing wells;
- i. site development guidelines as described in Policy 10.2.3 of this Plan; and
- j. any other information or technical studies that the County deems necessary.

10.2.3 Site Development Guidelines

Site development guidelines are intended to facilitate attractive, cohesive, high-quality developments or development areas.

Site development guidelines that set out building design, landscaping, signage, fencing and other site requirements shall be required for all multi-lot commercial or industrial developments, to the satisfaction of Lacombe County. The guidelines should serve to create visually appealing developments that meet or exceed municipal standards.

- requirements for building design;
- requirements for perimeter, lot, flankage, and yard screening which must include standards for the type, height, and material of fencing acceptable in the development. The screening standards shall require all outdoor storage to be screened from parking areas, primary roads, and the entrances to adjacent buildings;
- requirements specifying the acceptable size, appearance, and type of signage allowed in the development. This will include signage to identify the development and business identification signs;
- consistent with Lacombe County's *Guide to Landscaping*, standards that include

the following considerations: a planting buffer along Highway 12, 12A and Range Road 1-1; specifications for grading, planting and mulching; requirements for paving access driveways and parking areas, if any.

- for all business industrial lots, a principal building of a minimum of 278.7 square metres (3,000 square feet) in size is required to be established or under construction, to the satisfaction of the County, on each lot adjacent to Highway 12, 12A, and Range Road 1-1, prior to any non-agricultural use being established;
- Any other development design considerations deemed necessary by Lacombe County Council.



10.3 LAND USE BYLAW

POLICIES

10.3.1 Relation to Land Use Bylaw

The *Land Use Bylaw* will be the primary means of ensuring that subdivision and development in the Plan Area is consistent with the policies of the *Southeast Bentley Area Structure Plan*. Where necessary, amendments to the *Land Use Bylaw* will be made to implement the intent and direction of this area structure plan.

10.3.2 Subdivision Layout Required

Prior to approval of a *Land Use Bylaw* amendment that would allow subdivision of an area that does not require an outline plan, a subdivision layout showing how the area subject to the proposed amendment could be subdivided in the future will be provided.

10.3.3 Referrals

The County will refer all rezoning and subdivision applications in the Plan Area to the Town of Bentley, Alberta Transportation, Alberta Environment and Protected Areas, and other government agencies. Further referral may be made at the County's discretion on other matters of interest or potential concern.

10.0



10.4 SUBDIVISION AND DEVELOPMENT APPLICATIONS

POLICIES

10.4.1 Conformance Required

All subdivision decisions will conform to the policies of this Plan and any applicable outline plan that has been adopted by Council.

All development permit decisions involving a discretionary use will conform to the policies of this Plan and any applicable outline plan that has been adopted by Council.

10.4.2 General Expectations

Subdivision and development of the area will proceed in a manner that:

- allows for the orderly and efficient expansion of the County and Town;
- does not prejudice the further subdivision and development of the subject or adjoining lands;
- makes sufficient provision for road access and municipal utility servicing; and
- provides for the development of a park, open space and trail system as envisioned by this Plan.

10.5 DEVELOPMENT COSTS AND OTHER CONSIDERATIONS

POLICIES

10.5.1 Developer Responsible for Costs to Develop

All costs for required studies, designs, plans, assessments and the construction of municipal infrastructure (roads, water, sanitary sewer, storm drainage) within the area being developed will be the sole responsibility of the Developer.

10.5.2 Offsite Costs

Responsibility for the cost to provide infrastructure improvements outside of the area being developed but required to support the proposed development will be negotiated between the Developer, Town and County.

The Town and/or County may cover the costs of offsite infrastructure and/or major system components through offsite levies, oversize improvement arrangements or endeavors to assist.

10.5.3 No Obligation on Part of the Municipalities

The adoption of this Plan does not require the municipality to undertake any of the projects referred to by this Plan.

10.6 INTERPRETATION

POLICIES

10.6.1 Flexibility

This Plan should be interpreted with flexibility having regard to the purpose, concepts, and general policy direction of the Plan.

The boundaries between the various land uses and facilities shown on maps forming part of this Plan should not be rigidly interpreted. The precise boundaries and locations of key Features may be confirmed as more detailed design work and field survey is completed.

10.6.2 Ruling on Interpretation

Where questions of interpretation of this Plan arise, the matter will be put before Council for a decision. Council's decision on interpretation will be final.

