BYLAW NO. 1277-05

OF THE

TOWN OF BONNYVILLE

"THE TOWN OF BONNYVILLE WEST BONNYVILLE BUSINESS PARK AREA STRUCTURE PLAN BYLAW"

BEING A BYLAW OF THE TOWN OF BONNYVILLE IN THE PROVINCE OF ALBERTA TO ADOPT AN AREA STRUCTURE PLAN FOR THE TOWN OF BONNYVILLE.

WHEREAS pursuant to Section 633 of the Municipal Government Act; Revised Statutes of Alberta, 2000, Chapter M-26, and any amendments thereto, a Council of a municipality shall pass a bylaw in accordance with the Act.

AND WHEREAS the Council of the Town of Bonnyville deems it proper and expedient to pass such a bylaw.

NOW THEREFORE, COUNCIL OF THE TOWN OF BONNYVILLE, DULY ASSEMBLED HEREBY ENACTS AS FOLLOWS:

- 1. This Bylaw including the attached Schedule "A" may be cited as the Town of Bonnyville West Bonnyville Business Park Area Structure Plan Bylaw.
- The purpose of this Area Structure Plan (ASP) Bylaw is to refine or specify further the general policy direction and land use designations provided for these lands within the Town's Municipal Development Plan (MDP), to serve as the basis for land use classifications in the Town's Land Use Bylaw (LUB), and to establish a sound framework for future decisions on subsequent subdivision and development permit applications, and generally on the use of the West Bonnyville Business Park Development Lands, for the lands situated within the ASP boundary being part of Sec 14 -Twp 61-Rge 6-W4M.

As attached, Schedule A shows, the ASP area being SE ¼ Sec 14-61-6-W4M excluding the land west of 66 Street between 50 Avenue (Highway 28) and 58 Avenue.

- 3. This Bylaw may be amended by Bylaw in accordance with the Municipal Government Act.
- 4. The Town of Bonnyville West Bonnyville Business Park Area Structure Plan Bylaw, on the date of final reading of this Bylaw, shall come into force and effect on that date.

Bylaw No.1277-05 Page 1 of 2

#33063

INTRODUCED AND GIVEN FIRST REA	ADING this day of
, 7.10., 2000.	Mayor Sley
	Chief Administrative Officer
AS ADVERTISED on the day of, A.D., 2006 in the Bonnyville	April , 2006 and the 10 day of Nouvelle.
PUBLIC HEARING HELD AT THE TON	Unil Isley
	Mayor
	Chief Administrative Officer
GIVEN SECOND READING this	day of April , A.D., 2006.
	Mayor
	Chief Administrative Officer
GIVEN THIRD AND FINAL READING this 2006.	day of, A.D.,
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	Chief Administrative Officer
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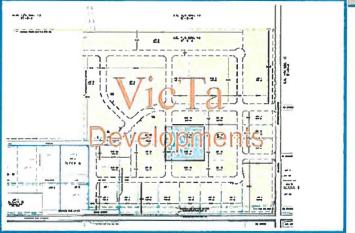
West Bonnyville Business Park AREA STRUCTURE PLAN

Prepared by



#201 5009—48th St. Lloydminster, AB T9V 0H7 Tel: 780-871-0638 Fax: 780-871-0625 March 13, 2006









For

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1.0 INTRODUCTION

1.1 Introduction

Victa Developments Ltd. is exploring the possibility of developing the SE½ Sec. 14 Twp. 61 Rge. 6 W4M. The land is located in Bonnyville on the north side of Highway 28 (50th Avenue) immediately west of 66th Street. The civic address of the property is 6801 50th Avenue. The initial work involved in obtaining the necessary approvals to begin the development work involves the preparation of an Area Structure Plan.

An Area Structure Plan (ASP) is a statutory plan adopted by Mayor and Council by Bylaw. The Plan provides a broad framework or "structure" for future development within a plan area. An ASP provides general policy direction regarding how an area will develop over time and offers opinions related to the impact on adjacent and future development. More importantly, the plan reflects the Municipality's goals and objectives in relation to this development and adjacent and future developments. Issues including land use, transportation and servicing are addressed in the plan. This ASP also includes all of the available background information related to the property being considered for development.

Area structure plans are prepared to ensure that all stakeholders involved in the development of a parcel of land are aware of the considerations associated with the development. Stakeholders include but may not be limited to the land Owner, the Town of Bonnyville, adjacent land owners and service providers (power, natural gas and communications services). Stakeholders have varied and over lapping, vested interests in land. Consequently, the ASP must provide and categorize all the information that is available at the time that the plan is prepared. The information then becomes the basis of comments and opinions related to the suitability of land in relation to the proposed development.

1.2 Background Information

Background information includes the information that was available at the time that this report was written. The background information that was gathered for the preparation of this report included bylaws, guidelines and regulations, previous reports, and information of record.

Preparation of the report gave due consideration to provincial legislation and municipal bylaws including the following:

- Province of Alberta, Municipal Government Act (Chapter M-26)
- Town of Bonnyville, Municipal Development Plan (Bylaw 1261-05)
- Town of Bonnyville, Municipal Development Plan, 1997 (Bylaw No. 1135-97).
- Town of Bonnyville, Land Use Bylaw (Bylaw No. 1152-98),
- Millennium Subdivision Area Structure Plan (Bylaw 1263-05),
- Ringuette Area Structure Plan, December 2003 (Bylaw 1233-03), and
- Vincent Area Structure Plan (Bylaw 1244-04), June 2004

Guidelines and regulations that were taken into consideration included:

- · Town of Bonnyville, Minimum Design Standards, and
- Town of Bonnyville, Guidelines to Land Development (February, 1986)

The information included in these documents provides a guideline for the manner in which the developer must make application and for considerations related to the required capacity of services.

"Information of record", specific to SE½ Sec. 14 Twp. 61 Rge. 6 W4M, that was gathered for this report included Land Title's information, water well information, and information pertaining to natural gas servicing and electrical power.

A number of Plans of Survey and Land Title documents were obtained including the following:

- Plan No. 635JY
- Plan No. 1457NY
- Plan No. 1861NY
- Plan No. 1998TR
- Plan No. 5702RS
- Plan No. 0324812
- Plan No. 0426695
- Plan No. 7922948
- Plan No. 9822708
- 062 026 615 Land Title Certificate
- 002 373 812 Land Title Certificate
- 022 180 407 Land Title Certificate
- 022 271 412 Land Title Certificate
- 032 353 431 Land Title Certificate
- 032 361 176 Land Title Certificate
- 032 361 176+2 Land Title Certificate
 032 361 176+3 Land Title Certificate
- 032 437 660 Land Title Certificate

The information pertaining to Plans of Survey and Land Titles was purchased in a digital format.

Information pertaining to water wells was obtained from Telus Geomatics. The available water well drilling information included a location map for water wells and records for four (4) of the wells. The well ID records that were available included:

Well ID: 0213569Well ID: 0213572Well ID: 0213574

The water well information is attached as Appendix "A".

Mr. Mark Harper from AltaGas Utilities provided a copy of Drawing No. W4-061-6-14-se indicating the location of natural gas lines on the property. The map is attached as Map 5A.

Mr. Varun Chhibbar, ATCO Electric was contacted by telephone (780-826-6758) for information pertaining to electrical services. The information that Mr. Chhibbar provided is included in the main body of this report.

The information that was gathered as outlined above became the basis for the preparation and organization of this Area Structure Plan.

1.3 Organization of the ASP for the SE1/4 Sec. 14 Twp. 61 Rge. 6 W4M

Information included in this plan has been categorized as follows:

- Legal requirements associated with the preparation of an Area Structure Plan
- Standards and guidelines for development,
- Current site information
- Existing site characteristics,
- Goals and objectives of development,

The information outlined above provides a basis for the development of comments and opinions related to the following:

- Compatibility with adjacent land uses,
- · Compatibility with future land uses,
- · Development of a land use concept for the Plan Area,
- Surface storm water drainage.
- · Sequencing of development through phasing, and
- Implementation of the Area Structure Plan.

