

LETHBRIDGE COUNTY



Hamlet of Chin

GROWTH STUDY



June 2020

Approved by Resolution of Council



OLDMAN RIVER REGIONAL SERVICES COMMISSION

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Prepared for Lethbridge County**

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LETHBRIDGE COUNTY HAMLET OF CHIN GROWTH STUDY

Part 1

STUDY OVERVIEW

Lethbridge County is undertaking hamlet growth studies for each of its hamlets. The purpose is to encourage and support the residential and economic viability of the hamlets within Lethbridge County. The studies are to analyze present and future servicing needs along with identifying logical areas to support growth. The municipality has authorized the Oldman River Regional Services Commission, as municipal planners for the municipality, to review and prepare the studies/reports on behalf of the County.

The Lethbridge County Municipal Development Plan (MDP) identified that planning for future hamlet growth areas is desirable within its land use management strategy. The MDP is a long-range statutory document providing a framework of policies for decision makers regarding future growth and development opportunities. As part of the growth policies in the MDP, one of the County's objectives is to sustain the hamlets within the County and continue to protect agricultural land uses by encouraging residential development in and around the hamlets. In particular, the MDP outlines the following policies:

- The County shall support hamlet growth provided appropriate servicing provisions exist to facilitate expansions.
- The County shall, where required, undertake servicing master plans and the development of infrastructure required to facilitate growth.

The hamlet growth studies are to guide and facilitate the comprehensive planning and development of servicing that will be needed to support healthy, probable growth projections.

1.1 Intent

This report presents a summary of existing conditions and future considerations to determine the potential growth and long-term viability of the second smallest hamlet within Lethbridge County, the Hamlet of Chin.

This report is similar in format to the other hamlet studies prepared for Lethbridge County, to ensure each individual hamlet is reviewed in a consistent and fair manner. The study is to be used in planning for both growth and servicing provisions for the hamlet. As is explained and highlighted in the document, a smaller hamlet such as Chin has unique constraints that present challenges to planning for future opportunities for growth.

The report has been divided into seven main parts to examine and assess the Hamlet of Chin's past, present and potential future. Parts 3 through 5 of the report analyses the existing hamlet conditions and identifies the potential opportunities for the Hamlet of Chin.

1.2 Objectives

- To provide an overview of the general hamlet conditions and assess the overall vitality (well-being) of the community.
- To identify if lands are available within the present hamlet boundary to accommodate growth in a contiguous manner or identify suitable land outside the present boundary.
- To provide a planning analysis and framework to determine if existing or future development could or should be serviced by municipal infrastructure. The reports' findings may be used to facilitate long-term infrastructure planning and management for the County.
- To provide an assessment/opportunity summary with recommendations to Lethbridge County decision makers to help guide future planning, servicing, and management.
- To provide recommendations based on the overall assessment, and determine if the Hamlet of Chin has realistic opportunities to grow or expand in the future.

Part 2

LEGISLATIVE BACKGROUND

Hamlets are small unincorporated communities within a larger rural municipality in Alberta. They are governed, taxed, and managed by the rural municipality within the boundaries of which they are located.

The *Municipal Government Act (MGA)*, section 59(1) states,

“59(1) The council of a municipal district or specialized municipality may designate an unincorporated community described in subsection (2) that is within its boundaries to be a hamlet.”

Subsections (2) and (3) state,

“(2) An unincorporated community may be designated a hamlet if the community:

- (a) consists of 5 or more buildings used as dwellings, a majority of which are on parcels of land smaller than 1850 square metres,*
- (b) has a generally accepted boundary and name, and*
- (c) contains parcels of land that are used for non-residential purposes.*

(3) The designation of a hamlet must specify the hamlet’s name and boundaries.”

The Hamlet of Chin conforms to the stipulated MGA criteria, as will be described in more detail in the accompanying report.

This Growth Study is not a statutory plan as defined by the MGA, but is a tool to help guide and shape direction and policy for Lethbridge County regarding planning for the hamlets. The suggested strategies and recommendations may be incorporated into the County’s Municipal Development Plan.

Part 3

HAMLET OF OVERVIEW

The Hamlet of Chin is located approximately 17 miles (27 km) east of the City of Lethbridge, ½ mile (0.8 km) north of Highway 3, situated between the Towns of Coaldale and Taber. Chin is located on the very eastern border of Lethbridge County with the Municipal District of Taber western boundary beginning immediately east of the hamlet. Chin encompasses approximately 19.7 acres (7.0 ha) of land within its designated boundary. The hamlet basically functions as a small urban residential area for the surrounding agricultural area. Chin is also located adjacent to the McCain Foods Ltd. potato processing plant, which is one of the larger industrial processing developments in Lethbridge County.

3.1 Population

As a designated place, Chin recorded a population of 62 persons living in 19 of its 19 total private dwellings according to the 2016 census. This was an increase of 29.2% from the previous census in 2011. In 2011 the population was 48 with 19 of its 21 dwellings being occupied. This was a 6.7% population increase from the 2006 census.

Table 1 contains population information for the Hamlet of Chin from 1996 to 2011.

Table 1
Census Population and Growth for Chin

	1996	2001	2006	2011	2016
POPULATION	23	35	45	48	62
5 YEAR TOTAL GROWTH (OR DECLINE) %		52.1%	28.6%	6.7%	29.2%

Population wise, the Hamlet of Chin is the second smallest of the eight designated hamlets in Lethbridge County. (Note: It is the smallest of the seven MGA criteria recognized (official) hamlets, as the Hamlet of Kipp does not meet all the provincial criteria.)

3.2 Hamlet History

Chin was initially founded as a settlement area in the early 1900s due to both agriculture and the Canadian Pacific Railway (CPR) line being established in close proximity. The name Chin was derived from the native Blackfoot language of the Blackfoot First Nations who historically held a significant presence in southern Alberta.¹ The CPR and the Alberta Railway and Irrigation Company registered the original subdivision site plan in 1910 (Plan 899AA) for lands north of the rail line (refer to Diagram C-1). The CPR appeared to have grand expectations for the community to grow, as the original plan covered an area twice as large as what exists today. The north half of the original Chin subdivision plan was never developed for hamlet use, and in 1964 was consolidated into one larger block (Block E) and amalgamated with adjacent Blocks A and B into a single title. Map 3 illustrates the current hamlet layout and lot/block configuration in respect of the 1964 consolidated plan.

As a testament to its role as an agricultural centre, Chin had at one time two active grain elevators located south of its boundary, adjacent to the railway. One elevator was originally built by Alberta Pacific Grain and was later owned by Parrish and Heimbecker, while the other grain elevator was built by the Ellison Milling and Elevator Company. These prairie sentinels are no longer standing as both elevators were demolished in 2008.

