

FRONTIER INDUSTRIAL PARK PHASE II

CONCEPTUAL SCHEME



BYLAW C-6766-2009, ADOPTED APRIL 28, 2009

MUNICIPAL DISTRICT OF ROCKY VIEW NO. 44 Department of Planning and Community Services

MUNICIPAL DISTRICT OF ROCKY VIEW NO. 44 BYLAW C-6766-2009

A Bylaw of the Municipal District of Rocky View No. 44, pursuant to Divisions 7 & 12 of Part 17 of the Municipal Government Act, to adopt the attached Schedule 'A' referred to as the "Frontier Park 2 Conceptual Scheme".

WHEREAS the Council of the Municipal District of Rocky View No. 44 has received an

application to adopt a Conceptual Scheme to provide a framework for subsequent redesignation, subdivision and development applications within the SE 6-24-28-W4M, consisting of an area of approximately ± 160 acres, as shown on Schedule

'A', attached to and forming part of this Bylaw; and

WHEREAS the Council deems it desirable to adopt the Conceptual Scheme; and

WHEREAS a notice was published on Tuesday, March 4, 2008 and Tuesday, March 11, 2008 in

the Rocky View Weekly, a newspaper circulating in the Municipal District of Rocky

View No. 44, advising of the Public Hearing for Tuesday, April 28, 2009; and

WHEREAS Council held a Public Hearing and have given consideration to the representations

made to it in accordance with Section 692 of the Municipal Government Act, being Chapter M-26 of the Revised Statutes of Alberta, 2000, and all amendments thereto.

NOW THEREFORE the Council enacts the following:

- 1. That the Conceptual Scheme to provide a framework for subsequent redesignation, subdivision and development applications within the SE 6-24-28-W4M, consisting of an area of approximately ± 160 acres, as shown on Schedule 'A', attached to and forming part of this Bylaw:
- 2. The Bylaw comes into effect upon the date of its third reading.

Division: 5 File: 04306001 2007-RV-160

First reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on Tuesday, March 17, 2009, on a motion by Councillor Solberg.

Second reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on Tuesday, April 28, 2009, on a motion by Councillor Solberg.

Third reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on Tuesday, April 28, 2009, on a motion by Councillor Louden.

REEVE OR DEPUTY REEVE	MUNICIPAL SECRETARY

Schedule 'A'

Forming Part of Bylaw C-6766-2009

A Conceptual Scheme for the SE 6-24-28-W4M, affecting the area within Section consisting of approximately \pm 160 acres, herein referred to as the "Frontier Park 2 Conceptual Scheme".

FRONTIER INDUSTRIAL PARK PHASE II CONCEPTUAL SCHEME

Prepared by: Interplan Strategies inc.

Urban Systems Stantec Consulting

Westhoff Engineering Resources, Inc.

InterPlan strategies inc. Westhoff

Engineering Resources, Inc.





On behalf of: Remington Development Corporation



For: The Municipal District of Rocky View No. 44

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1.0 VISION, LOCATION AND PURPOSE

1.1 Vision

Frontier Industrial Park Phase 2 (Frontier Park 2) is envisioned as a continuation of Phase 1 to the west. When completed, both phases will function as a hub of transportation related industrial uses geared to contribute to the regional industrial market and the economic vitality of the MD of Rocky View. As with Phase 1, the site is ideally located next to future major transportation corridors including the East Freeway (TUC) and Peigan Trail.

The Park is designed to accommodate a range of industrial lot sizes within a simple and efficient road network. Development of the individual lots will be guided by a set of development and design guidelines to ensure that there is a level of cohesiveness in the overall building designs and lot layouts with special emphasis on the utilization of low impact development principals.

1.2 Location

Frontier 2 (Figure 1) is located in the Municipal District of Rocky View (MD) within the boundaries of the Shepard Area Structure Plan and the Joint Planning Areas as determined by the City of Calgary and the MD.

The lands are bounded to the west by Frontier Phase 1, to the east by Garden Road (100^{th} Street SE), and to the south by Twp. Rd. 240 (50^{th} Avenue SE) and the CN rail line. The $\frac{1}{4}$ section to the north is part of the annexed City of Calgary lands and will be the site of future residential development.

Policy 1.1.1: Policies contained within the Frontier Industrial Park Phase 2 Conceptual Scheme shall apply to all lands within the Conceptual Scheme plan.

1.3 Purpose

The Conceptual Scheme describes how \pm 160 acres (65 hectares) of farmland will be developed into an efficient and orderly industrial park. The proposed development, Frontier Park 2, will feature two public utility lots and 28 industrial lots ranging in size from \pm 1.5 acres (0.60 hectares) to \pm 10 acres (4.05 hectares). The industrial park is intended to provide for those uses requiring minimal or no servicing requirements.