A review of legal and regulatory requirements provides a starting point for the investigative work that must be carried out to acquire the remaining information.

2.0 Legal and Regulatory Considerations

2.1 Introduction

The "Municipal Government Act" together with Municipal Bylaws and Municipal Regulations provides a guideline for the preparation of Area Structure Plans.

The Municipal Bylaws that influence the preparation of the ASP include:

- the Municipal Development Plan Bylaw 1261-05 and 1135-97
- the Land Use Bylaw No. 1152-98, and
- the Ringuette Area Structure Plan, Schedule "A" to Bylaw 1233-03

Documents published by the Town of Bonnyville that influence the preparation of the ASP include:

- · Guidelines to Land Development, 1986, and
- Minimum Design Guidelines
- Outline Plan 80-0P-06

The document entitled "Guidelines to Land Development, 1986" provides much of the required information that ensures ASPs will reflect the goals and objectives of the municipality in regard to land development.

The document entitled "Minimum Design Standards" provides insight into the engineering standards developed by the town for land development.

The Municipal Government Act provides a general guideline for the development of an ASP.

2.2 Municipal Government Act

The Municipal Government Act, 2000 provides a framework for the development of ASPs and identifies the amount of land that must be provided as municipal reserve.

Section 633 outlines the requirements related to an Area Structure Plan as follows:

- (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.
- (2) An area structure plan
 - (a) must describe
 - (i) the sequence of development proposed for the area.
 - (ii) the land uses proposed for the area, either generally or with respect to specific parts of the area,

- (iii) the density of population proposed for the area either generally or with respect to specific parts of the area, and
- (iv) the general location of major transportation routes and public utilities, and
- (b) may contain any other matters the council considers necessary.

Section 661 to 667 of the Alberta Municipal Government Act, 2000 identifies the requirements surrounding the dedication of land for roadways and municipal reserve. Section 661 states that:

The owner of a parcel of land that is the subject of a proposed subdivision must provide, without compensation,

- (a) to the Crown in right of Alberta or a municipality, land for roads, public utilities and environmental reserve, and
- (b) subject to section 663, to the Crown in right of Alberta, a municipality, one or more school authorities, land for municipal reserve, school reserve, municipal; and school reserve, money in place of any or all of those reserves or a combination of reserves and money, as required by the subdivision authority pursuant to this Division.

The remaining sections go on to specify the manner in which the land will either be dedicated or cash in lieu will be paid.

The Municipal Government Act provides a framework for the preparation of the ASP and the requirements for the dedication of land for public utilities, roadways and municipal reserve. Municipal bylaws outline the Municipality's goals and objectives and provide zoning regulations and development guidelines.

2.3 Municipal Development Plan

The Municipal Development Plan provides direction related to the preparation of Area Structure Plans, and the community's goals and objectives for the "Industrial West" industrial development policy area. It is anticipated that the land being considered for development will involve highway commercial development and industrial development.

Section 2.1 of the "Municipal Development Plan" (MDP) clearly states that the preparation and adoption of ASP's is, in effect, implementation of the MDP.

The land being considered as part of the work included in this report is referred to as "Industrial West" in the MDP. The objectives and policies outlined for the development of industrial land, including Industrial West, by the MDP include the following:

10.6.2 Objectives

The Town's industrial land use objectives are to:

- Encourage existing industrial uses to maintain and expand their operations;
- Encourage complimentary industrial uses to locate in existing industrial areas:
- Encourage a broad range of light, clean, and high tech developments. Educational, service commercial, institutional, and tourism based developments that reflect Bonnyville's economic development objectives are also encouraged;
- 4. Provide a high amenity base that will attract specific types of industrial and manufacturing uses;
- Provide for industrial expansion in areas that reduce traffic and related impacts on the Town;
- 6. Maintain an adequate supply of industrial land within the Town boundaries in order to provide a balanced assessment and employment base; and
- 7. Discourage noxious heavy industrial developments within the Town boundaries.

10.6.3 General Industrial Policies

Industrial Land

(a) The Town shall develop an Industrial land *Strategy* strategy

Industrial/Service Centre Strategy

(b) The Town shall develop an industrial/service centre strategy,

Promoting Bonnyville

(c) The Town and the Chamber of Commerce will continue to promote and market the Town and its potential for industry.

Industrial Economic Development Priorities

(d) The Town will work closely with various Town groups, including but not limited to, the Chamber of Commerce, tourism groups, agroeconomic committees, and Community Futures, to act on the industrial economic development priorities established by the Town.

New Industrial Areas

(e) New industrial uses are encouraged to locate in industrial parks.

Non-Intensive Commercial

(f) Non-intensive commercial uses requiring extensive areas of land will be encouraged to locate in industrial areas.

Reduced Service Industrial Area

- (g) The Town encourages the establishment of a large lot industrial area with a reduced level of municipal services, namely gravel roads, minimal street lighting, water supply cisterns, holding tanks for sanitary sewage, and storm drainage.
- (h) Once municipal water and sewer becomes available to the Reduced Service Industrial Areas, connection to municipal service shall be required.

Industries Not

 (i) New industries that create air pollution, *Permitted* negative environmental impacts or noxious odours will not be permitted to locate in Bonnyville.

Design Standards

(j) A high standard of building design, signage, and landscaping that demonstrates regard for Bonnyville's character is encouraged for industrial developments.

Screening

(k) Industrial developments shall be separated, screened and buffered from adjacent and uses and major transportation corridors. All outdoor storage areas of designated industrial parks shall be screened.

Existing Uses Encouraged

(I) Existing industrial operations are encouraged to expand their operations as they provide significant local employment opportunities.

Intensification

(m) Land use intensification of existing large industrial parcels is encouraged.

Relocation to Industrial Parks

(n) The Town encourages existing industrial uses to relocate from highway commercial areas to industrial parks.

Labour Intensive Industries

(o) Labour intensive industries are encouraged to locate in the existing industrial area in order for the labour force to be in proximity to the Downtown.

Limited Retailing

(p) retailing or wholesaling of products directly re lated to the site's principal industrial use shall be permitted.

The information outlined above provides an insight into the information that is included in the Municipal Development Plan (MDP). The Area Structure Plan must reflect the policies and objectives outlined in the Municipal Development Plan as much as possible. The Land Use Bylaw also has implications related to the preparation of the Area Structure Plan.

2.4 Land Use Bylaw

The purpose of the "Land Use Bylaw" is to divide the land within the jurisdiction of the Town of Bonnyville into Land Use Districts. The Land Use Districts given consideration for the development of SE¼ Sec. 14 Twp. 61 Rge. 6 W4M include C-3 Highway Commercial District, C-4 Shopping Centre District, M1 General Industrial District and M-3 Limited Services Industrial District.

Land use designations are subject to the development of a parcel of land for a specific business. Decisions related to specific types of zoning are made at the time that an application for a Subdivision or a Development Permit is lodged with the municipality. This report addresses considerations related to the four most likely land use designation zones that would satisfy the types of businesses interested in locating on this parcel of property.

Zoning considerations together with Guidelines for Land Development and Minimum Design Standards determine the parcel sizes and roadway widths that will be observed in the subdivision layouts.

2.5 Guidelines and Regulations

The Town of Bonnyville developed "Guidelines to Land Development" in 1986. The document provides guidance related to the procedures that must be observed to develop land within the corporate limits of the Town.

The document is divided into four sections of information as follows:

- Section A Development Methodology
- Section B Procedures for Development
- Section C Suggested Outline for Development Agreement
- Section D Minimum Design Standards

Sections B and D provide extremely useful information related to outline plans and the physical dimension of the elements that are included in an outline plan. The information is reflected in the majority of maps and diagrams included in this Area Structure Plan.

2.6 Summary

The information that has been gathered and reviewed for the preparation of this ASP provides reference material for all of the stakeholders involved with the development of SE¼ Sec. 14 Twp.61 Rge.6 W4M. The information also serves as a basis for the preparation of comments and opinions related to the suitability of this land for the development being proposed.

