

# **AREA STRUCTURE PLAN**

## **PROPOSED PARKVIEW INDUSTRIAL DEVELOPMENT**

**E ½ SECTION 23-40-26-W4**

**Prepared For**

**ARCLAN HOLDINGS LTD.**

**Prepared By**

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April, 2007 ADWE FILE NO. I12365.00**

**Revised by**

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## PREFACE

The Parkview Industrial Development Area Structure Plan (the “Plan”) applies to approximately 113 hectares (279 acres) of land in Lacombe County bounded by Highway 12 to the north, Range Road 26-1 to the east, Viterra, Lacombe and the CPR railway line to the west and the north boundary of NE ¼ Section 14-40-26-W4 to the south. The entire area is defined by E ½ Section 23-40-26-W4. The Plan area is predominantly agricultural in nature. The farming focuses mainly on crop and hay production. A portion of the land is used by Viterra and there is an Viterra Grain Terminal located in the western portion of the Plan area.

The Plan preparation involved the formulation of a storm water management plan and a groundwater evaluation, as well as transportation, geotechnical and land use studies. A Public Information Session, held on November 28<sup>th</sup>, 2006, was also organized to obtain input from landowners and residents of the Plan area, as well as, representatives from the Town of Lacombe and Lacombe County. The Plan was subsequently presented to Lacombe County for consideration and approval in accordance with Section 633 of the Municipal Government Act. First reading to Bylaw No. 1044/07, a Bylaw to adopt the Parkview Industrial Park Area Structure Plan was granted and a public hearing in accordance with Section 633 of the Municipal Government Act held. As a result of the public hearing Council directed the applicant to address specific issues raised within the Public Hearing.

The issues were specifically:

- 1) A revised concept plan showing the proposed phasing of the development, the lands to be dedicated as municipal reserve, and the public utility lot to be set aside for potential future pumping and treatment facilities that would be required for connection to a municipal or regional water and/or wastewater system. The concept plan must also confirm the elimination of the middle access that was previously provided onto Range Road 26-1 and the removal of the perimeter reserve;

- 2) A written response from Alberta Transportation confirming that the road issues have been resolved to their satisfaction;
- 3) A revised copy of the Site Development Guidelines including the updated concept plan, any revisions necessary to address the Woodrow's request for screening on the west side of the proposed development, and Council's requirement for solid fencing along the perimeter of the Industrial Park (ie. north and east sides).

In addition to the requirements outlined above, the County further requested written confirmation from a qualified professional confirming that all findings and recommendations in the various technical studies submitted in support of the previous application are still pertinent to the revisions proposed, and if not, an update to the studies.

Alberta Transportation indicated that the Traffic Impact Assessment provided by A.D. Williams Engineering Inc. ADWE File # 0012365.00 dated April 12, 2006 failed to meet the requirements of Alberta Transportation specifically with respect to minimum site distance requirements and the prerequisite for signalization and illumination. Alberta Transportation indicated that the Department was not prepared to support the Area Structure Plan as presented. Upon further discussion and analysis a supplemental Traffic Impact Assessment dated June 3rd, 2009 was completed by Morrison Hershfield and submitted to Alberta Transportation for review and consideration. The supplemental traffic impact assessment was approved by Alberta Transportation subject to conditions and a copy of the approval is included within 'Part 2 – Supporting Technical Information' attached hereto.

A revised concept plan ('Figure 5 – Concept Plan) incorporating the recommendations of the County of Lacombe and Alberta Transportation has now be completed and submitted to the County for consideration and approval.

The resulting plan will provide a framework for suitable industrial development of agricultural land along a major transportation corridor.

The Plan is established within the limits of the following guiding principles:

- promoting appropriate development of agricultural land;
- providing an effective and safe road network;
- protecting environmentally significant areas;
- introducing suitable utility facilities;
- creating a visually appealing industrial area;
- ensuring environmentally sustainable development;
- developing based on geotechnical conditions.

## **1.0 INTRODUCTION**

### **1.2 PURPOSE OF THE PLAN**

The Parkview Industrial Area Structure Plan has two main purposes. The Plan identifies implications associated with transportation, natural resources, utilities, existing land use, storm water runoff, water supply and visual aesthetics and provides solutions to mitigate these issues. Secondly, the Plan establishes a process of sequential development which is intended to ensure industrial growth proceeds in a logical, timely manner.

### **1.2 PLAN COMPLIANCE**

This Area Structure Plan has been prepared at the request of Lacombe County pursuant to Section 8 of the Municipal Development Plan, which require that such plans be prepared for select study areas. This section of the Municipal Development Plan identifies Industrial Development policies and objectives.

### **1.3 KEY ELEMENTS OF THE PLAN**

The three key elements in the Area Structure Plan are:

- A future vision and goals that provide a matrix in measuring the success of the plan.
- A process that is structured to coordinate development intensification in concert with transportation capacities.
- Policy Statements supplemented with a Land Use Map to establish a logical and sequential pattern of development.



## **1.4 POLICY INTERPRETATION**

The explanatory text accompanying a policy within the Plan is provided for information purposes only to enhance the understanding of the policy. If an inconsistency arises between this text and a policy, the policy will take precedence.

Where "shall" is used in a policy, the policy is considered mandatory. However, where actual quantities or numerical standards are contained within the policy such quantities or standards may be varied, provided that the variance is necessary to address unique circumstances that would otherwise render compliance impractical or impossible, and the general intent of the policy is still achieved.

Where "should" is used in a policy, the intent is that the policy is to be complied with. However, the policy may be varied in a specific situation provided that the variance is necessary to address unique circumstances that will otherwise render compliance impractical or impossible, or to introduce an acceptable alternate means to otherwise achieve the general intent of the policy.

## **1.5 PLAN AMENDMENTS**

In order to amend this Plan, including any changes to the text or maps within, an amendment to the Plan will be required to be approved by Bylaw. An amendment will require the holding of a statutory public hearing together with public notification carried out in accordance with procedures established by Council. Where an amendment to the Plan is requested, the applicant will be required to submit supporting information necessary to evaluate and justify the amendment. Such changes will be made from time to time as determined necessary to ensure that the text and maps remain accurate.

## **1.6 MAP INTERPRETATION**

Unless otherwise specified within the Plan, the boundaries or locations of any symbols or areas shown on a map are approximate only, not absolute, and shall be interpreted as such. They are not intended to define exact locations except where they coincide with clearly recognizable physical features or fixed boundaries, such as property lines or road and utility rights-of-way.

## **1.7 CONSISTENCY & MONITORING OF THE PLAN**

It is intended that consistency between the plan and any other policy directives which have been approved by Council, including but not limited to the Municipal Development Plan and the Lacombe Inter-municipal Plan, be maintained.

In order to ensure the plan remains current and relevant, it will be monitored over time. If any changes are deemed necessary as a result of future monitoring, the plan will be modified through the amendment process.

## **2.0 PLAN AREA**

### **2.2 REGIONAL CONTEXT**

The Plan applies to the land outlined as the Development Site shown on Figure 1 – Regional Context Plan. The Plan area is bounded by Highway 12 to the north, Range Road 26-1 to the east, Viterra and the CPR railway line to the west and the north boundary of NE ¼ Section 14-40-26-W4 to the south. This is illustrated in Figure 4 – Existing Transportation Features.

### **2.2 EXISTING CONDITIONS**

The majority of the land within the Plan area is cleared for crop production as illustrated in Figure 3 – Existing Land Use Pattern. A portion of the land is used by Argricore. There is an Viterra Grain Terminal located in the western portion of the Plan area, adjacent to an existing rail line. A service road, running southwest to northeast cuts through a portion of the Plan area and is owned by Viterra.

## **3.0 STRATEGY**

### **3.1 PLAN PRINCIPLES**

The Plan area is comprised of approximately 113 hectares (279 acres) of land in Lacombe County which is intended to house a phased 39 Industrial lot development with three storm water retention ponds, a Public Utility Lot, and a Municipal Reserve. Access / egress to the Plan area will be achieved through a realigned point of intersection of Range Road 26-1 with Highway 12. Based on results from the supplemental Traffic Impact Assessment, it has been determined that Phase I can be accommodated through the relocation of the point of intersection and construction of a Type 1Vb intersection which includes delineation illumination. The supplemental TIA has further determined that Phase I can be accommodated without the need for signalization. It is acknowledged that prior to commencement of Phase II or Future Phasing, a Traffic Impact Assessment will be completed based on ‘real time’ trip generated data. Further transportation network upgrades will be determined based on the recommendations within the updated Traffic Impact Assessment.

The Town of Lacombe has indicated that servicing of the plan area with a municipally-owned water and sanitary sewer utility does not appear to be a viable option at this time.

