





CITY OF LETHBRIDGE - PLANNING AND DEVELOPMENT SERVICES 910 - 4 AVENUE SOUTH LETHBRIDGE, AB TU OPS WWW.LETHBRIDGE..CA

#### BYLAW 5798

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1.4. 5

#### BEING A BYLAW OF THE CITY OF LETHBRIDGE TO ADOPT AN AREA STRUCTURE PLAN FOR LANDS IN THE CITY OF LETHBRIDGE

WHEREAS Section 633(1) of The Municipal Government Act, Chapter M-26, R.S.A. 2000, provides as follows:

633(1) For the purpose of providing a framework for subsequent subdivision and development of an area of land, a council may, by bylaw, adopt an area structure plan.

AND WHEREAS the Council of the City of Lethbridge wishes to adopt an Area Structure Plan for that area of land in the City of Lethbridge generally described as:

- 1. Plan 0214032, Block 1, Lot 1
- 2. Plan 0412041, Block 1, Lot 4
- 3. Plan 0412041, Block 1, Lot 3
- 4. Plan 1113457, Block 2, Lot 1
- 5. Plan 1113457, Block 1, Lot 1
- 6. Plan 1442FK, Parcels A & B
- 7. Plan 2495JK, Block C

3) /:

- 8. Plan 2495JK, Block F
- 9. Plan 6109GP, Parcel C
- 10. Plan 6109GP, Parcel E
- 11. Plan 7810090, Parcel B
- 12. Plan 9710982, Block 3
- 13. Plan 9710982, Block 1
- 14. Plan 9710982, Block 2
- 15. Plan 9712196, Block 5
- 10. Plan 9/12190, DIUCK 5
- 16. Plan 9912018, Block 1, Lot 1
- 17. Plan 9912018, Block 1, Lot 2
- 18. N. ½ of North East Quarter Section 4, Township 9, Range 22, W4
- 19. S. ½ of North East Quarter Section 4, Township 9, Range 22, W4
- 20. N. 660 Feet of South East Quarter Section 4, Township 9, Range 22, W4
- 21. LSD 5 in South West Quarter Section 3 Township 9, Range 22, W4
- 22. S. 660' of N. 1320' in the South East Quarter Section 4, Township 9, Range 22, W4
- 23. S. <sup>1</sup>/<sub>2</sub> of South East Quarter Section 4, Township 9, Range 22, W4
- 24. LSD 4 in South West Quarter Section 3, Township 9, Range 22, W4
- 25. Ptn. Of North West Quarter Section 3, Township 9, Range 22, W4

26. LSD 3 and Ptn. LSD 6 SW Quarter Section 3, Township 9, Range 22, W4

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- 27. Ptn. North East Quarter Section 3, Township 9, Range 22, W4
- 28. Ptn. South East Quarter Section 4, Township 9, Range 22, W4
- 29. Ptn. Of North West Quarter Section 3, Township 9, Range 22, W4
- 30. Ptn. Of West Half of Section 10, Township 9, Range 22, W4
- 31. Ptn. Of South West Quarter Section 2, Township 9, Range 22, W4
- 32. Ptn. Of North East Quarter Section 3, Township 9, Range 22, W4 (91.89 acres)
- 33. Ptn. Of North East Quarter Section 3, Township 9, Range 22, W4 (1.92 Acres)
- 34. Ptn. Of South East Quarter Section 3, Township 9, Range 22, W4(26.879 acres)
- 35. Ptn. Of South West Quarter Section 10, Township 9, Range 22, W4 (0.79 acres)
- 36. Ptn. LSD 7 & LSD 8 in SE Quarter Section 10 Township 9, Range 22, W4
- 37. South East Quarter Section 10, Township 9, Range 22, W4
- 38. Ptn. of N. 200' of the SE Quarter Section 3, Township 9, Range 22, W4
- 39. Ptn. Of South West Quarter Section 11, Township 9, Range 22, W4
- 40. LSD 13 & LSD 14 in NW Quarter of Section 2, Township 9, Range 22, W4
- 41. Ptn. LSD 11 & 12, in NW Quarter of Section 2, Township 9, Range 22, W4
- 42. Ptn. of South East Quarter of Section 3, Township 9, Range 22, W4(12.095 acres)
- 43. Ptn. Of South West Quarter Section 10, Township 9, Range 22, W4
- 44. Plan 6719FM, Parcel A

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- 45. Plan 9712196, Block 6
- 46. Ptn of North West Quarter Section 10, Township 9, Range 22, W4

Including all Road Allowances and Rail Rights of Way contained within those Sections and Registered Plans.

NOW THEREFORE, THE COUNCIL OF THE CITY OF LETHBRIDGE, IN THE PROVINCE OF ALBERTA, DULY ASSEMBLED, HEREBY ENACTS AS FOLLOWS:

- 1. The Plan which is attached hereto as Appendix "A" is hereby adopted as the Area Structure Plan for that area of land in the City of Lethbridge generally described as:
  - 1. Plan 0214032, Block 1, Lot 1
  - 2. Plan 0412041, Block 1, Lot 4
  - 3. Plan 0412041, Block 1, Lot 3
  - 4. Plan 1113457, Block 2, Lot 1
  - 5. Plan 1113457, Block 1, Lot 1

- 6. Plan 1442FK, Parcels A & B
- 7. Plan 2495JK, Block C
- 8. Plan 2495JK, Block F

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- 9. Plan 6109GP, Parcel C
- 10. Plan 6109GP, Parcel E
- 11. Plan 7810090, Parcel B
- 12. Plan 9710982, Block 3
- 13. Plan 9710982, Block 1
- 14. Plan 9710982, Block 2
- 15. Plan 9712196, Block 5
- 16. Plan 9912018, Block 1, Lot 1
- 17. Plan 9912018, Block 1, Lot 2
- 18. N. ½ of North East Quarter Section 4, Township 9, Range 22, W4
- 19. S. ½ of North East Quarter Section 4, Township 9, Range 22, W4
- 20. N. 660 Feet of South East Quarter Section 4, Township 9, Range 22, W4

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- 21. LSD 5 in South West Quarter Section 3 Township 9, Range 22, W4
- 22. S. 660' of N. 1320' in the South East Quarter Section 4, Township 9, Range 22, W4
- 23. S. ½ of South East Quarter Section 4, Township 9, Range 22, W4
- 24. LSD 4 in South West Quarter Section 3, Township 9, Range 22, W4
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- 26. LSD 3 and Ptn. LSD 6 SW Quarter Section 3, Township 9, Range 22, W4
- 27. Ptn. North East Quarter Section 3, Township 9, Range 22, W4
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- 32. Ptn. Of North East Quarter Section 3, Township 9, Range 22, W4 (91.89 acres)
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- 37. South East Quarter Section 10, Township 9, Range 22, W4
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- 39. Ptn. Of South West Quarter Section 11, Township 9, Range 22, W4
- 40. LSD 13 & LSD 14 in NW Quarter of Section 2, Township 9, Range 22, W4
- 41. Ptn. LSD 11 & 12, in NW Quarter of Section 2, Township 9, Range 22, W4
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- 43. Ptn. Of South West Quarter Section 10, Township 9, Range 22, W4

44. Plan 6719FM, Parcel A

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- 45. Plan 9712196, Block 6
- 46. Ptn of North West Quarter Section 10, Township 9, Range 22, W4

Including all Road Allowances and Rail Rights of Way contained within those Sections and Registered Plans.

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(all as shown on the attached Appendix "B")

and shall be known as the "West Lethbridge Employment Centre Area Structure Plan".

2. This Bylaw shall come into force on the date of final passing thereof.

READ A FIRST TIME this day of A.D. 2013 MAYOR **CITY CLERK** READ A SECOND TIME this day of A.D. 2013 MAYOR READ A THIRD TIME this dav of A.D. 2013 MAYOR CITY CL ÉRK

#### WEST LETHBRIDGE EMPLOYMENT CENTRE AREA STRUCTURE PLAN

PREPARED BY:

CITY OF LETHBRIDGE PLANNING & DEVELOPMENT SERVICES 910 - 4 AVENUE SOUTH LETHBRIDGE, ALBERTA TU OPG

ADOPTED BY CITY OF LETHBRIDGE BYLAW NO. 5798, FEBRUARY 19, 2013

Amended by City of Lethbridge Bylaw No. 6127, August 7, 2018 Amended by City of Lethbridge Bylaw No. 6347, March 8, 2022



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Appendix A – Land Use Statistics

Appendix B – Recommended Land Use Districts

Appendix C – University Drive Gateway Corridor Summary

#### A NOTE ON ACRONYMS

Acronyms have been used in various locations within the text of this ASP document, in order to avoid the repetition of lengthy phrases that are commonly used. The first time in this document that an acronym is used in the text, the full phrase will precede the acronym; for example: West Lethbridge Employment Centre (WLEC). In subsequent instances where the same phrase appears the acronym will be used. A list of the acronyms that are commonly used in this document can be found below:

*WLEC* – West Lethbridge Employment Centre *ASP* – Area Structure Plan *ICSP/MDP* - Integrated Community Sustainability Plan / Municipal Development Plan *IDP* – Intermunicipal Development Plan *ADRI* – Animal Disease Research Institute





#### LETTER FROM THE AUTHORS

In comparison to the rapid economic expansion seen in Alberta, the recent growth experienced by Lethbridge has been at a steady, manageable rate. Commodity-based economies offer high wages, but often increase community reliance upon a sole industry and can experience rapid market fluctuations. Lethbridge's economy is not commodity-based and instead the local economy has large government, educational and agricultural components making it more diverse and stable. Through the West Lethbridge Employment Centre Area Structure Plan, it is expected that Lethbridge will continue to diversify and evolve its employment base.

One of the avenues for this diversification is through the establishment of the knowledge-based employment sector in Lethbridge. Such businesses offer employment that is creative, provides high wages and requires access to a highly educated workforce. Lethbridge is home to two post-secondary institutions, which bodes well for its ability to attract knowledge-based employment and this potential is one of its untapped resources of the community waiting to be developed. The vision for the West Lethbridge Employment Centre is to blend more traditional industries with the emerging knowledge-based employment sector.

A unique approach to the development of the West Lethbridge Employment Centre has been taken to focus on the advantages and opportunities of the city at a time when the province is prospering as a whole.

Regards,

Tyson Boylan WLEC ASP - Project Manager

Tamagle ( Litto

Tatsuyuki Setta WLEC ASP - Project Manager





#### I.O INTRODUCTION

#### I.I PURPOSE

The purpose of this Area Structure Plan (ASP) is to provide a planning framework that will guide the long-term development and the land use pattern for the area known as the West Lethbridge Employment Centre, in accordance with the City of Lethbridge *Integrated Community Sustainability Plan / Municipal Development Plan (ICSP/MDP)*. It is intended for the West Lethbridge Employment Centre to primarily be developed to provide for additional employment and retail opportunities in the City and especially in West Lethbridge.

The ASP has been prepared in conformity with Section 633 of the *Municipal Government Act*. A regional plan under the Alberta Land Stewardship Act (ALSA) for the South Saskatchewan Region is currently underway, but has not been completed as of yet (Fall 2012). However, in accordance with Section 638.1 of the *Municipal Government Act* this regional plan will prevail in the event of a conflict or inconsistency between it and the ASP.

#### I.2 JUSTIFICATION AND BACKGROUND

The sector of the city, known as West Lethbridge, has over the past 30 years been the focus of much of the city's residential growth and, as a result is now larger than North and South Lethbridge, with 32,847 residents according to the 2012 municipal census. However, at this time there are limited employment and retail opportunities in West Lethbridge in comparison to other sectors of the city. This indicates a community need in these economic sectors. This need will become even greater into the future, as West Lethbridge is anticipated to continue to be the largest area of population growth within the city.

Lethbridge is an important trade centre in Southern Alberta, due to its proximity 100km north of the United States Border and its location on the CANAMEX Trade Corridor. This corridor is a major north-south international trade corridor that connects Mexico, the United States and Canada. From a regional perspective, the West Lethbridge Employment Centre will enhance the city's prominence as a trade centre and will improve upon the city's trade abilities as a whole.

The area known as the West Lethbridge Employment Centre (WLEC) has been intended, since the late 1960's, to provide a large portion of employment and retail opportunities to West Lethbridge. It was envisioned that the planning for this area would be linked to the provision of water and sanitary sewer servicing. This is found in the previous Municipal Development Plan that was adopted in 1995, under policy: 2)c which stated that,

#### "Development of the West Lethbridge Employment Area Should Coincide with the Provision of Core Infrastructure Services."

With the construction of these services across the Oldman River and into the employment centre set to be complete in the near future, the planning and subsequent urban development of the area known as the West Lethbridge Employment Centre can proceed.



#### I.3 PLANNING PRINCIPLES

The West Lethbridge Employment Centre is crucial to the long term success and sustainability of West Lethbridge. This ASP provides the planning framework and land use concept that reflects the following overarching principles for the WLEC:

- Expand employment and business opportunities in West Lethbridge.
- Provide an area within the city that encourages the continuing diversification of the Lethbridge economy. A diverse local economy is crucial to the long-term economic sustainability of the community.
- Create a dynamic area that is attractive and showcases Lethbridge.
- Ensure that development proceeds in an efficient and orderly fashion. This will facilitate the provision of City infrastructure in a fiscally sustainable manner.
- Develop a future land use framework that promotes development within the employment centre that is diverse and innovative, both now and into the future.
- In addition to the automobile, consider pedestrians, cyclists, and transit services as important transportation modes.
- Provide for the safe and efficient movement of people, goods and services throughout the West Lethbridge Employment Centre.
- Promote sustainable design that is energy efficient and reduces waste.
- Reduce the environmental impact and overall travel demand caused by the automobile.
- Provide land use districts that sufficiently meet the development needs of the market and the community.
- Ensure a functional transition between land use districts that could otherwise be incompatible with one another.

#### I.4 PLAN AREA

The location of the West Lethbridge Employment Centre is in the northern part of what is considered to be West Lethbridge, as shown on Map 1. It is bordered by Walsh Dr. to the south, the existing city boundary to the west, Highway #3 to the north and the top of coulee bank development setback or Oldman river valley to the east (see Map 2). The WLEC is located immediately north of the city's current extent of urban development and, aside from a few isolated uses, is largely undeveloped.

The ASP area, including existing railway and roadways, is comprised of 588 ha (1,453 ac), as shown on Map 2. Currently the plan area is broken up by two major physical features: The railway and University Dr. The City of Lethbridge has very little control over the railway and it is unlikely to be



## Legend





# Centre Pethbria West Lethbridge Employment Area Structure Plan

# MAP 1 Location





relocated at any time. University Dr. will serve an even greater role as the area around it is developed and will not be relocated from its present alignment.

As the West Lethbridge Employment Centre is quite large, these two features will be used to divide the plan into three separate sub-areas for the purposes of this ASP. This will allow each sub-area to be more comprehensively planned and contain a slightly different land use focus. As shown on Map 3, Sub-area 1 is the area located west of the railway right-of-way, Sub-area 2 is located east of the railway right-of-way, but west of University Dr. and Sub-area 3 extends east of University Dr. towards the top of the coulee banks. The sub-areas are different from the areas identified in section 8 that will form the Outline Plans, as the purpose of establishing these Outline Plan areas is to provide context for the next stage in the planning process and to provide a sequence for future development.

#### 1.5 LAND OWNERSHIP & PARCEL SIZE

There are 36 individual groups of property owners within the plan area, excluding residents of the manufactured home park. Residents of the manufactured home park often own their own dwelling unit, but lease the lot that the unit is located on. This area of West Lethbridge has been subject to subdivision activity in the past and, as a result, there are a number of parcels that are approximately one half of a quarter section in size (32 hectares), with the largest parcel being 34 hectares in size.

This has resulted in a large base of property owners that have been involved in the planning process.

#### I.6 PLANNING PROCESS

This ASP was commenced in January 2010 and completed in January 2013. The following summarizes the background research and community consultation that has gone into the preparation of the plan:

#### I.G.I BACKGROUND RESEARCH AND STUDIES

To assist in the preparation of the ASP, a number of key background and research studies were completed. The studies can be found in their entirety in the Technical Documents Appendix of the ASP and include:

- West Lethbridge Employment Centre Market Analysis & Development Forecast, March 2010
- West Lethbridge Employment Centre Area Structure Plan Environmental Overview Assessment, AMEC Earth & Environmental, May 2010
- West Lethbridge Employment Centre Area Structure Plan Geotechnical Evaluation, AMEC Earth & Environmental, May 2010
- External Survey of Development Trends and Best Practices, July 2010
- West Lethbridge Employment Centre Areas Structure Plan Traffic Impact Assessment, March 2012



• West Lethbridge Employment Centre Utility Servicing Plan, April 2012

These technical reports have been provided as background information in developing the policies of the ASP. As such, they do not form part of the ASP Bylaw to be adopted by City Council.

#### I.G.2 COMMUNITY CONSULTATION

A crucial part of the ASP planning process was consultation with stakeholders and the community as a whole. Direct mailings, media releases, newspaper advertisements and the posting of information on the City's website were used in different capacities during the planning process to create awareness of the project and to gather stakeholder and community input into the formulation of the ASP. Consultation activities that were undertaken are as follows:

#### City Council Project Commencement Meeting

A presentation was made at the January 11, 2010 City Council meeting to advise Council members that Planning and Development Services was about to commence work on the ASP. The scope and schedule of the project, as well as the process to be used were presented. Council was also advised of previous planning work that had been done that included this area and of the public consultation methods that were to be used in the development of this plan.

#### Property Owners Meetings

On March 10, 2010 a meeting was held at the University Dr. Alliance Church for the current property owners as well as those who had previously expressed interest in the development within the WLEC. These parties were invited to the meeting through direct mailing and representatives from 23 of the area's property owners were in attendance. Project staff made a presentation similar to the presentation that was previously given to council that outlined the general issues with the proposed plan and the schedule for the project. Opportunity was given for the attendees to ask questions and give feedback in regards to the ASP.

A second property owners meeting was held at the Crossings Branch of the Lethbridge Public Library on September 19, 2012. Property owners were again invited to this meeting through direct mailing and were also provided with copies of the latest draft of the ASP to review prior to the meeting. Representatives from 17 of the area's property owners were in attendance. Project staff made a presentation outlining the latest draft of the ASP, its associated policies and the remaining process of bringing the ASP to City Council for a decision. Project staff were also able to answer questions, provide further clarification on the policies contained in the draft ASP and obtain feedback.





#### Project Stakeholder Interviews

During the spring of 2010, a series of meetings and interviews were conducted with various stakeholders that could potentially have interest in development that occurs within the WLEC. These meetings were informal one-on-one sessions as opposed to conducting a formal presentation. These stakeholders included groups such as the school districts, emergency services, telecommunications providers, Canadian Pacific Railway, the Lethbridge Northern Irrigation District and Canada Food Inspections Agency who have a research facility that is immediately adjacent to the plan area, but outside of the municipality. Lethbridge County and the Town of Coalhurst were also consulted directly. The purpose of these meetings was to identify any issues and future opportunities that these groups may have in regards to development in the area based upon their interests so that these could be reflected in the ASP document.

#### **Open Houses**

There were two public Open Houses for this project. The initial Open House was held on September 8, 2010 at the Crossings Branch of the Lethbridge Public Library to present the planning vision, goals, planning approach, and development options that were being consider for the ASP and to obtain feedback from the general public. Approximately 250 people attended. Participants had the option to provide comments on three potential land use concepts that were developed for each of the three sub-areas of the employment centre and on the project as a whole through an exit survey.

The comments from the initial Open House were reviewed by project staff and considered along with technical knowledge for use in drafting the ASP document. This draft of the ASP document was then presented at a second Open House, which was held on September 27, 2012 at the Crossings Branch of the Lethbridge Public Library. Approximately 90 people attended this Open House and participants provided their comments on the draft ASP through an exit survey.

After this second Open House comments that were received were considered in developing the final draft of the ASP.

#### I.7 PLAN ORGANIZATION

The West Lethbridge Employment Centre ASP has been organized into the following sections:

#### 1.0 Introduction

Describes the purpose of the Employment Centre and the planning process that this ASP has undergone. This section also provides a description of the plan area and any relevant background information.





#### 2.0 Existing Conditions & Development Considerations

Provides an analysis of the existing environment, existing land uses and development constraints and considerations. A brief overview of the previous planning documents that included this area is also provided.

#### 3.0 Development Potential

Examines the development potential of this area within the context of the city and region. Current and future trends in industrial and commercial development that are taking place elsewhere will also be identified in order to offer suggestions that can be applied to the West Lethbridge Employment Centre, given the right circumstances.

#### 4.0 Land Use Concept

Outlines the planning principles, objectives and policies that shape the plan for the Employment Centre. The general land use concept is described in both map and text form.

#### 5.0 University Dr. Gateway Corridor

Recognizes the importance of the gateway function to the city that University Dr. will serve and that special considerations for the design of this area will need to be implemented. This section will identify the intended goals for the functioning of this corridor and provide the objectives and policies that will fulfill these goals.

#### 6.0 Transportation System

Provides an overview of the future transportation network. This includes the arterial and collector roads, public transit and the pathway system.

#### 7.0 Utility Servicing

Describes the concept for the provision of utility services. This includes stormwater management, sanitary sewer collection, water supply and shallow utilities.

#### 8.0 Implementation

Presents further requirements for Outline Plans, rezoning and subdivision and interim land uses .This section also provides the proposed sequence of Outline Plan development within the plan area.



#### 2.0 EXISTING CONDITIONS & DEVELOPMENT CONSIDERATIONS

#### 2.1 EXISTING CONDITIONS

#### 2.I.I PHYSICAL ENVIRONMENT

The WLEC has terrain that is flat to hummocky and tends to decrease in elevation towards the coulee banks in a southeast direction. Map 4 shows the existing topography.

#### Geotechnical Evaluation

A Geotechnical Evaluation was conducted in the spring of 2010. This consisted of a nonsite preliminary assessment, as well as a supplementary drilling program in which 20 boreholes were drilled and soil samples were collected.

This study found that the geology of area was generally suitable for the types of land uses that are proposed in the ASP and that the risk of mining subsidence that was posed to development was considered to be low. It did state that further geotechnical investigation should take place in later stages of planning and development.

For further details of the Geotechnical Evaluation and its recommendations, please see the full document in the Technical Documents Appendix.

#### Environmental Overview

An Environmental Overview was conducted in the spring of 2010. This consisted of a nonsite preliminary assessment and it identified and graded any areas of potential environmental concern. This study also identified any sensitive species that have been noted and identified any existing water wells.

This overview identified the following areas of potential environmental concern:

- Concrete plant (moderate)
- Oil/gas infrastructure (low to moderate)
- Animal Disease Research Institute (low to moderate)
- Archmount Cemetery (low)

As stated in the brackets all sites of potential concern had a classification of moderate or lower. This overview found no potentially serious areas of environmental concern.

This study also found three sensitive species within the study area; the Ferruginous Hawk, the Prairie Rattlesnake and the Water Speedwell. However, it must be noted that these species were recorded a few years ago and by the time the area is actually developed it is possible that these species may no longer exist within the plan area. The study also identified six ground water wells.



The Environmental Overview found that the plan area was generally appropriate for the types of land uses that are proposed. It recommended further investigation at later planning stages prior to development, especially in regards to conducting a Phase 1 Environmental Site Assessment and a habitat assessment, amongst other analysis. For complete details of these recommendations and the findings of the Environmental Overview, please see the full document in the Technical Documents Appendix.

Alberta Environment and Sustainable Resource Development has identified that sensitive species may be present, especially in Sub-area 3 near the river valley. Rattlesnakes are one such species that will likely be encountered during the development and use of this area, due to the propensity of rattlesnakes to hunt near the tops of coulee banks and nearby hibernacula that lies to the east of the WLEC, in the river valley. In order to alleviate these matters, similar wildlife protection measures, as has previously occurred in The Canyons (residential neighbourhood located in the southern portion of West Lethbridge), may need to be undertaken at the time of development.

Overall, it has been determined that there are no known environmental or geotechnical issues that would prevent development and that the area is generally appropriate for those uses that are outlined in this ASP. However, these studies were relatively broad in scope and are based upon current conditions, while the full development of the WLEC is a number of years into the future. It should be noted that these assumptions are limited to the extent of these studies and more detailed environmental analysis will be required at subsequent planning stages. This shall include a full Phase 1 Environmental Site Assessment and Environmental Impact Assessment that are subject to the terms of the City of Lethbridge for each Outline Plan Area. Further, more detailed geotechnical analysis will also be required at subsequent planning stages. This will require additional borehole sampling, consideration of the mine workings that underlay the plan area and recommendations to successfully remediate any on-site dugouts or septic fields.