10.7 PLAN AMENDMENT

POLICIES

10.7.1 When an Amendment is Required

Where an outline plan, *Land Use Bylaw* amendment, subdivision application or development permit application proposes a major change from the direction and policies of this Plan, a formal amendment adopted by bylaw will be required. This includes:

- elimination of a major arterial or collector roadway;
- change in the general land use pattern (commercial, industrial) shown in the Plan;
- change to the open space system beyond what is contemplated in the Plan; or
- deviation from the utility servicing concepts beyond what is contemplated in the Plan.

The following types of adjustments in response to more detailed design will not require a formal amendment:

- minor adjustments in land use boundaries, road alignments and features, and the use of discretion by the approving authority, as described in a specific policy in this Plan; or
- addition or relocation of public utility lots needed to implement a detailed servicing design.

10.7.2 Information Required for Plan Amendment

The applicant or person requesting an amendment of this Plan will submit the supporting information deemed necessary by the County to evaluate the requested changes.

10.7.3 Amendments to this Plan

Any amendments to this Plan shall follow the process and requirements of the County and the *Municipal Government Act*.

10.8 PLAN REVIEW

POLICIES

10.8.1 Timing of Routine Review

The County should review this Plan at least every ten (10) years to ensure that the Plan remains current.

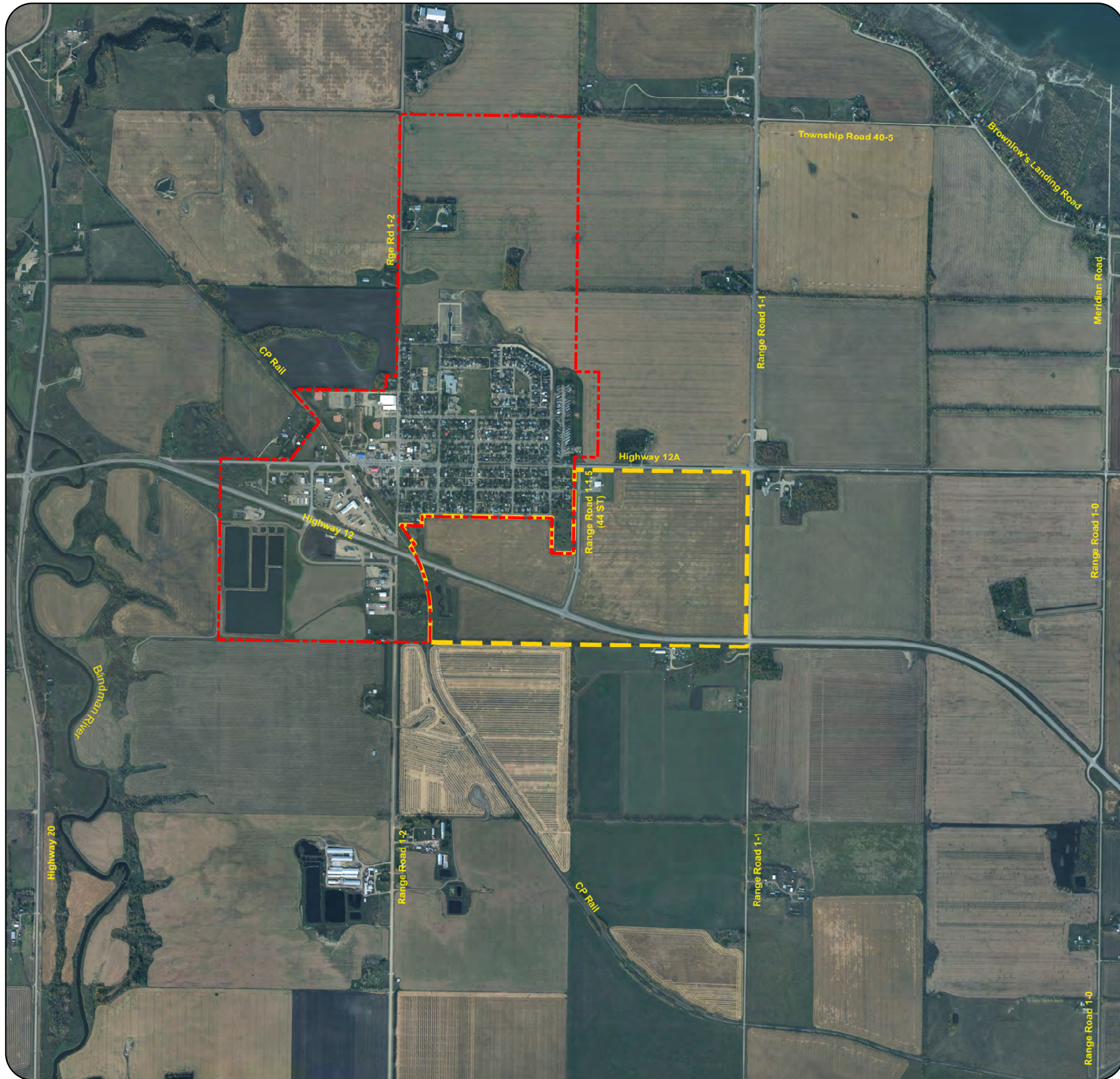
The review process should start with a written evaluation by planning staff followed by a recommendation to Council regarding the need to undertake a formal update process. Council may choose to direct a review of the Plan at any time.