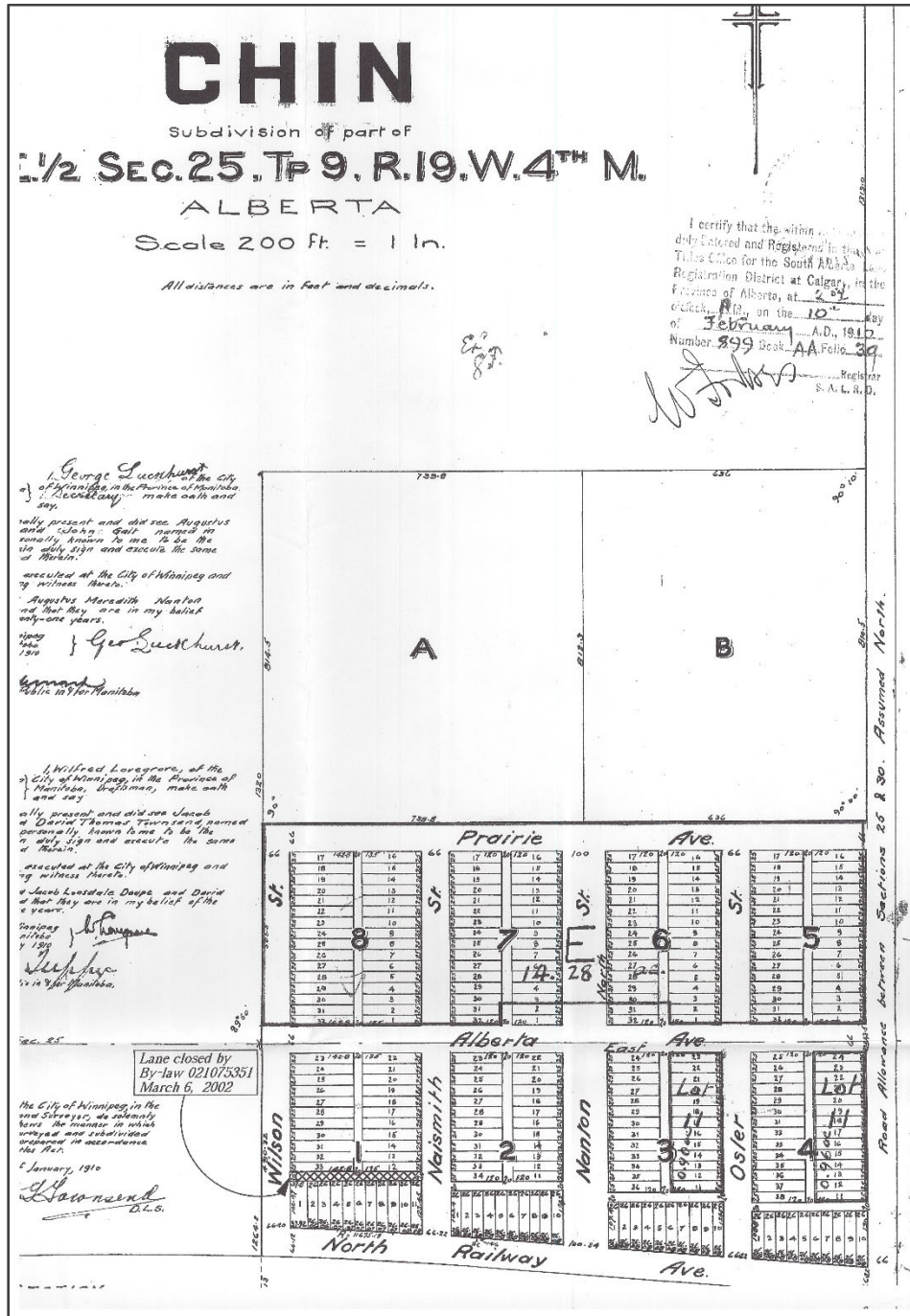
Chin never grew as originally anticipated and today it basically provides for a rural lifestyle within a small urban community setting. After a slight reduction in population size that occurred during the mid-century, the hamlet has experienced significant population growth over the last two decades. Population increases have included three census periods of 20% growth or higher, including one of 52.1% between 1996 and 2001. It is noted that these growth percentages appear high as the population itself is quite small at approximately 62 people. Chin remains a viable rural residential living option, especially as Taber and Coaldale continue to experience significant growth in the region.

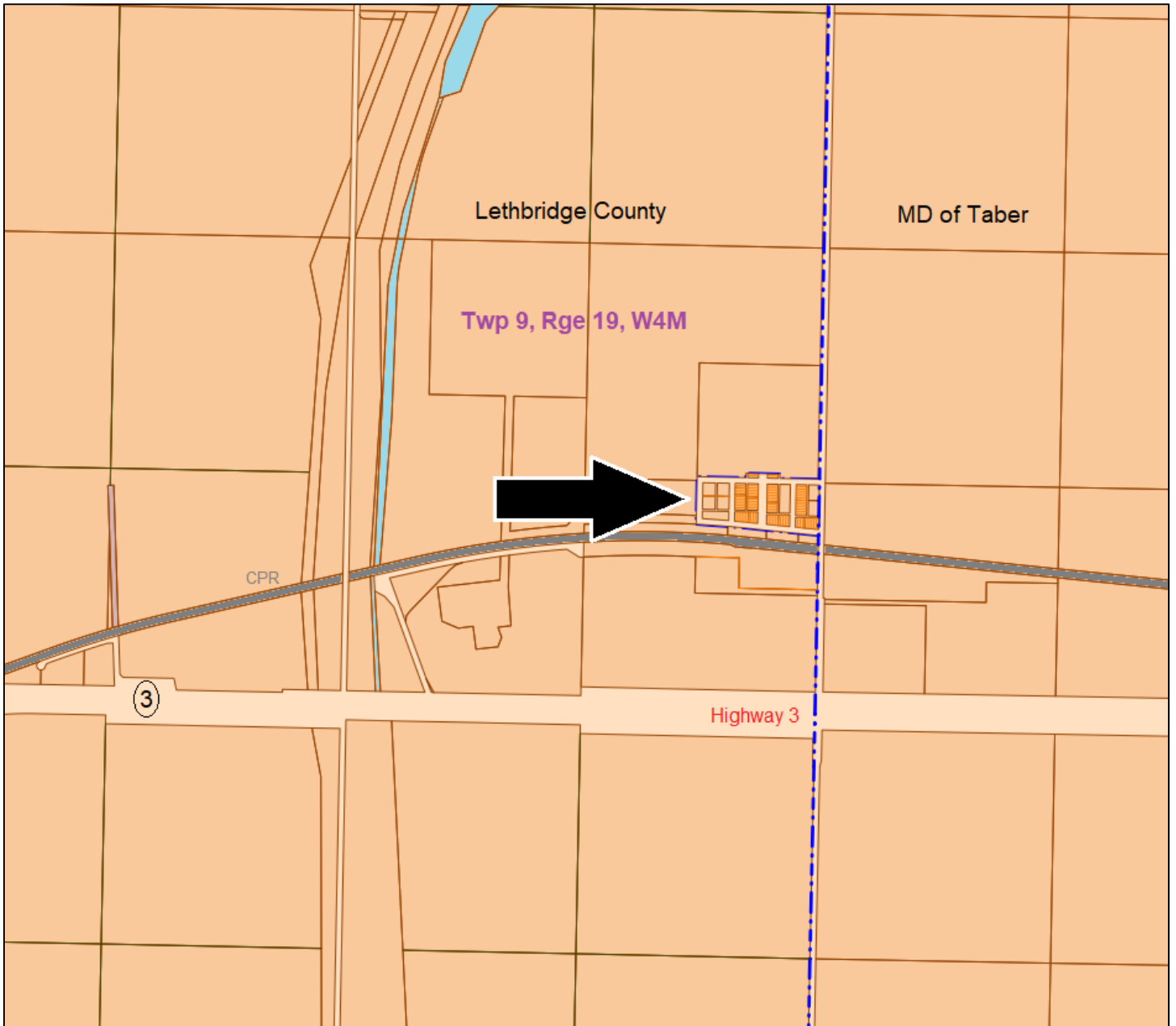
Today, the hamlet is situated in close proximity to several large industrial operations, such as McCain Foods Ltd. and an anaerobic digester facility located adjacent in the MD of Taber, which help provide economic viability to the Chin area. However, as these are thriving industrial operations in close proximity to the primarily residential character of Chin, the hamlet may also potentially be affected or hampered in attracting additional residential growth due to the close industrial activities.