In recognizing these constraints, the solutions are based on the principals referred to below:

#### **3.1.1 Environmental Sustainability**

A first principle of the Plan is to ensure the industrial development occurs in an environmentally sustainable manner. This includes storm water management to alleviate any downstream impacts due to storm water runoff from the Plan area. This principle will be achieved through the construction of three storm water retention ponds in low-lying areas of the Plan.

Environmental sustainability also includes the protection of the groundwater supply to ensure the resource lasts well into the future. Measures to achieve this include the following:

- Determine whether the diversion of 1,250 m<sup>3</sup>/year per lot can be sustained from local aquifers while not interfering with any household users, licensees or traditional agriculture users who exist when the subdivision is approved.
- Aquifers underlying the proposed undeveloped lots should be able to sustain production of 46,250 m<sup>3</sup>/year, and managed diversion of that groundwater should not negatively impact existing users.
- Water use will require testing and licensing under the Water Act.

### **3.1.2 Environmentally Significant Areas**

A second principle of the Plan is to protect environmentally significant areas specifically illustrated in Figure 2 – Existing Environmental Features, as well as encourage development of new features by the usage of tree, shrubbery and foliage in landscaping plans. Existing environmentally significant areas include:

- Tree stands and shelter belts located to the south and the east in the Plan area.
- Approximately 6.2 acres of poplars, willows, sedges.

### **3.1.3 Appropriate Land Use**

The third principle of the Plan is to ensure land within the Plan area is developed in a suitable manner based on its location in an agricultural area. The majority of current land use is for crop and hay production, with a portion of the land used by Viterra. As such, the following statements form a basis of appropriate land use:

- The Plan area must be developed in a manner that doesn't negatively impact adjacent land areas. As such, it must proceed with low density development of industrial businesses with non-polluting operations.
- Development should be phased and progress at a rate that would allow timely infrastructure upgrades as well as ensure better agricultural lands are not prematurely taken out of production.

### **3.1.4 Transportation Network**

- The fourth principle of the Plan is to provide an effective and safe road network which will service the Plan area. This includes the establishment of an acceptable road network to provide access to developments within the Plan area. There is currently only one road, owned by Viterra, which is located within the Plan area. The Plan envisions expansion of the road network through intersection relocation, municipal road upgrading and the construction of two additional roads which would provide access to the industrial area.

### **3.1.5 Geotechnical Conditions**

The fifth principle of the Plan is to develop design criteria based on the current geotechnical conditions of the land within the Plan area. The lithological sequence of soils is described as organic topsoil overlying till which overlies sand and/or silty sand. There were a few places where sand overlaid till. In-situ soils were found to be fine-grained with a significant amount of silt and/or clay.

Moisture contents varied considerably but generally indicated that the in-situ soils are near or below their estimated optimum moisture content. High groundwater within the frost penetration zone was encountered in places. Combined with frost susceptible material, there are risks for harmful frost action on surface structures. Compactibility of in-situ soils is expected to be fair to good.

Geotechnical conditions were applied to develop design criteria for the following:

- Construction activities including rough grading, excavations, roads and lanes, asphalt roadways, and gravel roads
- Foundation systems including soil bearing capacity, preparation of foundation soils, grade beams, and pile foundations.
- Frost protection
- Concrete

### **3.1.6 Servicing Infrastructure**

The sixth principle of the Plan is to provide for the installation of appropriate utility facilities necessary to support industrial development. There is currently no municipal water or sanitary sewer available, so development must provide for private water wells and onsite sewage disposal for each lot. A description of services which will need to be installed is outlined below:

- Sewer and Water: municipal water and sanitary sewer services will not be available in the Plan area so installation of private water wells and onsite sewage disposal systems will be required to meet the needs of the development.
- Storm Water: storm ponds will be constructed to alleviate any downstream impacts due to storm water runoff from the Plan area.
- Fire Protection: Due to the fact that municipal water supply is not available for fire protection, reservoirs for fire protection may need to be provided by individual businesses at time of building.

### **3.2 PLAN PROCESS**

The plan preparation process began by gathering, reviewing and analyzing all relevant information pertaining to future development options within, and around, the plan area. Secondly, a number of technical studies including storm water management, groundwater evaluation, traffic impact assessment, geotechnical investigation, and site development guidelines were developed in support of this Area Structure Plan. These technical investigations and reports, **‘PART 2 – SUPPORTING TECHNICAL INFORMATION’** while not part of the Area Structure Plan are acknowledged below and attached hereto for reference and information purposes.



### **3.2.1 Storm Water Management**

Storm Water Management Study, Parkview Industrial Development, E ½ 23-40-26-4, Lacombe County, Prepared for Arclan Holdings Ltd, prepared by A.D. Williams Engineering Inc., ADWE File No. i12365.00 September 2006.

### **3.2.2 Geotechnical Evaluation**

Geotechnical Investigation, Chiswell Subdivision, E ½ 23-40-26-4, Lacombe County prepared for A.D. Williams Engineering Inc. prepared by GTech Earth Sciences Corp., September 2, 2006.

### **3.2.3 Traffic Impact Assessment**

Traffic Impact Assessment, Parkview Industrial Development, Lacombe, Alberta prepared for Arclan Holdings prepared by A.D. Williams Engineering Inc., ADWE File # 0012365.00

### **3.2.4 Groundwater Evaluation**

Groundwater Evaluation Report, Proposed Industrial Subdivision Development, NE ¼ 23-40-26-4, Lacombe County, Alberta prepared for A.D. Williams Engineering Inc. Red Deer, Alberta prepared by Moncur Groundwater, # 13 Co-op Road, Box 609, Didsbury, Alberta, August 14<sup>th</sup>, 2006.

### **3.2.5 Supplemental Traffic Impact Assessment**

Supplemental Traffic Impact Assessment, Parkview Industrial Development, Lacombe, Alberta prepared for Arclan Holdings prepared by Morrison Hershfeld, dated June 3, 2009.

### **3.2.6 Site Design Guidelines**

A.D. Williams Engineering Inc., Parkview Industrial Park, Site Development Guidelines prepared by UMA Engineering Ltd., 206, 4807 50<sup>th</sup> Avenue, Red Deer, Alberta. F822-004-00-02 September 2006 and revised May 21<sup>st</sup>, 2010.

In addition to the studies, a public information session was held on November 28th, 2006, for landowners and residents from the plan area as well as representatives from the Town of Lacombe. The public session was advertised, and provided valuable input and direction in regard to planning the future of the Parkview Industrial development. Input obtained through the public consultation process will be considered when completing the subdivision design.

## **3.3 EXISTING SITE FEATURES AND CHARACTERISTICS**

### **3.3.1 Soil Characteristics**

The plan area is generally gently rolling topography. The vast majority of the area has been cleared for agricultural purposes, however existing tree stands and shelter belts remain to the south and east. Future development should be encouraged to provide opportunities for tree, shrubbery and foliage in their landscaping plans.

Existing topography and environmental features are shown on Figure 2 and include:

- The majority of the site is cropland which slopes from 1 to 3 % towards the west.
- A low-lying area is located in the southeast portion of the plan area, and covers approximately 2.5 hectares (6.2 Acres). Poplars, willows, sedges and swamp grasses are associated with this low area, and the surrounding lands are being used predominantly for agricultural pursuits.

- There are two existing drainage channels which play an important role in draining the site. Both channels flow east to west. As these channels also pick up runoff water from properties to the east, any development of the site needs to recognize that these channels should not be completely removed upon development. They should simply be realigned to accommodate the lot layout of the site.
- There are poplar trees & bush located along the south edge of the plan area. Grading of the area will likely not affect the majority of these trees.

Lower elevations in the western portion of the property, as well as the existing drainage channels, provide opportunities for integration into the local storm water management system. The Storm Water Management Plan prepared by A.D. Williams Engineering Inc. provides a detailed explanation of storm water management requirements for the site. Generally, the Storm Water Management Plan identifies a requirement for approximately 65,000 cubic meters of storage

### **3.3.2 Soil Classification**

The predominant land use within this area is agriculture. The farming focuses mostly on crop & hay production. A portion of the land is used by Viterra. There is an Viterra Grain Terminal located in the western portion of the site, along the rail line.

The Canada Land Inventory system of soil classification rates most of the area's soils as Class 1 and 2.

### **3.3.3 Natural Resources**

The lithological sequence of soils is described as organic topsoil overlying till which overlies sand and/or silty sand. The in-situ till and sands are suitable for construction. Both soil types may be used for road sub-base material. According to the Alberta Geological Survey Maps and the geotechnical investigation prepared by GTech Earth Science Corp., there are no substantial gravel deposits underlying the site.

### **3.3.4 Existing Land Use**

Existing zoning generally reflects and supports the existing land use pattern described above. The land use districts applicable to the plan area under the Lacombe County Land Use Bylaw 772/92 as follows:

- Agricultural District 'A' - This land use district applies to all of the lands within the plan area. The district permits uses that will facilitate agricultural pursuits and activities, including farmsteads and residences.