3.0 Current Site Information

3.1 Introduction

The area addressed by this Area Structure Plan is referred to as the "Plan Area" in the remainder of this report. Current site information pertaining to the plan area provides a comprehensive compendium of all of the background information of interest to all stakeholders. Information pertaining to the plan area included in this chapter has been categorized as follows:

- Information specific to the location of the plan area,
- Land ownership.
- Current land use and adjacent land use,
- Topography,
- · Utilities and utility easements,
- Water well sites,
- Oil well and petrochemical sites.
- · Geotechnical and Site Soils, and
- Other considerations related to development, and
- Summary

The information included in this chapter provides reference material for all of the stakeholders.

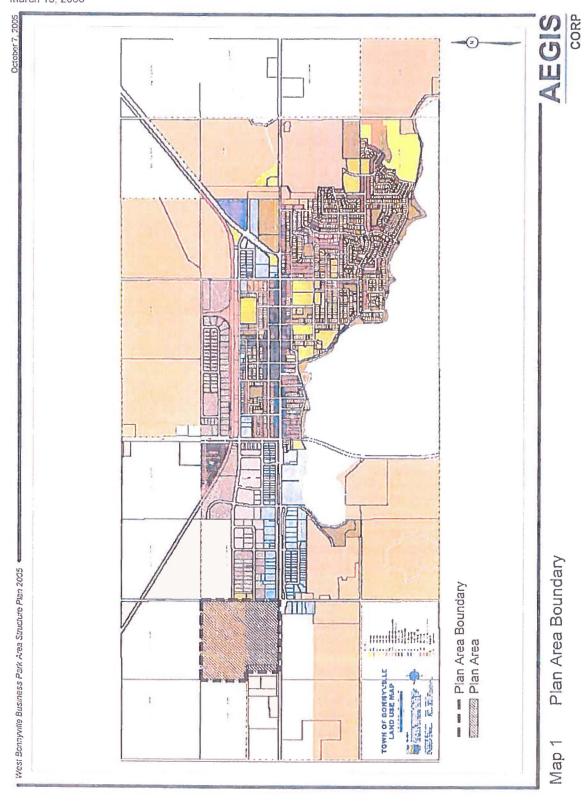
3.2 Plan Area

The plan area includes approximately 59.28 Ha (146.48ac) of the SE¼ Sec. 14 Twp. 61 Rge. 6 W4M. The land is located in the north west sector of the Town of Bonnyville and is bounded by Highway 28 (50th Avenue) to the south, 66th Street to the east, undeveloped land to the north, and unserviced industrial land to the west. The northern half of the westerly boundary of the plan area is also the westerly boundary of the SE½ Sec. 14 Twp. 61 Rge. 6 W4M. The southern half of the westerly boundary is bordered by Block A, Lots 2 and 4 of registered plan 032 4812. The northern boundary of the plan area is the northern boundary of the SE½ Sec. 14 Twp. 61 Rge. 6 W4M. and is also the northern corporate boundary of the Town of Bonnyville. Map 1 provides a diagram of the plan area.

3.3 Land Ownership

The SE¼ Sec. 14 Twp. 61 Rge. 6 W4M is owned by Mr. Victor Ringuette of Bonnyville, AB. Mr. Ringuette is the principal shareholder in VicTa Developments. VicTa Developments is the company that will assume responsibility for development of the plan area.

The names of the Owners of the land to the north and west of the plan area are shown on Map 2. It is possible that some of the titles may change between the time that the title search was conducted and the time that this report is published.



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Land Ownership

Map 2

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Consequently, some of the Owner's names may not be current at the time of development.

3.4 Current Land Use and Adjacent Land Use

Current and adjacent land use designations are shown on Map 3. The land north the plan area is zoned Urban Reserve and is presently being used for agricultural purposes. The southern portion of the SW ¼ Sec. 14 Twp. 61 Rge. 6 W4M, which is immediately west of the plan area is designated as Unserviced Industrial land and is being used for that purpose. The land south of the Highway 28 is designated as an Unserviced Industrial District and is being used mainly for agricultural purposes. The land situated immediately east of the Plan Area includes Highway Commercial, Institutional, General Industrial, and Unserviced Industrial land uses. The Plan Area and its adjacent land uses are also shown on the Town of Bonnyville Land Use Map (Schedule 'A' of Bylaw No. 1152-98).

3.5 Topography

Map 4 provides an insight into the topography of the plan area. The topography is well enough defined to allow identification of various land features including vegetation, natural storm drainage channels and ponds on the property.

There are no tree stands present in the plan area. Vegetation is mainly natural grasses and brush.

The Plan Area is relatively flat, with geodetic elevations ranging between 546.6m and 551.8m. The north portion of the Plan Area contains a natural drainage channel that drains surface runoff from the eastern edge of the plan area to the west. The south portion of the plan area includes one natural wet area occupying approximately 1.05 ha (2.6 ac). The southern portion also includes one man made storm water retention pond near the western boundary of the Plan Area.

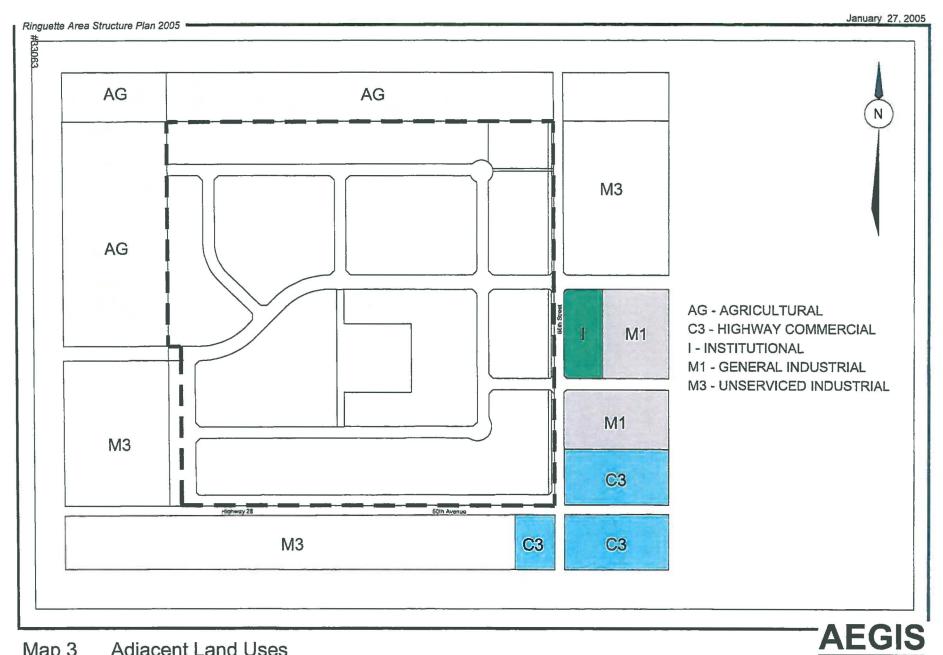
3.6 Utilities and Utility Agreements

Map 5 indicates the type and approximate location of easements that are present in the plan area.

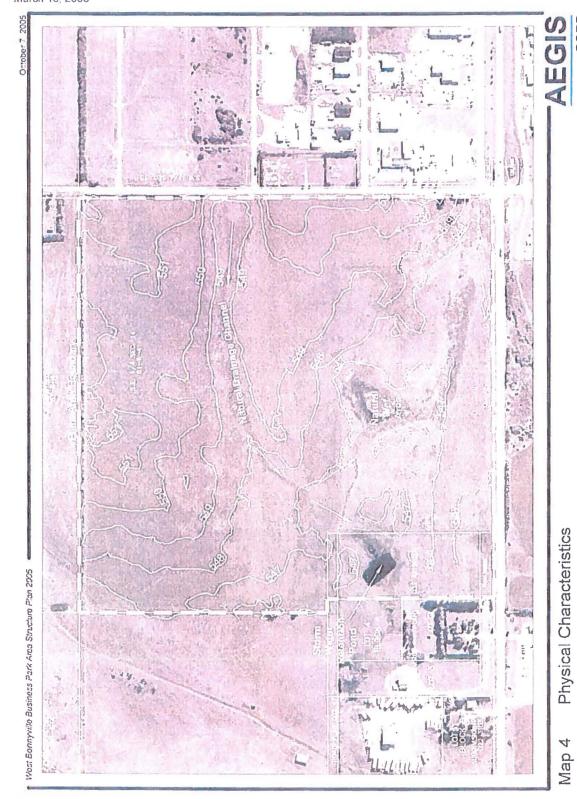
There are two natural gas right-of-ways as show on Map 5A traversing the plan area. AltaGas right of way plan 982 2708 runs north to south, parallel to the west boundary of the Plan Area. This gas line detours along the eastern periphery of Block A, Plan 032 4812. AltaGas right of way plan 792 2948 runs east to west, approximately 35m north of the Highway 28 road allowance.