¹ Place-names of Alberta. Ottawa: Geographic Board of Canada. 1928

DIAGRAM 1

ORIGINAL CHIN SUBDIVISION PLAN





Hamlet of Chin
 Growth Study
 Map 1 - Location

■ ■ ■ Hamlet Boundary



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 March 12, 2019 N:\Lethbridge-County\Hamlets\



Part 4

EXISTING CONDITIONS AND OVERALL ASSESSMENT

A review of the existing hamlet conditions was undertaken that involved a study of both land use and a general analysis of the character of the community. This review included assessing the following:

- Analysis of Population and Growth
- Determination of Land Use patterns
- Community Services – churches, schools, community halls, commercial (e.g. groceries)
- Parks and Recreation (i.e. playgrounds, ball diamonds, green space, etc.)
- General State Synopsis – personal property conditions, weeds, unsightly premises
- Confined Feeding Operations (CFOs) – proximity / effects
- Identification of Vacant Land Parcels
- Servicing – municipal and private utilities

Based on a review of the existing conditions, a general assessment statement is provided on the current state of the community (i.e. hamlet). Some conclusions are provided on the identified constraints present or potential need for the provision of various municipal or community services.

As part of the process, the residents of Chin were notified of the project and were sent a summary of the report along with a link to the full draft available for viewing on both the County and ORRSC websites. The purpose was to allow citizens to review and provide feedback in order to help ensure the County understands existing conditions and issues to more comprehensively plan for future growth or hamlet needs. The MD of Taber was also referred a copy of the draft report and provided comment.

4.1 Population Projections and Growth

The following Table 2 illustrates population projections for the Hamlet of Chin using the annual percentage compound growth method of population forecasting. A range of four different growth rates are provided below; from moderate (2.5%) to strong (5.0%), displayed for five-year (census period) intervals.

Based on the fixed growth rate method for population projections, the 2041 population of the Hamlet of Chin could reach between 72 and 82 people, dependent on the rate of growth and other factors. The main factor would be the availability of land to be developed to enable additional housing stock. If land and housing were available to accommodate growth, then it is presumed that 2.5% to 3.0% may be the most probable future population growth rate. The Arithmetic and Logarithmic straight-line projections in Diagram 2 depict significantly higher growth trends. Historically over the past two decades, the hamlet has experienced some population spikes, with a recent population high in 2016 of 62 persons. Over the past five federal census periods, the Hamlet of Chin has experienced positive growth during every period.

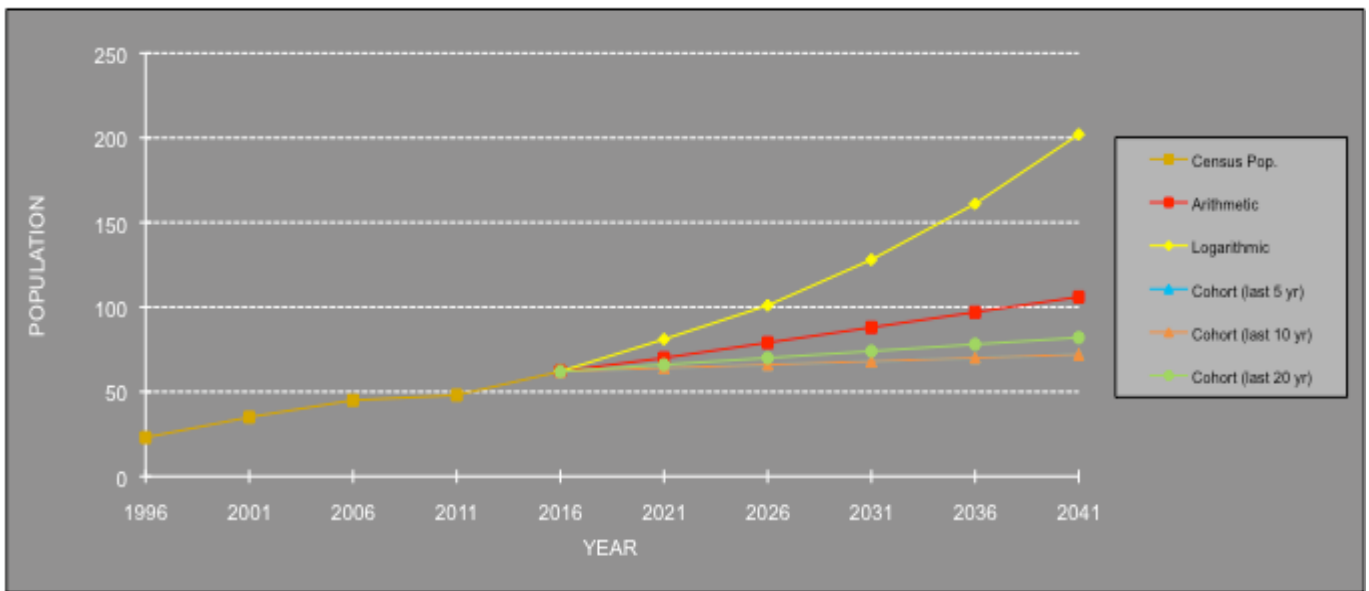
Table 2
Projected Population Growth (2016-2041) Per Census Period

Year	2.5% Growth	3.0% Growth	3.5% Growth	5% Growth
2016	62	62	62	62
2021	64	64	64	66
2026	66	66	66	70
2031	68	68	69	74
2036	70	70	72	78
2041	72	72	75	82

Diagram 2
Population Projections Line Graph

CHIN

Year	Census Pop.	Arithmetic	Logarithmic	2.50%	3%	5.00%
1996	23					
2001	35					
2006	45					
2011	48					
2016	62	62	62	62	62	62
2021		70	81	64	64	66
2026		79	101	66	66	70
2031		88	128	68	68	74
2036		97	161	70	70	78
2041		106	202	72	72	82



4.2 Residential Assessment – Existing Conditions

The majority of the residential housing in Chin is older, approximately 40 years or older housing stock.