10.8.2 Consistency with Other Statutory Plans

This Plan will be reviewed and updated in response to changes to the policy and direction set in the *Town of Bentley / Lacombe County Intermunicipal Development Plan* and/or the *Municipal Development Plan*.





11.0
MAPS



SOUTHEAST BENTLEY AREA STRUCTURE PLAN

MAP 1: PLAN AREA AND LOCATION

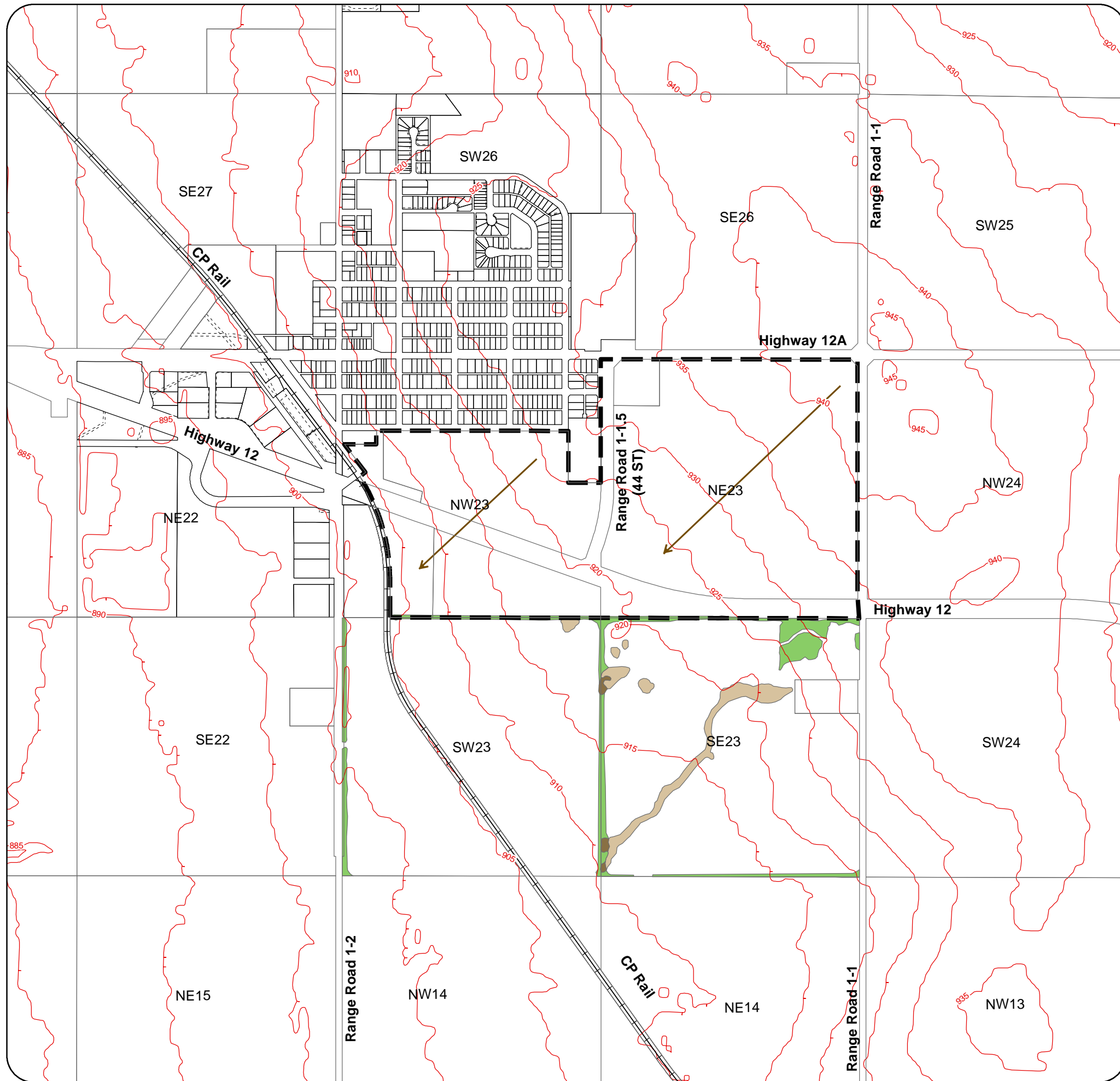
-  Plan Area Boundary
-  Town of Bentley Boundary