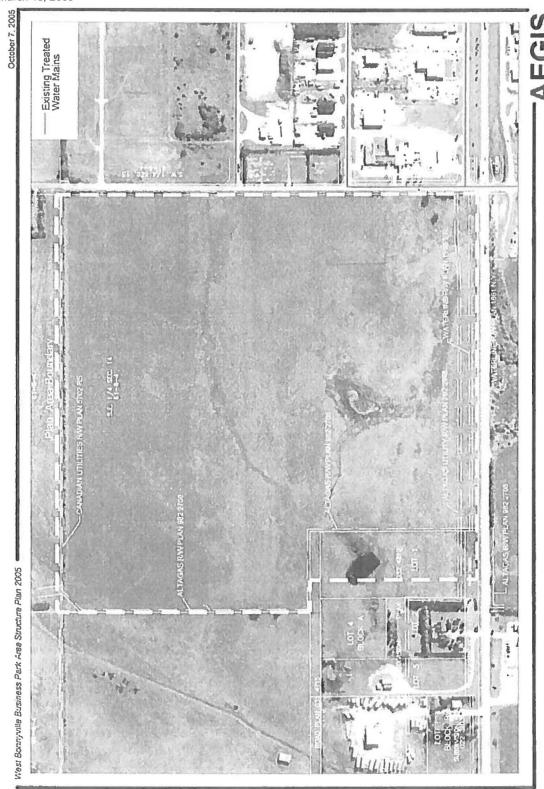
There are two raw water supply lines crossing the southern portion of the Plan Area. Waterline right of ways 1998TR and 1861NY both run parallel to Highway 28. Waterline 1998TR is located approximately 17m north of Highway 28. Waterline 1861NY is located approximately 11m north of Highway 28.

An ATCO Electric transmission power line right-of-way No. 5702 RS traverses the site along the northern boundary of the Plan Area. Map 5 illustrates the existing underground infrastructure in the Plan Area.



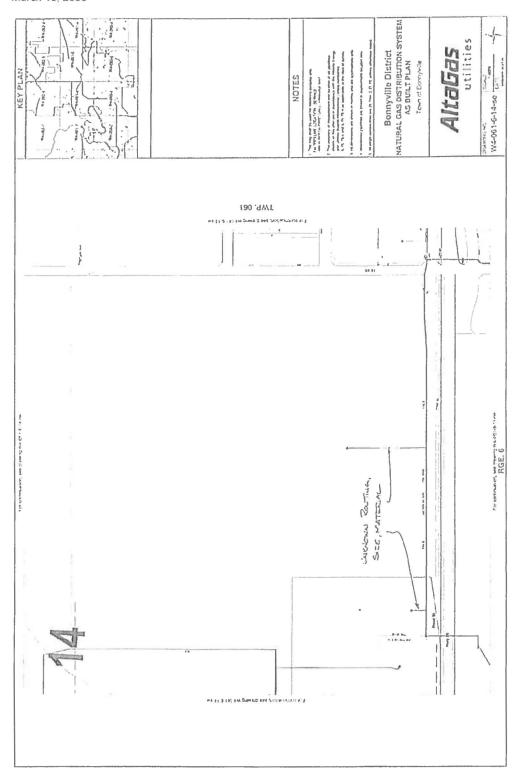
Adjacent Land Uses Map 3





Map 5 Existing Infrastructure





3.7 Water Well Sites

Information pertaining to water wells is attached as Appendix A. Three wells were drilled. The lack of information of the water well reports indicates that the wells were not developed to the point of producing water. It is probable that water was not present in the drilled holes at the time of drilling.

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3.8 Oil Well, Petrochemical Sites and Mineral Agreements

Information pertaining to oil well, petrochemical sites and mineral agreements was obtained from Abacus Datagraphics Ltd. The information is included as Appendix B. The information included in Appendix B makes reference to Crown Mineral Agreements. The rights afforded to the agreement holder are subject to the surface rights of the land owner.

There are no restrictions related to construction on this property as a result of the minerals agreements.

3.9 Geotechnical and Site Soils Conditions

A very thorough geotechnical report was prepared in the early summer of 2005 by AMEC Earth and Environmental. The report, which is attached as Appendix "C", concludes that the soils in the plan area will support development with little or no difficulty.

More specifically the report states:

"The subsurface conditions at this site are considered to be suitable for the proposed development since the native soil deposits at shallow depths have adequate bearing characteristics. It is expected that future industrial buildings will impose light to moderate structural loads. As such, the subsurface conditions are suites to strip and spread footing foundations, as well as pile foundations.

The soil conditions at the site are also well suited for installation of underground utilities, construction of slab-on-grade floors, and construction of asphalt surfaced roadways."

Twenty-four test holes were drilled on proposed roadways in the plan area. Consequently, it is reasonable to assume that the plan area soils are not a cause for concern.

3.10 Considerations Related to Development

Concern has been expressed regarding access to Lot 4, Block A, Subdivision Plan 032 4815 immediately west of the south westerly boundary of the plan area. Access will be provided from a proposed north/south road that will be constructed adjacent to the east boundary of Lots 2 and 4. VicTa Developments is prepared to allow a caveat or an easement to be registered ensuring that the parcel will be developed as a dedicated roadway.

All other concerns that are raised after this ASP has been reviewed by stakeholders will also be addressed.

3.11 Summary

The current site information provided in this section of the report is as complete as was possible. Stakeholders will find the Appendices to be useful reference material when reviewing the considerations related to development of this property. The information provides a basis for the development of a land use strategy for the property and supporting data for the Owner's objectives.

4.0 Land Use Strategy and Developers Objectives

4.1 Introduction

It is the intent of the proposed land use strategy to satisfy as many of the objectives related to the development of the plan area as possible. The Municipal Development Plan outlines objectives in the "General Industrial Policies". VictTa Developments has chosen goals and objectives that are consistent with Mayor and Council's vision for development in this part of the Community as outlined in the Municipal Development Plan. The land use strategy developed for this property includes highway commercial, general industrial development and municipal reserve.

4.2 Land Use Strategy

The southerly boundary of the plan area is adjacent to Highway 28 (50th Avenue) and the easterly boundary is adjacent to 66th Street (Road Allowance).

These roadways are both high traffic corridors in the Town. It is proposed that the land in the plan area adjacent to Highway 28 and the land adjacent to 66th Street north towards 52nd Avenue be designated as highway commercial property as shown on Map 6. There are obvious advantages associated with that proposal including compliance with the goals and objectives of Mayor and Council.

An important advantage that is not as obvious is that highway commercial development along the roadways will screen roadway traffic against the visual aesthetic of a general industrial designation that is planned for the remainder of the property.

The goals and objectives set by Mayor and Council are consistent with this proposal.

4.3 Highway Commercial Districts Goals and Objectives

Highway Commercial Districts are intended to provide for vehicle oriented businesses requiring highway visibility and a large site area. Uses that are or will become obnoxious by way of noise, odour, dust or fumes are not allowed in a highway commercial district.

Highway 28 is the major transportation corridor running east to west through Bonnyville. Development along the west entrance to the Town on Highway 28 is an extension of the existing development along the remainder of Highway

Map 6 Land Use Concept

28. Commercial development along the highway will screen the proposed General Industrial District.

The objectives of highway commercial development along these roadways (Highway 28 and 66th St.) are as follows:

- To provide an extended range of commodities available to consumers in Bonnyville and throughout the regional trade area,
- To appropriately screen the proposed General Industrial District north of Highway 28 and west of 66th St.,
- To improve the appearance of the entrance of Highway 28 to the Town of Bonnyville,
- To encourage a variety of vehicle orientated and big box commercial business operations to locate in this section of the plan area.