- Many of the dwellings are war time (WWII) era housing stock or from the 1950s through 1960s. There are a few mobile or manufactured home dwelling types sited in the hamlet.
- Overall, the housing within the hamlet appears to be in moderate/average condition, with a few in sub-par condition. Some of the older dwellings have been renovated and the exteriors updated. There has also been a couple of newer residential dwellings constructed over the last decade.
- There is a mixed state of general yard and dwelling maintenance, as some residents have well-kept and tidy yards, while others have unsightly outdoor storage accumulation.
- Problems stemming from conflicting or incompatible land uses within the hamlet are non-existent, as the majority of land is designated for residential use.

4.3 Business Commercial/Industrial Assessment – Existing Conditions

There are no existing commercial or industrial activities within Chin as the hamlet more or less serves as a rural bedroom community to the surrounding agricultural area.

- There are no commercial lots designated for such use within the hamlet boundaries of Chin under the County’s Land Use Bylaw. There are also no industrial lots designated for such activity. In respect of this situation, there are also no local retail commercial businesses or services of any type available to residents of the hamlet.
- The population of Chin would have to significantly increase (typically a population threshold five -times or greater) to sustain any viable retail commercial store type activity.
- It is noted that adjacent to the Hamlet of Chin south boundary, on lands technically outside the hamlet boundary, there are parcels designated as Rural General Industrial (RGI) land use. These include the CPR railway line lands and the McCain Foods processing plant and comprise approximately 140.18 acres (56.73 ha) of land. Over the years, hamlet residents have occasionally expressed some concerns regarding industrial activities on lands south of the hamlet along the rail-line.
- There is a small-scale home based business involving a tire shop operating as an approved home occupation business just to the immediate north of the Hamlet (technically outside the hamlet boundary).

4.4 Community Services Assessment – Existing Conditions

- Within Chin there are two parcels designated as Hamlet Public/Institutional (HPI) and are owned by the Peace Valley Church of Chin. These parcels occupy approximately 38,000 sq. ft. and 16,000 sq. ft. respectively in size. One of the parcels contains an active church facility building with a gravel parking space.

- There are no community centres or halls, seniors clubs or similar type associations established in the hamlet for residents.

4.5 Parks and Recreation Assessment – Existing Conditions

- There are no parks, playgrounds and/or recreational spaces within the Hamlet of Chin.
- There is no land currently available within the hamlet boundaries to designate and use for park or recreational space.
- With a population of 62 people, the population is too small to realistically support active, intensive recreational facilities but may benefit from some passive recreational space or playgrounds.

4.6 Confined Feeding Operations (CFOs) – Proximity / Effects

Confined feeding operations (CFOs) represent a major component of the agricultural industry within Lethbridge County. While the contributions these operations make to the economy is acknowledged, the location of CFOs and their associated negative externalities (dust, noise, traffic, odour, etc.) are sometimes a source of contention amongst the public. The most contentious issue has historically been with respect to the practice of spreading of manure (a practice not limited to CFOs specifically) and the odour that this practice generates. Difficulty managing these conflicts between land uses is further compounded by the relative lack of control the municipality has on the management of these operations, as they fall under the oversight and regulation of the Natural Resources Conservation Board (NRCB).

Map 5 outlines the location, type, and size of CFOs within the hamlet area Chin. Within a 2-mile radius this includes 4 operations within Lethbridge County consisting of:

- 1 mixed operation consisting of 48,000 chicken breeders, 30 meat/milk goats
- 1 beef operation consisting of 2,100 finishers
- 1 mixed operation - 300 beef (finishers) combined with a 1,400 swine (farrow/finish) operation
- 1 dairy operation consisting of 90 milking cows (plus associated dries and replacements)

And there are 2 operations within the adjacent boundary of the MD of Taber consisting of:

- 1 dairy operation consisting of 200 milking cows (plus associated dries and replacements)
- 1 poultry operation consisting of 100,000 broiler chickens

There are no confined feeding operations located within 1 mile of the Hamlet of Chin.

Overall, the Hamlet of Chin is considered to have a rather low concentration of CFOs in close proximity by comparison to many of the other hamlets in Lethbridge County. The municipality has a CFO exclusion zone designated around the hamlet as applied through the Municipal Development Plan. The CFO exclusion zone corresponds to the land dedicated as Rural Urban Fringe (RUF) around the hamlet boundary as designated within the County's Land Use Bylaw.

Part 5

GROWTH AND LAND USE STUDY

An analysis of the existing and projected land use is needed to establish potential future growth in the hamlet community. This will help provide an assessment of current potential land available for infill development, and what (how much) contiguous hamlet boundary lands may be available for future hamlet expansion when warranted. The following matters have been reviewed as part of the planning analysis and are described in more detail in this section:

(a) Infill Opportunity (inward growth)

- Inventory of vacant lots and potential to further develop
- Identifying the potential to further subdivide large parcels
- Potential to service and provide access to parcels

(b) Future Hamlet Boundary Expansion (outward growth)

- Identifying constraints (highways, railways, abandoned gas wells, etc.)
- Examining adjacent land uses / conflicting uses
- Studying physical features – elevations, topography, wetlands, known flood areas, etc.
- Identifying future land growth and expansion directions

(c) Municipal Services

- Water and sewer
- Storm water management
- Roads/lanes

(d) Area Structure Plan (ASP) Needs / Considerations

5.1 Infill Opportunity (inward growth)

As part of the hamlet review, an analysis was completed to identify existing vacant lots that may be available to be developed. Also, the potential to subdivide existing larger parcels into additional lots was evaluated. Planning for infill development where feasible and where services are readily available can assist the municipality in enabling growth but limiting the installation of costly new infrastructure.

To determine the availability of land for both the development of existing vacant² lots and infill potential, an air photo review of the identified parcels was carried out and followed up with field reconnaissance work. This analysis confirmed that without municipal sewer servicing, Chin does not have any potential

² Vacant refers to land that has no current buildings or improvements on it.

for densification through infill or subdivision. There is some very limited potential for vacant lot development, as there are presently two (2) vacant titles of residential land within the hamlet that could readily accommodate new housing (observed as of April 2019). The following is a breakdown of potential land available for development:

RESIDENTIAL:

Existing Vacant Titles:

- There are currently **2 vacant lots** available in the hamlet that do not contain any development and meet the minimum lot size of 15,000 sq. ft. as outlined in Land Use Bylaw No. 1404, for lots with municipal water but no municipal sewer service.

Infill Potential of Existing Residential Titles:

- There are **no** existing residential lots that have undeveloped portions that could be resubdivided based on a 15,000 sq. ft. lot area and due to the size required for private septic standards.

RESIDENTIAL TOTAL: There is an estimated potential for **2 lots** (including both vacant and infill development considerations).

COMMERCIAL:

Existing Vacant Commercial Titles:

- **None** - There are no commercial lots located within the hamlet designated for Hamlet Commercial (HC) use.

Infill-potential of Existing Commercial Titles:

- **None** - No current land available or subdivision potential of existing lots to create infill.

COMMERCIAL TOTAL: None.