The current land use districting pattern within the plan area is shown on Figure 3 – Existing Land use Pattern.

### **3.3.5 Existing Transportation Network**

Figure 4 – Existing Transportation Features illustrate the major features of the plan area's existing transportation system. The system is comprised of one highway (Highway 12), one county roadway (Range Road 26-1), and an access/service road. These features are described as follows:

- Highway 12 bounds the plan area to the north. This major provincial highway is a two lane free flow facility and, although access is restricted to Range Road 26-1 interchange, it affords the subject lands a high degree of exposure and visibility for future business industrial uses.

- The intersection of Highway 12 and Range Road 26-1 is Type IVb. The through lanes are 4.0 m wide and the turning lanes are 3.7 m wide. The shoulder width is 2.0 m.
- Range Road 26-1 bounds the plan area to the East. This 9.3m two lane, gravel roadway currently serves residents in the area, as well as traffic which wishes to access the Viterra Grain Terminal. This range road affords the subject lands multiple access opportunities.
- The service road is owned by Viterra and provides access to the grain facility. Future development would require modification of this road to service the entire development.

### **3.3.6 Water and Sanitary Sewage**

The only existing services on site are used by the Viterra Grain Terminal. The grain terminal was constructed in the year 2000. This terminal uses a private well for drinking water, and a private septic tank for sewage disposal.

### **3.3.7 Storm Water Management**

Storm water within the plan area drains via road ditches and local drainage courses. Storm water management facilities, therefore, should be located to take advantage of the natural low areas where possible.

### **3.3.8 Major Franchised Utilities**

Power connection for the development will be through FORTIS. The nearest three phase power line to the project site is located approximately 2.5 km west of the development site. The line runs in the north-south direction. Connection to this power line will involve upgrading approximately 2.5 km of Central Alberta Rural Electrification Association's single phase power line to three phase power along Highway 12.

Natural Gas connection for the development will be through ATCO Gas. ATCO has a number of gas lines in the area.

## **3.4 PUBLIC ENGAGEMENT**

As part of the public communication and plan preparation process, a public information session was held on Nov. 28, 2006, at the Lacombe Royal Canadian Legion. Approximately 30 people attended the meeting. The information session informed attendees of the development process and provided an opportunity for their input in regard to possible design/construction issues. The issues brought forward during the public information sessions are summarized as follows:

### **3.4.1 Transportation Issues:**

There was some concern from residents on how the development would affect the safety of the intersection of Highway 12 and Range Road 26-1 in regard to the turning movements and the amount of heavy truck traffic. The Traffic Impact Assessment completed by AD Williams Engineering Inc. determined the impact that the development will have on the intersection of Highway 12 and Range Road 26-1.

The intersection at Highway 12 and Range Road 26-1 currently is of Type IVb intersection and at full development, the intersection warrants a Type IVb intersection. The recommendation was therefore, the current intersection configuration can handle the anticipated traffic volumes that the development will generate. The Traffic Impact Assessment follows the warrant system that Alberta Transportation uses to determine if/when signalization and illumination of the intersection will be needed.

- Vertical alignment of the highway creates conflict with sight distance. A detailed survey determined that all vehicle scenarios did not meet the required sight distances without intersection upgrades. However, since there are currently acceleration and bypass lanes on Highway 12, the sightline conditions are sufficient to cross over Highway 12 and enter into the acceleration lane safely.

**Note:**

*It is important to note that the above statements reflect the concerns of the community with respect to Highway access and the solution provided at the time of the public information session reflected the Traffic Impact Assessment completed by A.D. Williams Engineering Inc. The supplemental Traffic Impact Assessment completed by Morrison Hershfield modifies the solution to reflect realignment of Range Road 26-1 and an improved transportation network with sight distances exceeding required standards.*

### **3.4.2 Site Development Issues:**

There will be site development guidelines for the subdivision which define the following aspects of the subdivision:

- Perimeter landscaping and screening
- Lot landscaping and screening
- Signage Criteria
- Easements for potential future servicing
- Building aesthetic criteria

### **3.4.3 Water / Sanitary Issues:**

- A groundwater study has been conducted and it has been determined that no negative impacts to existing groundwater users is anticipated.
- Geotechnical investigation has determined the use of individual septic systems is appropriate for the site.



#### **3.4.4 Storm Water Management Issues:**

- The Storm Water Management Plan will be part of the development of the site. A storm water pond will be designed to alleviate any downstream impacts due to storm water runoff from the development site.

#### **3.4.5 Subdivision Zoning/Planning Issues:**

There is a concern with the zoning of the development and what types of businesses may be allowed in the area. There is also a concern that if this land is designated for industrial use, that the possibility exists that other adjoining sections of land may follow suit. However, any further potential development on adjacent lands will require similar due process and research (i.e. an Area Structure Plan) before development occurs.

#### **3.4.6 Rail Access Issues:**

- Access may be granted to the businesses adjoining the existing rail spur.  
This will require agreements with CP Rail/Viterra.

## **4.0 PLAN OBJECTIVES**

The future land use concept reflects the following objectives of the Parkview Industrial Area Structure Plan:

- To provide for the appropriate industrial development of agricultural land.
- To provide for the development of effective and safe transportation network which will service the Plan area?
- To provide for the protection of environmentally significant areas where possible.
- To provide for the installation of suitable servicing infrastructure.
- To provide for the enhancement of visual aesthetics in the industrial development.
- To provide for the development of industry in an environmentally sustainable manner.
- To provide for the development of design criteria based on geotechnical conditions.

## **5.0 VISION**

*The Parkview Industrial Area has reached full development and is home to successful industrial businesses which utilize the land area encompassed in 39 lots, approximately 113 hectares, to its full potential.*

*Highway 12 borders this development to the north, providing a strong connection to the City of Lacombe and other major business sectors. Range Road 26-1 intersects with Highway 12, providing access to the Parkview Industrial Area through three service roads which divide the industrial subdivision.*

*The industrial developments in this subdivision are comprised of a mixture of agricultural based service and supply companies, agriculture and food processing companies, natural resource service operations, manufacturing, transportation, warehousing and distribution establishments, as well as small service rental businesses. Businesses in this development are mindful of the surrounding agricultural land use and ensure any substance release will not negatively impact the environment.*

*All developments have their own onsite sewage disposal system and private water well to provide water and sewer services. Businesses conduct themselves accordingly to ensure low water usage and waste water effluent discharge throughout the year.*

*Lots are effectively screened and buffered in a visually appealing manner and landscaping, design and signage controls are used to enhance the visual qualities of the industrial development.*

*Storm water retention ponds are constructed in three locations inside the Plan area. Individual lots are graded to direct runoff into drainage swales and ditches along lot lines which convey water from the lots to the storm ponds. The ponds effectively contain the storm water and alleviate downstream impacts due to runoff from the area.*

## **6.0 CONCEPT**

The land use pattern for the Plan area is illustrated in Figure 5 – Future Land Use Concept. This concept consists of prescribed future land uses, utility infrastructure, environmental protections including storm water retention ponds and a transportation network for the plan area.

### **6.1 PLAN POLICIES**

The following policies relating specifically to the Parkview Industrial Development area are to be applied at the time of new subdivision and development. All existing statutory plans and policies, particularly those policies contained in the County's Municipal Development Plan, must also be applied.

### **6.2 PHASED DEVELOPMENT**

The Parkview Industrial Park is envisioned as a phased developed, the time of which is influenced by several factors notwithstanding:

- The immediate needs of the landowner
- Market Conditions
- A coordinated approach in the provision and construction of the 'on site' infrastructure requirements.
- A coordinated approach in the provision and construction of the 'external' infrastructure improvements.

## **6.2.1 Land Use Concept Plan Phasing**

The Parkview Industrial Park is designed as a scalable project divided into phases which can be advanced on a phase by phase basis or by combining a series of incremental phases into a single phase.

It should be noted that, notwithstanding the above, external elements, such as regional and local economic conditions, and external requirements significantly impact the plan area and these factors may either expedite or defer individual phase progression.

### **6.2.1.1 Phase I of the Concept Plan**

Phase I shall include the following:

- 6.2.1.1.1 Redesignation of the plan area which consists of 113 hectares (279 acres more or less) from Agricultural District ‘A’ to Business Industrial District.
- 6.2.1.1.2 The subdivision and development of lots identified as Phase I of the Parkview Industrial Plan as shown in Figure 5 – Land Use Concept.
- 6.2.1.1.3 The relocation of the point of intersection of Hwy 12 and Range Road 26-1.
- 6.2.1.1.4 Upgrading of the Viterra internal road and Range Road 26-1, necessary to facilitate the development of Phase I in accordance with the requirements of the “Industrial Road Standards Guidelines” of Lacombe County.
- 6.2.1.1.5 A 10 Meter Utility Right of Way abutting the frontage of each lot will be created to accommodate the provision of municipal services should they become available in the future.