MAPS



AIRPHOTO DATE: OCTOBER 2019





LACOMBE COUNTY

Town of Bentley
come to be

SOUTHEAST BENTLEY AREA STRUCTURE PLAN

MAP 2A: NATURAL FEATURES

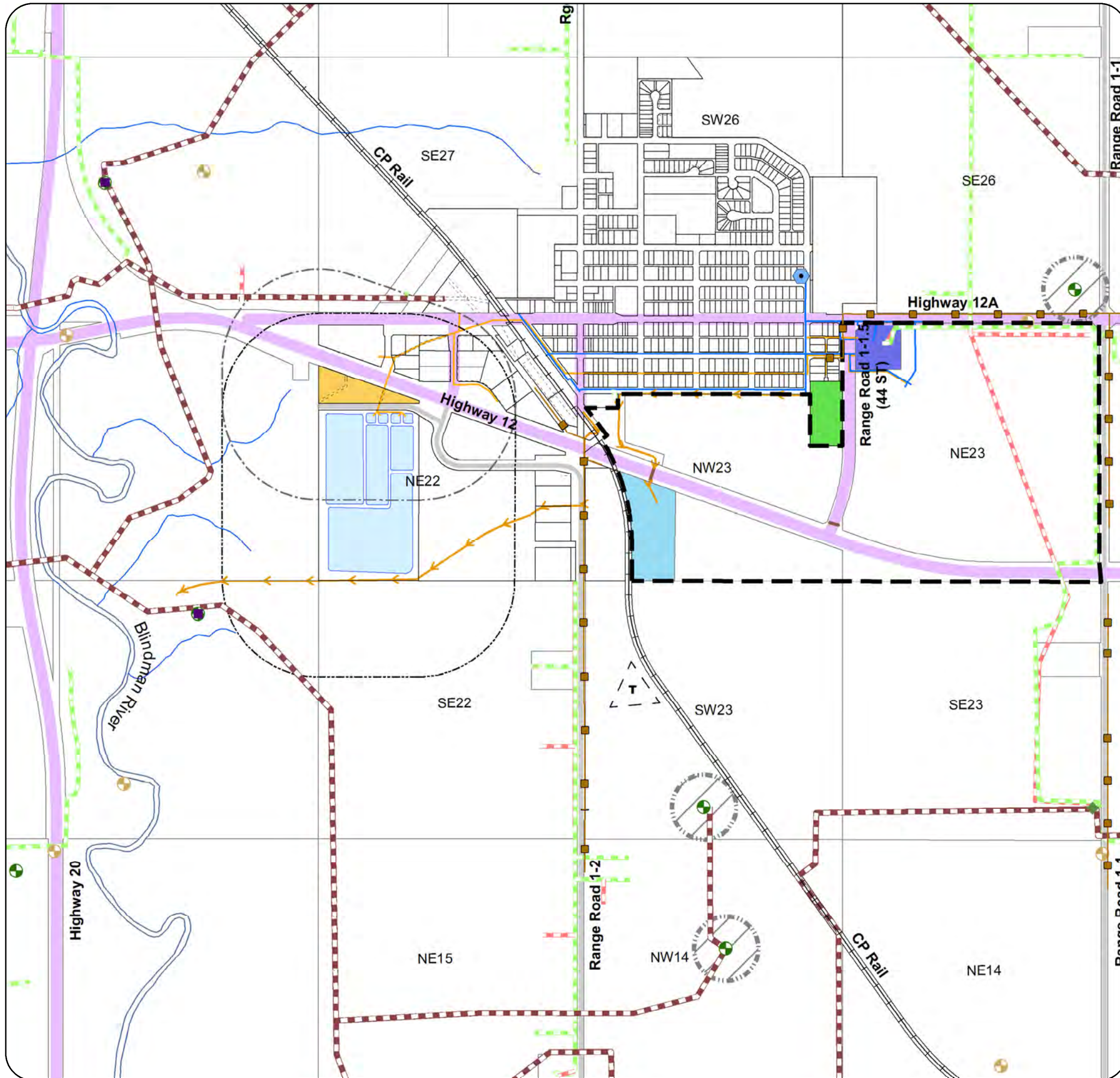
- Index Contour
- Aspen Woodland Alliance (AW)
- Graminoid Marsh - Class II (MGII)
- Deciduous Woodland Swamp (SWd)


