INDUSTRIAL:

Existing Vacant Industrial Titles:

- **None** - There are currently no industrial lots designated in the Hamlet of Chin for Hamlet Industrial (HI) use.

Infill – potential of Existing Industrial Titles:

- **None** - No current land available or subdivision potential of existing lots to create infill.

INDUSTRIAL TOTAL: None.

5.2 Future Hamlet Boundary Expansion (outward growth)

GROWTH AND LAND USE PROJECTIONS

The hamlet presently is comprised of approximately 19.76 acres (7.9 ha) of land within its boundary. For both long-range planning and to identify potential suitable land for future growth, an analysis of lands outside the current hamlet boundary were examined.

Land consumption calculations were completed based on population projections to delineate potential land needs in order to accommodate future hamlet growth. Chart 1 in outlines the potential land requirements for future residential growth for the hamlet, based on the past and forecasted rates of growth and the number of people per dwelling unit. Chart 1 provides land acreage calculations on the 2.5% (most probable) and 5.0% growth scenarios to illustrate what would be needed.

In 2016, the average number of persons per dwelling unit was 3.3 and the average number of dwelling units per acre was 1.04. From a land use and planning perspective, this is considered a very low land use density. Based on these calculations, if growth was able to continue at the current rate and development continued at the same density (large lot sizes at 15,000 to 20,000 sq. ft.), 2.71 acres of additional land may be required to accommodate the 2041 projected population. However, as the hamlet has no municipal sewer servicing and no internal land available to enable growth, it is obvious this is not a realistic scenario.

It is recognized that grouped country residential development with a 2 acre minimum parcel size is the logical scenario as servicing is unlikely to occur in the hamlet. The secondary chart depicts the slightly lower density [lots averaging 2 acres (or 87,000 sq. ft.) in size] land acreage needs. When the lower density calculation of 0.50 dwelling units per acre is used (for unserviced lots averaging 2 acres in size), then an additional 11.70 acres of land could be required to accommodate this growth. If household sizes were to become smaller over time, then approximately 14 to 16 acres of land may be needed. (Refer to Chart 1 - Land Use Projections.)

GROWTH STRATEGY AND LAND USE PLANNING

The required land projections in Chart 1 to accommodate growth, assume that no land is available within the hamlet, which is the actual circumstances for the Hamlet of Chin. This is the current scenario as the hamlet does not have municipal sewer services, so existing larger lots cannot be resubdivided as the land base is needed for private septic system disposal. If land were serviced, and some land areas available to be subdivided and developed internally, then the projections would take slightly longer to fulfill.

Overall in the case of Chin, there is no internal land available for subdivision to occur. There are currently two parcels that are designated as Hamlet Residential (HR) that are sitting vacant. Therefore, lands situated outside the present hamlet boundary would be needed to accommodate any future growth for Chin. Maps 4A and 4B illustrate a potential concept plan and road network to accommodate growth to the north of Chin. It is foreseen the lots would be approximately 2 acres or greater in size, as unserviced (no municipal sewer) grouped country residential sized lots.

CHART 1 Land Use Projections

Year	Population		Assumed Persons per D.U.	Total Required D.U.		Existing Number of D.U.	New D.U. Needed		2016 Dwelling Units per Acre*	Land Acreage Requirement	
	High	Low		High	Low		High	Low		High	Low
2021	66	64	3.50	19	18	19	0	-1	1.04	-0.14	-0.69
			3.30	20	19	19	1	0	1.04	0.96	0.38
			3.10	21	21	19	2	2	1.04	2.20	1.58
2026	70	66	3.50	20	19	19	1	0	1.04	0.96	-0.14
			3.30	21	20	19	2	1	1.04	2.13	0.96
			3.10	23	21	19	4	2	1.04	3.44	2.20
2031	74	68	3.50	21	19	19	2	0	1.04	2.06	0.41
			3.30	22	21	19	3	2	1.04	3.29	1.54
			3.10	24	22	19	5	3	1.04	4.68	2.82
2036	78	70	3.50	22	20	19	3	1	1.04	3.16	0.96
			3.30	24	21	19	5	2	1.04	4.46	2.13
			3.10	25	23	19	6	4	1.04	5.92	3.44
2041	82	72	3.50	23	21	19	4	2	1.04	4.26	1.51
			3.30	25	22	19	6	3	1.04	5.62	2.71
			3.10	26	23	19	7	4	1.04	7.17	4.06

Note: * Units per acre with area for roads, reserve land, utility right-of-ways removed

Note 2: the proposed 0.50 dwelling units per acre is based on a lower hamlet density (larger lots at 87,000 sq. ft. on average).

Note 3: 2016 Census, the average number of persons per dwelling unit (D.U) in Chin was 3.1

Note 4: 'Low' population growth is based on 2.5% and 'High' population is based on 5.0%, for 5-year intervals

Year	Population		Assumed Persons per D.U.	Total Required D.U.		Existing Number of D.U.	New D.U. Needed		Dwelling Units per Acre* 2	Land Acreage	
	High	Low		High	Low		High	Low		High	Low
2021	66	64	3.50	19	18	19	0	-1	0.50	-0.29	-1.43
			3.30	20	19	19	1	0	0.50	2.00	0.79
			3.10	21	21	19	2	2	0.50	4.58	3.29
2026	70	66	3.50	20	19	19	1	0	0.50	2.00	-0.29
			3.30	21	20	19	2	1	0.50	4.42	2.00
			3.10	23	21	19	4	2	0.50	7.16	4.58
2031	74	68	3.50	21	19	19	2	0	0.50	4.29	0.86
			3.30	22	21	19	3	2	0.50	6.85	3.21
			3.10	24	22	19	5	3	0.50	9.74	5.87
2036	78	70	3.50	22	20	19	3	1	0.50	6.57	2.00
			3.30	24	21	19	5	2	0.50	9.27	4.42
			3.10	25	23	19	6	4	0.50	12.32	7.16
2041	82	72	3.50	23	21	19	4	2	0.50	8.86	3.14
			3.30	25	22	19	6	3	0.50	11.70	5.64
			3.10	26	23	19	7	4	0.50	14.90	8.45

Note 1: the 1.04 dwelling units per acre is the 2016 hamlet density for Chin (average 15,000 to 18,000 sq. ft. sized lots).

Note 2: the proposed 0.50 dwelling units per acre is based on a lower hamlet density (larger lots at 87,000 sq. ft. on average).

Note 3: 2016 Census, the average number of persons per dwelling unit (D.U) in Chin was 3.1

Note 4: 'Low' population growth is based on 2.5% and 'High' population is based on 5.0%, for 5-year intervals

5.3 Municipal Services and Infrastructure

EXISTING

WATER: The Hamlet of Chin is serviced with domestic potable water supplied from the City of Lethbridge and provided to the hamlet via the County regional pipeline. The water is allocated under the County's own water license. There are no pressurized fire hydrants located within the hamlet.

SEWER: There is currently no municipal sewer service provided to the hamlet. Sewer in the hamlet is managed through individual on-site septic systems and pump-out tanks.