4.4 General Industrial Districts Goals and Objectives

General Industrial districts are intended to provide for warehousing and storage, and light and medium industrial and manufacturing uses which are not expected to have negative impacts beyond the boundaries of the site. General industrial districts, generally speaking, do not involve the handling of hazardous materials.

The Municipal Development Plan, 1997 suggests that 2.43 gross hectares of industrial land is required for each population increase of 100 persons. The population in Bonnyville increased by 610 persons (10.67% or approximately 2.2% per year) between 1996 and 2001. The population in 2001 was 5709 persons (Municipal Development Plan). The proposed strategy for the plan area includes approximately 38.0 ha of industrial land. The industrial land will be completely developed in approximately ten (10) years if the population growth rate continues at 2.2%.

The proposed General Industrial land use within the Plan Area is compatible with surrounding land uses, and complies with the Town of Bonnyville Municipal Development Plan Bylaw 1261-05.

The objectives of general industrial development are as follows:

- To ensure an adequate supply of industrial land is available in Bonnyville,
- To provide numerous lots of various sizes to accommodate unpredictable requests for Industrial land,
- To extend the Town's existing infrastructure into the plan area,
- To encourage future industrial business operations to locate in the Plan Area.
- To encourage existing industrial business operations to relocate from Highway Commercial areas to the Plan Area,
- To ensure industrial developments are appropriately screened from Highway 28 and 66th Street, and from incompatible land uses,
- To provide an adequate transportation network for the transportation of industrial goods,

 To ensure compatibility between the Plan Area and the Municipal Development Plan.

The Owner's objectives related to the development of the land are consistent with the objectives outlined above. Objectives for the development of municipal reserve within the plan area are not as clearly defined.

4.5 Municipal Reserve

The Municipal Government Act provides for the dedication of land for municipal reserve or for the payment of cash-in-lieu of dedicating land. Dedication of land or payment of cash is usually decided on the basis of an agreement between the land owner (developer) and the Subdivision Authority. Consideration can also be given to both dedication of land and payment of cash to satisfy the municipal reserve requirement.

Consideration should be given to dedicating land adjacent to the proposed storm sewer retention pond as municipal reserve. The remaining requirement for dedication of municipal reserve could be contributed in cash.

4.6 Summary

The land use strategy developed for the plan area incorporates the goals and objectives of Mayor and Council as outlined in the Municipal Development Plan for the "Industrial West", highway commercial development, general industrial development and municipal reserve dedication. The integration of infrastructure requirements into the overall land use strategy determines the develop ability of the plan area.

5.0 Infrastructure Requirements

5.1 Introduction

Comments pertaining to infrastructure requirements often benefit the Town and the Developer when identifying the considerations and possible costs associated with a development. Planning for storm water management, transportation, sanitary sewer systems, and water distribution at this early stage of the development process provides insight into the challenges that may arise when designing for the provision of these services. Telecommunications, gas, and electrical utilities are also required in modern developments. Storm water management is often referred to as the most important of the services and most forgotten when developing a subdivision.

5.2 Storm Water Management and Earthwork

The Town of Bonnyville Municipal Servicing Report proposed that the Town be divided into four major drainage areas for the purpose of addressing storm water flow concerns. The area included in the Area Structure Plan is referred to as the West Drainage Area. The eastern portion of the west drainage area contributes storm drainage to Jesse Lake. The western portion of the west drainage area contributes drainage to Moose Lake through natural drainage channels and man

made ditches. The development proposed by this ASP is in the western portion of the drainage area. The Town of Bonnyville Municipal Servicing Report suggests that consideration should be given to upgrading this system as development occurs.

Storm water management requirements are as outlined by the email included in Appendix D, as follows:

"The north western portion (20 ha) of the partially developed existing Commercial/Industrial area to the east of the plan area drains through a 450 mm culvert crossing under 66th Street, 40 m North of the intersection between 66th Street and 54th Avenue. This existing Commercial/Industrial area will contribute a flow of 0.14 m³/s through the culvert to the proposed area. The applicant, through the ASP, must demonstrate how this flow will be accommodated through the ASP lands.

The minor system will convey runoff from rainfall events less than or equal to 1 in 5 year storm event without any surface ponding or excessive surface flow. The Major system will consist of surface flood paths, roadways, roadway culverts, watercourse and storm water management facilities designed to carry runoff from events up to and including 1 in 100 year storm event. From a storm water management perspective, the applicant is required to provide the following information:

- a calculation of the pre-development flow rate on site;
- engineering proof that storm water discharge from on-site storm water management facilities will not exceed the pre-development flow rate;
- identification of the overland drainage route (e.g. ditch system or pond) and how it will drain to a drainage facility and/or off site; and
- demonstration that the development will result in no negative downstream impacts."

Map 8 entitled "Proposed Storm Water Drainage" indicates the overland route that is proposed to accommodate the additional flows from the north western portion (20 ha) of the partially developed existing Commercial/Industrial area to the east of the plan area. Map 8 also provides an indication of the overland flow routes which will provide minor and major systems to accommodate runoff from events up to and including 1 in 100 year storm events.

The remainder of the information pertaining to the instruction is included in Appendix D. Appendix H includes the following information:

a copy of the instruction received from the Town,

- copies of National Topographical Maps that demonstrate that adjacent land does not and will not contribute overland flow to the proposed development,
- a map indicating proposed elevations directing storm water to the proposed storage pond,
- storm water management model calculations for 1 in 5 year rainfall events for undeveloped and developed land.
- storm water management model calculations for a 1 in 100 year rainfall event for undeveloped and developed land,
- preliminary calculations to indicate the size of the retention pond,
- a map indicating off-site storm water drainage channels that will provide overland flow routes for drainage away from the proposed development, and
- excerpts from the Standards for Municipal Waterworks, Wastewater and Storm Drainage Systems outlining Best Management Practices (BMP's) for removal of pollutants from storm water.

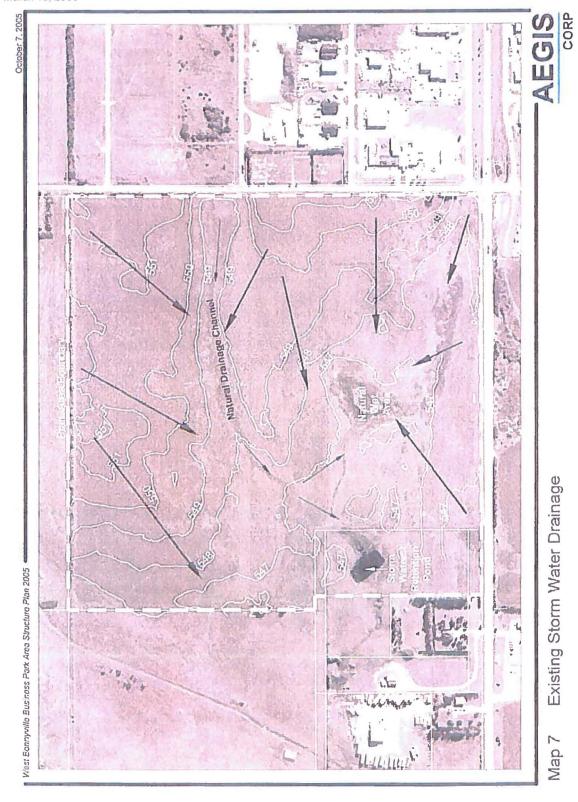
The incorporation of a storm water retention pond provides maximum mitigation of negative downstream impacts. Water will be pumped from the pond into the existing off site storm water receiving channels at the predevelopment flow rates. The proposed pumps will be designed to ensure that the predevelopment flow rates are maintained. This approach ensures that the proposed development will not contribute additional runoff to existing channels, thereby ensuring that there will be no erosion due to post development flows.