NORTH

PCPS
community planning services

SOUTHEAST BENTLEY AREA STRUCTURE PLAN

MAP 2B: BUILT FEATURES


















-  Plan Area Boundary
-  Cemetery
-  Fire Department
-  Storm Pond
-  Sewage Lagoon
-  Lacombe Regional Solid Waste Transfer Station
-  Telecommunications Tower and Anchors
-  Water Pump House
-  Oil/Gas Battery Location
-  Oil/Gas Regulator Station
-  Active Oil/Gas Well
-  Abandoned Oil/Gas Well
-  Active Oil/Gas Pipeline
-  Active ATCO/Co-op Low Pressure Oil/Gas Pipeline
-  Abandoned ATCO/Co-op Low Pressure Oil/Gas Pipeline
-  Overhead Power Lines
-  Water Pressure Main
-  Sanitary Gravity Main
-  Drainage Swale
-  Culvert
-  Paved Road
-  Gravel Road
-  Oil/Gas Well Setback (100m)
-  Lagoon Setback (300m)
-  Regional Solid Waste Transfer Station (300m Setback)

MAPS



SOUTHEAST BENTLEY AREA STRUCTURE PLAN

MAP 3: FUTURE LAND USE CONCEPT

-  Plan Area Boundary
-  Potential Community Park
-  Public Utility Lot
-  Highway Commercial
-  Business Industrial
-  Public/Institutional
-  Municipal Reserve
-  Highway ROW To Be Re-allocated
-  Highway and Local Roads
-  Easement Road
-  Possible Road Connection
-  Existing Railway Right-of-way
- C** Cemetery
- CE** Cemetery Expansion
- FD** Fire Department
- WTP** Future Water Treatment Plant and Reservoir
- SWMP** Storm Water Management Pond
-  Trail/Pedestrian Route
-  Tentative Property Line
-  Expected Setback From Highway 12 (10m)