DRAINAGE: Storm water drainage for Chin is not formally managed and is handled through an informal means of overland drainage. Over the last number of years, the north end of Osler Street near Alberta Ave has experienced some drainage issues, with periodic episodes of ponding water and poor drainage along the perimeter of the roadway.

ROADS: The roads in the hamlet of Chin are gravel surface roads. All the internal blocks have rear lanes designated on the registered subdivision plan. However, the lanes within the hamlet are not physically developed with the exception of the northern portion of the lane in the most easterly block (Block 4).

GROWTH SERVICING CONSIDERATIONS

In planning for future growth, the capacities for sewer and water infrastructure must be examined and addressed as part of the growth strategy.

WATER: Future water connections for Chin could be tied-in with the County regional pipeline distribution system that currently services the hamlet provided future capacity is available.

SEWER: Due to the low population and future growth expectations, it is not projected that installing a municipal sewer system would be financially feasible, at least not at this point in time. Therefore, accommodating future growth lands with the ability to utilize individual on-site septic systems should be considered.

STORM WATER MANAGEMENT: Future storm water management must be taken into consideration. Landowners/developers who plan to develop future identified growth areas will need to address storm water management as it pertains to their plans for subdivision at the Area Structure Plan preparation stage. Developers will be obliged to submit a storm water management plan which must be professionally prepared by a licensed, qualified engineer. It is anticipated an overland/ditch type of system would be planned and utilized with an associated area dedicated for a storm water detention or retention pond as part of the system.

ROADS: Any future expansion of the hamlet will require an Area Structure Plan that will include an acceptably designed road network plan. A potential future road network connectivity layout is provided to conceptually demonstrate the general location and required connection points to adjacent areas (see Map 4). This would need to be refined further at the Area Structure Plan stage. The potential access

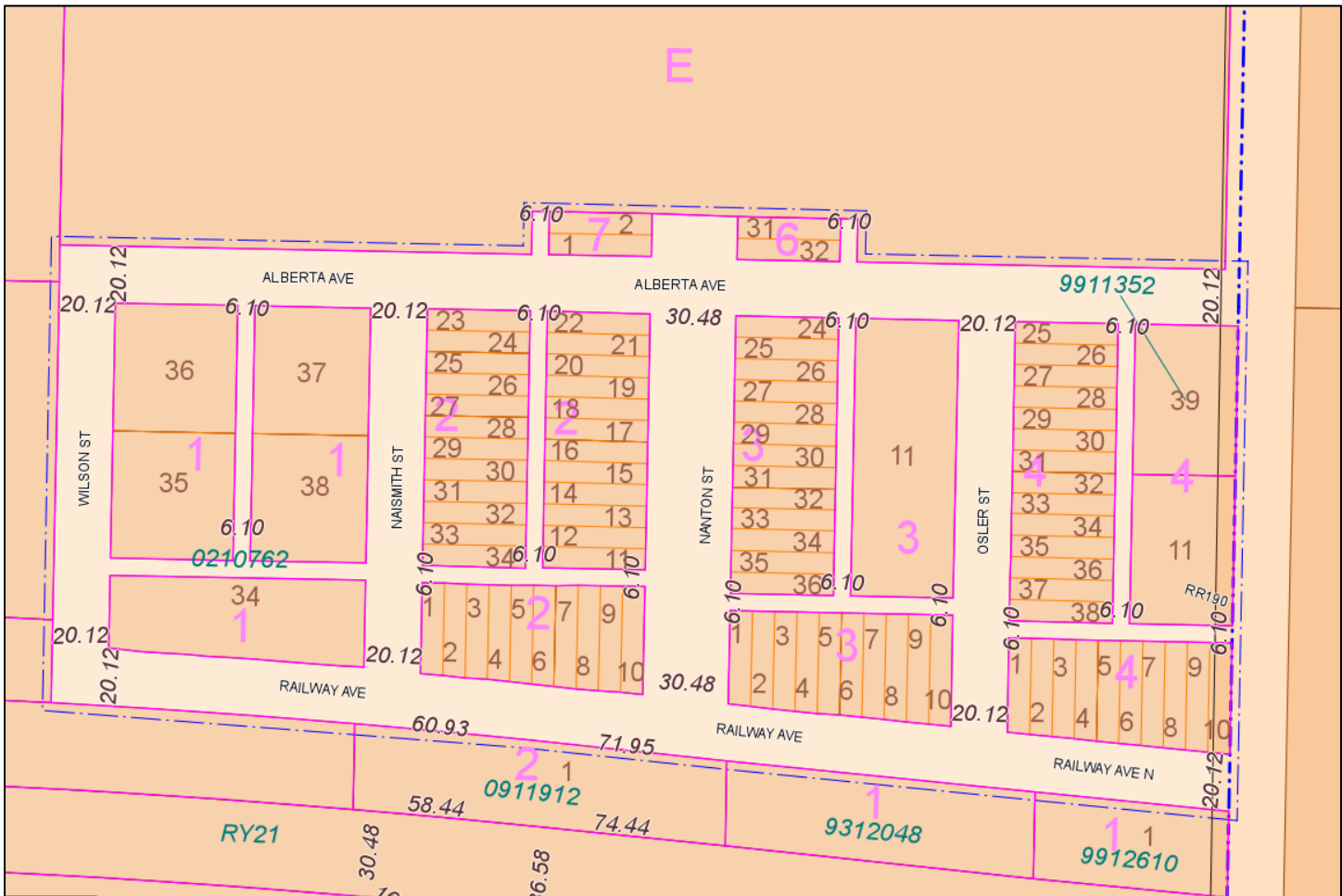
connection to the east must be acceptable to the MD of Taber as the east road allowance (Range Rd 19-0) is within their municipal jurisdiction. All new roads are to be constructed by developers in accordance with Lethbridge County's Engineering Guidelines and Minimum Servicing Standards.

If significant growth did occur resulting in increased traffic volumes that may impact the CPR railway crossing on Range Road 19-0, there may be requirements through Transport Canada for enhanced safety improvements at the rail grade crossings. If this were to occur, Lethbridge County would need to consult with the MD of Taber at that time as the MD is the managing party for Range Road 19-0.

5.4 Area Structure Plan (ASP) Considerations

As stated earlier, any future hamlet expansion will require an Area Structure Plan to be developed. An Area Structure Plan is required prior to multi-lot subdivision or at a land use redesignation stage for undeveloped lands in the identified future growth area. When an Area Structure Plan (ASP) is required it must be professionally prepared at the developer's/landowner's expense and shall comply with any and all relevant and applicable County policies.

Information that may be requested for an Area Structure Plan in the County shall be in accordance with the requirements of Lethbridge County's Municipal Development Plan, Land Use Bylaw and this study, and may include: site plans, lot density and layout, sewer and water systems, roadways, utilities and services, surface drainage and storm water management, geotechnical investigations, municipal reserve, development concept, staging of development, development specifications, and any other matters deemed necessary by the County.