#### 2.1.2 EXISTING LAND USES

The majority of land is currently cultivated for agricultural purposes. A number of farmsteads are scattered throughout, with a number of smaller acreages located between University Dr. and the top of coulee banks that form the eastern boundary. There are a few developed uses that are found amongst the farmland. A cement plant is found at the intersection of Walsh Dr. and Westside Dr. Further along Westside Dr. is the Archmount Cemetery and across Westside Dr. from this is a mini-storage facility and a manufactured home park. A farmstead adjacent to the western city boundary was given approval by council in 2009 to include shipping containers for the purpose of mini-storage and a construction company is located next to Bridge Dr. Existing land uses are shown on Map 5.

As the area containing the WLEC was annexed into the city in 1984, the cement plant near the intersection of Walsh Dr. and Westside Dr. exists as a non-conforming use, meaning that it was lawfully constructed at the initial time of construction, but is not compliant with the City's current Land Use Bylaw. Under the Land Use Bylaw, non-conforming uses are permitted to



# Centre West Lethbridge Employment Area Structure Plan

# MAP 4 Topography









continue to operate under certain restrictions, but the owner of the land may desire to bring this use into conformance with the Land Use Bylaw as the surrounding area is developed.

Bringing the cement plant into conformance would require making a provision to the future land use district to which this site and the surrounding area are zoned to allow *only this use at only this location* as a discretionary use. This has been done in other areas of the city, such as downtown, where there is a long standing use that no longer conforms to the Land Use Bylaw. This would occur when the area is rezoned prior to development and such issues in regards to landscaping and site design of the existing non-conforming use will be further addressed at the Outline Plan stage to ensure that the cement plant transitions well with the surrounding future uses when more is known about the type of development that will occur in the comprehensive area.



Existing cement plant

Existing roadways include, University Dr., Walsh Dr., and Bridge Dr., which are classified as arterial roadways and will undergo significant upgrades in the future, as required. Other existing roadways include 30th St., 2 Ave. and Westside Dr. and these too, will undergo improvements as warranted by nearby development. The existing Highway #3 has also been included and is expected to remain in its present alignment on a permanent basis. The main line of the railway also runs southeast to northwest, adjacent to Westside Dr.

To the south are the developed neighbourhoods of West Highlands and Heritage Heights, as well as the currently undeveloped residential neighbourhood known as Country Meadows. Adjacent lands to the north and west are within Lethbridge County and include farmland and the Animal Disease Research Institute. This institute is operated by the Federal Government (Canadian Food Inspection Agency) and extends approximately five kilometres further west to the river. To the east is the river valley that contains the Oldman River and an extensive park and open space system.

#### 2.1.3 HISTORICAL AND ARCHAEOLOGICAL RESOURCES

The Cultural Facilities and Historical Resources Division (CFHRD) of Alberta Community Development determined that a Historical Resources Impact Assessment was not required





(See Technical Documents Appendix). However, if any historic resources are discovered during the development of the area Alberta Historical Resources Management must be contacted and they will issue further instructions, as stated under the Historical Resources Act.

#### 2.1.4 FIRST NATIONS CONSULTATION

The Integrated Growth Management Study (IGMS) determines natural and man-made constraints to the potential future development of land in the City and the County of Lethbridge. One component of the IGMS is First Nations consultation with a representative of the Kainai First Nation. Through this study no sites of significance to First Nations were identified within the WLEC, however additional First Nations consultation should be considered at the Outline Plan stage to examine the potential occurrence of sites that are significance to First Nations at the more detailed Outline Plan area level.

#### 2.1.5 DEVELOPMENT CONSTRAINTS

There are a number of existing development constraints that need to be considered in the planning and development of the area, as shown on Map 6.

#### 240 kV Transmission Line

The right-of-way for a recently constructed 240 kV power transmission line crosses through the plan area. This line originates in the Municipal District of Pincher Creek to the west of the city and connects to a substation in North Lethbridge. The alignment for this right-of-way largely follows the northern boundary of the city in West Lethbridge and varies between 40 to 50 metres in width.

This utility right-of-way largely removes the land within it from future intensive development. However, it is possible that this corridor also be used for a more passive, secondary use such as a pathway, the future utility network or storm water management.



#### Railway

240 kV transmission line in the plan area

The alignment of the mainline of the Canadian Pacific Railway effectively divides the plan area into two sections and consumes approximately 30.5 ha of land. This location necessitates separate sewer and water connections on either side of the rail right-of-way and also limits the amount of integration and connectivity between lands on both sides of the railway tracks.

#### Highway #3

Highway #3, which provides an inter-provincial connection and access point for the city, intersects with both University Dr. and Westside Dr. At present Highway #3 and these



Lethbridge

## MAP 6 Development Constraints


associated interchanges are managed by Alberta Transportation and the City has limited ability to address any access or alignment issues around these interchanges.

#### Cemetery

The existing cemetery is generally not compatible with industrial uses, but will remain in its current location permanently. Surrounding land uses and buffering around the cemetery from these land uses will need to be carefully considered.

#### Existing and Future Adjacent Residential Areas

On the south side of Walsh Dr. the predominant land use is existing and future residential development. The transition from the employment area to the north of Walsh Dr. to this residential area will need to be handled sensitively. The establishment of a buffer is one such option.



View from Walsh Dr. of existing residential development to the south

#### Irrigation Infrastructure

The Lethbridge Northern Irrigation District operates both an irrigation canal and drainage canal that traverse the area, in addition to smaller ditches that serve individual properties. Urban development within this area will require that the irrigation canal be piped underground at the developer's expense and that no runoff from future development be permitted to drain into the irrigation conveyance system.

#### Coalhurst Potable Water Pipeline

The Town of Coalhurst currently receives its supply of potable water from the City of Lethbridge through a pipeline. This pipeline currently passes through the WLEC, running from southeast to northwest, but can be integrated into the future water distribution system that will serve development that occurs in the area.

#### Coalhurst Wastewater Pipeline

As of the summer of 2012, work has begun on a pipeline that will convey wastewater from the Town of Coalhurst to the City of Lethbridge's wastewater treatment plant. When complete this forcemain pipeline will travel from north to south along the existing 30<sup>th</sup> St. through the WLEC. The line assignment for this pipeline will be maintained until such time it becomes integrated into the ultimate sanitary sewer system that will serve development in the WLEC.

#### Sewage Lagoon

A sewage lagoon exists near the intersection of Westside Dr. and 2 Ave W. in Sub-area 1. This sewage lagoon serves the manufactured home park on the opposite side of Westside Dr.



to the south-east. Provincial regulations (legislated through the Municipal Government Act, Subdivision and Development Regulations and Alberta Environment's Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems) require a minimum setback of 300 metres between the sewage lagoon and any occupied building.

This will restrict future development to a distance of no less than 300 metres around the lagoon, until time as the lagoon is no longer needed, it has been decommissioned and the lagoon site has been remediated to a standard that is acceptable. This setback of 300 metres is shown on Map 6.

The method of decommissioning and remediating the sewage lagoon and the standard that this lagoon is remediated to must be described in the environmental investigation that is completed for the Outline Plan which contains this sewage lagoon.

These regulations also require that a minimum setback distance of 30 metres must be maintained between the working area of the sewage lagoon and the property line of the land where the lagoon is located. This may impact the future subdivision of land near the sewage lagoon, if the lagoon is still in existence at that time.

#### Natural Gas Wells and Pipelines

There is one existing sweet gas well in the northwest corner (Legal Parcel Address: Northern Half of NE 4-09-22-4) that is currently in production. This well was commissioned in 1999 and it is thought this well will continue to produce for at least another 30 years. The legislated required setback for structures around a sweet gas well head is currently 100 metres (see Map 6). A potential reduction in this setback would require approval from the necessary provincial authority, which at this time is the Energy Resources Conservation Board (ERCB). Due to the location of the gas well it is possible that the well will be abandoned by the time the area around it is ready for development.

There is also an abandoned gas well located northwest of Archmount Cemetery (Legal Parcel Address: Western Half of NW 3-09-22-4). It is recommended that once a gas well is abandoned that a setback of 5 metres from the abandoned well to any permanent structures and a setback of 3 metres from the abandoned well to any underground utilities be maintained.

There is an existing high-pressure gas production pipeline that collects gas from producing wells in the region, including the active well in the northwest that is described above. The local gas transmission company also operates a high pressure natural gas transmission pipeline that runs north to south within the existing road right-of-way for 30 St. W. In the future, if this road right-of-way is ever abandoned, a sufficient replacement pipeline right-of-way will be required to protect the pipeline. These pipelines result in setback limitations from the right-of-way for any proposed development while the pipeline right-of-way is still present.

All natural gas facilities in the area are shown on Map 6.



# SI'RE OBJECLIAEZ

- a) Confirm that the intended development is appropriate from geotechnical and environmental perspectives.
- b) Bring the existing cement plant into conformity with the Land Use Bylaw if the cement plant is to remain in operation beyond the development of the surrounding area.
- c) Ensure that existing and potential development constraints are fully understood and mitigated.

# 2.1.7 POLICIES

a) Further, more detailed geotechnical investigation shall be undertaken at the Outline Plan stage to confirm that the area that is subject to a given Outline Plan is appropriate for the intended land uses, as stated in the Geotechnical Evaluation conducted in the spring of 2010. This investigation shall include additional borehole sampling and shall further consider the mine workings that underlay the plan area in its approach.

This investigation shall also identify any dugouts and septic fields that are located within the Outline Plan area and shall provide recommendations to successfully remediate such sites given the proposed future land use of the area. Such recommendations shall be incorporated into the associated Outline Plan and this geotechnical investigation is subject to the terms of the City of Lethbridge.

- b) Further, more detailed environmental investigation shall be undertaken at the Outline Plan stage to confirm that the area that is subject to a given Outline Plan is appropriate for the intended land uses, as stated in the Environmental Overview conducted in the spring of 2010. This investigation shall include a full Phase 1 Environmental Site Assessment and an Environmental Impact Assessment for the Outline Plan area. This Environmental Site Assessment will provide an update as to the presence of sensitive species in the area and will identify a strategy to mitigate the development impact upon such sensitive species. These assessments shall be subject to the terms of the City of Lethbridge and in consultation with Alberta Environment and Sustainable Resource Development.
- c) Treatment of sensitive species that are discovered or encountered shall be in accordance with provincial legislation and federal legislation (i.e. Species at Risk Act, Alberta Wildlife Act).
- d) If any historic resources are discovered during the development of the area Alberta Historical Resources Management shall be contacted. They will issue further instructions regarding the documentation of such resources in compliance with the Historical Resources Act.
- e) The cement plant located near the intersection of Westside Dr. and Walsh Dr. shall be brought into conformance with the Land Use Bylaw by including only this use in only this location as a discretionary use in the associated land use district when this site and the



surrounding area are rezoned prior to development, This is only applicable if it is intended for this cement plant to continue operations into the future beyond the development of the surrounding area.

- f) To ensure an efficient transition between the existing cement plant and the surrounding future development, issues such as landscaping and the site design of the cement plant shall be addressed at the Outline Plan, prior to it becoming a conforming use.
- g) First Nations consultation should be considered at the Outline Plan stage to examine the potential occurrence of sites of significance to First Nations at the more detailed Outline Plan Area level.
- h) Future development shall occur no closer than 300 metres from the sewage lagoon located in Sub-area 1, until such time as this sewage lagoon has been decommissioned and has been successfully remediated to a level that is proven acceptable to the City of Lethbridge.
- i) More detailed environmental investigation, as identified under policy 2.1.7 b), shall identify an appropriate method for decommissioning and remediating the sewage lagoon. This environmental investigation shall also identify as to what standard that the lagoon site must be remediated to, in consideration of the proposed surrounding land uses.
- j) The sewage lagoon site must be remediated to a level that is proven to be acceptable by the City of Lethbridge prior to adoption of the Outline Plan which contains the lagoon site.
- k) A minimum setback distance of no less than 30 metres between the sewage lagoon and any new property line of the parcel that the lagoon is located on must be maintained.
- I) Development shall adhere to the provincially legislated setbacks from active and abandoned natural gas wells and pipelines.
- m) A developer may apply for a reduction in the 100 metre development setback around the active natural gas well. This reduction is subject to approval by the necessary provincial authority, which at present is the Alberta Energy and Resources Conservation Board.
- n) The natural gas transmission pipeline located parallel to 30 St. W shall be placed within a separate public utility lot when 30 St. W is moved or upgraded.
- o) Any alterations to the natural gas transmission pipeline to facilitate urban development shall be at the expense of the developer.

# 2.2 HEALTH & SAFETY

The safety of a community can also be enhanced through utilization of crime prevention through environmental design (CPTED) principles in both the public and private lands. CPTED considers the following issues:



- Natural Surveillance Keeps potential intruders under observation. This often includes lighting (can be directed to certain areas; does not require excessive light pollution). A special form of lighting – low sodium lighting - is often used in security lighting as it highlights distinctive personal features that identify a person. Natural Surveillance can also include maintaining sight lines through the proper use, maintenance and placement of landscaping, berms and fences.
- Natural Access Control This decreases opportunities for crime to occur by controlling access to certain areas. An example of this would be using landscaping against an exterior wall to inhibit access to a roof and also to deter graffiti from being applied to the wall.
- Territorial Reinforcement This promotes a sense of ownership and responsibility within people that are located within a given area. People are more likely to report suspicious behaviours in areas where they feel they have a vested interest and areas that are adequately maintained are less likely to experience degradation and vandalism.

Most CPTED principles are easy to consider and are relatively inexpensive to implement. It is strongly encouraged that the implementation of CPTED principles be considered prior to development as CPTED features become more costly and difficult to implement after development has already occurred.

# 2.2.1 OBJECTIVES

a) Ensure that the West Lethbridge Employment Centre is designed to be a safe environment.

# 2.2.2 POUCIES

a) CPTED principles will be considered in the environmental design and landscaping of the WLEC at the Outline Plan and development stages. These principles must be considered in both public and private spaces, as both complement one another and must work together.

# 2.3 PLANNING & POUCY FRAMEWORK

The West Lethbridge Employment Centre ASP has its foundation in a number of previous plans and City of Lethbridge bylaws. Below is a summary of the relevant parts of the existing Urbanization Plan, the Integrated Sustainability Plan / Municipal Development Plan, Intermunicipal Development Plan and Land Use Bylaw.

# 2.3.1 INTEGRATED COMMUNITY SUSTAINABILITY PLAN / MUNICIPAL DEVELOPMENT PLAN

The current Integrated Community Sustainability Plan / Municipal Development Plan – Bylaw # 5650 (ICSP/MDP) seeks to enhance economic opportunities in the local economy and to



ensure a sufficient supply of planned and serviced land to accommodate future business growth and development. It also seeks to support a range of choice for new residential, commercial and industrial expansion areas. The West Lethbridge Employment Centre will provide a new area for a significant amount of these economic activities to take place.

In regards to West Lethbridge this document notes the continuous residential expansion of West Lethbridge into the future and foresees the development of future employment and commercial centres in West Lethbridge to serve this growing population and therefore reduce the need for additional travel. The ICSP/MDP's future land use map also shows future industrial and commercial land uses being developed within the plan area of the West

Lethbridge Employment Centre and how these uses will integrate with land uses in the rest of the city at a conceptual level.

The ICSP/MDP also foresees the growth of hightech or knowledge based employment in the future, by building upon the strengths within local post-secondary institutions, cultural activities and research facilities as a way of diversifying the Lethbridge economy. This document also encourages and promotes mixed-use development and a variety of land uses in the employment area. The directions provided by the ICSP/MDP will be



components of the WLEC and are discussed in this ASP. The ICSP/MDP created a number of policies to guide the continued development of Lethbridge. Policies from the ICSP/MDP that provide specific guidance to the WLEC ASP are as follows:

#### 6.4.1 Lethbridge is a Compact City

• Incorporate transit-oriented development into land use planning.

#### 6.4.2 Lethbridge has an Efficient and Effective Integrated Transportation Network

- Integrate transit with community planning and design.
- Develop an integrated multimodal transportation system.

#### 6.4.3 Lethbridge is a Walkable, Bicycle Friendly City

- Develop and maintain a commuter oriented citywide integrated pedestrian and bicycle network.
- Ensure that future commercial and industrial developments provide convenient pedestrian access from adjacent sidewalks and bus stops.

#### 6.4.4 Lethbridge is Expanding in a Responsible Manner

• Discourage non-contiguous growth and expansion of the built environment within the



city.

- Require the completion of Area Structure Plans and Outline Plans prior to the development of new areas.
- Encourage and promote an adequate supply of land that is planned and available for servicing to meet market demand.
- Support a range of choice of new expansion areas for residential, commercial and industrial development.

# 6.4.5 Lethbridge is a Planned City that Exhibits Quality Urban Design

- Encourage and promote mixed-use development and a mix of land uses in employment areas.
- Coordinate land use with transit planning to ensure easy access to public transportation.

# 6.5.1 Lethbridge's River Valley is the Primary Open Space System

- Ensure that the river valley is accessible to all residents.
- Incorporate strategically located view corridors adjacent to the river valley.
- Increase accessibility to the river valley by requiring linear open space along the valley crest.
- Create a continuous pathway throughout and along the top of river valley.

Direction for the WLEC ASP is provided by these policies, especially in terms of the development of employment areas, the provision for multiple forms of transportation and ensuring that proper planning is in place prior to development. Access to and the protection of the river valley is also addressed in these ICSP/MDP policies and in the WLEC ASP.

# 2.3.2 INTERMUNICIPAL DEVELOPMENT PLAN

The City of Lethbridge and County of Lethbridge Intermunicipal Development Plan (IDP) identifies policies that relate to the area that composes the WLEC ASP. This area, along with other undeveloped areas of the city, is also within what the IDP classifies as "Policy Area 3". The following describes certain issues that are discussed in the IDP and impact the Employment Centre:

#### Communication Between Municipalities On Plans and Land Uses

In relation to this policy area the General Land Use Policies section (section 5.1.1) of the IDP states that each municipality will circulate for comment to the other municipality "proposed area structure plans in Area 3".





Lethbridge County has been notified by the City of the intentions of the ASP since initial work on it began and has been involved throughout the entire process. A draft of the proposed ASP was circulated to the County for their comment and their subsequent comments were considered in the final draft of the ASP.

Subsequent to the approval of this ASP, section 5.1.1 of the IDP also states that any amendments to this ASP and any Land Use Bylaw amendments within Policy Area 3 shall be circulated to the County for their comment. This section also states that any discretionary use permit applications that apply to land adjacent to the municipal boundary shall also be circulated to the County for comments.

#### Animal Disease Research Institute

The IDP also contains a section on development near or adjacent to the Animal Disease Research Institute (Section 5.4.14). It states that "*decisions regarding subdivision or development near to or adjacent to the Agriculture and Agri-Food Canada Research Station or ADRI should:"* 

- "Take into consideration comments received from the research centre upon circulation;"
- "Protect the research centre from unnecessary encroachment of uses that may limit centre activities"

During the development of the ASP the Animal Disease Research Institute (ADRI) was consulted directly and expressed that they wished to avoid direct animal contact between animals located within the confines of the ADRI and those from off-site. In order to prevent this, the ADRI site currently has a set of two fences surrounding its property.

#### City Entryways

Section 5.4.13 of the IDP states that main city entryways "should be given special consideration by both municipalities in approvals to protect and enhance the view with special landscaping, signage or other features."

The provision of providing a suitable entryway into the city along University Dr. is addressed in section 5 of this ASP.

# 2.3.3 WEST LETHBRIDGE URBANIZATION PLAN, 1969

The West Lethbridge Urbanization Plan of 1969 envisioned future industrial and commercial uses to be located generally in this area and stated that:

"The industrial services and regional commercial uses have been grouped around the major transportation network of road and rail providing the ease of accessibility from Lethbridge and surrounding area that these activities are designed to serve. The activities conceived for this



area are (a) a regional shopping centre, (b) an industrial park, comprised of industries and warehousing activities, (c) regional oriented transient accommodations and services"

While planning and development trends have shifted since this plan was adopted in the late 1960's, the same basic activities that were envisioned at this time remain relevant today and will likely continue into the future.

# 2.3.4 CITY OF LETHBRIDGE LAND USE BYLAW

Most of the lands within the plan area are designated under the Land Use Bylaw (LUB) as being in the Future Urban Development (FUD) district. The purpose of designating land in this district is *"for the control of subdivision and development until the required municipal services are available, area structure or area redevelopment plans are approved, and more appropriate alternative districts are applied."* 

Various other parcels of land have also been designated as Direct Control districts which have individual site specific purposes that "require specific sets of rules in order to achieve a desired result". Within this area the Direct Control designation has been employed to allow the landowners to develop their properties with uses that were not dependent on municipal servicing or a great deal of investment, recognizing that an ASP would eventually be created.

# 2.3.5 OBJECTIVES

- a) Ensure that this ASP is in accordance with all superseding plans and bylaws.
- b) Allow for constructive and open communication between the City, the County of Lethbridge and adjacent landowners who are within the County.

# 2.3.6 POUCIES

- a) The West Lethbridge Employment Centre shall be developed in accordance with the City of Lethbridge Integrated Community Sustainability Plan / Municipal Development Plan, West Lethbridge Urbanization Plan and City of Lethbridge Land Use Bylaw.
- b) The County of Lethbridge shall be circulated notification for comments in regards to any further amendments of this ASP.
- c) Lethbridge County shall be circulated notification for any Land Use Bylaw amendments or for any discretionary development permits that are adjacent to the shared municipal boundary.
- d) The Animal Disease Research Facility shall be forwarded any notification for further development or subdivision applications for land that is adjacent to the facility for their comment.



# 3.0 DEVELOPMENT POTENTIAL

# 3.I MARKET ANALYSIS

As background information to this plan, a market analysis was completed in early 2010 prior to the development of the land use concept and any policies in the ASP. This was undertaken in order to estimate the future market demand for general industrial, business industrial, office and retail/service commercial within West Lethbridge, beyond what has already been provided in previously approved ASPs and Outline Plans (i.e. Benton Crossing Outline Plan). This market analysis also included an estimate as to the potential size of a new low density residential neighbourhood that could be supported within the WLEC, if one were to be established.

This market analysis also estimated the timeframe it would take for the entire area to become fully developed based upon these uses. The full document is available in the Technical Documents Appendix.

The results from this market analysis are indicative of what type of land uses can reasonably be expected to be developed in the WLEC in a timely and efficient manner. These results were used to help determine the composition and total land area that should be given to each land use in the ASP. While the market analysis was an important input, it did not make the final determination of the land use concept for the ASP. This and other aspects, such as community needs and physical development constraints all played an important role in the creation of the ASP's land use concept.

# 3.I.I MARKET DEMAND

To estimate the future market demand in the city for the specified land uses, the market analysis used a timeframe of 50 years (to the year 2059) and the following methods:

- An extension of the previous growth in land area & floor space that has occurred over the past 50 years.
- A ratio of land area & floor space per capita combined with the estimated future population growth.
- A compounding annual growth rate for increased land area & floor space.

Each one of these methods generated separate results, which were compared against one another to devise a single general estimate for each land use. The share of this city-wide estimate that could be expected to occur in West Lethbridge – and the WLEC specifically – was then extracted by considering how much market demand for each land use there would be in other areas of the City and what amount would be reasonable for West Lethbridge in the future.



Below is a summary of the results of this analysis. This table shows the market demand for developable commercial and industrial land that is expected in West Lethbridge until 2059, beyond what has previously been planned for. This summary also includes an estimate as to the size of a potential residential neighbourhood that could be supported within the WLEC, if one were to be developed. The estimated demand is expressed as a range that consists of a minimum and a maximum amount of development that based upon market forces, could reasonably be expected to occur in West Lethbridge.

	Lower Bound Forecast for Additional Development in West Leth, Until 2059		Upper Bound Forecast for Additional Development in West Leth. Until 2059	
	Squarefeet	Hectares	Squarefeet	Hectares
Business Industrial	1,250,000	11.5	7,500,000	69.5
General Industrial	7,000,000	65.0	35,000,000	325.0
Office Commercial	800,000	7.5	2,800,000	26.0
Retail Commercial	10,000,000	93.0	20,000,000	186.0
Residential	0	0.0	4,400,000	41.0
TOTAL	19,050,000	177.0	65,300,000	647.

# Table 1 – Summary of West Lethbridge Land Area Forecasts

The table above represents the range of potential land requirements for each land use and does not include other inputs that consume land in a development, such as roads and storm water ponds. The market analysis did not consider topographic, physical and infrastructure constraints. The actual land area for each use will be refined in section 4 of this ASP, with further refinement through subsequent Outline Plans.

Based upon this market analysis the two largest consumers of land will be general industrial and retail commercial uses and that the majority of developable land in the WLEC should be reserved for these two land uses.

The anticipated amount of office demand was forecasted to be relatively low in comparison to other land uses. However this could change if Lethbridge undergoes more office development in the future than it has in the past. This is possible if the economy moves away from more traditional employment to more knowledge-based employment.