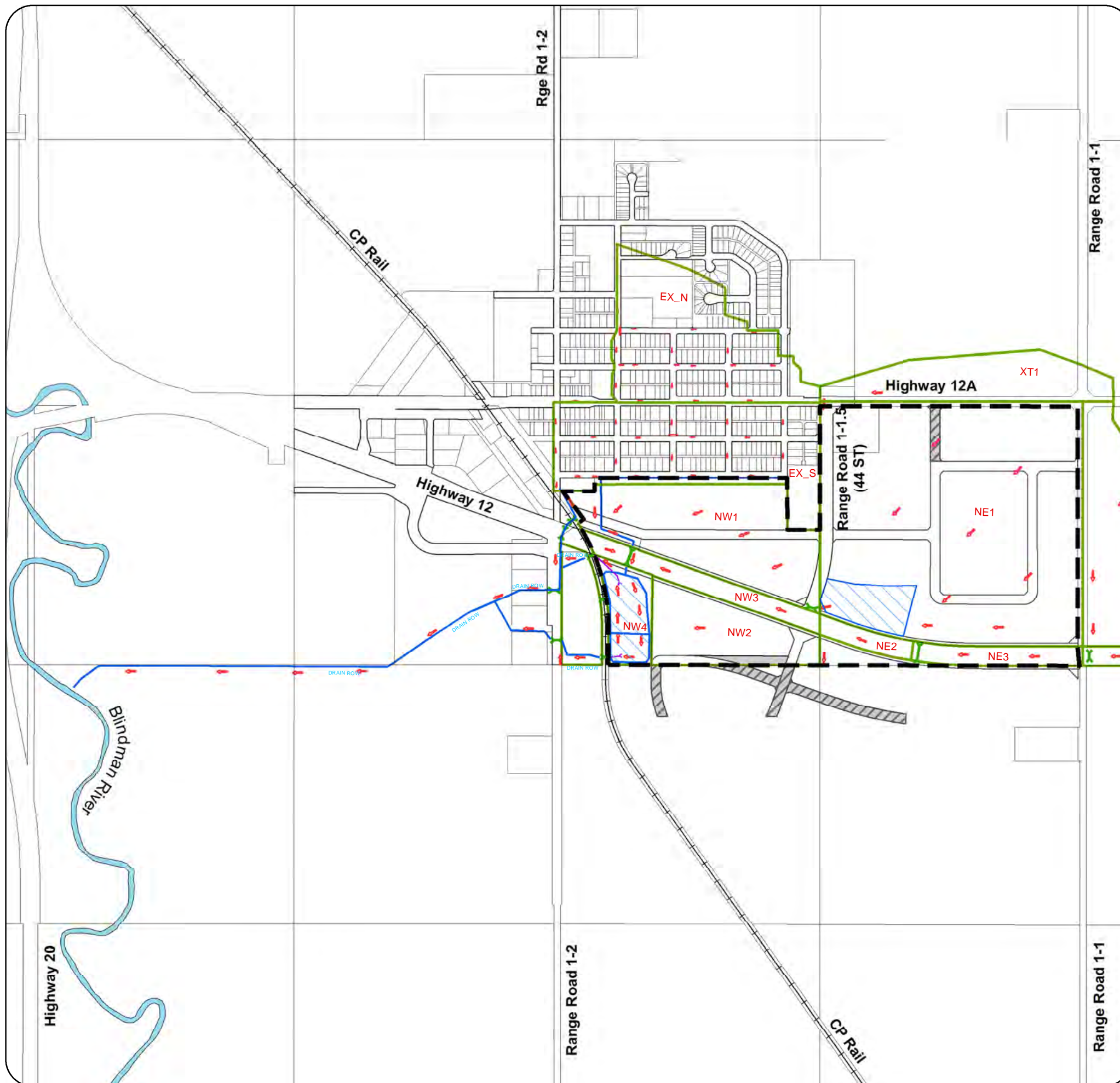
NOTE: THIS DRAWING IS NOT INTENDED FOR DETAILED SUBDIVISION AND ENGINEERING DESIGN. BOUNDARIES BETWEEN LAND USES AND LOCATION OF FEATURES ARE APPROXIMATE. VERIFICATION AT TIME OF SUBDIVISION AND/OR DEVELOPMENT IS REQUIRED.



SOUTHEAST BENTLEY AREA STRUCTURE PLAN

MAP 4: STORMWATER SERVICING CONCEPT

-  Plan Area Boundary
-  Storm Sub-Catchment Boundary
-  Existing Drainage Route
-  Proposed Drainage ROW
-  Pond Outlet Piping
- NW1** Storm Sub-catchment ID
-  Drainage Pattern
-  Existing Culvert
-  Proposed Storm Pond
-  Easement Road
-  Possible Road Connection