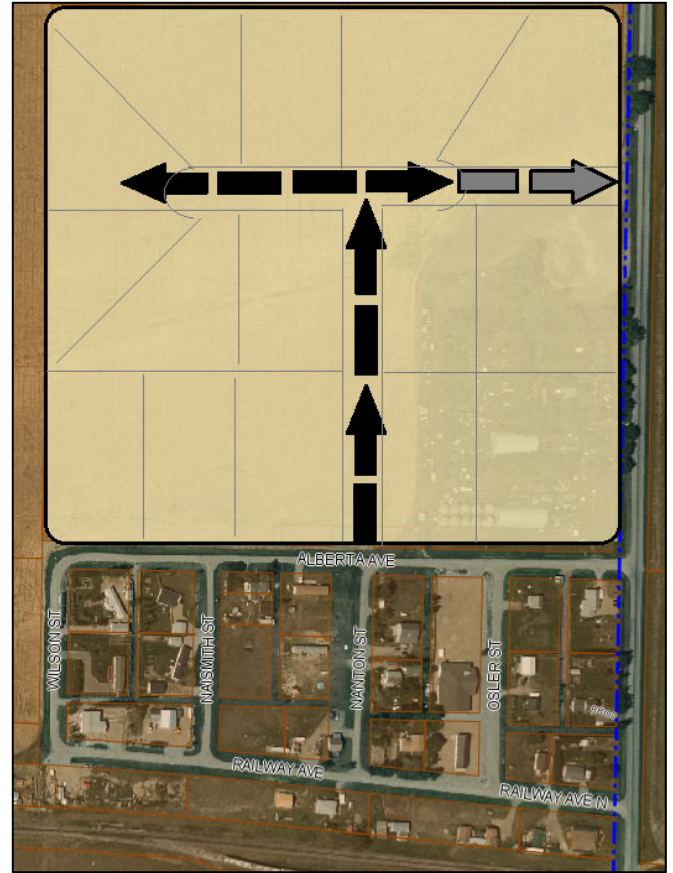
Hamlet of Chin
 Growth Study
 Map 3 - Remnant Hamlet Plan with Existing Lot Layout

Lot, Block and
 Plan Number





Map 4A



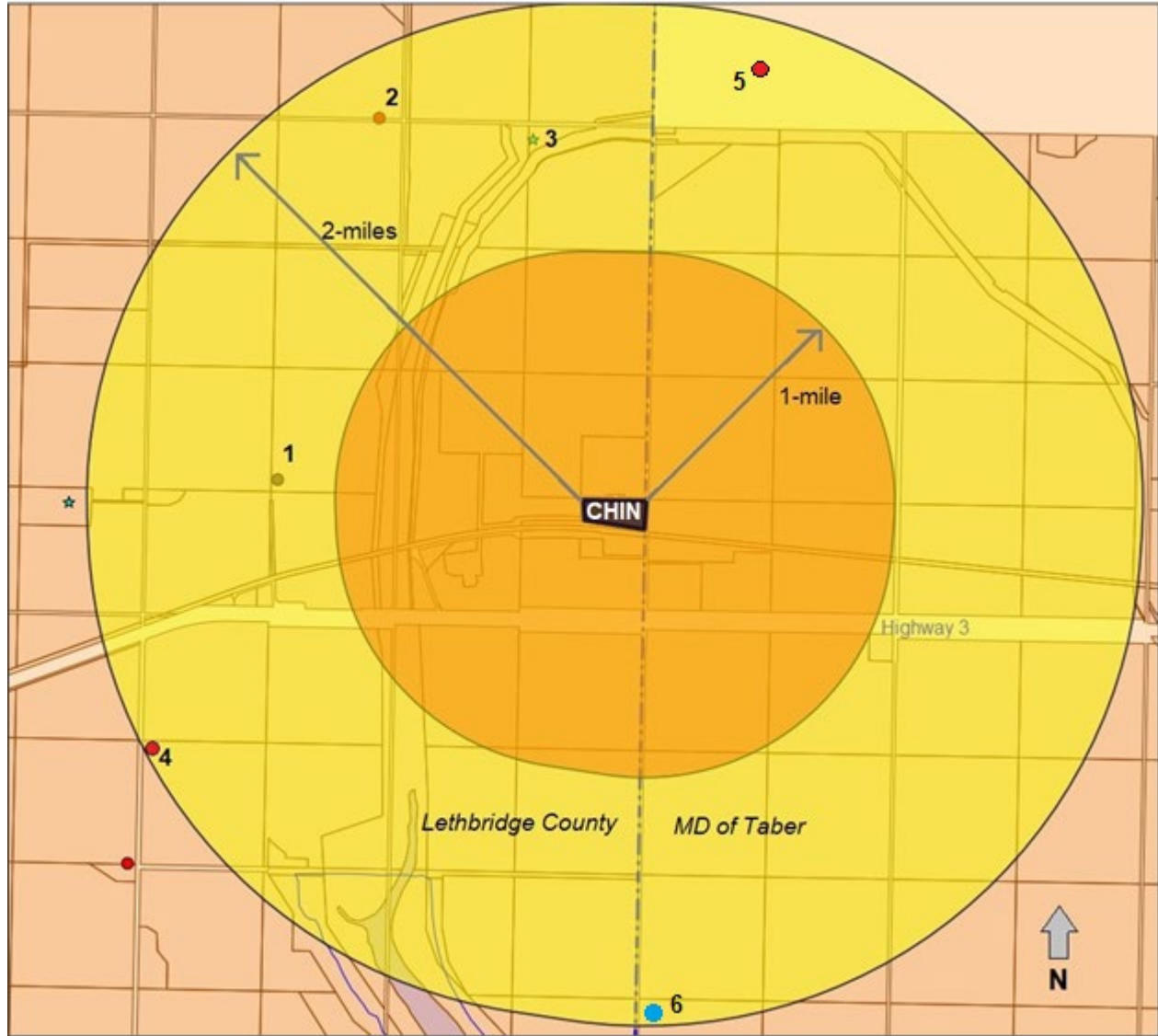
Map 4B

Hamlet of Chin
Growth Study

Map 4 - Potential Future Growth Area

- Future Growth Direction
- Potential Road Network
- County Boundary
- Potential Connecting Road





Hamlet of Chin Growth Study Map 5 - CFO Locations (Within 1 & 2 Mile Radius)

Within Lethbridge County:

1. NE 26-9-19-W4 – 48,000 chicken breeders, 30 meat/milk goats
2. SE 2-10-19-W4 – 2,100 beef finishers (permit on file but corrals physically removed)
3. NE 36-9-19-W4 – 300 beef finishers, 1,400 swine farrow to finish
4. SW 23-9-19-W4 – 90 milking cows (plus associated dries and replacements)

Within MD of Taber:

5. SW 6-10-18-W4 – 200 dairy, milking cows (plus associated dries and replacements)
6. SW 18-9-18-W5 – 100,000 broiler chickens

Note: CFO numbers denote permit numbers on file with NRCB as of May 2020.