The Standards for Municipal Waterworks, Wastewater and Storm Drainage Systems outlining Best Management Practices (BMP's) for removal of pollutants from storm water state that, "Wet ponds have been cited as providing the most reliable end-of-pipe BMP in terms of water quality treatment."

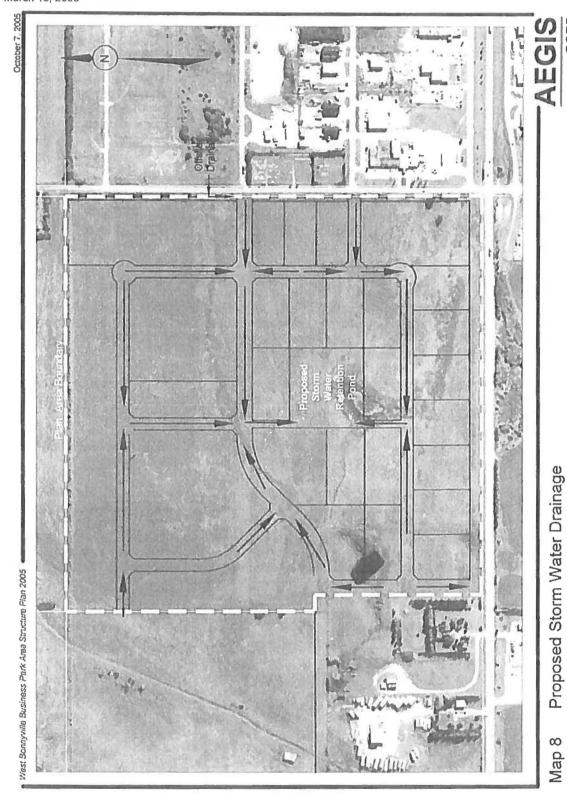
Storm water management will continue to be addressed to the satisfaction of the Town of Bonnyville as part of the work undertaken to complete the detailed engineering design of a storm water management system. These systems will be designed in compliance with *Storm Water Management Guidelines for the*

Province of Alberta and The Town of Bonnyville Design Guidelines. Compliance with these guidelines will ensure that storm water management systems are designed in accordance with best management practices. The control of storm water flow on site is dependent upon the elevations that are constructed on site. The construction of these elevations is accomplished by adjusting the existing topography of the site.

Existing topography is not always conducive to ensuring that storm water will flow away from buildings and roadways in the development area. Map 7 indicates the existing topography and storm water drainage patterns in the plan



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area. Normally, adjustments must be made to the existing topography to ensure that flooding is prevented and storm water does not pond on building sites and roadways.

The preferred method of storm drainage flow management within a subdivision is surface drainage as opposed to an underground storm drainage piping system. Surface drainage involves accommodating the flow of storm drainage along the surface of roadways. The elevations of the roadways are adjusted to cause storm water to flow to a storm water inlet or catch basin or to a pond. Elevations of roadways and building lots are created to accommodate storm flow by moving earth to create the desired grades.

The Town of Bonnyville has established minimum design standards related to storm drainage on roadways. Road gradients must maintain a minimum gradient of 0.5% to ensure adequate surface drainage. Catch basins are usually installed at 250 m to 350 m intervals to ensure that the flow of water on the surface of the roadways does not become too deep. The furthest points away from the pond in the proposed street layout for the plan area are approximately 650 m distant from the storm drainage pond. Consequently, catch basins and the associated underground piping will have to be installed in addition to adjusting the elevations of the existing ground surface to manage the flow of storm water. The adjustments to the existing ground surface involve moving earth to accommodate storm water drainage. The procedure is referred to as earthwork.

Preliminary earthwork calculations to accommodate storm water flows suggest that surface drainage that incorporates catch basins and underground piping is possible providing a storm water retention pond is constructed. Surface runoff will flow from the outer boundaries of the plan area to a retention pond near the center of the plan area. Catch basins and underground piping are required because the distance from the pond to the furthest point away from the pond exceeds 350 m.

Preliminary calculations indicate that approximately 390,000 cu. m. of earth will have to be moved to create acceptable surface drainage and a storm water retention pond. The size of the storm water pond, based on this preliminary overview, will be approximately 7,350 sq. m. if the pond is two (2) metres deep. Water levels in the pond will most probably have to be maintained by pumping excess water from the pond to the north ditch along Highway 28. The cursory review undertaken to reach this conclusion assumes that the roadways will function as storm water conduits.

5.3 Roadways and Transportation

Roadways are categorized as external or perimeter roadways and internal roadways. External roadways provide present and future access to the development at the intersections of the internal and external roadways. All roadways will be built according to a rural cross-section design.

The Plan Area is bounded on the south by Highway 28 (50th St.) and on the east by 66th Street. These two roadways are designated as Truck and Dangerous Goods routes. Highway 28 will provide high level controlled limited access. 66th St. provides access to an industrial collector roadway. Improvements are planned

for the intersection at Highway 28 and 66th Street. These roadways will provide a high level of service to the proposed development.

It is proposed that the internal road network include an industrial collector street and several local streets as shown on Map 9. The collector street is a continuance of 54th Avenue and runs east to west through the plan area as shown on Map 9A. Provision has also been made to ensure that the collector street can also cross the quarter section (SE¼ Sec. 14 Twp. 61 Rge. 6 W4M) to the west as outlined in the Ringuette Area Structure Plan Bylaw No. 1233-03. The internal roadways proposed for this plan area are consistent with the roadways planned for the "Ringuette Area Structure Plan" with the exception of the proposed roadways in a small area in the south east section of the "Ringuette Area Structure Plan". Provision for the widths of the roadways (Collector street) has been assigned in accordance with the design standards outlined by the Town of Bonnyville.

The Town of Bonnyville Minimum Design Standards require a 30m right-of-way and 13 m roadway surface for industrial and collector streets and a 24 m right-of-way and 11 m roadway surface for industrial local streets. These right-of-way and roadway widths are required for the safe transportation of large trucks and equipment.

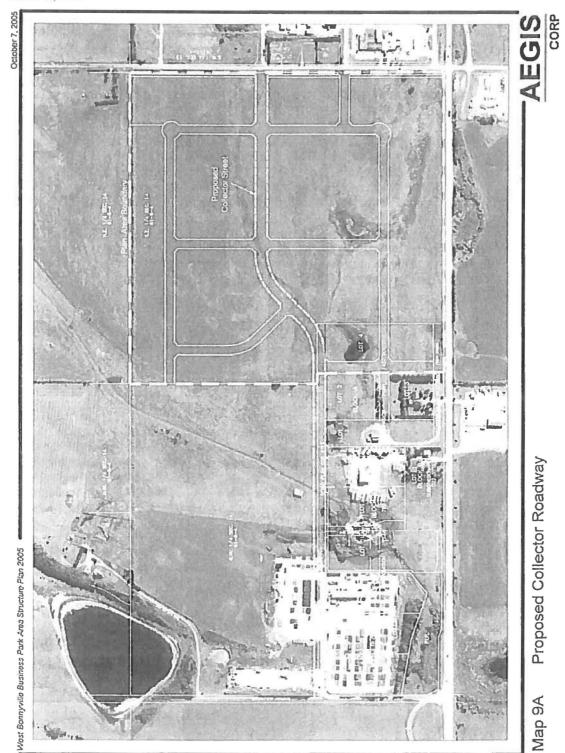
Frontage streets or service roads will be constructed adjacent to the west side of 66th Street and north of Highway 28 to provide access to the proposed commercial lots that cannot be accessed from these roadways.

The proposed road network as illustrated in Map 9 provides access to all lots as well as safe and efficient traffic flow through the plan area. The road network also provides a corridor for the installation of underground services including water mains.

5.4 Water Distribution

Water distribution piping is usually installed under the roadway surface. Existing treated water distribution mains have been installed to the east side of 66th St.. These water mains can be extended to provide treated water to the plan area. The capacity of the water mains will satisfy design requirements for servicing the proposed development. Proposed water mains must be looped to ensure adequate fire flow rates can be achieved.