Office uses are already integrated into many of the Land Use Bylaw's existing commercial and industrial land use districts which will be utilized in the WLEC. There is also the possibility that the local demand for office development could increase to a level where the creation of a new Land Use Bylaw district that is exclusively for the development of office buildings (i.e. like in an office or research park) is feasible. It should be noted that this market analysis considered office uses to be a separate land use category, however this ASP does not make this distinction and instead considers office uses to be part of the Business Industrial and Transition Commercial Areas. If necessary, further delineation of office uses will be made at the Outline Plan stage.



# 3.1.2 VERIFICATION OF MARKET ANALYSIS RESULTS

The results of this market analysis are similar to the market demand that has been forecasted in other studies and data:

- Preliminary results from the ongoing Integrated Growth Management Study which considers future long term growth in the City and surrounding County indicate that even more commercial and industrial land than what can be provided in the WLEC and other areas of the city will be required to fulfill the long term needs of the community.
- The Land Use Development Strategy that was completed for The Crossings Neighbourhood in West Lethbridge identifies support for regional-level retailing in the WLEC (i.e. serving the population in the entire City and region), as it is near Highway #3. The Crossings is able to support the market for community-based retailing (i.e. serving the surrounding population in West Lethbridge).
- As of this time 2013 there is very little undeveloped land remaining in other areas of the city that is zoned appropriately and is practical for large format retail uses The 26 hectares that are remaining is scattered in various locations and cannot be assembled to form sites that are adequately sized for large regional shopping sites. Additional large, contiguous areas are needed for long term retail growth in the City.
- Few areas currently exist in Lethbridge that are attractive to knowledge-based employment. Most existing knowledge-based employers in Lethbridge have opened in the city's existing industrial area in the north-east, as this is one of the few areas in the city where they can operate. However, this area contains the city's heavy industrial uses and contains few amenities, such as green space or sidewalks, which does not entice most knowledge-based employment. The opening of a new industrial frontier in the city, containing more amenities than what has traditionally been provided and industrial uses with fewer negative externalities and being located closer to the University would bode well for the City's ability to attract knowledge-based employment.

# 3.2 SURVEY OF BEST PRACTICES AND EMERGING TRENDS

The WLEC has the potential to contain some innovative technologies and forms of development that have not been previously attempted in Lethbridge, due to the fact that there is currently little existing development in the area and the extended development timeframe. Such innovations would also help the WLEC achieve some of the planning principles that were identified under section 1.3 of this document. Specifically this includes the following principles:

- Provide an area within the city that encourages the continuing diversification of the Lethbridge economy.
- Create a dynamic area that is attractive and showcases Lethbridge.



- Develop a future land use framework that promotes development within the employment centre that is diverse and innovative, both now and into the future.
- Provide for the safe and efficient movement of people, goods and services throughout the West Lethbridge Employment Centre.
- Promote sustainable design that is energy efficient and reduces waste.

In order to further investigate this potential and provide input into this ASP a survey of best practices and emerging development trends was completed. This survey examined some emerging trends in other centres and evaluated the practicality of such trends within the context of Lethbridge and how the WLEC could incorporate such trends.

The full survey of best practices and emerging trends document is available in the Technical Documents Appendix, however the concepts that were examined in this survey are summarized below:

#### Industrial / Office

- Knowledge-Based Employment / Research Parks Emerging industries that require access to a well educated and skilled workforce. Such industries provide high-paying, creative jobs and often serve a technological or research function. Examples can include the biomedical and information technology industries.
- Logistics Centres / Intermodal Railway Facilities Multi-modal transportation facilities for the transfer of freight from one mode of transportation to another (i.e. train to truck). Logistics Centres can be very large and can also include on-site warehousing.
- Eco-Industrial Parks Industrial Parks that foster environmentally responsible development through a reduction in energy consumption, pollution and waste. To accomplish this some methods can include the reuse of non-potable "grey" water in industrial functions and alternative storm water management.
- Industrial Symbiosis (Industrial Ecology) The sharing of information, services, utilities and byproducts amongst industries to add value, reduce wastes and improve the environment. This is an attempt at maintaining a closed loop system, where energy and wastes are continually recycled and reused. An example would be the reuse of sulphur, which is a by-product of coal power generation, as an additive in the production of drywall.
- On-Site Green Energy Generation The micro generation of electricity through methods that are environmentally sustainable. While not entirely eliminating the need of a particular building to be tied to the energy grid, such methods can reduce its reliance upon it. Examples can include solar panels, micro wind turbines and fuel cells.





District Energy Systems – A system where hot water, steam or chilled water is produced at a
centralized location to be distributed to multiple buildings in a local area or neighbourhood. This
results in each building requiring less on-site equipment to provide hot water, heating or cooling.

Electricity, that can be consumed by local buildings or sold back to the electrical grid, can also be generated in conjunction with the production of hot water or steam at the central facility. This method of generating electricity is more energy efficient than the traditional grid distribution method, but also represents a substantial amount of capital investment.



Enmax's Downtown Calgary District Energy Centre Source: Enmax Corporation "www.enmax.com"

### <u>Retail</u>

- Lifestyle Centres An emerging retail trend that additionally includes office, entertainment and sometimes even residential uses on one outdoor site. Lifestyle Centres incorporate such features as open-air plazas, sidewalks, pedestrian streets and internal side-street parking to retain the feeling of a vibrant urban neighbourhood, but within a controlled, private area. By including these features and other uses alongside retail, developers of Lifestyle Centres hope to attract customers to the site more often and retain them for longer periods of time than with more traditional single land use developments.
- Large Format Retail-Residential Hybrid Developments - Mixed-use developments that contain residential units in addition to large format retailers that are otherwise typically found as free-standing, single use buildings in suburban areas (i.e. Costco, Home Depot etc.). More consideration and effort on the part of the large format retailer, in regards to the design of the site and the building is required. The building form of such developments varies greatly from the generally typical form that is applied in suburban big box locations.



Example of a large format retailresidential hybrid development in Vancouver Source: Theodore C. Thoerig, "Best Practices In Development: 2009"





# 3.2.1 APPLICATION IN THE CONTEXT OF LETHBRIDGE AND THE WLEC

Of the concepts that were investigated, it was concluded that:

- Lethbridge has strong potential to expand upon its knowledge-based employment in the future and within Lethbridge, the WLEC is an ideal place to do so.
- Eco-industrial parks are not be feasible in the WLEC, at least in the near future. Eco-industrial
  parks would compete for development against more "traditional industrial land", which in Lethbridge
  is relatively abundant and inexpensive when compared to the typical cost of parcels in ecoindustrial parks. However, despite higher capital costs, such development could become more
  common if there is a rapid rise in the cost of energy or utilities.
- Based upon discussions with the local railway provider large intermodal facilities or rail-based logistics centres will not be developed in or near Lethbridge in the future. However, rail transportation is expected to increase over time. Within the WLEC railway spur lines or smaller transloading facilities (like what exists in the industrial area in northeast Lethbridge) could take advantage of this increased traffic.
- Industrial symbiosis would be most likely to occur in heavier industrial areas in the future, but could
  also occur in the WLEC depending upon what industries this area ultimately contains. The
  necessary space and access for the required infrastructure to support industrial symbiosis can be
  provided in the initial development stages, in case it is ever utilized.
- Green energy technologies that generate electricity on-site will improve their efficiencies in the future. Despite this they still may not achieve widespread practicality, but these technologies can usually be easily accommodated anywhere with few off-site impacts. Micro wind generation can have some larger off-site impacts, but in some instances is appropriate in industrial areas or in areas with large parcels of land as found in the WLEC.
- A district energy system would be more likely to be developed in a more intensively developed area or in conjunction with heavy industrial uses, but has potential with some of the higher density uses that could be found within the WLEC, such as with office buildings. The necessary space required for this infrastructure could be reserved in the initial development stages and could even occur alongside space reserved for the infrastructure associated with industrial symbiosis.
- Lifestyle centres could potentially be developed in Lethbridge and within the WLEC in the future. However, the development of omni-centres that essentially add certain lifestyle centre components to big box power centres or the development of mixed-use areas will be in greater demand.





• Hybrid developments that combine large format retailers with residential units would be welcome in Lethbridge and the WLEC. However, as these developments are a relatively new phenomenon and are not present in suburban areas yet, they would require a large overall market change to be successful in the WLEC.



**Example of a retail lifestyle centre** Source: Theodore C. Thoerig, "Best Practices In Development: 2009"





# 4.0 LAND USE CONCEPT

# 4.I GENERAL OVERVIEW

The land use concept is conceptual in nature and is intended to show the general relationship amongst the land uses that comprise the WLEC. A more precise picture of the specific size and location of the land uses will be delineated at the Outline Plan stage.

This section of the ASP takes the land uses that were identified in the Market Forecast as having the potential to be economically feasible (see section 3.1) and allocates them to the land use concept of the WLEC.

In West Lethbridge, the land uses of business industrial and general industrial can only be accommodated within the WLEC, as they are often incompatible with the nature of residential development that comprises the majority of current and future land use. The ASP allocates more business industrial development in the land use concept than was forecasted in the market study, because knowledge-based employment or office commercial uses can also be provided in such areas. Many uses that serve a public or utility function are also appropriate for business industrial areas.

It was understood that the WLEC should accommodate a substantial portion of future commercial development in West Lethbridge. This is due to its location near arterial roadways and Highway #3 and its ability to accommodate parcels that are appropriately sized for large format commercial development.

The WLEC will include mixed-use or multi-family residential development in key locations as a secondary use to areas that are primarily for commercial development. However, the inclusion of low density residential neighbourhoods, which might be feasible from a market perspective, can be better accommodated in other areas of West Lethbridge that are closer to schools and offer increased connectivity with other residential neighbourhoods.

For the purposes of the land use concept the entire plan area has been divided into 3 sub-areas. These sub-areas are shown on Map 3. Sub-area 1 comprises 360.5 ha and is located in the area between the western boundary of the City to the railway right-of-way in the east. This area is intended to be composed mainly of business industrial and general industrial land uses.

Sub-area 2 is located across from Sub-area 1 on the western side of the railway right-of-way and stretches to the existing University Dr. right-of-way and is 108.5 ha in size. It is composed of both large format commercial and business industrial land uses.

Sub-area 3 is located east of Sub-area 2, between University Dr. and the eastern boundary of the WLEC (the top of the coulee bank) and is 88.5 ha in size. Land uses in this area comprise large format commercial and business industrial. Commercial uses that can take advantage of the views provided by a close proximity to the river valley, such as restaurants, cafes and offices are also included in this area. This area adjacent to the river valley can also contain the residential development that is currently present in the area or small pockets of medium density residential or mixed use development. Commercial land uses that form a transition between the large format commercial and commercial uses that take advantage of the proximity to the river valley are also located in this sub-area.



The land use concept for all three sub-areas is shown on Map 7. In addition to the land uses listed above, this area will contain institutional uses, as well as infrastructure, utilities and public open space.

# 4.2 BUSINESS INDUSTRIAL

#### Located in: Sub-Area 1, 2 & 3 (see Map #3)

The Business Industrial Area located adjacent to Walsh Dr. and Archmount Cemetery is in this location in order to function as a buffer between general industrial uses and the nearby residential uses and cemetery. Such types of uses are largely incompatible with one another and the Business Industrial Area acts as an intermediary as it contains land uses that do not adversely impact the surrounding area. General industrial land uses are not suitable in this area, as due to their nature, some negative impacts beyond the site area can be generated.

The Business Industrial zone is also appropriate for uses that are of a public utility or infrastructure use that serve the greater good of the community. Examples of this include equipment servicing and storage and electrical infrastructure.

Land uses that are found in Business Industrial Area also function as a transition between land uses that are more commercial in nature and those that are more industrial. A number of uses that are found in the Business Industrial Area could also be found in commercial areas. As such, a substantial area for Business Industrial has been delineated in Sub-area 2 with the intention that this area would be ideal for knowledge-based employment that are often found in office/business parks, should there be a future need for such development in Lethbridge. If there is little demand for office/business type uses in this location, uses that are more industrial in nature could locate or mix in with the office/business uses in this area,. This is similar to what is currently seen in the W.T. Hill Business Park on the east side of the city.



A health-sciences firm that is part of an office park in a business industrial area

Land uses that are considered appropriate for this area include offices, business support services, vehicle sales and rentals, storage and household repair services.

# 4.2.1 OBJECTIVES

- a) Provide a sufficient area for significant business industrial employment activities to take place in West Lethbridge.
- b) Buffer residential neighbourhoods and Archmount Cemetery from general industrial development.



Large Format Commercial

**Coulee View Commercial** 

**Transition Commercial** 

General & Business Industrial

**Business Industrial** 

Existing Roadway Network

Proposed Roadway Network

Plan Area Boundary

# Centre West Lethbridge Employment **Area Structure Plan**

# MAP 7 Land Use Concept



Lethbridge



- c) Provide a transition between commercial and industrial land uses.
- d) Provide the land-use framework for knowledge-based employment in West Lethbridge.
- e) Support the potential for the WLEC to incorporate industrial best practices in the context of environmental responsibility and energy efficiency.

# 4.2.2 POUCIES

- a) Subject to the policies of this plan, the predominant use of land within Business Industrial Area shall be light intensity industrial land uses. Office, commercial and public land uses may be allowed with in this area where these uses are considered compatible and consistent with the industrial function of the area.
- b) The general categories of the land uses that were identified under policy a) above shall be refined further through the land use districts that are applied to the Business Industrial Area. Appropriate Land Use Bylaw districts for this area are identified in appendix b.
- c) Business industrial development shall occur along Walsh Dr., thus buffering residential neighbourhoods to the south of Walsh Dr. from general industrial uses of medium intensity further to the north.
- d) Business industrial development shall occur adjacent to Archmount Cemetery, thus buffering the cemetery from the surrounding general industrial uses.
- Activities that occur in the Business Industrial Area shall not have an adverse impact on adjacent neighbourhoods through noise, odours, outdoor lighting or emissions.
- Parking or storage areas shall be screened from public roadways using a combination of landscaping or physical structures. Policies around screening in this area shall be further refined at the Outline Plan stage.



Example of good quality screening and landscaping in a business industrial setting

- g) A new land use district(s) in the Land Use Bylaw that is exclusively for the development of offices, knowledge-based employment and their ancillary uses should be developed for use in the Business Industrial areas of the WLEC, if exiting land use districts are not appropriate. Interest in this potential form of development and its feasibility would need to be gauged at the Outline Plan stage and would be developed prior to the approval of the associated Outline Plan.
- h) A potential new land use district for the exclusive development of offices or knowledgebased employment would need to consider such elements as an increased level of on-site



landscaping and architectural integrity than what is typically found in other employment areas in the city to ensure that this area remains attractive to the establishment of offices knowledge-based employment.

- Access and facilities for disabled persons shall be provided in accordance with the City of Lethbridge Land Use Bylaw and the Alberta Building Code. The "Barrier-Free Design Guide" published by Government of Alberta Safety Code Council provides further explanation as to the intent of the Alberta Building Code in this regard.
- j) The use of innovative technologies or practices that are energy efficient, reduce wastes or are environmentally responsible in the development of the area shall be considered favourable. Such elements can include, but are not limited to:
  - Green building practices (i.e. LEED)
  - Onsite energy generation
  - Eco-Industrial Parks
  - Industrial Symbiosis
  - On-Site Green Energy Generation
  - District Energy Systems

# 4.3 GENERAL & BUSINESS INDUSTRIAL

Located in: Sub-Area 1 (see Map #3)

It is anticipated that in the future the Canadian economy will continue to evolve from more traditional heavy industries like materials processing to industries that have fewer negative externalities. As the estimated build-out timeframe for the entire WLEC is anticipated to take a number of decades it remains uncertain to what degree this shift will impact the local economy. In order to offer enough flexibility to cope with a changing market place, the area within the WLEC that has been designated as "General & Business Industrial" is intended to contain industrial development that is primarily medium intensity in nature. Such development typically has minimal offsite impacts (noise, emissions etc.) and includes such uses as warehouses and light to medium intensity manufacturing.

Depending upon the future industrial development market in Lethbridge it is entirely possible that there may be interest in developing light intensity industrial land uses in this area as well. Light intensity industrial land uses differ from medium intensity industrial land uses, as they have no offsite impacts and include such uses as business suppliers and building contractors. Despite this, both light and medium intensity industrial land uses share many similarities and when such uses are found in close proximity they are typically minimally impacted by one another.

The General & Business Industrial Area will consume the largest amount of land and will likely provide the most employment of any zone. Uses that are found in this area typically require large parcels of land and easy access to the external trade network through the highway. This area will not contain noxious industrial uses, but rather will contain medium or light intensity industrial uses that have minimal offsite impacts, but are generally not compatible with residential uses that would otherwise be adjacent.



Activities that are considered appropriate for the General & Business Industrial Area can include, warehousing, distribution centres, light to medium intensity manufacturing and assembly, and vehicle and equipment sales/rental/service.

# 4.3.1 OBJECTIVES

- a) Provide a sufficient area for significant industrial and employment activities to take place in West Lethbridge.
- b) Provide enough flexibility in the General & Business Industrial Area to respond to a changing marketplace, but without abandoning the vision and basic principles of the WLEC ASP.
- c) Prevent heavy intensity industrial uses that will produce significant offsite impacts from locating in the WLEC.
- d) Attain separation of non-compatible land uses.
- e) Provide an area that has superior access to regional, national and international transportation systems and markets.
- f) Support the potential for the WLEC to incorporate industrial best practices in the context of environmental responsibility and energy efficiency.



Example of an intensive industrial use that produces off-site impacts and will not occur in the WLEC

#### 4.3.2 POUCIES

- a) The predominant use of land within the General & Business Industrial Area shall be medium intensity industrial land uses. Light intensity industrial land uses may also be allowed within this area, where such uses are considered compatible and consistent with the industrial function of the area.
- b) Office and public land uses may also be allowed with in this area where these uses are considered compatible and consistent with the industrial function of the area.
- c) The types and potential locations of industrial development (light or medium intensity industrial) that will occur in the in the General & Business Industrial Area shall be determined at the Outline Plan stage, subject to the following criteria:
  - If light intensity industrial development is included in this area it must occur in a contiguous, non-fragmented fashion. Spot rezoning in the General and Business Industrial area will not be supported.



- d) In accordance with policy a) above, the Outline Plan will delineate appropriate land use districts or will indicate if a new land use district is desired. Appropriate Land Use Bylaw districts for this area are identified in appendix b.
- e) Medium intensity industrial development that occurs within the General & Business Industrial Area shall generally conform to the General Industrial (I-G) land use district that is provided in Land Use Bylaw 5700, with the following exception:
  - "Manufacturing, Intensive uses", which are a discretionary use under the General Industrial land use district (I-G) are not allowed in the WLEC, as these types of uses create major off-site impacts that are not desirable in the WLEC due to its location in the western sector of the city. The Heavy Industrial (I-H) land use district that is provided in Land Use Bylaw 5700 or any other future land use district that is similar in purpose or uses shall not be used within the WLEC.
- f) Activities that occur in the General & Business Industrial Area shall not have an adverse impact on adjacent neighbourhoods through noise, odours, outdoor lighting or emissions.
- g) Uses found in the General & Business Industrial Area shall not occur adjacent to existing residential land uses and shall be separated from these land uses by other, less intensive uses, such as business industrial – as also discussed in policy 4.2.2 (c - or commercial development.
- h) Medium intensity industrial land uses shall be located near Highway #3 and near major roadways that provide access to Highway #3.
- i) Medium intensity industrial land uses shall be placed within proximity to the existing railway, in the event that railway spur lines are constructed in the future (see section 6.8).
- j) Parking or storage areas shall be screened from public roadways using a combination of landscaping or physical structures. Policies around screening in this area shall be further refined at the Outline Plan stage.
- k) Access and facilities for disabled persons shall be provided in accordance with the City of Lethbridge Land Use Bylaw and the Alberta Building Code. The "Barrier-Free Design Guide" published by Government of Alberta Safety Code Council provides further explanation as to the intent of the Alberta Building Code in this regard.
- I) The use of innovative technologies or practices that are energy efficient, reduce wastes or are environmentally responsible in the development of the area shall be considered favourable. Such elements can include, but are not limited to:
  - Green building practices (i.e. LEED)
  - Onsite energy generation
  - Eco-Industrial Parks
  - Industrial Symbiosis
  - On-Site Green Energy Generation



• District Energy Systems

# 4.4 LARGE FORMAT COMMERCIAL

# Located in: Sub-Areas 1, 2 & 3 (see Map #3)

In addition to containing employment generating uses, it is proposed that the WLEC shall be an area of significant commercial retail and service development for the region and especially for West Lethbridge. In the WLEC it is intended for this type of development to mainly be in the form of large-format commercial, which in past years has been in the style of shopping malls or big box power centres. While in the future these particular forms may no longer be popular, there will still likely be a need for large format commercial development which may take the form of lifestyle centres, power-plus centres or a mixed use hybrid (see the "External Survey of Development Trends and Best Practices" in the Technical Documents Appendix for further definitions) amongst other forms that may not have been conceived of yet.

Large format commercial uses rely upon good access and good exposure to major transportation thoroughfares to serve both customers and their own logistical functions. This is why such uses in the WLEC are proposed to be clustered around the University Dr. corridor and Highway #3.

A significant portion of the area in the WLEC that has been classified as Large Format Commercial is directly adjacent to University Dr. and, as a result, is also in what is known as the University Drive Gateway Corridor. The intent of this corridor is to create an attractive gateway into the city through design requirements, while maintaining regional, large format commercial uses. Specific regulations for this corridor are further discussed in section 5 of this document.

Activities that are considered appropriate for an area of retail/service development can include retail stores and shopping centres. Due to its location near the highway, this area is also intended to include hotels and eating and drinking establishments. This area may incorporate offices providing they are maintained as secondary uses (i.e. dental offices or financial services), to the commercial retail or service uses, as is currently seen in many retail developments. Mixed-use or multifamily development can also be included in the Large Format Commercial provided that it is complementary to the other commercial uses.

# 4.4.1 OBJECTIVES

- a) Provide a significant retail/service area that serves the population of West Lethbridge, the city and the broader trade region.
- b) Create a retail/service area that allows for innovative forms of development and allows the integration of other compatible uses, such as office or multi-family residential, as secondary uses.
- c) Ensure that developable parcels can easily utilize various modes of transportation.
- d) In conjunction with City Infrastructure Services, provide an aesthetically pleasing retail/service corridor that functions as a gateway into the city.



# 4.4.2 POUCIES

- a) Subject to the policies of this plan, the predominant use of land within the Large Format Commercial Area shall be retail and service commercial land uses. Office and public land uses are allowed within this area, as accessory uses, where they are considered compatible and consistent with the retail function of the area.
- b) The general categories of the land uses that were identified under policy a) above shall be refined further through the land use districts that are applied to the Large Format Commercial Area in the future. Final determination of this will be made at the Outline Plan Stage. Appropriate land use districts for this area are identified in appendix b.
- c) When subdividing land, an adequately sized area that can provide contiguous blocks, 10
   15 ha in size, in order to accommodate nodes of significant retail/service development, shall be provided.
- d) Innovative forms of retail/service development, that have not been previously attempted in Lethbridge, shall be favourably considered.
- e) Multi-family residential, mixed use development or offices being combined with retail development, as secondary uses shall be favourably considered. Careful attention must be paid to ensure that the integration of these uses with the retail uses is appropriate.
- f) Access and facilities for disabled persons shall be provided in accordance with the City of Lethbridge Land Use Bylaw and the Alberta Building Code. The "Barrier-Free Design Guide" published by Government of Alberta Safety Code Council provides further explanation as to the intent of the Alberta Building Code in this regard.
- g) Areas that have been identified in section 5 of this document as being part of the University Dr. Gateway Corridor shall be subject to the policies and intentions associated with this corridor and have been laid out in section 5.

# 4.5 COULEE VIEW COMMERCIAL

#### Located in: Sub-Area 3 (see Map #3)

The Coulee View Commercial Area is located in the east along the coulee banks within Sub-area 3 (see Map 7). This particular area offers spectacular views of the river valley and the city including the High Level Bridge. Therefore special consideration of land use, design and site layout are required for this particular area in order to make the best use of this unique environment.

The urban form and character of development in this area should be respective of and complimentary to the visual elements of the area. The ASP focuses on the design of buildings, the street and viewpoints as the most important elements to ensure high quality development of the area. Future Outline Plans must demonstrate how these elements are delivered throughout the development area according to the provisions of this plan.



# Land Use

This area is intended to accommodate such uses as mixed use or medium density residential, boutique retail shops, professional offices, restaurants and other related uses, which will make the area a destination during both the day and evening. The existing buildings in the area are able to be accommodated for their current residential uses or can be converted to commercial uses that are similar to the other uses in the area in the future.