- 6.2.1.1.6 At the time of subdivision provision will be made for the dedication of a Public Utility Lot for the provision of a sewage treatment system, potable water storage facility and possible pumping station.
- 6.2.1.1.7 At the time of subdivision the developer shall enter into a deferred servicing agreement relating to the future provision of a communal potable water and sewage treatment system to the satisfaction of Lacombe County.

#### **6.2.1.2 Phase II and Future Phasing of the Concept Plan**

It is acknowledged that the Parkview Industrial Park is designed as a scalable project and as such the specific number of lots contained within Phase II shall be determined by the developer upon completion of any technical investigations necessary to support an application for subdivision. It is further acknowledged that Phase II may consist of a portion or all of the lots referenced within ‘future phasing’ as shown in Figure 5 – Land Use Concept.

Phase II and Future Phasing shall include the following:

- 6.2.1.2.1 The configuration of Phase II and Future Phasing shall be representative of the road configuration and lot alignments represented within Figure 5 – Concept Plan.
- 6.2.1.2.2 The completion of the internal road system and infrastructure improvements and the upgrade of Range Road 26-1 necessary to facilitate the development of Phase II and Future Phasing.
- 6.2.1.2.3 A 10 Meter Utility Right of Way abutting the frontage of each lot will be created to accommodate the provision of municipal services should they become available in the future.

## **6.3 LAND USE**

### **OVERVIEW**

The purpose of these policies is to ensure the appropriate industrial development of agricultural land. Currently, land within the Plan area is cleared farm land which is being used for production of crops and hay. Although it is recognized that the lands proposed for industrial use are rated as better agricultural land, the Municipal Development Plan allows for the conversion of such land to non-farming activities for industrial and Industrial expansion next to major transportation corridors.

The Plan area is divided into 39 individual lots and three storm water retention ponds, dedicated as Public Utility Lots, as shown in Figure 5 – Future Land Use Concept. The lots will be developed to support industrial businesses suitable for an agricultural area which wouldn't negatively impacting adjacent agricultural land. This entails proceeding with low density development of light industrial businesses with non-polluting operations. Emphasis will be placed on developing a considerable variety of appropriate uses of the Plan area so that the rate of absorption can facilitate the timely construction of an internal road system. Subdivision and development permit applications for lands located adjacent to Highway 12 shall be referred to Alberta Transportation for their review and comment.

#### **6.3.1 Land Use Policies**

- 6.3.1.1 All future subdivision and development in the Parkview Industrial Development area shall comply with the Land Use Concept shown on Figure 5.

- 6.3.1.2 All future subdivision and development within the plan area shall be in accordance with the requirements stipulated in the Business Industrial District of the Land Use Bylaw.
- 6.3.1.3 The minimum lot size in the area designated for light industrial shall be 2.0 acres.
- 6.3.1.4 Development shall be restricted to non-polluting operations, as per Alberta Environment Standards and Guidelines.
- 6.3.1.5 All subdivision and development shall be in accordance with the requirements stipulated within the Parkview Industrial Park Site Development Guidelines.
- 6.3.1.6 Municipal Reserve shall be provided as shown within Figure 5 - Land Use Concept Plan and provided at the time of subdivision



## **6.4 TRANSPORTATION NETWORK**

### **OVERVIEW**

The purpose of these policies is to create effective and safe road networks to service the Plan area. The Concept Plan Figure 5 identifies the existing and proposed internal roads within the Plan area, while Existing Transportation Features, illustrated in Figure 4, identifies the Regional Road and the Major Road servicing the area.

The Regional Road is Highway 12, to the north of the Plan area, which is aligned east to west. The Major Road is Range Road 26-1, located east of the Plan area and aligned north to south. The only existing internal road is the Viterra access road which is aligned southwest to northeast. In addition, there are two proposed internal roads.

A Traffic Impact Assessment (TIA), prepared by A.D. Williams Engineering Inc., and subsequent Supplemental Traffic Impact Assessment completed by Morrison Hershfield dated June 03, 2009 and approved by Alberta Transportation dated October 1<sup>st</sup>, 2009 form the basis of the transportation network policies outline as follows:

#### **6.4.1 Transportation Network Policies**

- 6.4.1.1 Any costs incurred in designing, constructing and upgrading all internal roads will be borne by the Developer.
- 6.4.1.2 All roads shall be constructed to the “Industrial Subdivision Road Standard” applied by Lacombe County.
- 6.4.1.3 Any roads required to facilitate the implementation of the Parkview Industrial Area Structure Plan shall be at the sole cost and expense of the Developer.

- 6.4.1.4 The existing Viterra access road shall be upgraded to municipal standards by the developer and subsequently maintained by the County.
- 6.4.1.5 The Developer shall, at his sole cost and expense construct the prescribed improvements to Highway 12 and Range Road 26-1, which includes the relocation of the point of intersection of Highway 12 and Range Road 26-1. The standards of which shall be in accordance with the requirements of Alberta Transportation
- 6.4.1.6 The County would include “endeavor to assist” provisions in the development agreement, in order to compensate the Developer for any other developments that might benefit from these improvements.
- 6.4.1.7 Subdivision and development permit applications for lands located adjacent to Highway 12 shall be referred to Alberta Transportation and Infrastructure for their review and comment.
- 6.4.1.8 Prior to the commencement of Phase II, the developer shall at his sole cost and expense complete a Traffic Impact Assessment based on ‘real time’ trip generation data. This Traffic Impact Assessment will determine what if any highway improvements may be required in the development of future phases.
- 6.4.1.9 Upon development, roads within the Plan area shall be maintained by Lacombe County.

## **6.5 ENVIRONMENTALLY SIGNIFICANT AREAS**

### **OVERVIEW**

The purpose of these policies is to ensure existing environmentally significant areas within the Plan boundaries are protected, where possible, while also providing opportunities for the development of new environmental features.

Environmentally significant areas within the Plan boundaries include existing tree stands and shelter belts located to the south and the east as well as a low-lying area of approximately 6.2 acres located in the southeast which is covered with poplars, willows, sedges and swamp grasses. This is illustrated in Figure 2 – Existing Environmental Features. Other environmental features currently present include poplar trees and bush located along the south edge of the plan.

#### **6.5.1 Environmentally Significant Features Policies**

- 6.5.1.1 Existing environmental significant areas, such as the tree stands, shelter belts and the low-lying area, shall be protected where possible.
- 6.5.1.2 Future development should provide opportunities for tree, shrubbery and foliage in landscaping plans.

## **6.6 GEOTECHNICAL CONDITIONS**

### **OVERVIEW**

The lithological sequence of soils is described as organic topsoil overlying till which overlies sand and/or silty sand. In a few places the sand overlaid the till. In-situ soils were found to be fine-grained with a significant amount of silt and/or clay. Classifications would be inorganic clays of low to medium plasticity, sand and silty sand.

Moisture contents varied considerably but generally indicated that the in-situ soils are near (sands) or below (till) their estimated optimum moisture content. The sands can dry rapidly when disturbed. Therefore, use of a water truck to achieve proper compaction is anticipated. However, heavy use of a water truck is not anticipated.

High groundwater within the frost penetration zone was encountered in places. Combined with frost susceptible material, there are risks for harmful frost action on surface structures. Compounding the risk to structures is the presence of clay. Clay can be expected to swell and shrink when subjected to either increases or decreases in moisture content. However, till containing clay was characterized as medium plastic. As such, the risk for shrink/swell is mitigated somewhat.

Movement of the soil can result in cracked pavement, sidewalks and house foundations and/or floor slabs. It is recommended that all practical precautions be taken to ensure that the natural moisture content of the clayey soils does not change significantly. For added precaution, floor slabs can be underlain with a water proof membrane to minimize future moisture changes in foundation soil from the building.

Compactibility of in-situ soils is expected to be fair to good. Bedrock is not expected to be encountered in the development of the Plan area. Soil strengths ascertained by limited pocket penetrometer tests were satisfactory.

Properties vary within the different soils. In particular, the clayey till will take on and retain water very differently from the silty sands when watered to achieve proper compaction. Contractors may have difficulty applying proper proportions of water for changing soil types to achieve advised optimum moisture content specifications. Differentiating soil types may prove problematic. Advance planning will aid contractors in construction.

The relevant findings of the geotechnical investigation can be found in the ‘Geotechnical Investigation – Chiswell Subdivision’ report completed by GTECH Earth Sciences Corp.