Part 6

GROWTH VISION / STRATEGY

In respect of the hamlet planning analysis completed, land use constraints and servicing restrictions, a growth vision for the hamlet has been formulated based on the following main general planning strategies:

- The Hamlet of Chin does not have municipal sewer service and with its small population size, is unlikely warranted. On that basis, there is no internal land available to accommodate new development and any new growth would need to be directed to adjacent lands outside the hamlet boundary.
- Land to the north (Blocks A, B and E, Plan 899AA) is the most logical and probable direction for growth as it currently remains a small agricultural land holding. Developing to the south of the hamlet brings the CPR rail tracks into consideration, some industrial land, as well as increased proximity to Highway 3. Lands across the road allowance to the east are within the MD of Taber. Therefore, the most logical direction for growth outside the hamlet present boundary would be to the north.
- New residential lots may be subdivided at a size that may be considered very “large lots” from an urban planning perspective (2 acres or 87,000 sq. ft. in size), what are typically country residential lots. This is in order to manage and accommodate private on-site septic treatment systems. (In consideration of the South Saskatchewan Regional Plan land use principles, the larger lots may be considered as part of the County’s efficient use of land strategy, as promoting and directing residential growth in the hamlet has the goal of envisioning less of a need or demand to subdivide county residential parcels 2 acres or greater in size in rural agricultural areas outside of the hamlet.)
- New hamlet growth would largely be to accommodate residential and recreational/institutional type land use, as it is not foreseen that there is any need or community support to dedicate or develop industrial land within the hamlet, especially given that vacant industrial land is available and designated outside the hamlet for “Rural General Industrial” use. Recreational use would be to potentially provide some land for a neighborhood park/playground space for residents.

Part 7

GROWTH EXPECTATIONS SUMMARY AND RECOMMENDATIONS

This final section provides an overall summary of the existing and future growth expectations for the hamlet. Recommendations are also offered on planning matters that need to be addressed to enable growth, and/or the constraints that may be present for providing various municipal or community services.

LAND USE – GROWTH

1. As Chin does not have municipal sewer service, the existing lots cannot be subdivided and any new lots in the identified growth area must be larger lot sizes (2.0 acres or greater).
2. In consideration of the small population and projected growth expectations, the overall study would not see a need for the County to plan for or consider the provision of installing a municipal sewer system, at least not at this point in time.
3. Future hamlet growth should be directed to land to the north (Blocks A, B and E, Plan 899AA). An Area Structure Plan (ASP) should be prepared and deemed acceptable to Lethbridge County prior to allowing any subdivision to occur. This land should continue to be used for primarily agricultural purposes until such time additional hamlet urban residential expansion occurs.
4. The title to the north of the hamlet boundary (Blocks A, B and E, Plan 899AA) is comprised of 39.4 acres (15.95 ha) of land and can readily accommodate the projected future population growth for Chin over the next 25-year period and beyond. It is estimated approximately 15 large lots at 2 acres or greater in size could be planned for future subdivision purposes.
5. The vision for the general area surrounding Chin to the south and out to Highway 3 is to continue to use these lands for Rural General Industrial (RGI) use and to potentially attract new industrial developments. For land adjacent to the hamlet, and in consideration of the primarily residential character of Chin, proposed discretionary industrial uses should be closely reviewed in terms of their potential impacts to residents and how it may affect the quality of life, such as with noise, odour or smoke emissions being an issue.
6. The proposed future growth area will require a professionally prepared Area Structure Plan (ASP) to more fully address future lot layouts and sizes, servicing, road networks, drainage (possible storm pond area), and utility rights-of-way that will be needed.
7. The internal road network in future growth areas should connect and align to existing hamlet roads to the south and adequate street lighting should be planned for. The MD of Taber must be consulted regarding the potential to connect the future road network east to the MDs' road allowance.

8. Prior to the future growth area being planned for and eventually developed for Chin expansion, the lands should be protected from incompatible development that may hinder or conflict with the future growth patterns for the area where primarily residential growth is foreseen to occur.
9. As Chin is currently deemed deficient in having any park space being available for residents, future planning should entail the inclusion of parks, playgrounds or recreational space to encourage young families to reside in the hamlet and for Chin to continue to grow and serve the needs of residents. Future subdivision and planning may give consideration for the dedication of Municipal Reserve land for community park space and recreational use.
10. If the hamlet were to grow in the future, commercial land dedication may be something that could be considered; however, the logical area for such uses may be the future conversion of parcels currently outside of the hamlet boundary, situated south of Railway Ave. For the foreseeable future, the establishment of hamlet retail type commercial businesses is not seen as viable.
11. Lands to the south of the present hamlet boundary, south of Railway Ave and north of the CPR rail-line, are presently designated as Rural Urban Fringe (RUF) and could be considered for inclusion into the hamlet boundary. However, this would be more for County municipal management purposes than for growth expansion, as the parcels themselves cannot be further subdivided to accommodate new development.
12. As with all new subdivisions and new hamlet growth areas, the County can consider establishing a redevelopment levy or off-site levy bylaw in the future to apply to new municipal infrastructure or upgrades that may be needed in the hamlet.
13. The future growth lands identified to the north (Blocks A, B and E, Plan 899AA) of the present Hamlet of Chin boundary may be included into the hamlet boundary when warranted, or could possibly be developed outside the hamlet as a grouped country residential development in consideration of the large 2.0 acre lot sizes required without municipal sewer servicing available. However, the benefit of expanding the hamlet boundary and including the land into Chin is that it provides a more cohesive community and Lethbridge County may take advantage of future grants or infrastructure funds that may become available for hamlet use.
14. At the time future expansion outside the present hamlet boundaries is commenced, an adjustment to the official hamlet boundary in the Land Use Bylaw will be required and this should be filed with Municipal Affairs at that time.
15. It is recognized that Lethbridge County has an Intermunicipal Development Plan (IDP) adopted with its rural neighbor to the east, the MD of Taber, and the IDP contains special policies relating to the Chin and Highway 3 vicinity. Although both municipalities agreed in the IDP, that for the Chin industrial area north of Highway 3 uses deemed incompatible with industrial development should be avoided in this area, the proposed north grow direction for Chin would be the most logical and would direct residential use away from the industrial highway vicinity.

16. Lethbridge County will need to consult with the MD of Taber as planning for growth of the Hamlet of Chin evolves and develops over time.

COMMUNITY – GENERAL

17. The County should continue its more recent proactive practice of encouraging and working with landowners to keep more tidy premises. The County has bylaws with regard to unsightly premises, animal control, burning, etc., that apply to properties and citizens in Chin, and similarly within all of the County's jurisdiction, and these may be reviewed by the County from time-to-time to address or update their applicability on such matters.
18. At some point, the County may formulate a plan to address the usage (mainly outdoor storage) of undeveloped lanes by property owners. If the lanes are deemed unnecessary, the County may want to consider formally closing them.
19. The County should continue as best it can to regularly assess the conditions of roads and drainage issues within Chin. The gravel roadways within the hamlet generally appear to be in good condition and they should be continued to be well maintained to prevent expensive upgrades in the future.
20. The County should continue to regularly engage and communicate with the citizens of Chin about possible future plans and as the onward planning of the hamlet unfolds over time.
21. This Hamlet of Chin growth study and long-range strategy should be reviewed by Lethbridge County periodically over time to confirm its relevancy and to consider any necessary updates that may be warranted, especially if any infrastructure or servicing conditions change.