# Buildings

Building facades are particularly important for creating pedestrian friendly spaces in both the public and private lands. Therefore, special attention must be given to the exterior design of buildings. Overhangs, canopies and front yard landscaping are strongly encouraged to create an attractive urban space while avoiding tall, monolithic facades. Direct street access from buildings must be provided. Areas such as parking, storage of waste and recycling must be screened from the street.

# Site Development

The quality of site development is strongly connected to the overall image of the area. To be consistent with adjacent properties and the character of urban form, future development must pay special consideration to items such as signage, landscaping and lighting.

#### Street

The expectation of this ASP is the creation of a pedestrian friendly environment. The primary focus in the Coulee View Commercial Area will be on pedestrians and cyclists as opposed to vehicles. A high quality streetscape will be designed primarily for these users and meet all the requirements in any related regulations. This can include delineation between spaces for different modes of transportation, maintaining a low speed limit and through the provision of street trees and street furniture. Connectivity to the regional trail system is also required.

# Public Open Space & Viewpoints

The provision of high quality public open space is crucial. The ASP identifies appropriate locations for public open space such as plazas or focal points as well as suitable amenities that make public open space more attractive. A creative approach should be employed to ensure innovative open space development along with high quality paving materials and patterns, landscaping and safety features to emphasize the pedestrian friendly environment.

Public open space can also be utilized to protect the views of the river valley from the encroachment of development; therefore public viewpoints must be created where appropriate and reinforced by adequate public open space with amenities such as benches and public art. Along the corridor, four viewpoints have been conceptually identified.

It is also important to also consider providing appropriate public access to the river valley and the protection of the natural environment along the banks of the river valley. This can be discussed in greater detail at the Outline Plan stage.



# Public Art

Public art is an important element of creating an attractive public open space. The ASP aims to provide an opportunity in the Coulee View Commercial Area for displaying public art that creates a strong sense of place and public awareness in both the public and private lands. Further public art opportunities must be discussed at the Outline Plan stage and dealt with in consultation with the City.

# Public Transit

Sufficient provision should be made so the area can be serviced by an adequate public transit system to ensure accessibility from other areas of the city and to promote a pedestrian friendly environment.

# Proposed Land Use Overlay

A number of land use districts can be used within the Coulee View Commercial Area to provide the land uses that are generally intended for this area (see appendix b). However, these land use districts would not provide the design and functional elements that are specifically required in this area of the WLEC.

In order to provide these elements it is recommended that a new land use overlay be adopted into the Land Use Bylaw. This overlay would maintain the prescribed land uses, but would also make the design and function of the area more prominent, in conjunction with the policies outlined in this ASP and any subsequent Outline Plans.

# 4.5.1 OBJECTIVES

- a) Create an area along the edge of the river valley for the development of mixed-use, commercial and medium density residential uses.
- b) Accommodate the buildings and uses that are currently in existence in the area.
- c) Provide an opportunity for all visitors and residents to access and experience the natural landscape and future employment, retail and entertainment uses (cafes, pubs, restaurants etc.) along the river valley.
- d) Ensure this area is designed and developed in a manner that is pedestrian friendly and is unique to Lethbridge.
- e) Protect the integrity of the river valley and its provided views.
- f) Ensure that the design elements and functionality for development that occurs in the Coulee View Commercial area are carried out as is intended in this ASP.

# 4.5.2 POUCIES

a) This area shall contain uses that are mainly commercial in nature and are welcoming to pedestrians and are intimate in scale. Examples of uses that are considered appropriate for this area include offices, boutique retail and restaurants, amongst other similar type



uses, with buildings that are a total of 2,500 to 15,000 square feet in size. Appropriate land use districts for this area are identified in appendix b.

- b) In addition to commercial uses this area may also contain mixed use or medium density residential as secondary uses. Such uses are intended to be in close proximity to the commercial uses in the area and in buildings that are two to three storeys in height. Appropriate land use districts for this area are identified in appendix b.
- c) Existing homes that are located in the area that has been designated as "Coulee View Commercial' are permitted to continue in perpetuity, until such time as the owner wishes to redevelop the property. At such time the property shall be redeveloped for the uses that are outlined in policies 4.5.2 (a) and (b) of this document. Redevelopment of the property will require a Land Use Bylaw amendment and development approval and may also require subdivision approval from the City of Lethbridge, depending upon the nature of the development.
- d) A roadway running parallel along the safe development setback line through a portion of the Coulee View Commercial area shall be included in the Outline Plan and provided at the time of subdivision. A pathway shall be incorporated on the east side of this road, between the roadway and the river valley and shall be connected to the city's pathway system and the river valley below.
- e) The sharing of access to service, loading and parking facilities between buildings shall occur wherever it is possible to do so.
- f) Any structures that are an accessory to the primary building on a site shall conform to the architectural form, articulation and materials of the primary building.
- g) The location and design of buildings shall be designed to carefully consider to ensure views of the river valley for building occupants and the general public.
- h) Parking, service and loading areas shall be located at the rear or side of primary buildings.
- i) Buildings shall be oriented toward the nearest street.
- j) New buildings shall be built at the property line along the street and in compliance with any land use districts or land use overlays that are applied to the area.
- k) Sufficient landscaping or fencing shall be provided to effectively screen service, storage, loading and parking areas of buildings that are visible from any adjacent roadways.
- I) In order to reduce the visual impact of future development above the river valley the maximum height of development shall be staggered away from the coulee banks.

To accomplish this effect buildings that are directly adjacent to the safe development setback line (regardless of any roadway or public space), and thus form the first row of development nearest the coulee bank shall have a maximum height of two storeys.



Buildings that are not adjacent to the safe development setback line and are thus west of the first row of development shall have a maximum height of three storeys.

These maximum height restrictions shall be in compliance with any land use districts or land use overlays that are applied to the area.

- m) Public Space areas that present views of the river valley shall be provided at appropriate intervals in the Coulee View Commercial Area. The specific locations of such viewpoints shall be provided at the Outline Plan stage.
- n) Public open space including focal points/plazas, parks, walkways shall be provided and shall employ a complementary design approach with the surrounding buildings
- o) Buildings shall incorporate attractive and distinct features along the street front such as windows or patios. Large, blank monolithic massing of buildings shall be avoided.
- p) Building façade design and materials and on-site landscaping shall be consistent with adjacent development.
- q) Architectural features of buildings (material, color, etc) shall carefully be determined. Preferred exterior materials are textured concrete, wood, stone, brick, or glass.
- r) Large free-standing signage is considered to be generally inappropriate in this area. It is preferred for signage is to be integrated with the building(s) façade and/or landscaping.
- s) Access and facilities for disabled persons shall be provided in accordance with the City of Lethbridge Land Use Bylaw and the Alberta Building Code. The "Barrier-Free Design Guide" published by Government of Alberta Safety Code Council provides further explanation as to the intent of the Alberta Building Code in this regard.
- t) Lighting of façades shall highlight the building and the street. Building lighting shall be subdued and not exceed ambient street lighting.
- u) A sufficient amount of street trees and street furniture shall be provided where appropriate. Street trees, lights, and street furniture are important elements that help foster a sense of place.
- v) Public art on public and private property shall be looked upon as being favourable as this adds to the vitality of area and fosters a sense of place. Further details and policies around public art shall be investigated at the Outline Plan stage.
- w) The Transit Department shall be consulted at the Outline Plan stage in order to provide capacity to maintain an adequate level of service in the future and sufficient provision is made for routes and stops in the Coulee View Commercial Area.
- x) Additional, more specific design policies shall be considered at the Outline Plan stage, when more is known about the specific character of the area.



- y) A land use overlay district that regulates the design and function of development in the Coulee View Commercial Area shall be created with the intention of being adopted into the Land Use Bylaw This overlay district shall address issues such as, sign regulations, building and site design and landscaping amongst other issues, in conjunction with the intentions of section 4.5 of this ASP.
- z) This land use overlay district shall be developed by City staff and included into the Land Use Bylaw after this ASP has been adopted and prior to the completion of the first Outline Plan that is completed for the area that has been identified as Coulee View Commercial. This overlay district will also provide regulations for the Transition Commercial Area (see section 4.6) as this area and the Coulee View Commercial Area are similar in nature. However this land use overlay will differentiate policies between the two areas where necessary to do so.







A conceptual crossection showing the interface of development and public space along the banks of the river valley in the Coulee View Commercial Area



A conceptual street view perspective of the side streets in the Coulee View Commercial Area





A conceptual illustration of what the Coulee View Commercial Area could potentially look like, as envisioned by the WLEC ASP. This is subject to further refinement in subsequent planning stages. Potential viewpoints are also shown



# 4.6 TRANSITION COMMERCIAL

### Located in: Sub-Area 3 (see Map #3)

The Transition Commercial Area is intended to provide a functional and aesthetically pleasing transition from the large-scale retail land uses adjacent to University Dr. to the smaller-scale commercial and residential land uses that are adjacent to the coulee banks. This area will therefore borrow elements from both the Large Format Commercial Area and the Coulee View Commercial Area which are described in sections 4.4 and 4.5 of this document, respectively.

Land uses in the Transition Commercial Area should be similar to those that are found in the Coulee View Commercial Area, consisting of personal service, retail, restaurants, cafes and especially offices. Large format buildings should be avoided, as should residential development.

Taller maximum building heights, than what is allowed in the Coulee View Commercial area should be permitted within the Transition Commercial Area, in order to encourage the establishment of office buildings in this area.

While design elements such as signage, building facades and building materials while be considered in the Transition Commercial Area, this will not be to same degree that is found in the Coulee View Commercial Area. Rather, this will be more similar to what is found in the Large Format Commercial Area.

The Transition Commercial Area will still consider pedestrians, cyclist and public transit to a high degree, however it will consider these methods of transportation equal to the automobile. When compared to the Coulee View Commercial Area, this is an increase in reliance upon the automobile, but is similar to what is found in the Large Format Commercial Area.

The Transition Commercial Area, for the most part, does not connect to the river valley and will not contain the viewpoints that will be in the Coulee View Commercial area, however it is possible that some of the public open space that is found in the Coulee View Commercial Area can be shared with the Transition Commercial Area as well.

In order to achieve the aims of the Transition Commercial Area a land use overlay district should be used. As the Transition Commercial Area and the Coulee View Commercial Area are similar in location and goals both areas can utilize the same overlay district, as long as the overlay district differentiates between uses and requirements for both areas.

# 4.6.1 OBJECTIVES

- a) Create an area that provides an effective transition between the Large Format Commercial area and the Coulee View Commercial area.
- b) Encourage the development of offices in this area, amongst other commercial land uses.
- c) Ensure that developable parcels can easily utilize various modes of transportation.



d) Ensure that the design elements and functionality for development that occurs in the Transition Commercial area are carried out as is intended in this ASP.

# 4.6.2 POUCIES

- a) The Transition Commercial Area shall be composed of commercial land uses. Examples of uses that are considered appropriate for this area includes offices, personal service, retail and restaurants, amongst other similar type uses. Appropriate land use districts for this area are identified in appendix b.
- b) The sharing of access to service, loading and parking facilities between buildings shall occur wherever it is possible to do so.
- c) The majority of off-street parking stalls shall be provided at the rear or side buildings, with a minority of parking stalls that can be provided at the front of buildings, facing the street.
- d) Sufficient landscaping or fencing shall be provided to effectively screen service, storage, loading and parking areas of buildings that are visible from any adjacent roadways.
- e) Buildings within the Transition Commercial Area, shall still consider the physical appearance of buildings, however they do not need to consider the views of the river valley.
- f) Large, blank monolithic massing of buildings shall be avoided.
- g) Free-standing signage is considered to be generally appropriate in the Transition Commercial Area, as long as such signage is consistent with the development that it is associated with. Such signage must also be in compliance with any land use districts or land use overlays that are applied to the area.
- h) Access and facilities for disabled persons shall be provided in accordance with the City of Lethbridge Land Use Bylaw and the Alberta Building Code. The "Barrier-Free Design Guide" published by Government of Alberta Safety Code Council provides further explanation as to the intent of the Alberta Building Code in this regard.
- i) Buildings shall have a maximum building height of six storeys, in order to encourage the establishment of office buildings. This must be in compliance with any land use districts or land use overlays that are applied to the area.
- j) Additional, more specific design policies shall be considered at the Outline Plan stage, when more is known about the specific character of the area.
- k) Sidewalks and bicycle lanes that link the river valley and coulee banks to the University Dr. corridor shall be provided through the Transition Commercial Area.
- I) The design and function of development in the Transition Commercial Area shall be regulated through the same land use overlay district that is created for the Coulee View Commercial Area (see policy 4.5.2 y) ).This overlay district will differentiate uses and


requirements between the two areas where necessary to do so. In regards to the Transition Commercial Area this overlay district shall address issues such as, sign regulations, site design and building height, in conjunction with the intentions of section 4.6 of this ASP.

m) This land use overlay district shall be developed by City staff and included into the Land Use Bylaw after this ASP has been adopted and prior to the completion of the first Outline Plan that is completed for the area that has been identified as Transition Commercial.

### 4.7 UTIUTY/INFRASTRUCTURE USES

The major utility/infrastructure uses, such as the 240 kV electrical transmission line that currently exists in the WLEC or are known to be developed in the future are generally suitable for establishment in an industrial or commercial area.

### Electrical Transmission

The City of Lethbridge Electric Department will require a new substation within the WLEC. The power lines that connect it to the electricity grid will be routed along major roadways (shown in this ASP as arterial or collector roadways) as closely as possible in order to use the land efficiently and provide access for maintenance. These power lines will require their own dedicated right-of-way running parallel to the adjacent road right-of-way to achieve effective separation between these power lines and adjacent properties.

The existing 240 kV electrical transmission line that runs through the northern portion of the plan area will continue to remain on a permanent basis. As a result, many uses are restricted from development in this line's right-of-way. However, this right-of-way could potentially contain other uses, such as pathways or other forms of utility infrastructure, so long as such uses would not negatively interfere with the right-of-way's primary electrical transmission functions and in agreement with the transmission line's operator.

### Energy Generation

Energy generation, that produces either electrical or thermal energy, is an activity that has the potential of being located within the WLEC, subject to certain conditions. Nearby access to an electrical generation facility can provide greater energy redundancy, as this can reduce reliance upon the provincial electricity grid in the event of a major power outage. Such redundancy is especially important to the industrial and commercial uses that will comprise the WLEC, although it must be noted that the supply of electricity to the city in the event of a power outage is at the discretion of the provincial electrical system operator. Thermal energy generation in the form of a district energy system where heat is generated in a central location and is distributed to other buildings in the area could also be beneficial to these types of uses, as this can reduce the need for on-site heating equipment (boilers, etc.) for each building.

Ideally, as identified under section 3.2 of this ASP and in the Survey of Best Practices and Emerging Trends, district energy systems that produce both thermal and electrical energy in a centralized location



(also called co-generation), represents the most efficient form of energy generation due their ability to conserve energy by making make use of residual energy that would otherwise be wasted. This is dependent upon the feasibility of operating such a system within the WLEC and within the context of the economics of provincial energy generation.

While the potential benefits of energy generation facilities being located within the WLEC are great and the opportunity for this to occur should exist, the establishment of such a system must abide by appropriate regulations to ensure it is also complimentary within the context of the WLEC and its commercial and light/medium industrial land uses:

- In order to ensure that there are no significant off-site impacts generated, an energy generation facility should produce emissions, odours and noise that are no greater than what occurs with a natural gas-fired plant. In other words, coal or oil-fired plants would not be acceptable, but gas-fired, geothermal or some other future clean-burning energy source may be acceptable.
- In order to "promote sustainable design that is energy efficient and reduces waste" in the WLEC, as stated in the Planning Principles of this ASP (section 1.3), it is encouraged for an energy generation facility to be a district energy or co-generation plant that produces both electricity and heat for the consumption of other buildings, where it is feasible to do so.
- An energy generation facility that is located east of the railway, in Sub-areas 2 and 3, will have a higher standard of landscaping and appearance than one would have to the west of the railway in Sub-area 1. Sub-area 1 is largely industrial in nature and therefore is not as prominent as Sub-areas 2 and 3, which are part of a commercial gateway into the city and therefore require appropriate aesthetics that are similar to the surrounding land uses.
- A site, where an energy generation facility is the primary use, would be required to be zoned as a Direct Control (DC) land use district in order to control initial and future development on the site and to ensure that such a facility does not have an appearance and scale that is more akin to heavy industrial.
- Energy generation facilities must meet the requirements of the appropriate federal and provincial regulatory authorities.

### **Telecommunication**

The local telecommunications company has also identified a possible need for at least one remote switching centre within the plan area in the future, although the location of this site has not been officially determined as of yet. Screening and landscaping will be employed to assist with the compatibility of these facilities with adjacent land uses.

### Irrigation / Water / Wastewater

At least a portion of the existing irrigation infrastructure will also likely remain. The main canal in WLEC will continue to serve facilities in other areas of West Lethbridge. While agricultural producers using irrigation water in the plan will begin to decrease once the area is developed, it is encouraged for future





industrial users to tap into the irrigation facilities to provide suitable water for their industrial processes, if at all possible. Currently the irrigation canal is in the form of an open ditch. However, as the area is developed this canal will need to be placed within an underground pipe, as is currently the situation south of Walsh Dr.

A pipeline that supplies the Town of Coalhurst to the northwest with potable water currently passes through the WLEC, running from southeast to northwest (see Map #6). This pipeline is contained inside of the road right-of-ways for Westside Dr., 2 Ave. and 30 St. and its location is permanent. This pipeline will be integrated into the future water distribution system as the area is developed and will be upgraded accordingly.

A pipeline carrying wastewater from the Town of Coalhurst in the northwest to the City of Lethbridge's Wastewater Treatment Plant will be completed in the WLEC in the near future. This pipeline will be within the existing road right-of-ways for 30<sup>th</sup> St., Walsh Dr and Westside Dr. (see Map #6 for the approximate alignment), but will require its own dedicated right-of-way when the portion of 30<sup>th</sup> St. that lies to the north of Walsh Dr. is closed (see Map #10). This pipeline will be constructed as a forcemain and will only serve Coalhurst. However, as the land surrounding the pipeline is developed, segments of this pipeline will be abandoned resulting in Coalhurst wastewater being discharged into the WLEC gravity system.

### 4.7.1 OBJECTIVES

- a) Provide appropriate sites for utility/infrastructure uses that serve the community.
- b) Under appropriate regulation, provide the opportunity for energy generation to occur within the WLEC.
- c) Allow the potential for utility/infrastructure facilities to incorporate additional secondary uses where appropriate. Such secondary uses must not interfere with the facility's primary utility functions.
- d) Allow for existing irrigation facilities to continue current operations and potentially serve new development that will occur.

### 4.7.2 POUCIES

- a) Conflicts between utility uses and adjacent land uses shall be minimized as much as possible.
- b) Facilities for an electrical substation and telecommunications remote switching centre(s) and their associated infrastructure shall be allowed within the WLEC. Additional facilities that have not been identified at this stage may also be required.
- c) Transmission lines that connect electrical substations or energy generation facilities to the electrical grid and their associated right-of-ways shall be routed along arterial or collector roadways (as identified in this ASP) wherever feasible. This will make efficient use of the



land, provide maintenance access and achieve effective separation between these lines and any other land uses.

- d) Utility facilities may proceed prior to the adoption of an Outline Plan for the area, as they will (at least in part) serve future development in the area. Above-ground power lines and their associated dedicated right-of-ways shall follow major roadways as closely as possible.
- e) Utility/Infrastructure uses shall be appropriately landscaped and screened as required by the Land Use Bylaw and in accordance with surrounding land uses. For example, different standards will apply in a commercial area versus an industrial area.
- f) Emissions, odours and noise produced by any energy generation facilities must not exceed those that are produced by gas-fired generation. Coal or oil-fired energy generation is not permitted.
- g) It shall be encouraged for an energy generation facility that is developed in the WLEC to produce both electricity and district heating, where feasible to do so.
- h) Any energy generation facility located in the WLEC must be aesthetically similar to the surrounding development and must incorporate landscaping into its design. For example, an energy generation facility that is located in Sub-areas 2 and 3, which is largely commercial in nature and serves an important role as a gateway to the city would have a higher standard of landscaping and appearance and may exclude more fuel sources than one located in Sub-area 1, which is largely business and general industrial.
- i) A site where an energy generation facility is the primary use shall be zoned as a Direct Control (DC) district in order to closely regulate development that occurs on the site. This Direct Control district shall regulate matters such as: the permitted land uses, maximum generation capacity, exterior design, maximum building/exhaust stack height and setbacks amongst any other requirements of City Council.
- j) Any energy generation facility shall be developed in accordance with provincial and federal regulations and their associated regulatory bodies.
- k) The secondary use of the existing 240 kV transmission line right-of-way as a location for a regional pathway shall be pursued by the City, provided that such a use does not interfere with the primary functions of the line. Establishment of this pathway in the right-of-way will require the permission of the utility company who controls the right-of-way. Consultation with the utility company in regards to this issue shall occur at the Outline Plan stage or prior to development of the pathway.
- I) The existing irrigation canal shall be piped underground at the developer's expense prior to urban development, in consultation with the controlling irrigation district.
- m) Development shall attempt to utilize nearby irrigation water in processes that do not require the use of potable water, if possible and subject to agreement with the irrigation district.



- n) The Town of Coalhurst potable water pipeline shall be incorporated into the water distribution system that serves the uses in the WLEC as this area is developed and serviced.
- The WLEC wastewater collection system shall be designed with capacity to accommodate Town of Coalhurst wastewater volumes near the location where the forcemain enters the City limits.

### 4.8 OPEN SPACE SYSTEM

The open space system is depicted on Map 8. This is composed of newly developed open space for municipal reserve and stormwater management facilities. Approximately 29.5 ha will be required for stormwater management facilities and the ASP identifies about 24.5 ha of municipal reserve space in the WLEC. The exact amount of municipal reserve that is dedicated will be in accordance with legislative requirements and confirmed at the Outline Plan stage.

Newly developed open space will be for the purposes of buffering non compatible land uses from one another and providing landscaping around storm water management facilities. It is also intended for this open space to be provided for the recreation and enjoyment of residents and/or workers in the area; more so than with what has traditionally been provided in Lethbridge's commercial and industrial areas in the past. These areas do contain some open space, however this open space is often devoted to specific uses (i.e. Rugby, Soccer Leagues) and not for use by the general, local population.

### Municipal Reserve

Much of the open space in the WLEC will be provided through municipal reserve and the future Outline Plans in the area will determine the municipal reserve space that is to be dedicated for each Outline Plan area. In making this determination future Outline Plans must balance the need for functional open space to be provided for the recreation and enjoyment of residents and/or workers in the area, with the fact the WLEC will not contain schools or neighbourhoods that are primarily residential in nature and will not require as much open space as is found in residential areas of the city. This determination is also contingent upon factors such as the types of land uses contained in the associated Outline Plan area (i.e. an area containing residential units will require more open space than one containing no residential and mainly industrial uses), if there are any development constraints that require buffering and proximity to other features than can enhance the open space, such as proximity to pathways and the coulee banks.

### Linear Open Space

A strip of linear open space is intended to buffer the residential neighbourhoods located south of Walsh Dr. from the industrial uses north of Walsh Dr. It will be a minimum of 30 metres in width and extend approximately 2 km from the intersection of Walsh Dr. and Westside Dr. to the western city boundary.



## Centre West Lethbridge Employment Area Structure Plan

### MAP 8 Open Space

& Pathways



The strip of linear open space will be located adjacent to the existing and future residential neighbourhoods, which, in addition to creating a buffer can contain a pathway and some landscaping. Its positioning south of Walsh Dr. will also provide the adjacent business industrial uses with important exposure onto the arterial roadway of Walsh Dr. Map 8 illustrates the general location and alignment of linear open space. Its size and distance and the type of landscaping that will be utilized will be further refined at the Outline Plan stage. Landscaping can utilize a low-impact design if done in an aesthetically pleasing way, similar to what is cited in the Landscape Design Guidelines in Land Use Bylaw #5700.



Existing linear open space in North Lethbridge buffering industrial uses and providing walking pathways with landscaping

### Stormwater Management Facilities

Stormwater management facilities will primarily serve a utility function. However they also provide an aesthetic and recreational value as well. The level of landscaping that accompanies these facilities is dependent upon the setting that they are located in (i.e. a dry pond in an industrial area is going to be landscaped differently than a wet pond in a high traffic, commercial area). The stormwater management facilities will be composed of both of wet ponds and dry ponds.

### 4.8.1 OBJECTIVES

- a) Provide enough functional open space to meet the needs of future residents and / or employees in the WLEC.
- b) Grant an appropriately landscaped linear open space that provides a buffer from industrial uses and effectively separate non-compatible uses from one another.
- c) Provide aesthetically pleasing storm water management facilities that have recreational value.