#### **6.6.1 Geotechnical Policies**

- 6.6.1.1 All development within the plan area shall have regard to the findings of the geotechnical investigation and report completed by GTECH Earth Sciences Corp.
- 6.6.1.2 On any lands within the plan area a geotechnical report, shall be submitted to the County as part of an application for a development permit to ensure that the proposed development has due regard for the unique geotechnical characteristics of the site.

## **6.7      SERVICING INFRASTRUCTURE**

### **OVERVIEW**

The purpose of these policies is to provide for the installation of appropriate utility facilities necessary to support industrial development. Due to the fact that Municipal water, sewer and fire protection services will be unavailable within the Plan area, each lot will have a private water well, onsite sewage disposal system and fire protection reservoir. Three storm water ponds will also need to be constructed within the Plan area to prevent downstream impacts due to water runoff. Additional background and policies pertaining to water wells and storm water management is outlined in Section 7.6.

All development in the Plan area must be undertaken with the recognition that municipal water and sanitary sewer services will be unavailable and each lot will need to utilize a private water well and an onsite sewage disposal system. As such, the minimum lot size proposed for the industrial area is two acres. Local realtors and County representatives have indicated that the demand for industrial land in the Plan area appears to be for larger lots, up to twenty acres.

Due to the fact that municipal water supply is not available for fire protection, lower density development is more desirable. Reservoirs for fire protection may need to be provided by individual businesses at time of building.

Low water use and waste water effluent are a requirement for this development. A Utility Right of Way Plan with a width of 10 meters shall be registered along the frontage of properties within the Plan area to accommodate future municipal services that may become available.

### **6.7.1 Potable Water**

The Water Act specifies that proposed residential developments must determine whether the diversion of 1,250 m<sup>3</sup>/year per household (lot) for domestic use can be sustained from local aquifers, and this diversion should not interfere with any household users, licensees or traditional agriculture users who exist when the subdivision is approved.

The primary aquifer is the fractured shale unit and possibly sandstone units in the Paskapoo Formation. The primary aquifer is capable of yielding sufficient quantities of groundwater for the proposed development (yields far greater than the 19 Igpm required can be developed). This assumes a properly constructed well. Based on the existing data and potential groundwater extraction, negative impacts to existing groundwater users are not anticipated.

Groundwater from an Viterra water well within the Plan area has a Ca-Mg-SO<sub>4</sub>-HCO<sub>3</sub> water type and meets or exceeds guidelines for Canadian drinking water quality. Only the TDS (Total Dissolved Solids) exceed AO (aesthetic objectives) guidelines. TDS refers mainly to inorganic substances dissolved in the water. The effect of TDS on drinking water quality depends on the level of its individual components; excessive hardness, taste, mineral deposition and corrosion are common properties of highly mineralized water.

#### **6.7.1.1 Potable Water Policies**

6.7.1.1.1 All subdivisions and development shall be capable of being serviced on-site with individual well systems.

6.7.1.1.2 Water wells which serve Industrial users, shall meet the licensing requirements of the Water Act including the licensing of each well drilled as identified in the ‘Ground Water Evaluation Report – Proposed Industrial Subdivision Development’ completed by Moncur Groundwater

- 6.7.1.1.3 On-site reservoirs for fire protection shall be the responsibility of the lot owners.

## **6.7.2 Sanitary Sewer System**

Percolation tests indicate that the Plan area is suitable for conventional septic fields. Options include mound, field, or pump out systems. Groundwater separation from the bottom of the effluent may not be achievable in places. Thus, the appropriate system for private sewage disposal will be dependent on soil conditions. A Geotechnical Investigation, prepared by G Tech Earth Sciences Corp. provides supporting technical data regarding the suitability of soils in the development area to support private sewage systems.

### **6.7.2.1 Sanitary Sewage System Policies**

- 6.7.2.1.1 All subdivisions and development shall be capable of being serviced onsite with a private onsite sewage disposal system.
- 6.7.2.1.2 All private sewage systems shall comply with the current codes and standards of Practice.
- 6.7.2.1.3 All private sewage systems shall utilize methods identified in the Geotechnical Investigation completed by GTech Earth Science Corp.



### **6.7.3 Storm Water Management**

Managing storm water will ensure large volumes of water created by storm events do not leave the Plan area in an uncontrolled manner. The purpose of this is to prevent soil erosion or wash out conditions on neighboring agricultural lands which could negatively affect crop production. This issue was raised by an adjacent landowner during the public hearing process which was initiated by the County to review the Area Structure Plan. Three storm water retention ponds are proposed for this subdivision to collect and contain storm water during peak flows. The ponds should be located in the western portion of the property, where elevations are lower.

The first pond, which will collect runoff from the northern half of the property, should be located in the very northwest corner of the property. It will collect water from all lots to the north of the Viterra access road. The second pond will collect runoff from the central portion of the property. This pond should be located immediately south of Viterra grain terminal. The third pond should be located in the very south west corner of the property. This pond will collect runoff from the southern portion of the property. The locations of the second and third storm ponds allow them to be linked to the existing drainage channels which flow east to west. The locations of the storm water ponds are illustrated in Figure 5.

All storm ponds should be designed as two stage facilities. The upper stage is designed to temporarily store large, infrequent storms. The lower state designed to store smaller, infrequent storms. The upper stage of the pond will be slowly drained using a controlled outlet structure as the storm event passes. The lower stage of the pond will retain water after a storm event has passed. The water will be slowly released through infiltration into the soil and through evaporation to the air.

An overland drainage system will be used for storm water management which will be accomplished by using roadway ditches, culverts and drainage swales along lot lines. The layout of the overland flow system will be chosen to work closely with existing topography, as well as lot layouts.

As mentioned previously, an adjacent landowner during the public hearing process expressed concern about the incorporation of a comprehensive storm water management plan into the development to ensure that increased storm water during major events materially would not negatively impact their lands. Alberta Environment regulations require that developments ensure that storm water is managed in a responsible manner and that post development flows be no greater than pre-development flows. As such, the existing drainage patterns which leave the property must be protected and the existing rate of flow maintained, however, storm mitigation designs and practices proposed will ensure that post development flows will not exceed pre-development flows. The storm water management plan prepared by A.D. Williams Engineering Inc. provides for three storm retention ponds two of which will be located on the channels identified by adjacent landowners as being a concern. The Storm Water Management Plan provided for 2 celled ‘dry ponds’ however, prior to the commencement of Phase II the storm water management plan will be re-examined to determine if ‘Wet Ponds’ would assist in the mitigation of existing drainage issues. It again, must be recognized that drainage within the channels must be maintained in accordance with the requirements of Alberta Environment.

#### **6.7.3.1 Storm Water Management Policies**

- 6.7.3.1.1 The Developer shall provide storm water management facilities to the satisfaction of Lacombe County.
- 6.7.3.1.2 Storm water management for this development will be conducted utilizing an overland drainage system only.
- 6.7.3.1.3 Individual lots shall be graded to direct runoff water to the drainage swales or ditches which will convey water from the lots to the storm ponds.

- 6.7.3.1.4 The existing drainage channels may be altered in accordance with a comprehensive Storm Water Management Plan to be submitted to Lacombe County and Alberta Environment as part of the detailed subdivision approval process.
- 6.7.3.1.5 The northern drainage channel may be realigned so that it runs along the Viterro access road.
- 6.7.3.1.6 The southern drainage channel should be realigned to run along the proposed internal subdivision road network.
- 6.7.3.1.7 The storm water management plan may be modified, as approved by Alberta Environment and the Lacombe County during the detailed design process to reflect changes in subdivision design where required.
- 6.7.3.1.8 A storm water management review will be completed prior to the commencement of Phase II to examine the effectiveness of the existing storm water management plan which includes downstream impacts and flow control.
- 6.7.3.1.9 Recommendations or changes suggested in the storm water management review will be incorporated into the Phase II and future phases of the development plan.

- 6.7.3.1.10 All storm ponds should be designed as two stage facilities in which the lower stage of the storm pond should be sized to hold a runoff volume equal to the difference between the predevelopment and post development runoff volumes during a 1 in 25 year storm.
- 6.7.3.1.11 Design for constructed storm water management facilities shall follow the ‘Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems’, Alberta Environment, latest edition as a minimum.
- 6.7.3.1.12 Constructed storm water management facilities shall be landscaped with native and/or naturalized plant materials.
- 6.7.3.1.13 Constructed storm water management facilities shall have a minimum of 25% of the waters edge planted to provide shade and reduce algae and warming of water.
- 6.7.3.1.14 The condition of the pond side slopes at the time of construction should be reviewed and clayey soils, which may inhibit seepage from the basin should be sub-cut out.
- 6.7.3.1.15 The pond shore line should be protected against erosion from wave action, because shoreline erosion may destabilize the pond slopes. Side slopes should be vegetated as soon as possible after construction.
- 6.7.3.1.16 Storm water management works shall be constructed prior to final subdivision approval

## **6.8 VISUAL APPEAL**

### **OVERVIEW**

The Parkview Industrial Site Development Guidelines completed by UMA/AECOM, form the basis of the requirements for this plan in terms of screening, plantings, building envelope and signage. The purpose of these guidelines and policies are to promote land development in a visually appealing, consistent, and organized manner while ensuring all development occurs to the satisfaction of Lacombe County. Enforcement of these guidelines and policies also ensures the establishment of natural features, such as trees and bushes, and minimizes future land use conflicts.