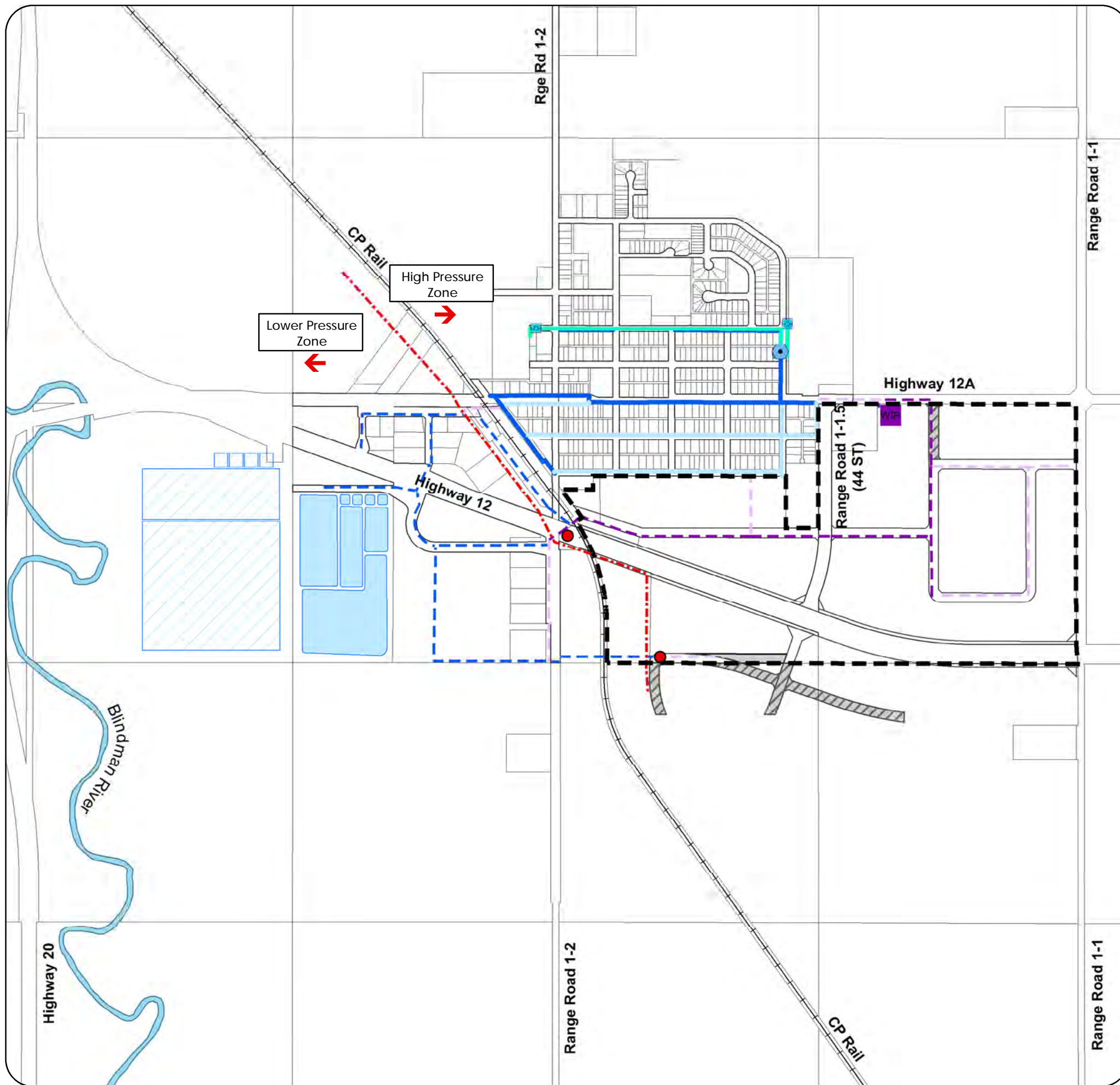
MAPS



SOUTHEAST BENTLEY AREA STRUCTURE PLAN

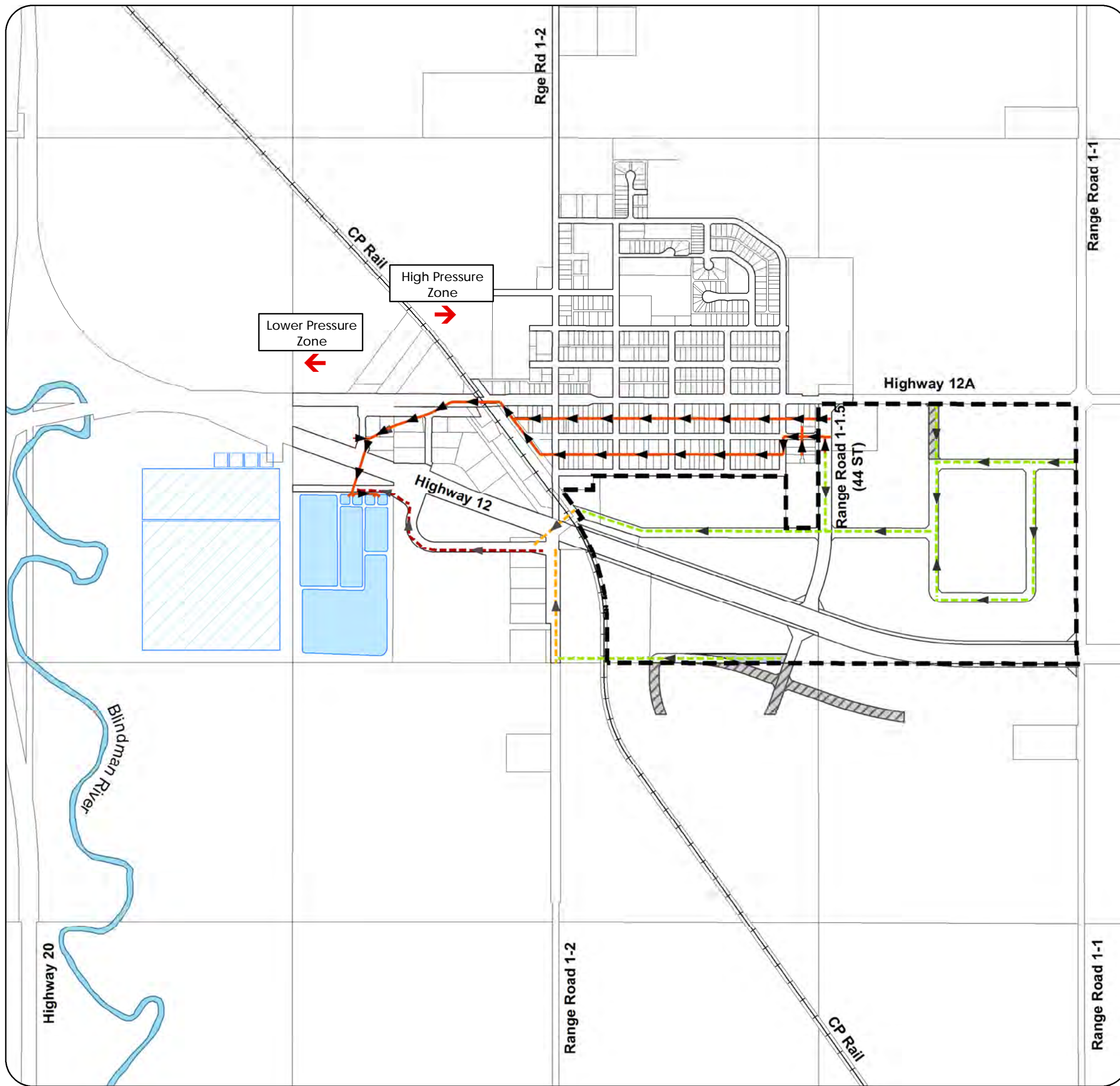
MAP 5: WATER SERVICING CONCEPT

- Plan Area Boundary
 - ⬢ Existing Reservoir and Pumps
 - ⊕ Water Wells
 - WTP Future Reservoirs
 - Future Pressure Reducing Valve
 - - - Approximate Water Servicing Pressure Zone Boundary
 - Existing Sewage Lagoon
 - Future Lagoon Expansion (Based on 0.05 L/s/ha Scenario)
 - Easement Road
 - Possible Road Connection
- Existing Water Mains**
- Well Supply Line
 - 150 mm
 - 200 mm
- Future Water Mains**
(Based on 0.05 L/s/ha Scenario)
- 200 mm
 - 250 mm
 - 300 mm



MAPS





SOUTHEAST BENTLEY AREA STRUCTURE PLAN

MAP 6: WASTEWATER SERVICING CONCEPT

Plan Area Boundary

--- Plan Area Boundary

Existing Wastewater Mains

—▶ Wastewater (Sizes vary 200-300mm, some unknown)

Future Wastewater Mains

- - -▶ 250 mm

- - -▶ 300 mm

- - -▶ 450 mm

■ Existing Sewage Lagoon

▨ Future Lagoon Expansion (Based on 0.05 L/s/ha Scenario)

■ Easement Road

▨ Possible Road Connection

NORTH

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