### 4.8.2 POUCIES

- a) Sufficient public open space shall be provided to meet the needs of both the residents and employees of the WLEC.
- b) The amount of Municipal Reserve that is to be dedicated for each Outline Plan area shall be determined at the Outline Plan stage. The amount that is dedicated is dependent upon factors such as, the type of land use, development constraints and the proximity to other features that enhance the open space in the Outline Plan area.



- c) A linear open space that utilizes appropriate landscaping and runs parallel to Walsh Dr. shall be provided south of Walsh Dr. This linear open space is to a minimum of 30 metres in width and shall run approximately from Westside Dr. to the current western boundary of the city (or Chinook Tr.).
- d) In addition to its primary function of providing a buffer, the linear open space shall also contain a pathway.
- e) Provide adequate land area to accommodate any storm water infrastructure. The amount of required land area is described in section 7.1 of this document.
- f) Xeriscaping or the use of naturally occurring plant species shall be considered in the landscaping around wet ponds.
- g) Stormwater management facilities shall be designed and landscaped to match adjacent land uses
- h) Stormwater management facilities shall be designed to accommodate recreational activities wherever possible.
- i) Wet stormwater management facilities shall be supplemented with irrigation water, wherever made possible by the irrigation district, to enhance the recreation potential of such facilities. This is subject to the City and the irrigation district entering into a water conveyance agreement and the City having access to the irrigation system.

### 4.9 PUBLIC USES

The WLEC contains public land uses that are currently in existence and those that will be developed in the future years. The existing Archmount Cemetery will not provide a service to the surrounding commercial and industrial land uses and is largely incompatible with these uses. However, other future public uses that are developed in or near the plan area will provide a service to these uses in addition to other areas of the city.

### Archmount Cemetery

Archmount Cemetery is located adjacent to Westside Dr. and was first developed in the 1950's by a private entity. This cemetery is comprised of 13.3 ha of land with about 7.3 ha of this area that has been or will be developed for cemetery functions. This leaves approximately 6 ha remaining of cemetery land that is unused. The Cemetery Master Plan that was completed for the City in January 2011 recommended that this unused portion of the cemetery should be divested from the cemetery and sold or returned to the city reserve.



Archmount Cemetery



City of Lethbridge Cemetery Services has confirmed that the unused portion of Archmount Cemetery will not be required and will be devoted to other purposes, as recommended in the Cemetery Master Plan. This cemetery will continue to exist into the future, but will eventually be closed off to new burials once the developed area of this cemetery has been consumed.

### **Emergency Services**

Emergency medical services and fire protection shall be maintained from the Indian Battle Heights Fire Station at the intersection of Whoop-Up Dr. and Jerry Potts Blvd. for at least the initial stages of the WLEC's development.

During the preparation of the ASP, the Lethbridge Police Service was contacted and they indicated that police service would be based out of the existing downtown headquarters. At this time they identified no need for a police substation in the West Lethbridge Employment Centre.

### 4.9.1 OBJECTIVES

- a) Protect the aesthetic integrity of the existing cemetery.
- b) Allow for an appropriate use for the portion of the cemetery that is not required for internment purposes.
- c) Maintain sufficient protective and emergency services for the West Lethbridge Employment Centre.

### 4.9.2 POUCIES

- a) The existing cemetery shall be buffered from medium intensity industrial land uses by light intensity industrial land uses.
- b) The existing cemetery shall further be buffered from adjacent uses through use of on-site landscaping. Landscaping details shall be determined at the Outline Plan stage.
- c) Land uses that are adjacent to the developed portion of the cemetery shall incorporate landscaping on the property line that is adjacent to the cemetery in order to properly screen adjacent land uses from the cemetery. Landscaping details shall be determined at the Outline Plan stage.
- d) It is preferred that the portion of the cemetery that is not developed for internment purposes be retained for uses that serve public interests, such as utility or city-owned facilities.
- e) Any use that is developed in the future on the portion of the cemetery that is currently undeveloped shall respect the aesthetic integrity of the portion of the cemetery that is utilized for internment purposes and shall incorporate the design requirements under policy c) above.



f) Fire and EMS services will initially be provided from the existing Indian Battle Heights fire station.





### 5.0 UNIVERSITY DRIVE GATEWAY CORRIDOR

As identified on Map 9, the area that has been defined as the University Drive Gateway Corridor extends for nearly two kilometers along University Dr. from the intersection of Walsh Dr. to just south of the railway. Lands that have been identified as being part of this corridor are located, for the most part, on both sides of University Dr. These lands extend behind University Dr. to the first collector roadway that occurs behind it; a distance of approximately 300 – 400 metres.

The area that has been designated for the University Dr. Gateway Corridor overlaps much of the area that has been designated in the land use concept (section 4) for large format commercial development. This is intentional, as the gateway corridor is intended to contain these same types of major commercial uses that serve the city and broader region. What sets the gateway corridor apart from other, more traditional, areas of large format commercial development is that this corridor will pay particular interest to the design of the area, in terms of the aesthetic form of development and its functionality.

The University Drive Gateway Corridor consists of both private and public lands and both must be attractive, work together and be mutually beneficial for this area to ultimately be successful. The intended design of the public lands will be achieved through the policies of this ASP, the design of any upgrades to this portion of University Dr. and any subsequent planning documents. The intended design of the private lands will be achieved through the policies of this ASP and any subsequent planning documents, as well as through any new potential land use overlay districts in the Land Use Bylaw.

### 5.I VISION OF THE GATEWAY CORRIDOR

University Dr. is a major gateway into the City of Lethbridge and this role will only increase in the future as West Lethbridge continues to grow and the WLEC undergoes development. Above all, this corridor must accomplish the following:

- Function from a transportation perspective and provide an adequate level of service for multiple modes of transportation.
- Create a commercial gateway area into West Lethbridge that is both appealing and maintains a sense of place through its design.

This conforms to the planning principles from section 1 of this document which states that the WLEC should "Create a dynamic area that is attractive and showcases Lethbridge" and should "Provide for the safe and efficient movement of goods, service, and people throughout the West Lethbridge Employment Centre."

In order to accomplish these goals, this section of the ASP identifies this arterial roadway and the adjacent land as an area that requires special attention and will be subject to particular development requirements.

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### An Arterial Roadway with a Difference...

University Dr. is intended to continue to be developed as an urban arterial roadway, as it will be required to carry a high volume of traffic and a high rate of speed (i.e. above 50 km/h). At the same time there will still be a need for large format commercial development in Lethbridge, which, for the last half-century or so, has a taken on a form that is relatively low density. The University Drive Gateway Corridor is attractive for large format commercial development, as it is adjacent to a high-traffic roadway and also enjoys direct access to the highway that provides a connection to the broader regional market. Because of these factors, for most of its length this corridor cannot take on a denser, more compact form that a roadway, carrying a smaller volume of traffic could.

Despite the Gateway Corridor being an arterial roadway in a primarily suburban setting, it will still incorporate elements that make it unique and attractive in the context of Lethbridge and will represent a departure from the way in which auto-oriented corridors have previously been developed. This corridor will be conducive towards multi-modal transportation and development that is oriented towards the roadway and appealing to the human scale, while still allowing for a commercial format that serves the broader city and region.



### A conceptual rendering of the intended form of development for the majority of the University Drive Gateway Corridor

These elements have been successfully implemented in cities such as Calgary and in other locations that also experience difficult winters. Many of these elements even have local precedent in various locations in Lethbridge. The implementation of these elements that are proposed for University Drive Gateway Corridor does not have to be arduous or prohibitively expensive and is entirely within the realm of possibility.



### Centre Lethbridge West Lethbridge Employment Area Structure Plan

MAP 9 University Dr.

Gateway Corridor





Source: Crocker Park "www.crockerpark.com"

Real-world examples of the concept presented on the previous page showing the interface between the arterial roadway and large format commercial development. Above: A retail lifestyle centre with landscaping and a pathway on the boulevard and orientation of buildings towards the roadway. Below: A 'big box' store in Surrey, B.C. that has a main entrance, architectural features and landscaping oriented towards the adjacent pathway and roadway.



Source: City of Surrey





There is also the ability for a higher density form of development to occur in select nodes centered around two major intersections along University Dr (see Map 9). In these nodes the roadway and the area adjacent to the roadway will contain mixed-use or multi-family residential development in addition to commercial development and will be well connected to the public transit system. These nodes and their associated policies are discussed further in section 5.4 of this document. This concept of a commercial corridor consisting of nodes of walkable, higher density, mixed-use development connected by stretches of auto-oriented strip commercial development can be thought of as a "string-of-pearls"<sup>1</sup>.

### 5.2 PUBUC LANDS

The public lands within the gateway corridor consist of the area found within the public road right-of-way and includes the road structure, pathways/sidewalks, open areas and utilities. This area is intended for use by the general public and will be maintained by the City of Lethbridge. The following is a description of the aims for the public lands in the Gateway Corridor:

### Landscaping

Boulevards and medians can incorporate landscaping features such as shrubs, grass and trees and can also incorporate man-made, decorative features such as stamped or coloured concrete or specialty paving stones. Landscaping the boulevards and medians of major roadways in an attractive manner has been done in various areas within Lethbridge and should be a focal point for this gateway corridor, as well.

Landscaping can also take the form of xeriscaping, which uses drought resistant plants and typically requires less maintenance than more traditional manicured and irrigated areas.



New landscaping in the University Dr. median. Landscaping such as this is attractive, yet does not require extensive maintenance

### Pathways

Pathways can be incorporated into the boulevard on both sides of the roadway. This provides effective multi-modal transportation in a pleasant park-like setting for users that wish to access areas on both sides on University Dr. Incorporating pathways into the boulevards of arterial roadways has been successful in other locations in Lethbridge and will be an integral part of the University Drive Gateway Corridor as well.



Existing pathway in a landscaped boulevard parallel to Mayor Magrath Dr.

<sup>&</sup>lt;sup>1</sup> Dixon, David. "Practice Corridor Planning", Zoning Practice, February 2011. American Planning Association, Chicago.



Pathways in the Gateway Corridor can be included within the road right-of-way and should cross streets where safe to do so at major intersections. The pathway system along University Dr. must extend south of the railway tracks to Walsh Dr. in order to effectively provide a connection to the city-wide pedestrian network.

### Roadways

A reduced road right–of-way for University Dr. would consume less land and encourage commercial and pedestrian activities to be oriented towards the street, while still recognizing that University Dr. will ultimately carry a high volume of traffic and must be constructed accordingly. A reduced right-of-way is possible in this corridor as the adjacent land use will be primarily commercial in nature, and the extra width in the right-of-way to accommodate sound attenuation is not required, as this portion of University Dr. does not pass through a residential neighbourhood.

Intersection and driveway spacing along this portion of University Dr. shall follow the current guidelines for arterial road design, unless approval is otherwise granted by Infrastructure Services, as this provides a safe and efficient level of service to the vehicles that will travel this route.

### Techniques to Deliver Infrastructure

While sometimes overlooked, alternative techniques to deliver infrastructure can also contribute towards the attractiveness of the gateway corridor. Infrastructure for stormwater management along arterial roadways in Lethbridge has taken the form of both open drainage ditches and underground piping. Open drainage ditches can offer a riparian environment that requires minimal maintenance, but consume land in the right-of-way that can be used more efficiently for pedestrian movement and landscaping. The effectiveness of open drainage ditches in areas such as this is also compromised when driveways or roadways to access adjacent areas are constructed over top of the drainage ditch, as this limits their capacity to hold a certain volume of stormwater.

Stormwater management through underground piping is more complex than with open drainage ditches. However, this method uses land in the right-of-way more efficiently, allowing more space for other features and its capacity is not compromised by construction that occurs over top of it. In order to avoid the problems associated with open drainage ditches and offer a more comprehensive and efficient gateway corridor, the stormwater management infrastructure that serves this portion of University Dr. and other areas of the WLEC, shall be piped underground.

Stylized street light standards can also be used in the gateway corridor to contribute towards the character of the area. Most light standards used in the city (and most other cities for that matter) are relatively generic. However, different forms of distinguishable street light standards can be used to help create an atmosphere in a certain area and have been used previously in Lethbridge.

### **Public Transit**

Integration and ease of access between pedestrian walkways and public transit on University Dr. is important, as this encourages the use of public transit and pedestrian mobility, by providing an efficient transfer of pedestrians or bicyclists to public transit and vice-versa. This also encourages a critical mass of people to form in this area, which promotes the construction of buildings, as opposed to expansive



AREA STRUCTURE PLAN



parking areas near the arterial roadway. In turn this should make transit service to the area more viable than has been experienced in other, more traditional commercial corridors.

In order to further integrate public transit with pathways or sidewalks it is desirable to locate bus stops along University Dr.

### 5.2.1 OBJECTIVES

- a) Ensure that the public lands are developed in a manner that that is both notable and attractive and sustains an area that mainly consists of large format commercial development.
- b) Ensure that the development of the public lands of the University Drive Gateway Corridor enhances the adjacent private lands and that both complement one another.
- c) Create an area that effectively and safely accommodates multiple modes of transportation.

### 5.2.2 POUCIES

- a) The boulevards and medians in the gateway corridor shall be attractively landscaped with trees, grasses and shrubs. Such landscaping can be in the form of more traditional, manicured landscaping, through xeriscaping or with a combination of the two forms.
- b) The boulevards and medians in the gateway corridor shall incorporate man-made decorative features such as stamped or coloured concrete, specialty paving stones or unique bollards amongst other features. Crosswalks and pathways in the gateway corridor shall also incorporate such features.
- c) Street light standards in the University Dr. Gateway Corridor shall be stylized and shall be unique to the area.
- d) Stormwater management along University Dr., and other areas of the WLEC, shall use underground piping as opposed to open drainage ditches. This will provide a more effective drainage system.
- Pathways shall be installed on both sides of University Dr. in order to provide for effective non-vehicular modes of transportation, such as bicycles, pedestrians and wheelchairs. These pathways shall be located within the landscaped boulevard providing a "park-like" atmosphere.
- f) The pathways that are installed parallel to University Dr. must continuously extend southward across the railway tracks to Walsh Dr. in order to maintain a direct pathway connection between the University Dr. Commercial Corridor and the city-wide pedestrian network.



- g) The road right-of-way width for the portion of University Dr. that is within the gateway corridor shall be reduced from the current arterial standard of 75 metres to 50 55 metres. Due to the primarily commercial uses in this area, land within this right-of-way is not required for sound-attenuation purposes thus making this reduction possible.
- h) Intersection and driveway spacing along the portion of University Dr. that is in the gateway corridor shall adhere to the current City of Lethbridge standards for arterial roadway design, unless approval is otherwise given by City of Lethbridge Infrastructure Services.
- i) When bus service is provided to the University Drive Gateway Corridor, bus stops shall be located along University Dr., with direct pedestrian connection to the pathway system. Spacing of these stops shall adhere to City of Lethbridge transportation standards, but shall be closer wherever feasible to do so. Bus stops on University Dr. shall utilize bus pull-outs in their design to improve the flow of traffic on University Dr.
- j) New technologies that are inventive or environmentally friendly (i.e. LED lights etc.) shall be implemented in the design and construction of the gateway corridor's public lands wherever feasible.
- k) Specific design standards for the public lands in the University Drive Gateway Corridor shall be further refined at the Outline Plan stage and through the proposed design study as described in section 5.5 of this document.

### 5.3 PRIVATE LANDS

In order to attain the goals for the private lands in the University Drive Gateway Corridor, it is proposed that regulations must be developed through a new land use overlay, in addition to the regulations that are defined in this ASP. As previously stated it is intended for development that occurs on the private lands in this corridor to be regional commercial in nature, consisting mainly of retail development. These types of uses are common in other commercial areas in the city, however what is unique about the private development that will occur in this corridor is that greater attention will be paid towards its design and functionality.

### Site Layout

While recognizing that the type of commercial development that will be located in the WLEC lends itself toward automobile use, it is intended for parking areas in this corridor to be situated so that they are hidden from the arterial roadway and do not pose an obstacle to people who are using other forms of transportation to access commercial services. By concentrating parking areas in the middle of the site or to the side or rear of a building, buildings can be orientated to the arterial roadway as they are allowed to locate closer to University Dr. on the perimeter of the site, further increasing the attractiveness of this corridor from the roadway. This also means that building entrances shall also be orientated towards the arterial roadway as well.

In a functional sense this also makes the commercial sites more accessible for people who wish to use other modes of transportation near University Dr. (i.e. biking, walking, public transit etc.) as there is less of a hard surface (i.e. parking lot) to cross.





An example of site layout in a commercial context that is to be avoided in the Gateway Corridor. Parking is located internally and the boulevard contains appropriate landscaping and a pathway, however these features have a muted effect as the building is not oriented towards the adjacent roadway. The side of the building facing the roadway is absent of any building entrances and has few architectural features, leaving a blank wall and hampering the function of multi-modal transportation to the site.

### Maximum Surface Parking Requirements

Large format commercial development is often associated with large tracts of surface parking that present an unattractive expanse of concrete. This type of parking also discourages the forms of transportation other than the automobile, as it helps to create large distances between attractions that people want to visit in an area.

Despite the fact that these parking areas serve large businesses with many customers, they are almost always underutilized even during peak shopping seasons (i.e. Christmas season). Simply put, such large surface parking areas help to create unremarkable commercial nodes and are an inefficient use of land. This is what the University Drive Gateway Corridor seeks to avoid.

The existing Land Use Bylaw includes a minimum parking requirement that regulates the minimum number of parking stalls that must be provided in a development, which is often greatly exceeded in large format commercial sites. However, the Land Use Bylaw does not does not employ a maximum parking requirement that would limit the number of excess parking stalls that are provided on such sites. While a relatively new concept in Lethbridge, maximum parking requirements have been successfully implemented elsewhere in North America.

It is therefore intended for a maximum surface parking requirement to be introduced for development that occurs in the University Drive Gateway Corridor. This maximum parking requirement shall be based upon evidence that this is an appropriate figure for this type of development, as care must be



ensured that such a requirement would not be too over-zealous and discourage development from occurring. Such a parking requirement would only be applied to buildings that are greater than a certain size threshold, as larger commercial buildings tend to be the most liberal when it comes to the provision of parking stalls and make the greatest contribution to the over-supply of parking.

Structured parking is encouraged as an acceptable alternative to surface parking and will not be regulated in the same way that surface parking is, as it makes more efficient use of land. However it is recognized that due to the shear cost of structured parking, in many situations it is simply not feasible in the Lethbridge market. Therefore care must be taken to ensure that a balance must be struck between maintaining the aesthetics of the Gateway Corridor and the parking needs of the uses that will populate the area.

### Site Access and Circulation

It is preferable that driveway access from public roadways to the adjacent properties be shared amongst multiple properties in order to avoid unnecessary duplication and ensure that traffic flow on public roadways functions as efficiently as possible.

In order to maintain non-vehicular modes of transportation as being effective, direct pedestrian connections from the pathway/sidewalk along University Dr. to the adjacent commercial sites must also be provided. Within the site these linkages must continue to circulate throughout the site, with as little impedance as possible. As many of these sites are quite large this is important to ensure that pedestrians have an unobstructed path from the public pathway or transit stop in the road right-of-way to the doorway of any particular building.



Sidewalk to nowhere... An example, from a retail development, of a public sidewalk that is not continued onto private lands. This does not promote pedestrian connectivity







Source: City of Surrey

Above: Internal sidewalk providing a direct pedestrian connection within a large-format retail site. Landscaping and man-made features are used to improve the quality of this feature

Below: Distinctive monuments, landscaping and bollards utilized within a commercial powercentre in Calgary





### Site Landscaping and Features

Internally these sites can also incorporate attractive landscaping in order to break up the expanse of concrete and features such as benches, monuments or other structures that may otherwise be found in public plazas or parks can also be included. In addition to being visually enticing, such lifestyle elements are also functional for the users and pedestrians who visit the site and can help encourage people to stay and enjoy other amenities of the site beyond shopping.

Outdoor patios or display areas that are an accessory to primary uses (i.e. cafes or restaurants) can also be used to bring people together, avoid monotony and can be beneficial towards attracting customers.

Off-street bicycle parking can be easily incorporated on almost any site and is especially crucial considering the multi-modal aspect of the WLEC. Provision in this corridor has been made to encourage cyclists to ride within the gateway corridor, through the provision of public pathways and direct site access but once they arrive at their destination they must have a secure place to park their bike. It is important for bike parking to be located near the main entrance of buildings and if there are multiple businesses or buildings on a site, for it to be scattered at these locations, instead of being concentrated in one area. Bicycle parking can be provided through a number of methods such as bike racks, bike lockers or even indoor bike parking.

### **Building Design**

In order to promote the University Dr. Gateway Corridor as a dynamic and attractive place it is important for the structures that are located within the gateway corridor to incorporate distinct and attentive architectural elements into their design. Many large-format commercial businesses tend to use a building design that is simple and has been used many times elsewhere. Designs of this type are to be avoided in this gateway corridor. Examples of large-format retailers utilizing distinct architectural elements do exist and are becoming an increasingly common trend.



Example of a large format chain store utilizing architectural elements beyond what is its typical design. This has little impact upon the functioning of the store, as it incorporates the same footprint that it has been utilized many times elsewhere Source: Maple Grove Shops "http://www.maplegroveshops.com/costco-maplegrove.php"

Blank walls on building facades that are visible from major roadways are also to be avoided in this area. Instead building walls facing the roadway shall incorporate entrances, windows and other attractive architectural features into their design. In addition to visual appeal such features must be made functional wherever possible.

Loading and service areas of buildings are often difficult to be made attractive. In this instance it is desirable for these areas to be located at the back or side of buildings where they are least visible and should be screened by landscaping or other features when they are visible from a major roadway.







Stand-alone large format anchor store that incorporates attention-grabbing architectural features

### Signage and Billboards

Billboards and signs can potentially make an area less attractive if they are not applied well. Billboards are currently restricted from locating in certain areas in Lethbridge and should be restricted from the gateway corridor as well, so as not to distract from the view of the area. Sign regulations that currently exist for similar commercial areas in Lethbridge are sufficient to attain the desired aesthetic level in the gateway corridor, provided that such signs mirror the architectural features of the associated property.

### 5.3.1 OBJECTIVES

- a) Ensure that private development in the University Drive Gateway Corridor has visual appeal and provides functional amenities.
- b) Ensure that the private lands within the University Drive Gateway Corridor enhance the public lands and that both public and private lands complement one another.
- c) Ensure that development within the gateway corridor is equally supportive of multiple modes of transportation.



### 5.3.2 POLICIES

- a) Parking areas shall be situated on-site so that they are hidden as much as possible from the arterial roadway. In order to accomplish this parking areas shall be concentrated on the middle of a site or to the side or rear of buildings.
- b) Buildings shall be located on the perimeter of the site, wherever possible and shall be orientated towards the street. Building entrances and windows that face towards the nearest street shall be provided wherever possible.
- c) Buildings in the gateway corridor must incorporate distinct and attractive architectural elements into their design and are to avoid blank walls wherever possible. Building designs that are commonplace and simple are to be avoided. This is particularly important in regards to building elevations that front onto a major roadway.
- Loading and service areas shall be situated at the back or side of buildings where they are least visible from major roadways.



A uniquely designed large format retail store utilizing architectural features such as archways and windows in its facade Source: Foothill Retail Corridor "http://www.foothillretail corridor.com/"

- e) Sites that are developed in the area shall have a significant amount of on-site landscaping. Such landscaping must be designed to complement the buildings that are located on site. Further landscaping details and policies shall be identified at the Outline Plan stage.
- f) Sufficient landscaping or fencing shall be provided to effectively screen on-site service, loading and parking areas that are visible from University Dr.
- g) A maximum surface parking requirement shall be implemented for development that occurs within the University Drive Gateway Corridor. This specific requirement shall be determined prior to the Outline Plan stage with the provision of the proposed new land use overlay and shall be based on the following criteria:
  - It will apply only to large buildings that serve a retail purpose. Applicable size thresholds and uses will be stated in the future land use overlay.
  - The maximum parking requirements will only apply to surface parking and not to structured parking, as structured parking is encouraged.
  - The specific maximum parking requirement shall be determined based upon an investigation of the parking supply



and demand of existing similar land uses. Methods such as, traffic counts and examination of approved development permits can be utilized in this investigation.