Lot components such as buildings, parking and driveways, as well as outdoor functions such as product displays, shall be arranged and located to emphasize the aesthetically pleasant components of the lot. This includes trees, views, and architectural features. Less attractive elements such as service facilities, outside storage and equipment areas, and garbage enclosures should be disguised through placement and design of the structure and landscape.

Where buildings are located on corner lots, consideration should be given to the exposed exterior side walls visible from both streets. These side elevations should incorporate design features to complement the main façade and provide some architectural interest. Front façades of large buildings visible from public right-of-ways shall include architectural features to add interest to the building elevation.

In multi-building complexes, a comprehensive architectural concept shall be developed and maintained. Building massing design will be emphasized. Massing will be reviewed in the context of building height, number of stories, roof configuration, and building groupings. Roofs shall be an integral part of the building design. Roof style in new buildings or additions shall be compatible with the existing roof designs on the same lot.

A comprehensive color and materials scheme shall be developed for each lot. Color and materials schemes shall be harmonious and compatible with adjacent development and within the lot. Earth tone colors are encouraged. During the public hearing process an adjacent landowner expressed concern about the visual impact of the development on his residence. Upon site inspection it was determined that a small portion of the extreme south west corner of the industrial park is visible from the existing residence, however, a greater portion of the south west corner of the industrial park is visible from the farm yard. While it is impractical to screen the entire west boundary of the industrial park as it would have limited if any success in screening the development from adjacent lands it may be more prudent to initiate screen practices within the limited exposure of the farm yard.

#### **6.8.1 Visual Appeal Policies**

All Development within the plan area shall have regard to the Parkview Industrial Site Development Guidelines to be adopted by Lacombe County.

##### **6.8.1.1 Screening**

6.8.1.1.1 Perimeter, lot, flankage, amenity, and yard screening shall be implemented as defined within the Site Development Guidelines.

6.8.1.1.2 It shall be the responsibility of the Developer to provide perimeter screening in accordance with the Site Development Guidelines.

6.8.1.1.3 Prior to the commencement of Phase II screening options within the existing farmyard of the adjacent landowner will be examined to determine the most practical measure to mitigate visual impacts from the development.

- 6.8.1.1.4 It shall be the responsibility of the lot owner to provide lot, flankage, yard, and amenity screening in accordance with the Site Design Guidelines.

#### **6.8.1.2 Planting**

- 6.8.1.2.1 As a condition of subdivision approval the Developer shall provide to Lacombe County a comprehensive landscape plan that shall be in strict accordance with the requirements, as well as, within the spirit and intent of the Site Development Guidelines.
- 6.8.1.2.2 A 5 meter landscape buffer strip surrounding the north and east perimeter of the development lands shall be set aside at the time of subdivision.
- 6.8.1.2.3 The Developer shall provide a planting buffer adjacent to Highway 12 and Range Road 26-1 and within the Municipal Reserve dedication as reflected in an approved comprehensive landscape plan and in accordance with the conditions and requirements outlined within the Site Design Guidelines.
- 6.8.1.2.4 The Developer and the County shall enter into a binding agreement in which the Developer and subsequently the collective tenants of the Parkview Industrial shall assume full responsibility for the continued maintenance and upkeep of the buffer strip and the associated plantings to the satisfaction of the County.

### **6.8.1.3 Signage**

- 6.8.1.3.1 The Developer shall provide Industrial park entrance signs, as stipulated in and in compliance with the Site Design Guidelines.
- 6.8.1.3.2 Maintenance of the Industrial park entrance signs will be the responsibility of the collective tenants of the Parkview Industrial Park.
- 6.8.1.3.3 All lot signage shall be designed and displayed in accordance with the requirements stipulated within the Site Development Guidelines.

### **6.8.1.4 Access**

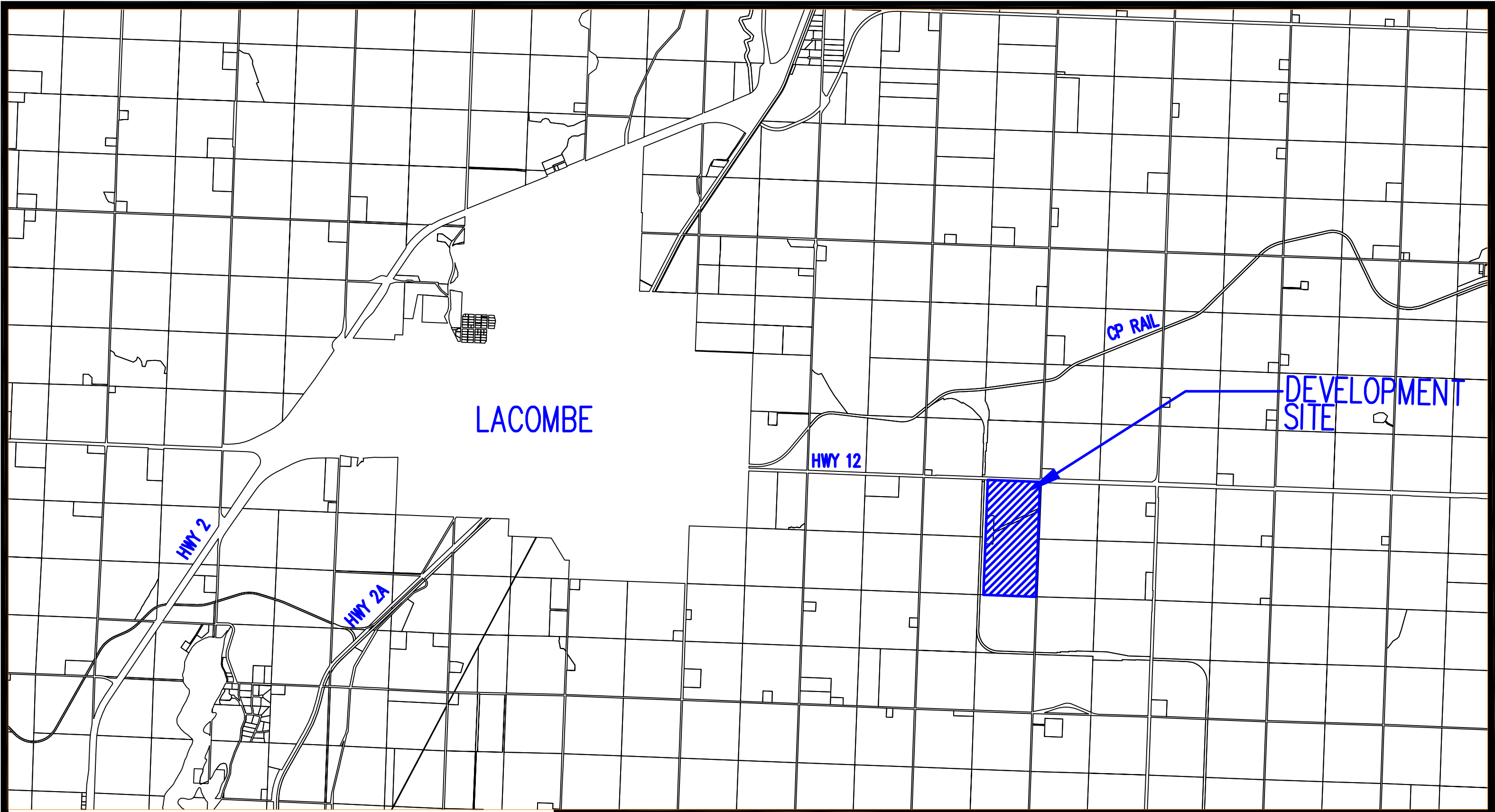
- 6.8.1.4.1 Individual lot access shall be in accordance with the requirements stipulated within the Site Development Guidelines.

### **6.8.1.5 Buildings**

- 6.8.1.5.1 Buildings shall be located on the lot to screen proposed working areas from public right-of-ways.
- 6.8.1.5.2 Adjacent buildings on the same or separate lots shall be compatible in height and scale. If different scale is required for functional reasons, adequate transition shall be provided between the buildings.
- 6.8.1.5.3 Temporary buildings, such as trailers, shall not be permitted.
- 6.8.1.5.4 Primary public entrances shall be well defined and primary building elevations shall face the highways and/or interior streets.