The Town of Bonnyville Minimum Design Standards stipulate that water systems must be designed to be consistent with both the Town's minimum



Proposed Collector Roadway

Map 9A

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Design Standards and the Insurance Bureau of Canada's recommended standards for fire flow. Commercial districts require a flow rate of 190 litres/second (2500 igpm). General Industrial districts require a flow rate of 230 litres/second (3000 igpm). The minimum water main size required for Commercial and Industrial districts is 250mm diameter.

The proposed water distribution system will be connected to the existing water main at two (2) locations:

- the existing 250mm diameter water main located on the east side of the intersection between 66th Street and 52nd Avenue and
- the existing 200mm diameter water main located on the east side of the intersection between 66th Street and 54th Avenue

In order to be consistent with the Town of Bonnyville Municipal Servicing Report of January 1979, the proposed water distribution system will be extended to the north east through a utility right-of-way for future connection on 66th Street. The water mains on the west and north side of the proposed water distribution system will be 300mm diameter.

The proposed water distribution system for the plan area is shown on Map 10.

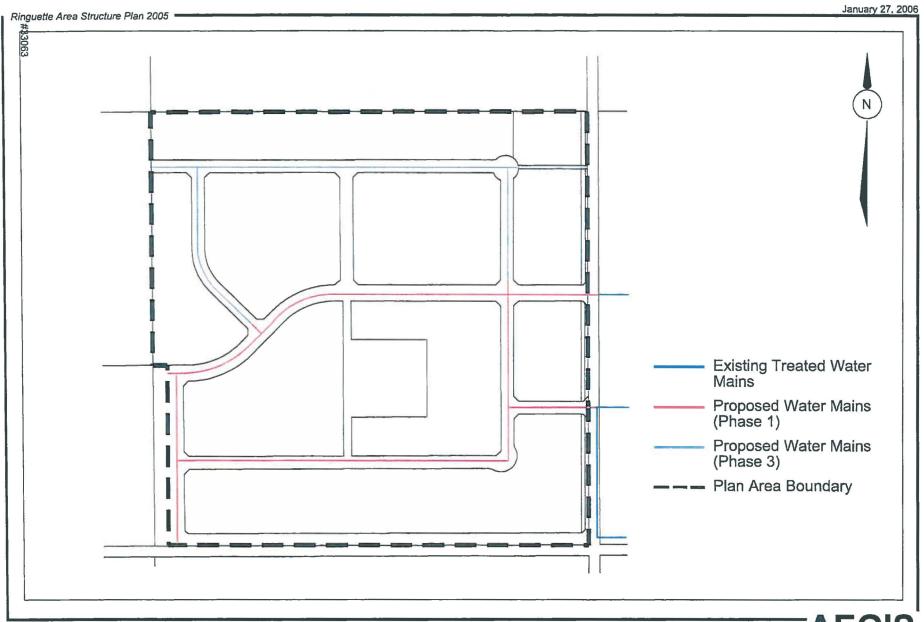
The installation of water mains is always undertaken in conjunction with the installation of sanitary sewerage mains.

5.5 Sanitary Sewage Collection

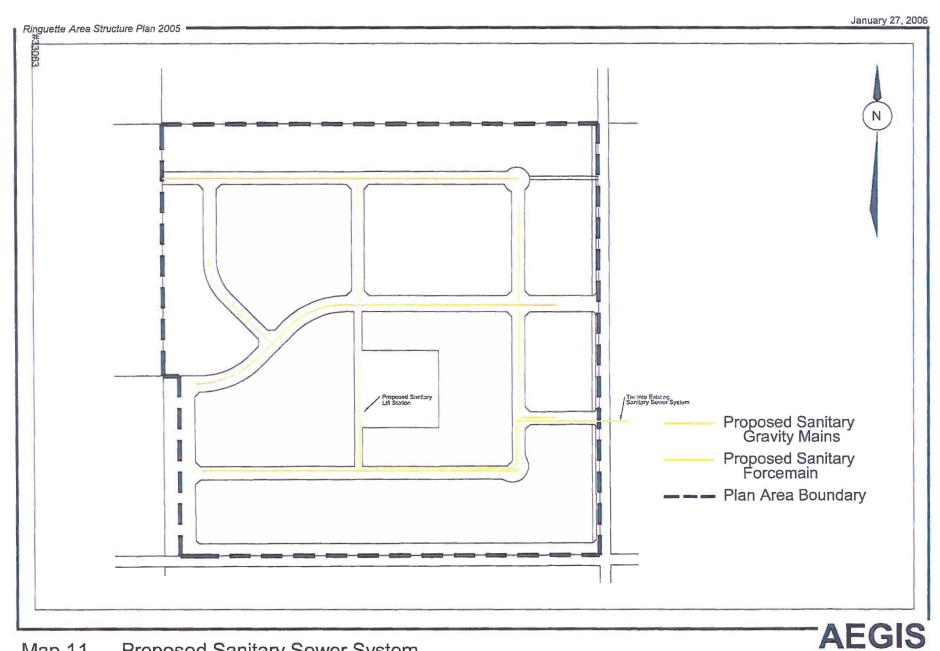
Sanitary sewage collection piping is also installed under the roadway surface. The existing sanitary sewer main installed on 52nd Avenue to the east side of 66th St. is a 200 mm diameter pipe. This connection offers adequate capacity to accept flows from the proposed development but does not have adequate depth to allow gravity flow of the sewage. The design elevations of the proposed development dictate that a collection point for sanitary sewage must be constructed in the area of the storm retention pond as shown on Map 11.

A lift station located as shown will require that a sanitary sewage force be installed from the lift station to the existing sanitary sewage main on 52nd Ave. The force main must be capable of satisfying the Town's Minimum Design Standards for flow volumes.

The Town of Bonnyville Minimum Design Standards stipulate that sewage piping must have a design capacity of 6,800 litres per gross hectare per day for industrial development, and 22,500 litres per gross hectare per day for commercial development. The piping must also be designed to accommodate



Map 10 Proposed Water Distribution System



Map 11 Proposed Sanitary Sewer System

a peak hourly flow rate of 3.5 times the average hourly flow rate. Collection piping and the force main must be designed to satisfy these requirements.

The remaining underground or shallow utilities include electrical, natural gas and communications installations.

5.6 Electrical Services

Electrical energy can be delivered either by overhead or underground wires. Electrical distribution services can be installed in easement in the back of the lots but are usually in easement adjacent to the front lot lines. The developer shall be responsible for obtaining relevant approvals and paying for electrical infrastructure associated with the development of the site.

There is an existing transmission power line right-of-way along the northern boundary of the plan area. It is doubtful that the service provider can connect to that power line.

Electrical utility distribution and servicing is coordinated by ATCO Electric at the request of the Developer.

5.7 Natural Gas Services

Natural gas distribution and servicing is also designed and coordinated by the gas company (AltaGas) upon request from the Developer.

There are two gas pipelines that traverse the plan area. AltaGas will decide if either of the lines can contribute to distribution or servicing in the proposed development. The developer shall be responsible for obtaining relevant approvals and paying for natural gas infrastructure associated with the development of the site.

5.8 Communication Services

Communications services include telephone, internet and cable services. The service providers for these services are Telus and Northern Cablevision. These services are installed under the same conditions that electrical and natural gas services are installed. The developer shall be responsible for obtaining relevant approvals and paying for communications infrastructure associated with the development of the site.

5.9 Summary

All of the preliminary work undertaken to evaluate the development of the plan area has indicated that the plan area can be serviced with a minimum of challenges and difficulties. But, it must be emphasized that the work undertaken to date has been preliminary in nature. Consequently, the comments offered in regard to infrastructure requirements may have to be adjusted to reflect the results of more thorough detailed engineering design work.

Construction and installation of the various components of the infrastructure is extremely expensive. Also, there is no guarantee that the subdivided land will sell in a timely manner. It was suggested earlier in this document that the industrial land alone may require as long as ten years to sell. The only available procedure that can be implemented to reduce the amount of the initial investment is to explore the possibility of constructing the subdivision in phases.