- It is recognized that a balance must be maintained between reaching the goals of the Gateway Corridor, by limiting the amount of unnecessary parking, and providing for the realistic parking needs of uses in the area.
- h) A minimum bicycle parking requirement shall be implemented for development that occurs within the University Drive Gateway Corridor. This specific requirement shall be determined prior to the Outline Plan stage with the provision of the proposed new land use overlay. This requirement shall identify the minimum number of stalls that are required in addition to other requirements such as the location of parking stalls on a site or the parking structure that should be used (bike rack etc.). The specific bicycle parking requirement shall be determined based upon an investigation of the bicycle parking requirements for similar land uses in similar cities, such as Edmonton and Grande Prairie.
- i) Driveway access shall be shared amongst multiple properties, wherever possible.
- j) Direct pedestrian access from the pathway/sidewalk and bus stops along University Dr. to the site that is separated from vehicle access must be provided. This is in addition to any pedestrian access that is provided alongside vehicle access.
- k) Sites in the gateway corridor must also maintain pedestrian access internally, to provide effective pedestrian circulation within the site. Pedestrians should be able to navigate from the public pathway to any particular building as conveniently and with as little impedance as possible.
- I) Development in the gateway corridor shall incorporate on-site lifestyle features such as landscaping, monuments, benches or plazas amongst other such features. Outdoor display or patio areas that are accessory to the primary uses on-site shall also be developed where feasible.
- m) Billboards shall not be permitted within the University Drive Gateway Corridor.
- n) Signs for businesses within the gateway corridor shall be permitted, in accordance with existing City bylaws, provided that such signs mirror the architectural features of the property they are associated with.
- New technologies that are inventive or environmentally friendly (i.e. LED lights etc.) shall be implemented in the design and construction of the gateway corridor's private lands wherever feasible.
- p) Specific regulations that govern the private lands in University Drive Gateway Corridor shall be further refined at the Outline Plan stage and through a proposed new overlay district for gateway commercial corridors as described in section 5.6 of this document.



### 5.4 URBAN DEVELOPMENT NODES

As stated above, the opportunity exists inside the gateway corridor for two nodes at major intersections along University Dr. to take on a more urban texture that incorporates denser mixed-use or residential development. These are considered the pearls on the "string-of-pearls" model that was discussed in section 5.1.

To truly be successful, such nodes must be well connected to the pedestrian system and the public transit system that serves the corridor. When transit service is provided along this portion of University Dr., transit stops must occur at or near these nodes and ideally should incorporate bus shelters.

In order to give these nodes more of an urban texture, it is proposed that the road right-of-way for University Dr. within these nodes shall be narrowed from the width that occurs in the more suburban sections of the gateway corridor. This will encourage buildings to locate closer to the roadway and promote more of an active street front due to closer proximity to pedestrians.

Due to the decreased road right-of-way width, this will also mean that the pedestrian environment in these nodes will also become less park-like or landscaped and move towards an area that incorporates more made-made features and hard surfaces, such as planters or benches. While on the other, more suburban areas of the gateway corridor pedestrians and bicyclists are placed on the same pathway, it is proposed that, within the urban development nodes, that sidewalks be used exclusively for pedestrians instead. Bicyclists will be accommodated through bicycle lanes on the road surface. Such lanes can be separated from vehicular traffic using curbs or bollards amongst other techniques to create cycle tracks, if desired.



An example of a cycle track at a roadway intersection. Cycle tracks physically separate bicycles from vehicular traffic, increasing the comfort level of bicyclists Source: National Assoc. of City Transportation Officials "http://nacto.org/cities-forcycling/design-guide/cycle-tracks/"

As these nodes contain intersections, greater integration of vehicular and pedestrian traffic is considered safe, as vehicular traffic will be slowing down as it approaches the intersection. A narrower road right-of-way also encourages traffic calming in itself.

Development that occurs on the private lands at these nodes must attain a certain minimum density in order to sustain the urban context that is contributed by the public lands. These nodes shall contain some form of residential development that can take advantage of the proximity to nearby retail space, services and employment.

In order to promote an effective streetscape and work with the adjacent sidewalks, buildings in these urban development nodes must be orientated towards the roadway and must utilize appealing design elements and avoid blank walls. Such elements are to be included throughout the entire corridor, but are especially critical at the urban development nodes. As it is important for the Urban Development Nodes to offer a sense of density when compared to other suburban areas, buildings at the Urban Development Nodes must also be constructed to a minimum of two storeys and a maximum of four



storeys. To remain feasible in the marketplace, yet still achieve this sense of density the additional storeys constructed above the first storey can consist of either useable floor space or a false façade.



A conceptual rendering of the development form at the identified urban development nodes along University Dr.

### 5.4.1 OBJECTIVES

a) Provide the opportunity within the University Drive Gateway Corridor for two nodes of higher density, pedestrian-oriented mixed use or residential development with nearby access to employment and services.

### 5.4.2 POUCIES

- a) Urban development nodes shall be located at two major intersections on University Dr. within the West Lethbridge Employment Centre, as shown on Map 9.
- b) The road right-of-way width in these two nodes shall be further decreased from the roadright-of-way in the rest of University Dr. Confirmation of the specific right-of-way width shall come in the future Public Lands Design Requirements (see section 5.5).
- c) Boulevards in the urban development nodes shall incorporate more hard surfaces and man-made features and less landscaping than the other less dense areas of University Dr. that were described in section 5.2.
- d) In place of multi-modal pathways, as seen in the rest of the gateway corridor, pedestrians shall be accommodated with sidewalks and cyclists shall be accommodated through bike lanes in the urban development nodes.



- e) When transit service is provided along this portion of University Dr., transit stops shall be located at or as near as possible to each urban development node.
- f) Transit stops located at or nearest to the urban development nodes, shall be considered the highest priority stops within the gateway corridor. As such, transit stops located at these nodes shall include bus shelters.
- g) Development within these nodes shall include residential or mixed-use development.
- h) Buildings that are found at these urban development nodes shall be a minimum of two storeys and a maximum of four storeys in height. To achieve the height, additional storeys constructed above the first storey can consist of either useable floor space or a false façade.
- i) Buildings that are found at these urban development nodes shall face the intersection or major street they are located on.
- j) Buildings that are found at these urban development nodes shall be located on the perimeter of the site. Parking shall be located in the rear of these buildings.
- birect pedestrian access from the sidewalk to the adjacent buildings must be accommodated.
- I) Buildings in the urban development nodes must incorporate eye-catching architectural elements into their design. The use of blank walls along major roadways is not permitted.
- m) Specific regulations for development at the urban development node shall be further refined at the Outline Plan stage.

### 5.5 DETAILED PUBLIC LANDS DESIGN REQUIREMENTS

On a conceptual level, this ASP identifies the University Drive Gateway Corridor as a unique entrance area to the city. In regards to the public lands, requirements for the aesthetic design and functionality of the University Dr. public right-of-way will determine how this will be achieved in specific terms. It is intended that these requirements will ensure that the gateway corridor does not become a commercial strip that is largely composed of monolithic buildings and asphalt and has an imbalance of transportation alternatives in favour of the automobile. Rather, pedestrians and cyclists will find the area appealing and will feel welcome and safe in the presence of automobile traffic.

Previous commercial areas have been largely designed to accommodate a high volume of traffic and encouraged people to remain in their vehicles, either to move within the area or leave immediately after their shopping is complete. While the gateway corridor does need to accommodate a high volume of traffic, the design requirements for the public lands will encourage patrons to use their automobile as little as possible and will entice them to stay within the area once they have arrived by creating a hospitable environment. This environment will interface with the private property to encourage uses in addition to shopping that are for multiple lifestyle needs.



These requirements will address the following elements:

- Median / Boulevard Landscaping
- Signs and Way-Finding Elements
- Street Lighting
- Street Furniture and Fixtures
- Pathway / Sidewalk / Crosswalk Design
- Transit Stops
- Connections to the Private Lands

The following criteria must also be considered for these elements:

- All-Season Use of the Public Lands
- Appropriateness Considering the Local Climate
- Crime Prevention Through Environmental Design
- Aesthetic Design Principles
- Minimal Impacts Upon the Natural Environment
- Cost

Consideration for the aesthetic design and functionality of the public right-of-way will occur in the future when upgrades to University Dr. to accommodate greater traffic volume are required. This will allow the technical roadway design of the area to also consider the goals that are outlined in this ASP and the relationship between the public lands and the adjacent uses. This will also ensure that the latest technologies can be utilized and that the actual cost implications are better understood at the time imminent to construction.

### 5.5.1 OBJECTIVES

a) Provide guidance for the appearance of the public lands in University Dr. corridor at full development.

### 5.5.2 POUCIES

a) Requirements for the specific aesthetic design and functionality of the public lands within the University Dr. corridor at full development, as stated in this ASP, shall be further determined, by the City, in conjunction with future roadway upgrades to University Dr. This will examine elements such as, median / boulevard landscaping, signs and wayfinding elements, street lighting, street furniture and fixtures, pathway / sidewalk / crosswalk design, transit stops and connections to private lands.

Factors such as the all-season use of the public lands, appropriateness considering the local climate, crime prevention through environmental design, aesthetic design principles, minimal impact upon the natural environment and cost must also be considered in regards to these elements.



### 5.6 PROPOSED LAND USE OVERLAY

The existing Highway Commercial (C-H) land use district in the Land Use Bylaw could be utilized in this corridor to provide the intended large format commercial land use. However, this land use district would likely produce similar results that have been experienced locally in the more traditional commercial corridors. As the University Drive Gateway Corridor has been identified in this ASP as being a unique area, existing districts in the Land Use Bylaw are not detailed enough when it comes to ensuring that the design elements and functions that have been identified as being integral to this corridor will be carried out. As stated above, in order to fulfil the goals of the University Drive Gateway Corridor it is desirable for a new land use overlay to be adopted into the Land Use Bylaw and for this new land use overlay to work in conjunction with the policies that have been laid out in this section of the ASP. This would be designed to allow for large-format commercial uses under the conventional zoning, but would require a greater emphasis placed on the design and function of the area.

It is intended for the new proposed land use overlay to also have the ability to be used in other locations in the city that are developed in the future and that serve a similar commercial gateway function.

### 5.6.1 OBJECTIVES

- a) Ensure that the design elements and functionality for development that occurs in the University Drive Gateway Corridor are carried out as is intended in this ASP.
- b) Allow this land use overlay to be used in other similar commercial gateways into the city in the future.

### 5.6.2 POUCIES

- a) Create a land use overlay district to be adopted into the Land Use Bylaw that permits large format commercial land uses, but regulates the design and function of such development in conjunction with the intentions of section 5 of this ASP.
- b) This land use overlay district shall be developed by City staff and included into the Land Use Bylaw after this ASP has been adopted and prior to the completion of the first Outline Plan that is completed for areas that include the University Drive Gateway Corridor.
- c) This land use overlay district shall be used for development that occurs within the University Drive Gateway Corridor, but it is also intended to potentially be used in other future commercial corridors in the city as well.





### 6.0 TRANSPORTATION SYSTEM

### 6.1 PLANNING PRINCIPLES AND OBJECTIVES

The overall transportation system for the West Lethbridge Employment Centre shall consist of a system of roadways, a pathway network that is practical and convenient for non-vehicular users and a well-designed public transit system. Proximity to the rail line that passes through Lethbridge also makes rail a possibility to provide freight transportation for uses in the WLEC.

The transportation system for West Lethbridge Employment Centre, as illustrated on Maps 8 and 10 intends to meet the following planning principles as identified in section 1.3 of this ASP:

- Provide for the safe and efficient movement of people, goods and services throughout the West Lethbridge Employment Centre.
- In addition to the automobile, consider pedestrians, cyclists and transit services as important transportation modes.
- Reduce the environmental impact and overall travel demand caused by the automobile.

### 6.2 TRANSPORTATION IMPACT ASSESSMENT

As part of the overall planning process for the proposed West Lethbridge Employment Centre ASP, a Transportation Impact Assessment (TIA) was completed to assess the adequacy of the future collector and arterial roadway network in accommodating traffic flows. The scope of this transportation impact assessment was limited to consideration of the internal road network, the intersections that internal roads have with the external road network, the pathway network and the transit network. In addition, this TIA also analyzed the impact that future development in the WLEC would have upon three highway interchanges in the area (With Highway #3 at Westside Dr., University Dr. and Bridge Dr.) and proposed necessary modifications / improvements. This TIA also has proposed requirements for the pathway network and public transit system. The findings of this TIA were used as technical information to help develop the transportation policies of this ASP.

The analysis was based on an iterative process utilizing road network, population and land use assumptions developed by the WLEC ASP's project management committee. The fundamental conclusions of the TIA are as follows:

### **Overall Conclusions**

• Future Road Network and Alignment: The TIA reviewed the road network and road alignments that were proposed by the City in the early stages of the development of the WLEC ASP. The TIA also proposed adjustments to the road network, which have been incorporated into the ASP.

Walsh Dr, Bridge Dr. and University Dr. are existing arterial roadways and were confirmed to be located in their current alignment. The alignment of Métis Tr. north of Walsh Dr. was



# Centre West Lethbridge Employment Area Structure Plan

MAP 10 Road & Rail Network



confirmed to extend further north through the plan area. Westside Dr. currently provides direct access to and from Highway #3 through an interchange. The south end of Westside Dr. intersects Walsh Dr. at a point that is almost half the standard arterial roadway intersection spacing from University Dr., which is also an arterial roadway. Traffic capacity and safety issues are expected if Westside Dr. remains as an arterial roadway. In order to minimize these problems, the TIA proposed that this link be severed at the north end of Westside Dr. and that the future Métis Tr. will provide direct access to Highway #3 instead. Métis Tr. will be the central arterial roadway in West Lethbridge. A connection of Métis Tr. with Highway #3 in addition to the existing University Dr connection was considered to be a natural choice from the overall road network connectivity in West Lethbridge.

The remaining roads in the proposed road network will be collector roadways. Local roadways were not considered at the ASP stage, but will be included at subsequent planning stages.

 Road Network Classification and Upgrades: The internal road network will need to be constructed or upgraded based upon the recommended road classifications. At the ultimate build-out University Dr., Walsh Dr. and Métis Tr. will become four lane divided arterial roadways at minimum.

Chinook Tr. will be constructed as an arterial roadway south of Walsh Dr. however the TIA forecasted that there would not be great enough traffic volume for it to continue as an arterial roadway to the north through the plan area. Due to the disconnection of Westside Dr. from Highway #3, Westside Dr. will remain a collector roadway.

Where two arterial roadways intersect, dual left turn bays and free flowing right turn lanes may be required. The internal road network will be constructed as adjacent lands are developed.

 Constraints & Remedies: The intersections of Walsh Dr. / University Dr. and Bridge Dr. / University Dr. have been identified as being potentially problematic at full build-out, even while utilizing an improved at-grade intersection and ways to improve conditions at these two intersections was considered. The TIA offered one solution consisting of constructing an additional above-grade rail crossing in the plan area, to connect Sub-area 1 with Sub-areas 2 & 3 to improve the function of both intersections.

The TIA also suggested alternative intersection designs for further analysis as the Walsh Dr. / University Dr. intersection was anticipated to be congested and additional improvements to this intersection would be constrained by existing adjacent development. Some of these intersection designs worked well from a technical perspective, however they were not likely to perform as well in consideration of the impact on adjacent existing land uses and acceptability to the overall community.

 Highway #3 Interchanges: The two existing highway interchanges will adequately support development in the plan area in their current configuration at the interim, 20 year horizon. However, prior to the WLEC being fully developed, the existing Westside Dr. / Highway #3 interchange will need to be realigned so that access to the interchange is provided from Métis Tr. In addition this interchange will need to be upgraded from the current two direction interchange (i.e. only going to and from Coalhurst) to one that facilitates movement in all


directions. (i.e. going to and from Coalhurst, as well as going to and from Downtown Lethbridge). This will require more land to be acquired to accommodate the additional right-of-way needs of this upgraded interchange.

Upgrades to the Westside Dr. (Métis Tr.) / Highway #3 interchange should also be considered within the regional context and be designed to accommodate traffic from the neighbouring County of Lethbridge and Town of Coalhurst. As these municipalities continue to grow and develop they will require better access and it is thought that improvements to this interchange would be both rational and efficient for the broader region.

 Transit Network: According to the City's current transit standards, all areas should fall within 750 metres of a transit route and routes should be aligned to minimize the average walking distance to a bus stop. Transit stops should be placed within 50 metres of adjacent intersections and should be connected to adjacent development with direct sidewalks or pathways.

Use of transit is especially important in Sub-areas 2 and 3 and the transit route should make use of internal roadways connected by University Dr. in order to provide better transit service through shorter walking distances and to help create transit nodes.

 Pathway Network: The TIA proposed a pathway system that will encourage pedestrian/bicycle recreational and commuter traffic within the study area. This network will also connect with the existing and future pathway system in West Lethbridge.

The pathway network is limited by the following barriers:

- No pedestrian crossings of Highway #3 to areas outside of the City to the north.
- The railway that divides the WLEC represents a significant man-made barrier.
- The Coulee banks to the east represent a significant natural barrier.

### 6.3 ARTERIAL ROADWAYS

The ASP area contains both arterial roadways that already exist and arterial roadways that will be developed in the future. These arterials not only serve the WLEC itself, but also provide essential connections for the entire city.

The proposed arterial roadway network includes the existing arterial roadways of University Dr., Walsh Dr. and Bridge Dr. In addition, Métis Tr. will also be constructed as an arterial roadway. Within the WLEC it is proposed that all of these roadways will ultimately be developed at a divided, four-lane arterial standard at a minimum. University Dr. will also require special attention as it will be a major gateway into the City. Currently this portion of University Dr. is a rural roadway





with limited lighting, no landscaping and ditches on either side of the roadway. As development occurs on either side of University Dr., this roadway and its associated public right-of-way will be expanded and rebuilt to a full urban standard. Details of this are outlined under section 5 of this document.

The standard right-of-way width for an arterial roadway in Lethbridge is currently 75 metres. However, it is recommended that, except in regards to Walsh Dr., this right-of-way width be narrowed within the WLEC wherever possible. For the most part, these arterial roadways will not be passing through residential areas, as a result the space that is typically used in the right-of-way as a noise buffer is not required.

A right-of-way that is full width or nearly full width is required for all of Walsh Dr. within the WLEC. This is for two reasons:

- Any portion of this right-of-way that is not used for roadway or utilities will contribute to the linear open space between Walsh Dr. and the residential neighbourhoods to the south. This will buffer these residential uses from the industrial uses to the north.
- Sufficient space is needed at the Walsh Dr. / University Dr. intersection. This
  intersection is forecasted to manage a large volume of traffic and will require
  enough land to provide the necessary lanes and medians at this intersection.

Access to the arterial roadways will be spaced at safe intervals in accordance with City of Lethbridge guidelines.

### 6.3.1 OBJECTIVES

- a) Ensure adequate land is provided for the development of arterial roadways that will serve the WLEC.
- b) Ensure that access to arterial roadways is both safe and efficient.
- c) Maintain University Dr. as a major gateway to the city.

### 6.3.2 POUCIES

- a) Arterial roadway right-of-ways shall be narrower than the current City of Lethbridge standard of 75 m, wherever extra space within the right-of-way is not required for utility purposes or the buffering of adjacent residential uses. A right-of-way between 45 m to 60 m is likely adequate to accommodate a roadway, pathway, utilities and other such features. Final determination of the right-of-way width shall come at the Outline Plan stage.
- b) Walsh Dr. will require a right-of-way width of 75 metres for most of its distance in order to contribute to the linear open space south of Walsh Dr. that will provide buffering for the adjacent residential uses.



- c) Although linear open space near the Walsh Dr./University Dr. intersection is not needed, a road right-of-way width of 50 to 60 metres shall still be required in this location in order to provide sufficient land for medians and additional turning lanes for the intersection to effectively function.
- d) All-directions access to the arterial roadways will be permitted at intervals of approximately 400 metres, and right-in/right-out access shall be permitted at intervals no closer than 200 metres in accordance with City of Lethbridge design standards. Variations from this standard are subject to the approval of City of Lethbridge Infrastructure Services.
- e) The ultimate development of University Dr. shall be subjected to the University Dr. Gateway Corridor guidelines that are found in section 5 of this document. These guidelines tie together the technical considerations of the arterial roadway with the adjacent land uses.

### 6.4 INTERNAL ROADWAY SYSTEM

The internal road network, which consists of collector and local roadways, will follow a grid or modified grid pattern as closely as possible. A grid or modified grid pattern is conducive towards creating large parcels of land and granting easy access to the highway system that is appropriate for industrial or large-format commercial development. However, there are a number of areas where this may not be possible due to topography or physical boundaries such as the railway right-of-way.

Collector roadways will occur at various intervals in order to provide efficient and effective access to all parts of the plan area. The skeletal collector roadway network is shown on Map 10. Local roadways are not shown on this map as they are not identified until the Outline Plan stage, but will occur at various intervals between collector roadways in order to adequately service adjacent development. The internal roadway system is essential to the movement of automobiles, commercial trucks, and bicycles and is important for providing an effective and efficient public transit system.

In existing industrial areas there is often no pedestrian walkway adjacent to collector or local roadways. This discourages walking, as pedestrians do not have a clear and direct route and have lower perceptions of safety due to the large vehicles that frequently use these roadways. The WLEC intends to encourage walking in its industrial areas by providing safe and direct pedestrian routes by providing a sidewalk or pathway on at least one side of its collector and local roadways.

The portion of Chinook Tr. north of Walsh Dr. and inside the WLEC will be constructed as a collector roadway to 2 Ave W. Unlike the remainder of Chinook Tr., located south of Walsh Dr., traffic volumes on this portion will not be great enough to require classification as an arterial roadway for at least the foreseeable future.

### 6.4.1 OBJECTIVES

a) Develop a cost effective internal road network that promotes the orderly and efficient use of land.



- b) Effectively integrate the internal road network with the arterial roadways that serve the WLEC.
- c) Ensure that the internal road network can accommodate the expected vehicular traffic.
- d) Ensure that entire WLEC is internally well connected and enjoys good access to the highway system, despite the presence of the railway.
- e) Ensure that the road network can effectively accommodate forms of transportation such as pedestrians, cyclists or public transit in addition to vehicles.

### 6.4.2 POUCIES

- a) All roadways and roadway accesses shall be approved by City of Lethbridge Infrastructure Services.
- b) The internal road network shall allow for a number of routes linking destinations or multiple navigation opportunities. This is accomplished through a grid or modified grid internal road network, wherever possible.
- c) Cul-de-sacs or curvilinear internal roads should be avoided, wherever possible.
- d) Further, more in-depth, transportation analysis on the internal road network shall be completed at the Outline Plan stage. This analysis shall use the Traffic Impact Assessment that was completed for the WLEC ASP, as background information and offer further examination of this Traffic Impact Assessment that is more specific to the Outline Plan area.
- e) The alignment of local roadways shall be determined at the Outline Plan stage. The alignment of arterial and collector roads, as identified in this ASP, shall also be confirmed at this stage.
- f) The regional internal pathway system shall be integrated with the internal roadway system as much as possible. This includes the location of these pathways within or adjacent to the roadway right-of-way.
- g) Collector and local roadways shall have a sidewalk or pathway on a least one side of the roadway at minimum in industrial areas.

### 6.5 ADDITIONAL RAILWAY CROSSING

The railway right-of-way is an imposing boundary for the connectivity between lands located on either side of it. Access between the west and east sides of the railway is currently facilitated at only one point through an above-grade railway crossing on University Dr. This crossing will facilitate an increasing amount of traffic into the future. It has been identified that as the WLEC is developed an additional above-grade railway crossing would:



- Alleviate Pressure at the University Dr. / Walsh Dr. Intersection The TIA has identified that at the ultimate build-out the intersection of University Dr. / Walsh Dr. will operate at a sub-optimal level of service if no improvements to the intersection are made, beyond what is standard in Lethbridge. An additional railway crossing further north would facilitate much of the traffic that would otherwise be accommodated through the existing University Dr. crossing, managing traffic at the University Dr. / Walsh Dr. intersection to a level that is acceptable and similar to other major intersections throughout the city.
- Promote Greater Connectivity An additional crossing would also ensure that the area to west of the railway (Sub-area 1) remains well connected to the areas to the east (Sub-areas 2 & 3) and the external highway system. Maintaining this highway access is important for the feasibility of future industrial uses that will locate in this area.

The new railway crossing will be connected to the road network at one of two locations: at Bridge Dr., near the existing University Dr. crossing (shown as "1" on Map 10) or at the nearest collector roadway to the north (shown as "2" on Map 10). Both locations have their advantages, as a crossing that is connected directly to Bridge Dr. would produce a convenient link to an arterial roadway carrying a large volume of traffic, whereas a crossing that is located further north would be more central to the plan area and further from the existing University Dr. crossing. Further, more detailed evaluation of each crossing option is required to determine the preferred option.

It is thought that an additional railway crossing would not be required in the immediate future; however both potential options for the location of this additional crossing are located in an area of the WLEC which will undergo urban development in the near future, prior to construction of the railway crossing. Therefore, a sufficient amount of land for the construction of the future additional railway crossing must be provided at the beginning of development in the WLEC.