- 6.8.1.5.5 Buildings shall be designed with consideration for pedestrian scale at the entrance. A higher level of detail will be required at the entrance zone on, and adjacent to the building.
- 6.8.1.5.6 Loading docks should not face public right-of-ways but, if visible should be screened and articulated in such a manner to mitigate the visual impact.
- 6.8.1.5.7 Roof mounted service equipment shall be screened from view.
- 6.8.1.5.8 Large expanses of highly reflective surface and mirror glass exterior walls shall be avoided to prevent heat and glare impacts on the adjacent properties and public right-of-ways.



LACOMBE

HWY 12

CP RAIL

DEVELOPMENT  
SITE

HWY 2

HWY 2A



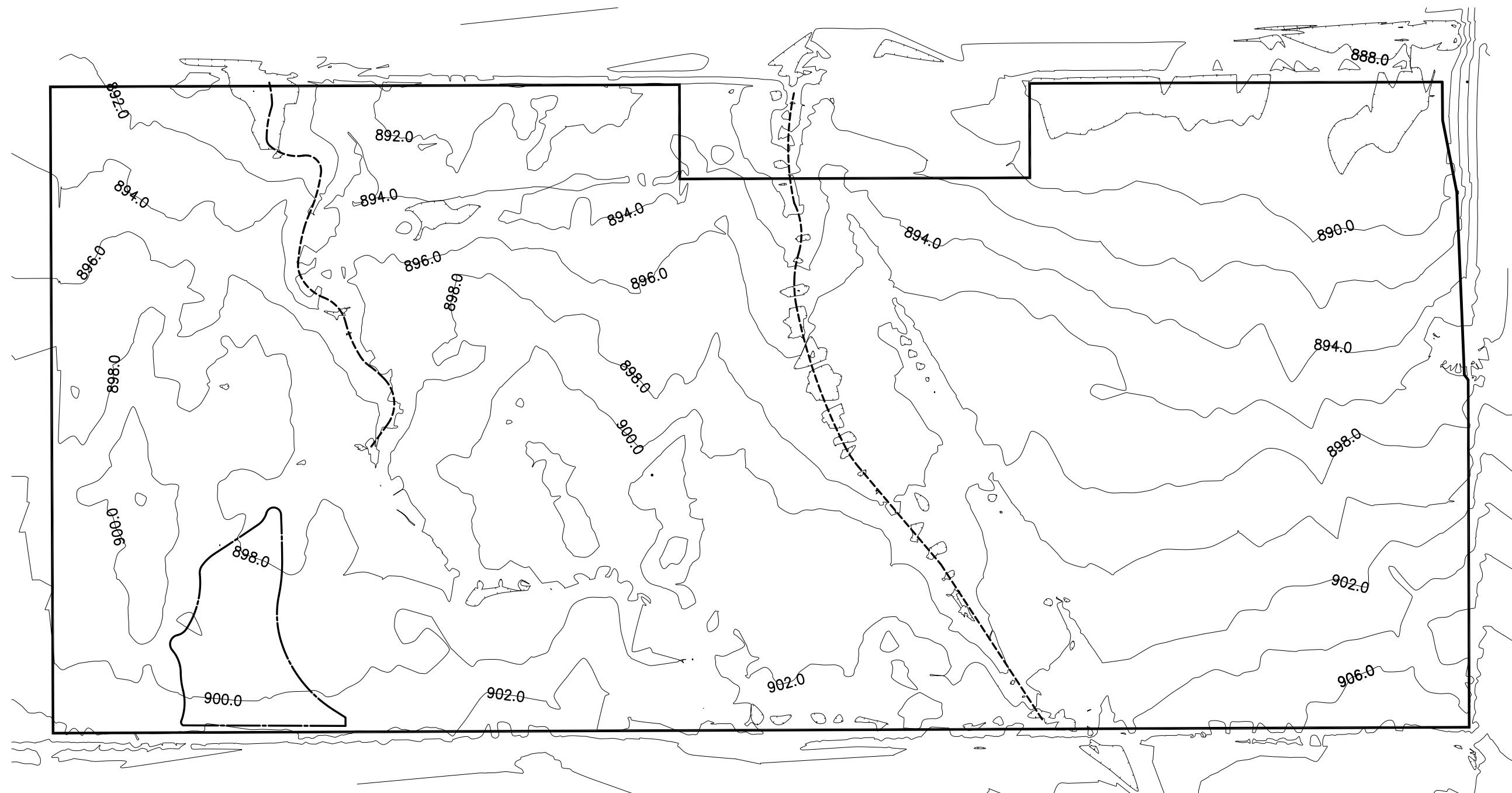
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Consulting Engineers

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Multi-Disciplined Consulting Engineering Services

JOB. TITLE: **PARKVIEW INDUSTRIAL  
DEVELOPMENT**  
**LACOMBE, AB**  
DWG. TITLE: **FIGURE 1**  
**REGIONAL CONTEXT PLAN**

DWN. BY:	DES. BY:	PROJ. MGR.:
WY	DL	WG
PEER REVIEW:	DATE: (YY-MM-DD) 2006.08.08	SCALE: 1:50000
CLIENT PROJ. #	ADWE PROJ. # 12365.00	
DWG. # 12365.00-B-C-001	5	REV



**LEGEND**

- LEGAL BOUNDARY
- CONTOUR LINES
- - - DRAINAGE CHANNEL
- WET AREA



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JOB. TITLE:

**PARKVIEW INDUSTRIAL  
DEVELOPMENT  
LACOMBE, AB**

DWG. TITLE:

**FIGURE 2  
EXISTING ENVIRONMENTAL  
FEATURES**

DWN. BY:

**CB**

DES. BY:

**DL**

PROJ. MGR.:

**WG**

PEER REVIEW:

DATE: (YY-MM-DD)

**2006.08.08**

SCALE:

**1:5000**

CLIENT PROJ. #

ADWE PROJ. #

**12365.00**

DWG. #

**12365.00-B-C-002**

OF **5**

REV #



CANADIAN PACIFIC RAILWAY

HIGHWAY 12

RANGE RD 26-1

'A' (CROP)

AGRICORE ACCESS RD

LEGEND

— LEGAL BOUNDARY



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JOB. TITLE:

**PARKVIEW INDUSTRIAL  
DEVELOPMENT  
LACOMBE, AB**

DWG. TITLE:

**FIGURE 3  
EXISTING LAND USE PATTERN  
'A' (CROP)**

DWN. BY:

**CB**

DES. BY:

**DL**

PROJ. MGR.:

**WG**

PEER REVIEW:

DATE: (YY-MM-DD)

**2006.08.08**

SCALE:

**1:5000**

CLIENT PROJ. #

ADWE PROJ. #

**12365.00**

DWG #

**12365.00-B-C-003**

OF

**5**

REV #



CANADIAN PACIFIC RAILWAY

HIGHWAY 12

AGRICORE ACCESS RD

RANGE RD 26-1

LEGEND

— LEGAL BOUNDARY



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DWG. TITLE:

**FIGURE 4  
EXISTING  
TRANSPORTATION FEATURES**

DWN. BY:

**CB**

DES. BY:

**DL**

PROJ. MGR.:

**WG**

PEER REVIEW:

DATE: (YY-MM-DD)

**2006.08.08**

SCALE:

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CLIENT PROJ. #

ADWE PROJ. #

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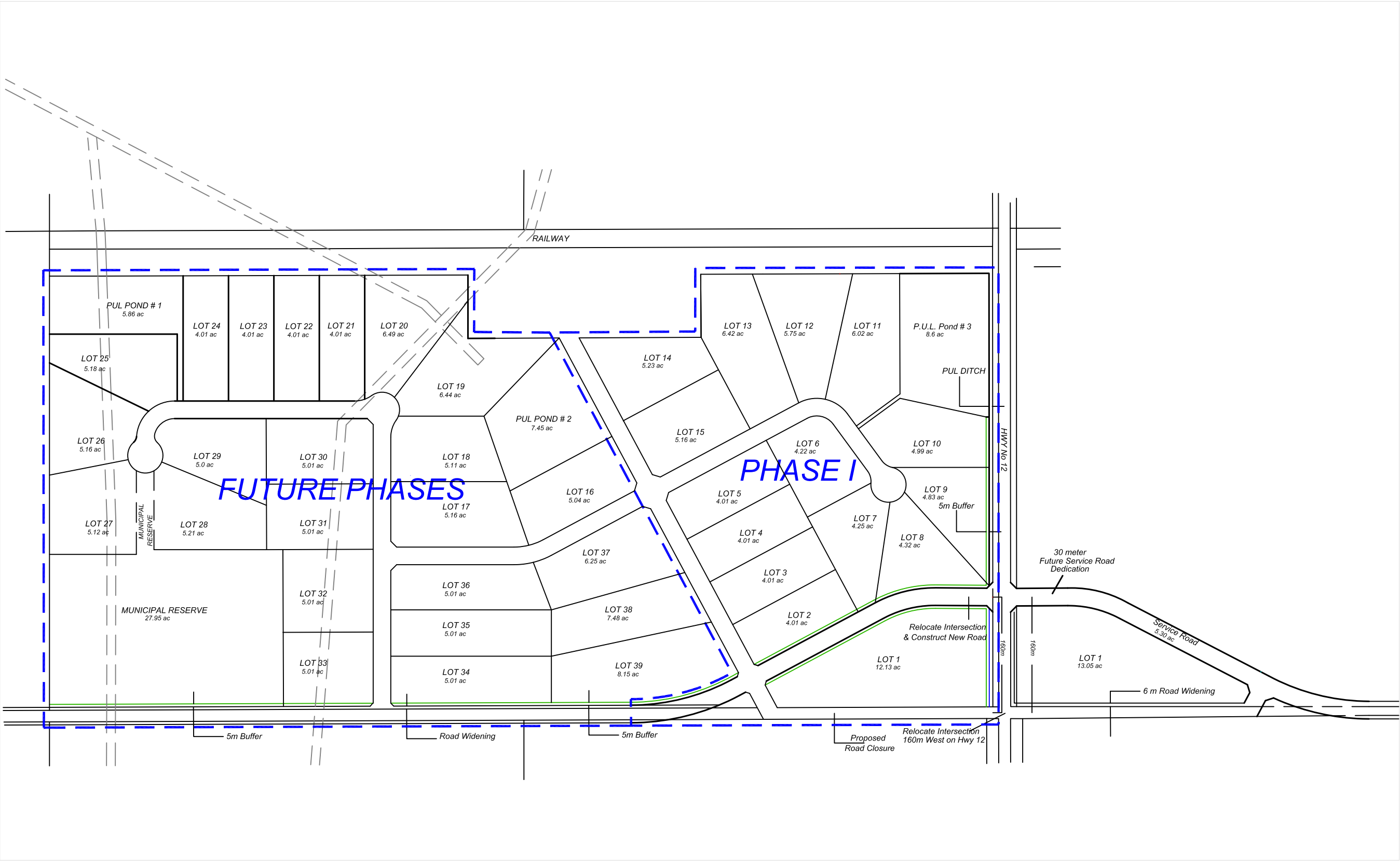
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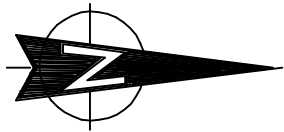
**5**

REV #



CONCEPT PLAN  
OF  
LOTS 1 & 2 PLAN 002-0702  
WITHIN  
E 1/2 23 - 40 - 26 - W4  
FOR  
ARCLAN HOLDINGS LTD

C OF T AREA	272.54 ac
TOTAL MR RESERVE REQ.	27.25 ac
TOTAL MR PROVIDED	27.95 ac
PUBLIC UTILITY LOT	3
# OF LOTS	39



- NOTES:
- ALL DISTANCES ARE IN METRES AND DECIMALS THEREOF.
  - ELEVATIONS ARE GEODETIC AND DERIVED FROM ALSM.

NO	DD/MM/YY	DESCRIPTION	BY
6			
5			
4			
3			
2	12/02/10	MUNICIPAL RESERVE	RTW
1	12/01/10	ROAD ALIGNMENT	RTW
		REVISIONS	

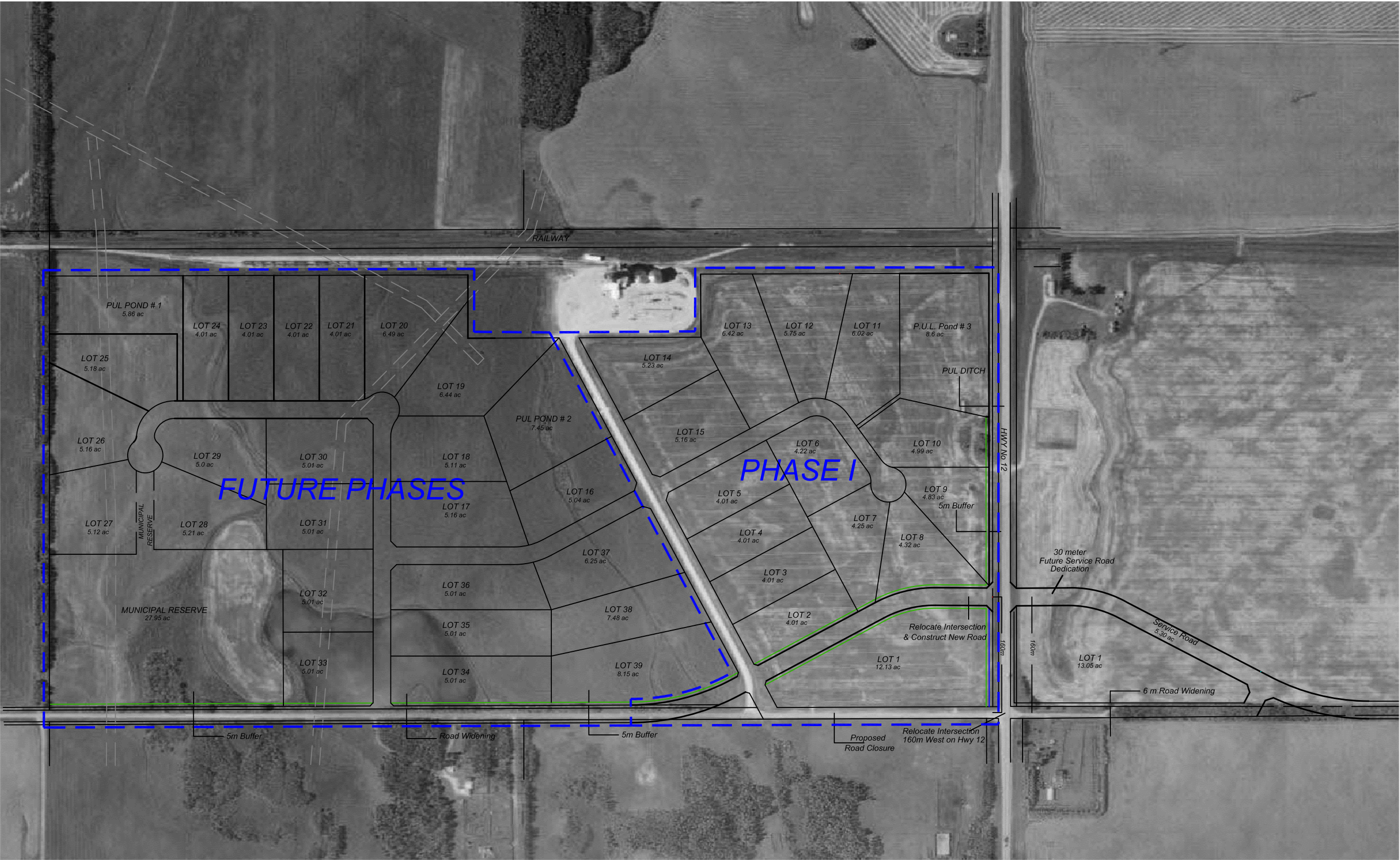
PROJECT  
ARCLAN HOLDINGS  
PARKVIEW INDUSTRIAL PARK

CLIENT  
ARCLAN HOLDINGS LTD

DRAWING TITLE  
RTW029 PARKVIEW INDUSTRIAL PARK  
CONCEPT PLAN - FIGURE 5

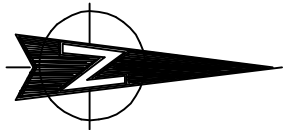
FILE # RTW029	SCALE 1:2000	DATE 21/05/10	DRAWN BY: RTW
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CONCEPT PLAN  
OF  
LOTS 1 & 2 PLAN 002-0702  
WITHIN  
E 1/2 23 - 40 - 26 - W4  
FOR  
ARCLAN HOLDINGS LTD

C OF T AREA	272.54 ac
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PUBLIC UTILITY LOT	3
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  - ELEVATIONS ARE GEODETIC AND DERIVED FROM ALSM.

NO	DD/MM/YY	DESCRIPTION	BY
6			
5			
4			
3			
2	12/02/10	MUNICIPAL RESERVE	RTW
1	12/01/10	ROAD ALIGNMENT	RTW
		REVISIONS	

PROJECT  
ARCLAN HOLDINGS  
PARKVIEW INDUSTRIAL PARK

CLIENT  
ARCLAN HOLDINGS LTD

DRAWING TITLE  
RTW029 PARKVIEW INDUSTRIAL PARK  
CONCEPT PLAN - FIGURE 5A

FILE # RTW029	SCALE 1:2000	DATE 21/05/10	DRAWN BY: RTW
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