6.0 Phasing of the Development

6.1 Introduction

Phasing the development of a subdivision reduces the amount of capital investment that is required at the outset of the work. Phasing allows a section of the subdivision to be developed and sold. The sale of the initial lots generates cash flow to begin construction of a second phase. This approach allows land to be developed with a minimal amount of capital at the outset. The ASP designates the approved layout of the subdivision by bylaw and, as such, cannot be changed over the course of the development without an amendment to the bylaw. The phasing of the subdivision can be adjusted to develop only the lots that can be sold in a specified time frame such as a year or two years.

The phasing proposed for this subdivision is a suggestion only. The actual phasing of the development of the subdivision will be determined by the lot sales and the economy. Map 12 indicates a suggested phasing for this development. More importantly, the map introduces the concept of phasing in regard to the plan area.

Three phases have been proposed for the plan area. The phases have been developed on the basis of a logical progression of development and the economical, efficient extension of services.

6.2 Phase 1

Phase 1 includes the development of a parcel of highway commercial property north of Highway 28 and east of 66th St. (Map 12 Proposed Phasing of Development) This area has been selected as Phase 1 on the basis that it is the most visible and probably the most saleable portion of the development.

This phase will be developed, initially as a block of land. Lots will then be subdivided from the phase as the lots are sold. That approach allows a specific purchaser to purchase a lot size that is suitable to his development. Water and sewer can be installed at the time of the sale of a parcel. The roads will be constructed as illustrated on Map 12 (Phase 1). The construction of the service road will be included in Phase 1.

The water system will need to be extended from the intersection of 52nd Avenue and 66th Street, and the intersection of 54th Avenue and 66th Street. The proposed water system will be looped as shown on Map 10 Proposed Water

Map 12 Proposed Phasing of Development



Distribution System. The proposed storm water retention pond and sanitary lift station will be developed as part of Phase 1. The development of Phase 2 can begin after 80% of the land designated as Phase 1 has been sold.

6.3 Phase 2

Phase 2 involves the development of both general and heavy industrial parcels. The water system has already been installed as part of Phase 1 (See Map 10 Proposed Water Distribution System.

54th Avenue will be extended as part of this phase of the development. See Map 12 Proposed Phasing of Development. Sanitary sewer infrastructure can be extended north of the lift station. The remaining roadways and services will be constructed as part of Phase 3.

6.4 Phase 3

Phase 3 involves the development of the remaining parcels of property. This stage of development will require the completion of the water and sanitary sewer infrastructure and the roadways.

6.5 Summary

The suggested phasing identifies a logical south to north sequence for development of the plan area. The proposed phasing of development will allow development costs to be partially financed by the sale of lots in previous phases of development.

Implementation of the Area Structure Plan through phasing aids in ensuring that the developer has adequate funds to complete the entire subdivision.

7.0 Implementation

7.1 Introduction

Implementation of this Area Structure Plan requires that Council approve the plan on the recommendation of the Administration. Area Structure Plans prepared for adjacent areas of proposed development must be reviewed to ensure that the plans are compatible. Changes to Area Structure Plans for adjacent properties must be adopted by amendments to the Bylaw approving the plan.

Development of the Plan Area may proceed only after the process of :

- amendment and/or adoption of plan(s)
- · rezoning of parcels
- subdivision approval
- development agreement from subdivision approval
- · development and building permits

Plan implementation is an integrated process involving Council, Administration, the Developers, and all other stakeholders working in the interest of the community.

7.2 Adoption of the West Bonnyville Business Park Area Structure Plan

Section 633 of the Municipal Development Act states that a council may adopt an Area Structure Plan by bylaw. Section 230 of the *Municipal Government Act* requires a public hearing be held prior to passing of a bylaw. The public must be notified of the hearing in accordance with section 606 of the *Act*. This process ensures that anyone with an interest in the development is afforded the opportunity of a hearing in the presence of Mayor and Council.

7.3 Review of Area Structure Plans for Adjacent Developments

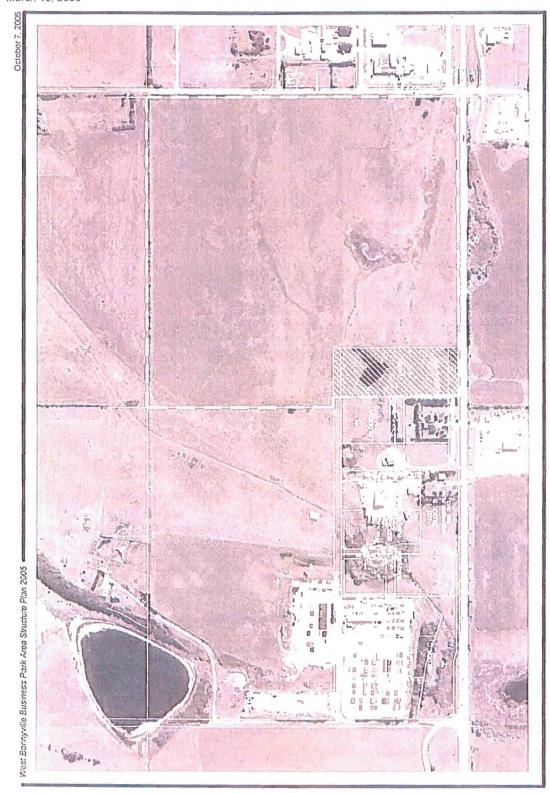
An Area Structure Plan was prepared for the south half of the SW¼ Sec. 14 Twp. 61 Rge. 6 W4M in 2003. The Ringuette Area Structure Plan was adopted by Bylaw 1233-03 in 2003. A small portion of that Plan in the south east area of the Plan requires amendment as shown on Schedule A Page 1 and Page 2.

8.0 Conclusions

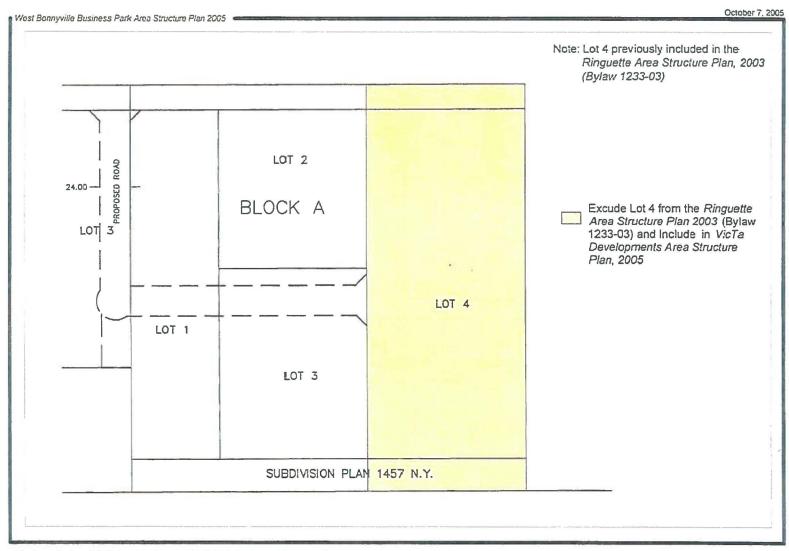
The "West Bonnyville Business Park Area Structure Plan, 2005" set a number of objectives at the outset of the preparation of the plan. All of the objectives were addressed with the following results:

- All available information related to the plan area has been assembled and included in this report,
- The proposed development addresses the existing demand for highway commercial and general industrial land within the Town of Bonnyville,
- The plan demonstrates that the proposed development can be supported by the physical dimensions of the plan area,
- The proposed development compliments existing and adjacent development,
- Transportation and roadways issues are addressed
- To the extent that it has been demonstrated that external and internal roadways can accommodate the orderly and efficient flow of traffic into, out of and within the subdivision.
- It has been demonstrated that servicing the proposed development can be undertaken in a manner that satisfies the requirements outlined by the Town of Bonnyville's Minimum Design Standards,
- · A proposed method of phasing the development is suggested, and
- The plan addresses legislative changes that must be undertaken to adopt this plan and amend plans for proposed adjacent developments.

This plan offers a substantial investment in the community that will provide for growth and economic development as well as land development for many years into the future.



Schedule "A" to Bylaw XXXX-05 Page 1



Schedule "A" to Bylaw XXXX-05 Page 2