### 6.5.1 OBJECTIVES

- a) Improve the functioning of the University Dr. / Walsh Dr. intersection by providing an additional railway crossing in the WLEC.
- b) Promote connectivity between lands located on both the west and east sides of the railway right-of-way

### 6.5.2 POUCIES

- a) An above-grade railway crossing will be constructed at one of the two potential locations as shown on Map 10; either as an extension of Bridge Dr. or at the collector roadway to the north.
- b) A final decision on the location and alignment of railway crossing shall be made in conjunction with City of Lethbridge Infrastructure Services at the Outline Plan stage for Outline Plan area 1.



c) The required right-of-way for the additional railway crossing shall be provided prior to the beginning of development in Outline Plan area 1.

### 6.6 PATHWAY NETWORK

The pathway system within the WLEC includes both regional (which allows for connections to the broader community) and internal pathways (which are primarily used to connect the internal areas of the WLEC). Pathways are to be included as part of the primary transportation network, alongside cars, trucks, public transit and other forms of transportation. It is intended for the pathway network to be used for both recreational and commuting purposes for pedestrians, cyclists and other non-vehicular forms of transportation (skateboards, motorized wheelchairs etc.). The pathway network will exist inside of select road-right-of-ways alongside vehicular traffic and also outside of such right-of-ways, depending upon locational circumstances. The pathway network concept is shown on Map 8.

### 6.6.1 OBJECTIVES

- a) Establish a pathway network that is functional for both recreational and commuting purposes.
- b) Ensure the pathway network is both safe and efficient for users.

### 6.6.2 POUCIES

 Pathways that are developed shall be intended for use by non-vehicular modes of transportation, such as pedestrians, bicycles, skateboards and motorized wheelchairs.



- b) A regional pathway shall be located along the top of coulee banks that run along the eastern perimeter of the WLEC. Due to its location it is understood that much of this pathway may not be located within a road right-of-way, and may occur within other forms of public land, such as municipal or environmental reserve.
- c) The construction of a pathway within the right-of-way for the 240 kV transmission line shall be pursued by the City, provided that this would not interfere with the utility function of the right-of-way. However this is dependent upon approval from the utility company that controls the transmission line's right-of-way. This shall be further investigated and consultation with the utility company shall occur at the Outline Plan stage or prior to development of the pathway.
- d) Pathways shall be located parallel to the roadways of University Dr., Walsh Dr. and Chinook Tr., Métis Tr. and Westside Dr. These pathways shall be located within the buffer area of the right-of-way of these roadways so as to take advantage of the available space and landscaping.



- e) The pathways that are installed parallel to University Dr. must continuously extend southward across the railway tracks to Walsh Dr. in order to maintain a direct pathway connection between the University Dr. Gateway Corridor and the city-wide pedestrian network.
- f) The pathway network that is identified in this ASP shall be connected to city-wide pathway network wherever possible.
- g) The WLEC ASP is supportive of a connection, located north of Bridge Dr., between the pathway network in the WLEC and any future pathways that may be developed in the river valley, should the opportunity arise.
- h) University Dr. shall be developed with pathways on both sides of the right-of-way and shall be developed in accordance with the guidelines that have been developed for the University Dr. Gateway Corridor (see section 5).
- i) Internal pathways shall provide adequate connections between uses that are within the WLEC or to provide connections to the external pathways.
- j) Pathway crossings at roadways shall be located at intersections.
- k) Pathways shall be incorporated with stormwater management facilities and alongside/within roadway and utility right-of-ways as much as possible and wherever feasible.

### 6.7 TRANSIT

Public transit service to the WLEC will be consistent with Transit Department's service standards.

University Dr. in the WLEC is intended to have a multi-modal focus and also offers the opportunity to develop urban development nodes of mixed use or multi-family development along its length. Transit use is well suited to these nodes, as they are intended to be in close proximity to commercial services, mixed use development and employment, which can create a critical mass that increases the level of service for transit. These nodes are further discussed in section 5 of this ASP and are shown on Map 9.

### 6.7.1 OBJECTIVES

- a) Provide an adequate level of public transit service.
- b) Encourage greater public transit use in industrial and commercial areas.
- c) Further integrate public transit utilization with land use.



### 6.7.2 POUCIES

- a) Appropriate transit routes for the employment centre should be determined by the Transit Department in accordance with service standards. It is preferable for this to occur at the Outline Plan stage.
- b) The standard walking distance to a transit stop shall be in accordance with the service standards of the Transit Department.
- c) Spacing of transit stops shall be in accordance with the service standards of the Transit Department.
- d) Transit stops shall be located after intersections when possible. For example this would mean that on a south-bound traffic lane, the bus stop would be located on the south-side of the intersection, as opposed to the north-side.
- e) Transit stops shall be connected to adjacent development through pathways or sidewalks, wherever possible.
- f) It shall be considered preferable for areas with high concentrations of employment to be serviced with conveniently located transit stops.

### 6.8 RAIL

A major railway transects the plan area from south-east to north-west. While in some respects this represents a constraint, this feature also provides an opportunity for potential industrial uses to access freight shipping on the railway through the development of rail facilities, such as spur lines, transloading facilities or small-scale logistics centres. The development of these types of rail facilities would be very similar to the existing rail facilities that exist in the industrial area on the east side of Lethbridge.

While during the past few decades shipping via the highway system has taken over a large portion of the railway's share of the logistics market, it is thought that there could be resurgence in freight shipping via the railway in the long-term future. Ultimately the type of uses that are developed and whether or not this these uses would utilize the railway will determine whether additional rail facilities are constructed. However, it is important to consider this opportunity well in advance of any development, as rail facilities require a significant supply of contiguous land and are very difficult and costly to supply after adjacent development has already occurred.



University Dr. crossing over the railway within the plan area



As such the provision of rail facilities to the industrial areas that are adjacent to the west side of the existing railway right-of-way should be considered at the Outline Plan stage, when more is known about their potential market.

### 6.8.1 OBJECTIVES

- a) Encourage and provide opportunities for rail facilities to serve the industrial portion of the WLEC.
- b) Provide appropriate areas where rail facilities can be developed.

### 6.8.2 POUCIES

a) A decision on the provision of a rail spur right-of-way(s) shall be made at the Outline Plan stage for the Outline Plan areas that are adjacent to the railway on the west. As stated in section 8.1 this constitutes Outline Plan areas 2, 4 and 6. In general, the industrial uses in the WLEC could benefit from access to adjacent rail facilities. However, the success of a rail spur will ultimately be determined by the specific needs of the potential customers who have access to it.

A decision to provide a rail spur right-of-way(s) would require setting aside the necessary land for the rail facilities, but does not necessarily mean that the rail facilities would be constructed.

- b) The alignment for a right-of-way for the purpose of containing a rail spur within the employment centre shall be defined at the Outline Plan stage, if it is determined that this is required, as stated in policy 6.8.2 a).
- c) The extension of rail facilities into the employment centre shall be subject to City of Lethbridge approvals.



### 7.0 UTILITY SERVICING

This section of the ASP provides objectives and policies in regards to the provision of utility services in the WLEC. It also summarizes the findings of the Utility Servicing Plan, from which the polices that govern the supply of stormwater, sanitary sewer and water distribution services to development in the WLEC are based upon. The Utility Servicing Plan, along with its full technical details can be found in the Technical Documents Appendix.

### 7.I STORMWATER MANAGEMENT SYSTEM

### 7.I.I SERVICING CONCEPT

The stormwater servicing concept is a standard urban stormwater collection system consisting of catchbasins, storm sewers and stormwater management facilities. The minor system will consist of catchbasins and storm sewers; roadside drainage ditches will not be used to convey minor system flows.

### 7.1.2 CATCHMENT AREAS AND CHARACTERISTICS

Map 11 shows the boundary of the WLEC and the stormwater catchments within. The stormwater catchment areas were derived from the City's 2009 digital elevation model and includes the WLEC and the adjacent Highway #3 as the highway contributes to stormwater runoff. Catchments and their areas are shown in Table 2 - Catchments.

### Table 2 – Catchments

Catchment	Area ha
WN	92
W	20
WS	270
EN	71
ES	140
Total	593

Non-developable areas will still contribute to storm runoff and are considered in this discussion of the proposed stormwater system.

The percentage of the imperviousness of catchment areas is an important characteristic in the design of stormwater systems. The overall percentage of imperviousness was determined from the projected land uses. The percentage of the imperviousness for each land use and the



resulting overall weighted average are shown in the Utility Servicing Plan.

### 7.1.3 PREDEVELOPMENT AND POST DEVELOPMENT RUNOFF RATES

One of the requirements of the proposed stormwater system will be to reduce post development runoff to the predevelopment rate. Post development runoff is affected by characteristics such as contributing area, slope and the ratio of pervious to impervious area. Given the characteristics of an area, the intensity and duration of a hypothetical design rainfall event is used to determine post development runoff rates and volumes. It is common practice to size the minor (underground) portion of a stormwater system to convey the runoff from a 1 in 5 year rainfall design event. It is also common to design overland flow routes and detention ponds to accommodate the runoff from a 1 in 100 year design event.

Further technical information and post-development runoff rates can be found in the Utility Servicing Plan.

### 7.I.4 DESIGN CRITERIA

The number of stormwater management facilities that are required are governed primarily by practical considerations; contributing areas are limited to 50 ha or less because the larger the contributing area, the larger the size of the pipes that are required to convey the 1 in 5 year flow. The size and number of stormwater management facilities (SWMF) proposed for each catchment area are shown in Table 3.

Catchment	Area	Volume	Unit Volume	Total SWMF Surface Area	No. of SWMF
	ha	ha-m	m³/ha	ha	
WN	92	6.6	717	3.8	2
W	20	1.4	700	0.9	1
WS	270	19.3	715	10.5	5
EN	71	5.1	718	3.0	2
ES	140	10.0	714	5.6	3
Total	593	42.3	713	23.8	13

### Table 3: Stormwater Management Facilities

The actual area required for the facilities will be greater than this theoretical area that is shown in table 3. For the purposes of this ASP, it has been assumed that the total area that will actually be required for SWMF will be approximately 6% of the gross developable area (29.5 ha).

For individual commercial and industrial parcels, on site retention of runoff in excess of the 1 in 5 year design event is a requirement of the City's Drainage Bylaw. This requirement does not



### Centre West Lethbridge Employment Area Structure Plan

### **MAP 11** Stormwater Management



impact the volume of storage required in the above stormwater management facilities. For a major rainfall event, on-site storage reduces runoff to a rate that can be accommodated by the minor (underground) system and serves to minimize the impact of overland flow along public roadways.

### 7.1.5 CONNECTIONS AND UPGRADES

There will be one downstream connection and at least two connections from west to east across the railway right-of-way. The two railway connection points will accommodate runoff from all catchment areas to the west. The runoff from these areas presently runs along an overland flow route in the CPR right-of-way under the University Dr. overpass. Future alternatives for this connection point are either a pipe crossing under the railway right-of-way or upgrading of the existing overland flow route. Whichever alternative is chosen, the system will connect to the Bridge Dr. storm drainage system.

The other crossing under the railway right-of-way will be in the form of a pipe and will be required to convey flow from catchment WN to catchment EN, although the exact location is unknown at this point.

The Bridge Dr. connection point will accommodate runoff from all catchment areas. The Bridge Dr. storm drainage system will be designed to accommodate the combined flow from the ES catchment and the University Dr. connection.

### 7.I.E OBJECTIVES

- a) Ensure that development has as little impact as possible upon pre-existing stormwater runoff.
- b) Provide a stormwater management system that is both efficient and effective.

### 7.1.7 POLICIES

- a) The stormwater system shall reduce post development stormwater runoff to the predevelopment stormwater runoff rate.
- b) Stormwater management facilities shall be designed to provide sufficient storage volume to reduce downstream flow to predevelopment rates.
- c) On-site retention of runoff in excess of the 1 in 5 year rainfall event shall be required for commercial and industrial sites.
- d) The minor stormwater management system shall be designed to convey the 1 in 5 year peak runoff rate to stormwater management facilities and shall be piped underground.
- e) The major stormwater management system shall be designed to convey the 1 in 100 year peak runoff rate to stormwater management facilities and will be an overland system.



- f) One downstream connection point shall be required at Bridge Dr. This connection point will accommodate runoff from all catchment areas
- g) A minimum of two connections to convey stormwater from the west side of the railway to the east side and on to the Bridge Dr. downstream connection will be required. The existing southern connection point that runs under the University Dr. overpass will generally stay in the same location. The exact location of the future connection between catchment areas WN and EN is unknown at this point, but shall be determined at the Outline Plan stage.
- h) The stormwater connection between catchment areas WN and EN shall be in the form of a pipe. The southern stormwater connection shall be in the form of either a pipe or through upgrading the existing overland route. This shall be determined at the Outline Plan stage.
- i) Stormwater management facilities in the area shall consist of a mixture of both wet and dry ponds. It is preferable for wet ponds to be located in commercial areas, where these facilities can also be used as aesthetic features. Dry ponds are considered to be more appropriate for industrial areas. Stormwater management facilities shall be designed and landscaped in accordance with the Outline Plan and surrounding land uses.
- j) Final determination of the location of both wet and dry storm ponds shall be made at the Outline Plan stage.
- k) Drainage ditches shall not be permitted. Instead the stormwater management system shall consist of a system of underground pipes, wet ponds and dry ponds.
- I) The stormwater management system shall meet the current standards that exist at the time of development.
- m) Stormwater runoff from future development shall drain into the future stormwater management system and not into the irrigation water conveyance system.

### 7.2 SANITARY SEWER COLLECTION SYSTEM

### 7.2.1 SERVICING CONCEPT

Sanitary sewer servicing will be provided by a standard urban sanitary sewer system following the alignment of arterial, collector and circulation roadways. Sub-areas 1 and 2 can be serviced by gravity, whereas Sub-area 3 will likely require at least one lift station.

### 7.2.2 SEWERSHEDS

Map 12 shows the boundary of the plan area, the sanitary sewersheds and the alignment of sanitary sewers along proposed roadways. Sewersheds and their areas are shown in Table 4.





Table 4: Sewersheds

Sewershed	Area ha
Sub-area 1	220.5
Sub-area 2	73.5
Sub-area 3	57.5
Total	351.5

The sizing and alignment of the sanitary sewer collection system will be refined during the Outline Plan process. Additional technical details on the wastewater generation rates are found in the Utility Servicing Plan.

### 7.2.3 CONNECTIONS AND UPGRADES

The sole downstream connection point for the sanitary system will be the sanitary trunk along Bridge Dr., which is part of the Bridge Dr. Utility Corridor capital project.

At this time, the only upstream connection planned is a regional forcemain from the Town of Coalhurst. As the ASP area is developed, southern sections of the forcemain will be abandoned and the forcemain will terminate at the northern boundary of the ASP area's sanitary system. Development of Sub-area 3 will likely require construction of a sanitary lift station in the northwest. The location and sizing of this lift station will be determined in the Outline Plan for that area.

### 7.2.4 OBJECTIVES

a) Provide a sanitary sewer system that serves the community.

### 7.2.5 POUCIES

- a) Sub-areas 1 & 2 (see Map 12) shall be serviced by a gravity fed sanitary sewer system.
- b) Sub-area 3 shall be serviced by a minimum of one sanitary lift station. The location and sizing of any such lift stations shall be determined at the Outline Plan stage.
- c) The sizing and alignment of the collection system shall meet the current standards that exist at the time of development.
- d) The downstream connection point for the sanitary sewer system shall be the sanitary sewer trunk along Bridge Dr.
- e) The WLEC wastewater collection system shall be designed with capacity to



accommodate Town of Coalhurst wastewater volumes near the location where the forcemain enters the City limits.

f) Current sanitary sewer standards that are in effect at the time of development shall be used in the design and construction of the sanitary sewer collection system and shall super-seed this ASP in the event of conflict.

### 7.3 WATER DISTRIBUTION SYSTEM

### 7.3.1 SERVICING CONCEPT

The WLEC will be serviced by a standard urban water distribution system following the alignment of arterial, collector and circulation roadways. Water will be supplied from connections to the current and future water distribution system at points along Walsh Dr. The Water Distribution System is shown on Map 13.

### 7.3.2 DESIGN CRITERIA

The City of Lethbridge water distribution system is divided into two pressure zones. All of West Lethbridge is one pressure zone. One set of high-lift pumps at the Water Treatment Plant deliver water through a transmission line to the West Lethbridge Reservoir for distribution across West Lethbridge. The existing West Lethbridge Reservoir provides a storage capacity of 22,000 m<sup>3</sup>. A second transmission line and reservoir will become operational in the near future to provide redundancy to and increase the total storage capacity for West Lethbridge to 42,000 m<sup>3</sup>. The projected water usage for the WLEC can be found in the Utility Servicing Plan located in the Technical Documents Appendix.

The sizing and alignment of the water distribution system will be refined during the Outline Plan process. Additional distribution system design criteria includes:

- Fire flows for commercial and industrial areas should be calculated using the Fire Underwriters Survey guidelines and reasonable projections for building sizes, construction materials and separations
- Looping of all phases of development (i.e. at least two connections to the existing distribution system). This will necessitate that two railway right-of-way crossings, be constructed prior to any development of the plan area east of the railway.

The two railway crossings shown in Map 13 - Water Servicing Concept must be constructed prior to the ultimate build-out of the WLEC. Construction of the northernmost crossing, during the initial stages of development, would pose high initial construction costs and could significantly delay development east of the railway, as the area around the northernmost crossing will likely be developed much later than areas further to the south. In order to avoid this, yet still provide looping for the water system it is preferable for an additional railway crossing to be constructed at a point between the two crossings that are shown on Map 13.



## Centre West Lethbridge Employment Area Structure Plan

**MAP 13** Water Servicing Concept







The precise location and any specific requirements for the additional railway crossing will be determined at the Outline Plan stage, if this crossing is to be constructed.

### 7.3.3 OBJECTIVES

- a) Provide a water distribution system that meets the needs of the community.
- b) Provide a water distribution system that is resilient to service interruptions.
- c) Encourage the establishment of a water distribution system that is innovative, yet practical.

### 7.3.4 POUCIES

- a) Water to the WLEC shall be provided by the new Bridge Dr. water transmission line and reservoir.
- b) The sizing and alignment of the water distribution system shall meet the current standards that exist at the time of development.
- c) Fire flows for commercial and industrial areas shall be calculated using the Fire Underwriters Survey guidelines and reasonable projections for building sizes, construction materials and separations.
- d) The water distribution system in all phases of development shall be looped in order to provide at least two connections to the rest of the water distribution system.
- e) Looping of the water distribution system to the area east of the railway (Sub-areas 2 & 3) must be provided prior to the commencement of development in this area. This can be accomplished by constructing the two railway crossings that are shown in Map 13. Alternatively and in place of constructing the northernmost crossing in the initial stages of development, looping for this area can also be accomplished through the construction of an additional railway crossing further to the south.

Further details, such as the precise location and the requirements of the City shall be determined at the Outline Plan stage.

f) Both of the railway right-of-way crossings shown in Map 13 shall be constructed prior to the ultimate build-out of the area east of the railway. This is in addition to any other railway crossings that are constructed, but not shown on this map.



### 7.4 SHALLOW UTILITIES

### Natural Gas

ATCO Gas is the current provider of natural gas distribution servicing throughout the City of Lethbridge. There are existing small-diameter (48mm size and smaller) gas distribution lines throughout the plan area that currently provide servicing to existing farmsteads. These lines can readily be relocated/abandoned as development phasing occurs.

### Electrical Servicing

The City of Lethbridge infrastructure services electrical department provides electrical servicing to west Lethbridge. The existing overhead 13,000-volt lines are part of the distribution network. As urban development occurs, these overhead lines will be absorbed into the urban distribution system and located underground.

### *Communications – Telephone and Cable TV*

Provision of communication technology to the employment centre is important and especially critical for the establishment of knowledge-based industries. Such uses will likely utilize such emerging technologies that offer larger data bandwidths, such as fibre-optic cable to the premises (as opposed to the traditional copper wire) or those that offer increased mobility, such as the wireless 4-G network (from cell phone towers). Communications technology is continually advancing and development must also be adaptable to future technological upgrades that are not been foreseen as of yet.

Telephone (Telus Communications Inc.) and Cable TV (Shaw Cable) servicing will be facilitated by extensions to the existing system and will largely take place through trench installation. Other communication facilities, such as remote switching centres or cellular mobility towers will likely be required, as they are in other areas of the city.

### 7.4.1 OBJECTIVES

- a) Allow for the necessary utilities to adequately service the WLEC.
- b) Ensure infrastructure service adheres to the level of service prescribed by City of Lethbridge and provincial standards.
- c) Provide for the future establishment and expansion of significant telecommunications infrastructure that are attractive to knowledge-based employment.
- d) Locate shallow utilities in manner that will best serve proposed development and their corresponding building setbacks.

### 7.4.2 POUCIES

a) Shallow utilities shall be designed to the level of service that is established by the City of Lethbridge and the provincial government.



- b) Details of shallow utility servicing shall be resolved at the Outline Plan stage.
- c) The feasibility of expanding the telecommunications infrastructure within the WLEC beyond what is typically constructed in other employment areas shall be further examined at the Outline Plan stage. Enhanced telecommunication infrastructure can be used to better attract knowledge-based employment.
- d) The location of shallow utilities and how they will relate to proposed building setbacks shall be identified at the Outline Plan stage.





AREA STRUCTURE PLAN

### 8.1 OUTUNE PLANS AND SEQUENCE OF DEVELOPMENT

Additional comprehensive planning is required beyond the policies outlined in this ASP before development within the employment centre. In accordance with the practices of the City of Lethbridge, Outline Plans will need to be prepared and approved for various areas within the WLEC, prior to the commencement of development in that area.



One of the Planning Principles identified in section 1.3 of this ASP was to, "ensure that development proceeds in an efficient and orderly fashion. This will facilitate the provision of City infrastructure in a fiscally sustainable manner." In order to fulfill this principle these Outline Plans will be developed in



sequential order, over the build-out of the entire WLEC. These Outline Plans and the order in which they are to be developed are shown on Map 14 – Outline Plan Sequence.

In previous ASPs, the development area for Outline Plans and their sequence of development were, for the most part, based upon local market conditions and land ownership. This method did not consider other issues with the same importance such as overland drainage and catchment basins or the availability of services to the site. This sometimes resulted in inconsistent development that could have been serviced more efficiently. Therefore the sequence of development and the size of each Outline Plan area has been determined based upon a number of criteria, beyond what had been considered in previous ASPs. This set of criteria is as follows:

- Market Absorption for Specified Land Uses
- Natural and Man-made Constraints
- Development Pressure
- Geomorphology (i.e. lay of the land)
- Timing of Utility Service Upgrades
- Timing of Transportation Upgrades

The location, general size and sequence of the Outline Plans was determined through a number of brain-storming sessions that involved the City's Planning Department, as well as members from the Infrastructure Department and Solicitor's Office. In making this determination the following steps were undertaken:

- 1. A grid for the WLEC area was created that physically divided the area up into approximately 90 rectangular sections.
- 2. Next the criteria to provide a ranking for each section was discussed and agreed upon by this group.
- 3. The group was then asked, considering their own area of expertise, to rank how far into the future that each section was away from servicing and development. This was done by using a ranking matrix that scored each section and then applied a weighting to each set of criteria.
- 4. The results from this ranking exercise were applied to a map for the WLEC, showing this grid. This visually identified areas, which collectively the group thought were either a low, medium of high priority for development. From this development patterns began to emerge.
- 5. Next, storm water catchment areas, parcel boundaries and the ultimate road network were combined with this development priority grid. By combining these factors the group was able to determine boundaries for future Outline Plans within the WLEC that were both practical and efficient. Care was taken to attempt to follow the natural boundaries of catchment areas as



closely as possible and consideration was given to trying to include both sides of a major transportation route in one Outline Plan area in order to ensure that both sides of a transportation corridor experienced consistent development. Parcel boundaries were also used to define Outline Plans in areas where the catchment area had to be divided due to size or location.

From this step, the sequence in which the Outline Plans are to be developed was also determined.

6. Finally the group was asked to review the proposed Outline Plan areas and sequence of development for the entire WLEC one last time. Revisions were made accordingly.

Based upon this exercise, development in the WLEC will generally extend from the southeast corner (where transportation and utility services are currently concentrated) and will expand northwards and westwards.

It should be noted that it may be possible for development to proceed non-sequentially (i.e. proceeding from Outline Plan area 3 to Outline Plan area 5, skipping Outline Plan area 4 in the process), so long as the developer assumes the entire cost of extending services to their area and at the discretion of the City of Lethbridge. In addition the City of Lethbridge may review and revise the Outline Plan areas and sequence from time to time as needed.

The development of the WLEC will take a number of years. As such, development may occur unevenly as the area transitions from the existing uses to its future uses. To ensure that existing uses will not be unduly impacted by adjacent development as the area is transitioning, Outline Plans will address how the transition from existing uses to future uses occurs.

Future development that occurs in the WLEC and in other areas of West Lethbridge will require the existing interchange at Westside Dr. and Highway #3 to be upgraded from a two-way interchange to an all-directions interchange at some point. At this time, it remains unknown as to when this upgrade will be required, as it is dependent upon the pace of development in West Lethbridge. In order to ensure that the existing interchange system can manage new development in the WLEC, each Outline Plan will evaluate the impact that urban development in the Outline Plan area will have on the interchanges that serve the WLEC prior to its adoption. It is preferred that this evaluation be completed in the initial stages of the Outline Plan process to reduce any unnecessary expenditure.

While this ASP has been prepared by the City of Lethbridge, completion of the Outline Plans will be the responsibility of area landowners/developers, as they better understand the market implications of specific land uses. Review and approval of these Outline Plans will still be at the discretion of the City of Lethbridge. Outline Plans will also provide more specifics with regard to land use, individual development phases of the Outline Plan, the local roadway network and the provision of municipal infrastructure as described in the City of Lethbridge Design Standards.

### 8.I.I OBJECTIVES

a) Provide more detailed and comprehensive planning for the WLEC through Outline Plans.



# West Lethbridge Employment Centre Area Structure Plan

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### **MAP 14 Outline Plan** Sequence



b) Ensure that new growth areas are developed in an efficient and cost-effective manner.

### 8.1.2 POUCIES

- a) Under the direction of this ASP, Outline Plans shall be undertaken for the area that has been identified as the West Lethbridge Employment Centre by interested developers or landowners to provide more comprehensive planning, prior to subdivision and permanent development.
- b) Outline Plans shall be developed according to the sequence, location and size of the Outline Plan areas shown on Map 14 of this ASP.
- c) Development of Outline Plans may proceed non-sequentially if the developer assumes the cost of extending services to the Outline Plan area they wish to develop. This includes capital costs in addition to necessary maintenance costs. Approval of Outline Plan development that is non-sequential is ultimately at the discretion of the City of Lethbridge.
- d) Outline Plans will address how the transition from existing uses to future uses occurs.
- e) At the commencement of the Outline Plan process, the traffic impact that future development in the Outline Plan area will have upon the existing interchange system Highway #3 with Westside Dr., University Dr. and Bridge Dr. shall be evaluated to ensure that these interchanges can effectively manage this growth. If it is determined that new development will exceed the capacity of the interchanges, approval of the Outline Plan will be suspended until necessary improvements to the interchange system, that can facilitate this development, are made.
- f) Development of uses that provide necessary municipal or utility services either to the WLEC or the city (i.e. electrical substations, snow dump) may proceed within the WLEC, prior to the adoption of an Outline Plan for its specified location.
- g) Any Outline Plans shall be completed according to City of Lethbridge practices.
- h) The City of Lethbridge may review and revise the Outline Plan areas and sequence from time to time as needed.

### 8.2 NEW OR MODIFIED LAND USE DISTRICTS AND OVERLAYS

The implementation of additional land use districts or land use overlays through the Land Use Bylaw would greatly support the planning goals and policies that are laid out in this ASP. Existing land use districts could also be modified in order to accommodate the same function, but where relatively minor changes are needed to do so. Such measures would provide a regulatory structure that would either encourage or discourage certain types of development from becoming established in the WLEC. This will entail:



• Land use overlay to establish attractive commercial gateways into the city. The current Highway Commercial (C-H) district is used on many commercial corridors that are located at entrances into the city. A new land use overlay will maintain the existing C-H district and its associated uses, but will expect a higher degree of attention paid towards landscaping, the built form of buildings and how the public and private lands interact with one another.

Within the WLEC this district will be used for the development of the University Dr. Gateway Corridor in order to accomplish the goals of this commercial corridor that were laid out in section 5 of this ASP document.

- Land use overlay to protect areas that are adjacent to the coulee bank. As mentioned in the land use concept for this ASP, the area shown as "Coulee View Commercial" requires special considerations in order to protect the views and integrity of the adjacent coulee banks. An effective transition away from the higher intensity commercial uses that are adjacent to University Dr. is also provided through the "Transition Commercial" area. A new land use overlay, would ensure this by controlling issues such as, building height, density and the built form of development. As both the "Coulee View Commercial" and "Transition Commercial" areas are similar a single land use overlay, that provides a differentiation between the two where necessary, will be applied to both areas. Land use in these areas could be satisfied by using selected land use districts that are already in existence.
- Land use districts designed specifically for knowledge-based employment. Under the current Land Use Bylaw such uses are applicable under certain industrial or commercial land use districts. However, under these existing land use districts they are also combined with other industrial or commercial uses, such as manufacturing or retail stores. These other uses are not generally conducive towards attracting development for knowledge-based employment, which often require aesthetically pleasing areas that are separated from other uses that may produce offsite externalities.

Currently in Lethbridge there are no land use districts that are geared exclusively towards the development of knowledge-based employment, however examples of such land use districts are commonly found in other municipalities that have designated areas for similar research/technology/office parks.

Within the WLEC a new land use district that is designed specifically for knowledge-based employment would be used for the development of nodes of such employment in the industrial or commercial areas of this ASP's land use concept.

Modification of existing land use districts to restrict the development of heavy industrial uses. Heavy industrial uses have their own separate land use district under the City's current Land Use Bylaw and it is explicitly intended for this land use district to be restricted from the West Lethbridge Employment Centre. However, intensive manufacturing is also a discretionary use under the General Industrial (I-G) land use district so the possibility exists that intensive manufacturing could mistakenly be approved in the employment centre at some point. In order to prevent this error form occurring, it is prudent to modify the existing General Industrial (I-G) land

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use district, to still allow intensive manufacturing uses under the I-G district elsewhere in the city, but, aside from the existing cement plant, restrict it entirely from West Lethbridge.

### 8.2.1 OBJECTIVES

- a) Provide new land use overlays or land use districts that assist in the development of the WLEC as intended in this ASP through its goals and policies.
- b) Provide new land use overlays or land use districts that can also be effectively applied in the future to other areas of the city beyond the WLEC.
- c) Modify existing land use districts to assist in the development of the WLEC as intended in this ASP through its goals and policies.

### 8.2.2 POUCIES

- a) A new land use overlay shall be developed by City staff with the intention of establishing attractive gateway corridors into the city. This new land use overlay shall reflect the objectives and policies that were identified in section 5.6 of this ASP. Within the context of the WLEC ASP this new land use overlay is intended for use in what has been identified as the "University Dr. Gateway Corridor". This new overlay will be incorporated into the Land Use Bylaw after the adoption of this ASP.
- b) A new land use overlay shall be developed for the areas that were identified as "Coulee View Commercial" and "Transition Commercial" in the land use concept of this ASP. This new land use overlay shall reflect the objectives and policies that were identified with these areas in sections 4.5 and 4.6 of this ASP. This new overlay shall be brought forward to council after the adoption of this ASP.
- c) The creation of a new land use district that is more conducive towards the establishment of knowledge-based employment, offices or business parks than current land use districts shall be shall be considered at the Outline Plan stage, if based on the proposed land use, there is a need for this type of development in the community. Such a land use district would need to be brought forward to City Council for their approval
- d) The existing General Industrial (I-G) district in the Land Use Bylaw shall be modified in order to restrict the discretionary use of "manufacturing, intensive" from becoming established in the WLEC, while maintaining its existing application elsewhere in the city. This amendment to the existing I-G district shall be brought forward to council after the adoption of this ASP. This does not apply to the existing cement plant located in the WLEC.

### 8.3 INTERIM LAND USES

There is currently an interest amongst a number of land owners to proceed with development of their property in the near future. However, as with other undeveloped areas within the city, permanent





development is not possible until further planning is complete and municipal services, proceeding in an orderly fashion, become available for a given property. These include both hard services such as, adequate roadways, water mains, sanitary sewers, storm sewers and soft services such as fire and police protection.

Land will be made available for development in the order shown on Map 14. Due to the available real estate market and the distance that some properties lay from servicing, the full urban development of some areas will be quite far off into the future.

Previously, interim land uses that have been considered to be appropriate have been given approval but have not followed any kind of standard in their implementation. The policies in this ASP governing interim land uses are attempting to bring a standard for all such future interim uses to ensure that approvals for such interim uses are applied as fairly and clearly as possible.

In order to provide area land owners with a provisional opportunity to develop their property in some form, but recognizing that this potential development must not interfere with the future urban development of the area and must not place a strain upon existing services, this ASP has laid out policies to guide interim land uses that are appropriate for the area until such time as the land is ready for development. These policies have been created to address the following issues:



An existing form of interim development within the plan area

- Land use Other than with what has already been established, interim development must avoid
  permanent structures and require minimal or no municipal servicing. Any development must also
  be relatively easy to remove once the land is ready for urban development and must incorporate
  minimal improvements to the site. Examples of such are mini-storage provided through shipping
  containers or recreational vehicle storage.
- Maximum area of property devoted to interim development Interim uses cannot compose a
  substantial portion of a given property, as they begin to mirror permanent development and put a
  strain on unimproved services if they are allowed to become too substantial. The existing land use
  must be retained as the primary use on the site, until such time as the property is ready for urban
  development.
- Limiting Parcel Fragmentation The WLEC is an area where land ownership has become fragmented, as it is currently agricultural in nature, yet all of the previous quarter-sections have been subdivided. Parcel fragmentation makes it difficult for future urban development to proceed in an efficient and consistent manner. The approval of interim uses carries with it the potential for such uses to be legally separated from the existing uses through subdivision. In order to limit further fragmentation in the WLEC, subdivision of parcels containing interim uses must be restricted.
- Maximum amount of interim development permitted in the WLEC There is the potential for existing infrastructure to be taxed beyond capacity if certain levels of interim development are

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exceeded. A situation such as this would also make it more difficult for urban development to eventually become cohesively established in the WLEC.

The polices in this ASP that deal with these issues are intended to allow landowners some flexibility in the operation of their property and to establish parameters on what types of interim uses are appropriate. Any development that is proposed under these policies is not necessarily guaranteed to receive the recommendation of City Administration or the approval of the Approving Authority. The reason for this is that there may be other issues associated with any type of proposed development that cannot be foreseen at this time through this ASP. Such potential issues can have detrimental impacts both on-site (i.e. the storage of a noxious substance) and off-site (i.e. the impact of additional traffic generation from a new development on the connecting roadways). As with any other application that is brought forward, the approving authority still maintains their ultimate decision making powers and can ultimately refuse an application. The policies contained in this ASP do not supersede the regulations for development provided through other legislation either (i.e. the fire code).

### 8.3.1 OBJECTIVES

- a) Provide the opportunity for interim development that is feasible and beneficial for landowners prior to the full urban development of the area.
- b) Ensure that such development is not premature and that municipal servicing capacity exists for such interim development to occur.
- c) Ensure that such development will not become an obstacle to the full urban development of the area.

### 8.3.2 POLICIES

- a) An interim use shall be defined as a land use that is not intended to be permanent and requires minimal improvements to the site. It must be relatively easy to remove once the land is ready for full urban development and shall not include permanent structures. Servicing to a given interim development must not be required or must be kept to minimal levels and must not require any improvements to public infrastructure.
- b) Existing land uses and structures that have previously been established in the plan area shall be permitted to continue to operate as they have in the past. Expansion of existing operations are as governed under the existing corresponding land use district for a given property.
- c) If a proposed interim development is neither a permitted nor a discretionary use under the existing land use district for a given parcel, an application to amend the Land Use Bylaw shall be required. Such an application must be approved by Lethbridge City Council prior to the development of the intended use.
- d) Any Land Use Bylaw amendment proposed to facilitate an interim development must redistrict the land to a Direct Control (DC) district. This district will place specific limitations on the interim development to ensure that this development cannot be modified form the



original intent, until such time as the property is ready to undergo full urban development. Conventional zoning districts do not allow this type of control.

- e) Any Direct Control district that is approved to facilitate an interim development must restrict additional subdivision from occurring on the associated parcel. The purpose of this is to limit additional parcel fragmentation in the WLEC, which is an area where parcel fragmentation has occurred in the past.
- f) Standard procedures for Land Use Bylaw amendments or development permit applications and any subsequent public notification or public hearings shall still apply for any interim development proposals. The approving authority shall retain the ability to approve, amend or refuse any such application.
- g) The maximum amount of the total parcel that an interim use can utilize shall be 20%. For example, a 10 ha parcel would allow a maximum of 2 ha of the parcel to be used for interim uses, while the remaining 8 ha would be retained for the existing purposes.

Smaller, non-rectangular parcels may be significantly constrained from interim use by this requirement. The generally triangular parcel described legally as:

Meridian 4 Range 22 Township 9 Section 3 That Portion Of The SE Quarter Which Lies E Of The Railway On Plan RY157 And To The North Of The Southerly Limit Of The Roadway On Plan 1672EZ Containing 10.87 Hectares (26.879 Acres) More Or Less Excepting: First The Northerly 200 Feet Thereof Containing 2.13 Hectares (5.27 Acres) More Or Less

Secondly			
Plan Roadway	Number 1834HX	Hectares more or less 2.11	Acres more or less 5.22
Also Except	ting Thereout		
Plan	Number	Hectares	Acres
Roadway	9012022	0.759 Hectares	1.88

Excepting thereout all mines and minerals and the right to work the same

and having the municipal address as 270 University Drive W. (as of December 1, 2021), shall be permitted interim utilization up to 80%.<sup>1</sup>

h) The maximum amount of land that can be used for interim land uses within the entire plan area is at the discretion of the development authority. It shall be based upon such factors as existing roadway capacity, existing servicing capacity or emergency services response. This maximum has been applied in order to ensure that the plan area is not developed prematurely by interim land uses, and these interim land uses do not interfere with its full urban development. It is also applied to ensure that any existing limited services are not

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<sup>&</sup>lt;sup>1</sup> Policy amended by Bylaw 6347, March 8, 2022



used at a greater level than what they are designed for. For example, the maximum capacity for a gravel road is currently 1000 vehicles per day. A proposed interim development that would increase the traffic volume on a given gravel road to a volume above it would not be approved.

i) The development area of any interim use shall be setback a minimum of 200 m from the nearest edge of the University Dr. right-of-way. This setback shall be shown on a site plan, prior to issuance of a development permit. This requirement is due to the recognition of University Dr. as a major gateway into the city and the desire for this corridor to remain appealing while maintaining a sense of place even while the area is being developed.

Smaller, non-rectangular parcels may be significantly constrained from interim use by this requirement. The generally triangular parcel described legally as:

Meridian 4 Range 22 Township 9 Section 3 That Portion Of The SE Quarter Which Lies E Of The Railway On Plan RY157 And To The North Of The Southerly Limit Of The Roadway On Plan 1672EZ Containing 10.87 Hectares (26.879 Acres) More Or Less Excepting: First The Northerly 200 Feet Thereof Containing 2.13 Hectares (5.27 Acres) More Or Less Secondly Plan Number Hectares more or less Acres more or less 1834HX 5.22 Roadway 2.11

Also Excepting Thereout

7 100 27000	ang mereeu		
Plan	Number	Hectares	Acres
Roadway	9012022	0.759 Hectares	1.88

Excepting thereout all mines and minerals and the right to work the same

and having the municipal address as 270 University Drive W. (as of December 1, 2021), shall be allowed interim use with a minimum 20 m setback from the University Drive Right-of-way.<sup>2</sup>

j) The City shall maintain the ability to impose any other restrictions through the Direct Control land use district or through any development permits that are issued for the interim land use. The policies in regards to interim land uses that have been laid out in this ASP cannot effectively regulate all aspects of a development as they are general in scope. Restrictions that are imposed through the Direct Control land use district or development permit deal are site-specific to a particular proposed development.

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<sup>2</sup> Policy amended by Bylaw 6347, March 8, 2022



### 8.4 PERFORMANCE MONITORING

Implementation of this ASP is an ongoing, long-term activity and, as such, is prone to changes in technology and service delivery. In order to ensure that the implementation of the plan is proceeding correctly, and that any potential problems are adequately addressed, the performance of this plan must be monitored at the completion of the development in each Outline Plan area. This monitoring should take place in the form of a report to City Council and City Administration and should discuss the following in relation to the ASP and its goals:

### Previous Performance

- Identification of any Outline Plans that are in development or have been approved over the previous monitoring term.
- Any publically-funded projects that have occurred over the previous monitoring term.
- Any amendments to the ASP that have occurred over the previous monitoring term.
- Any strengths or weaknesses of the ASP that have been identified through the implementation process.
- Evaluation of how well the needs of the community are being fulfilled through the implementation of the ASP.

### Future Actions

- Development that is expected to occur over the next monitoring term.
- Any publically-funded projects which are likely to occur over the next monitoring term.
- Any amendments to the ASP that should be made in the future.

In addition this plan should be reviewed by Infrastructure Services with each update to the Capital Improvement Program (CIP) in order to make certain that the infrastructure needs of the WLEC are met to facilitate future growth.

### 8.4.1 OBJECTIVES

- a) Provide a method to monitor the implementation of the WLEC ASP and ensure that any problems with the ASP implementation are adequately addressed.
- b) Ensure that the infrastructure needs to facilitate future growth in the WLEC are understood and provided for.

### 8.4.2 POLICIES

a) A Performance Monitoring Report for review by City Council and City Administration shall be developed at the completion of development in each Outline Plan.

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- b) The Performance Monitoring Report shall discuss the performance of the ASP and its implementation over the previous monitoring term. This shall include discussion on ongoing Outline Plans and development in the WLEC, previous publically-funded projects and any ASP amendments that have occurred. This shall also identify any strengths and weaknesses that have been identified through the implementation process and shall evaluate the ASP in terms of how well it is meeting the needs of the community.
- c) The Performance Monitoring Report shall identify future actions that should occur in the ASP implementation process. This includes discussion on future development that is anticipated to occur during the next monitoring term, any publically-funded projects that are anticipated to occur over the next monitoring term and any amendments to the ASP that should be made in the future.
- d) The WLEC ASP shall be reviewed by Infrastructure Services with each update to the Capital Improvement Program to identify any future infrastructure upgrades that will be required in the WLEC to facilitate future growth.





### APPENDIX A - LAND USE STATISTICS

	Land Use Stat	istics			
We	st Lethbridge Employment Ce	ntre Area Structure Plan			
				Total	% of GDA
GROSS AREA				588.0	
Rail Right-of-Way	Sub-Area 1	Sub-Area 2	Sub-Area 3	30.5	
GROSS AREA W/ RAIL RIGHT-OF-WAY EXCLUDED	360.5	108.5	88.5	557.5	
Arterial Roadways <sup>1</sup>	25.5	4	4	33.5	
Archmount Cemetery	7.5	0	0	7.5	
240 Kv Transmission Line Right-of Way	7.5	4	1	12.5	
Gas Collection Pipeline R/W	2.5	0	0	2.5	
Gas Transmission Pipeline R/W <sup>2</sup>	3	0	0	3.0	
GROSS DEVELOPABLE AREA	314.5	100.5	83.5	498.5	100%
Circulation (18% GDA)	57	18	15	90	18%
Stormwater Management Facilities	18.5	4	7	29.5	6%
Park/Open Space (5% of GDA)	16	5	4	25	5%
	91.5	27	26	144.5	2 <b>9%</b>
Large Format Commercial	2.5	59.5	28	90	18%
Coulee View Commercial	0	0	8	8	2%
Transition Commercial	0	0	3.5	3.5	19
Business Industrial	42	14	18	74	15%
General & Business Industrial	178.5	0	0	178.5	36%
NET DEVELOPABLE AREA	223	73.5	57.5	354	71%

<sup>1</sup>Assumes average right-of-way width of 60 metres. This figure is approximate and subject to change.

<sup>2</sup>Gas transmission line is currently located within a government road allowance. If this road allowance is ever modified or moved it will require a right-of-way that is 12 metres in width. The area required to provide this right-of-way is reflected in this table.

### Notesto Reader:

\* Additional area may need to be provided to maintain the irrigation district facilities in the area. This exact area will be determined at later planning stages when it is known what size of irrigation right-ofways are required. This is also largely based upon the needs of the developer.

\* Figures are approximate and are rounded to the nearest 0.5 hectare.

\* Amended from original by Bylaw 6127



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### APPENDIX B - RECOMMENDED LAND USE DISTRICTS

This ASP does not provide specific land use districts, as the current land use bylaw and its associated districts may not be applicable by the time the area is built out and some flexibility has been left for subsequent planning stages to determine. Rather these proposed land uses shall be refined through the subsequent Outline Plans and through Land Use Bylaw amendments.

The following table provides recommended land use districts under the current City of Lethbridge Land Use Bylaw # 5700 (as of 2012) for each land use policy area that has been described in this ASP (see section 4 of the ASP document). This table has been provided in order to provide a reference for city administration, municipal government, and developers in determining what land use districts are appropriate for the plan area at the outline plan and land use bylaw amendment stages. Any proposed land use bylaw amendment that occurs in the ASP plan area must meet the intentions and comply with the policies which have been outlined in the ASP.

This table also includes new land use districts that have been proposed, by this ASP (see section 8.2 of the ASP document) for inclusion into the Land Use Bylaw, but have not yet been included (as of the writing of this ASP in 2012). Such future proposed districts are denoted with a \* in the table.

As the timeframe for the full build-out of the plan area is quite extensive, it is entirely possible that the current land uses that have been identified in this table may be modified or may no longer be in operation when it is time for development. If this occurs then the closest equivalent land use district at the time, that still withholds the same intentions of the listed land use district, may be used. A land use district that is not listed in the following table may be considered appropriate as determined by the approving authority.



	Recommen	Recommended Land Use Districts	
Land Use as Shown in ASP	Recommended Land Use Districts	Potential Land Use Districts, Under Certain Circumstances	Not Desired
General & Business Industrial	- General Industrial (I-G) - Business Industrial (I-B)	- Office / Knowledge-Based Commercial*	- Heavy Industrial (I-H) - All Commercial Districts other than Office / Knowledge-Based Commercial
Business Industrial	- Business Industrial (I-B)	- Office / Knowledge-Based Commercial *	- Heavy Industrial (I-H) - General Industrial (I-G) - All Commercial Districts other than Office / Knowledge-Based Commercial
Large Farmat Commercial	- Highway Commercial (C-H) - Shopping Mall Commercial (C-S)	- Office / Knowledge-Based Commercial *	- All Industrial Districts
Coulee View Commercial	<ul> <li>Neighbourhood Commercial (C-N)</li> <li>Office / Knowledge-Based Commercial *</li> </ul>	- Medium Density Residential Districts (R-37, R- 50, R-60, R-75) - shall only be considered in conjunction with adjacent commercial uses	- All Industrial Dístricts - All Residential Districts other than Medium Density Residential (R-37, R- 50, R-60, R-75)
Transition Commercial	<ul> <li>Neighbourhood Commercial (C-N)</li> <li>Office / Knowledge-Based Commercial *</li> </ul>	- Highway Commercial (C-H)	- All Industrial Districts - All Residential Districts
* Indicates land use districts that <sup>1</sup> Direct Control (DC) and Urban In <sup>2</sup> Public, recreational and institutiv authority	* Indicates land use districts that do not currently exist under the Land Use Bylaw, but have the potential to be included in the future <sup>1</sup> Direct Control (DC) and Urban Innovation (UI) districts are also possible throughout the entire plan area, so long as their intended us <sup>2</sup> Public, recreational and institutional uses and their associated land-use districts are allowed throughout the entire plan area where authority	* Indicates land use districts that do not currently exist under the Land Use Bylaw, but have the potential to be included in the future <sup>1</sup> Direct Control (DC) and Urban Innovation (UI) districts are also possible throughout the entire plan area, so long as their intended use remains the same as what this table specifies <sup>2</sup> Public, recreational and institutional uses and their associated land-use districts are allowed throughout the entire plan area where appropriate and permitted by the approving authority	ains the same as what this table specifies priate and permitted by the approving





### APPENDIX C - UNIVERSITY DR. GATEWAY CORRIDOR SUMMARY

What is Desired	What Shall Bo
Underground stormwater system & land- scaped boulevards for multi-modal transporta- tion	Open– ditch stormwater management Commercial Strips that cater only towards the automobile and have limited landscaping
Inclusion of multi-storey & residential mixed- use development	Development consisting exclusively of low- density, single use buildings
Stylized street furniture	Street furniture that is commonplace
Buildings that incorporate unique architectural features	Plain architecture
Direct pedestrian connections between public and private lands	Pedestrian access that is not maintained from the public right-of-way through to a developed site
	Buildings that are oriented away from the road- way, with entrances and architectural features facing away
Development that provides for all forms of transportation	Development that caters exclusively to the auto- mobile