The Conceptual Scheme for Frontier Park 2 provides a foundation for the redesignation and subdivision of lands legally described as the SE ¼ of Section 6-24-28 W4M in the Municipal District of Rocky View. In preparation of this Conceptual Scheme, careful attention was paid to the policies and objectives set forth in the Shepard Area Structure Plan (ASP) Bylaw C-5330-2001, adopted on May 29, 2001. The Shepard Area Structure Plan provides a comprehensive policy framework for evaluating development proposals within its plan boundaries.

The following sections of this plan discuss the Conceptual Scheme objectives, policy framework, site characteristics, development concept and land uses, municipal reserve and open space requirements, transportation and access, proposed site servicing and implementation strategy.

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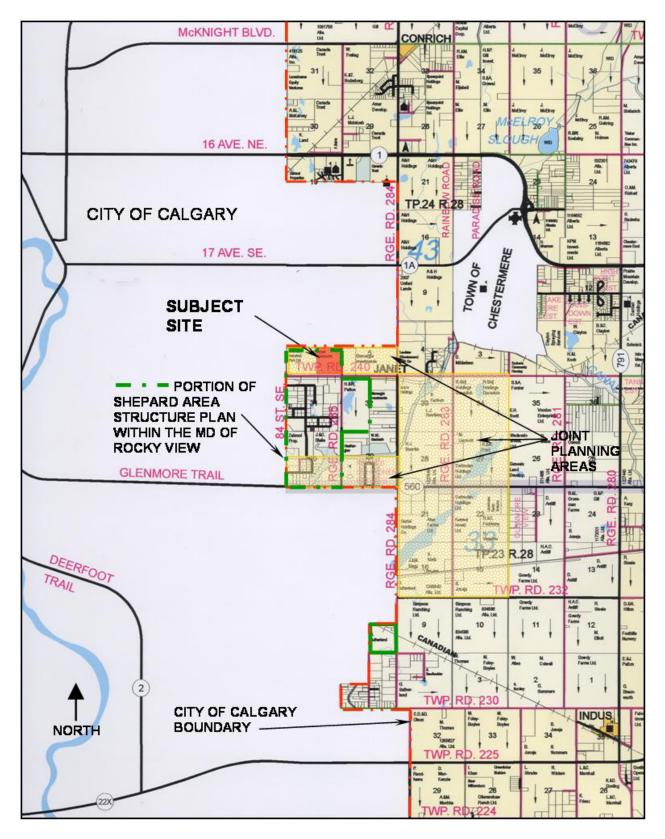


FIGURE 1: SITE LOCATION

1.4 Conceptual Scheme Objectives

The Frontier Park 2 Conceptual Scheme has the following objectives:

- 1. To create a comprehensive plan that describes uses, designs and strategies for appropriate development of the SE ¼ of Section 6-24-28 W4M in the Municipal District of Rocky View;
- 2. To provide a policy framework that guides development and subdivision within the plan area and is consistent with the requirements of the Shepard Area Structure Plan;
- 3. To identify a land use district that meets the needs of the development concept;
- 4. To detail a development concept that services the regional industrial market and is acceptable to local residents;
- 5. To illustrate the physical characteristics of the plan area and describe any physical impact on the natural environment by the proposed development;
- 6. To identify any constraints on the plan area and how these will be addressed in the proposed development;
- 7. To determine performance standards and development guidelines for industrial land uses within the Conceptual Scheme plan area; and
- 8. To address the servicing, transportation and open space requirements associated with the proposed development.

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2.0 POLICY FRAMEWORK

2.1 Municipal Development Plan

The Municipal District of Rocky View's Municipal Development Plan (MDP) adopted as Bylaw C-4840-97 on July 6, 1998 provides the overall Municipal philosophy and vision, a land use strategy, and planning policies, all of which guide and shape the future of the Municipality. The MDP recognizes the significance of economic development and has the stated goal "to encourage and facilitate business opportunities which enhance and strengthen the economy of the Municipality". Policy 6.1.1 of the MDP specifically states that the Municipality "supports the development of its commercial and industrial land base". The MDP also provides criteria for evaluating proposals for business developments and related subdivisions that address such matters as the scale and compatibility of the proposed development, availability of infrastructure development and the provision for any area structure plan that may have to be adopted to accommodate the proposed development.

2.2 Intermunicipal Development Plan

The Municipal District of Rocky View/City of Calgary Intermunicipal Development Plan (IDP) was approved by the Municipal District of Rocky View Council on October 6, 1998 as Bylaw C-4929-98 and by the City of Calgary Council on October 5th, 1998 as Bylaw 24P98. Frontier Park is situated within part of a Special Area in the IDP referred to as Proposed Shepard Area Structure Plan.

The IDP recognizes that business development within the Municipal District of Rocky View "may include a range of commercial and industrial uses" that "will be encouraged to locate in areas where proposed business is complementary to surrounding land uses".

The recent annexation effective January 01, 2007 removed a significant portion of the Shepard Plan area from the MD of Rocky View and transferred it to the City of Calgary, thereby reducing the amount of available industrial/general business lands in this part of the MD. The annexation agreement identifies this area of the MD as an industrial growth corridor.

The 2006 Annexation Agreement also established Joint Planning areas. The subject lands are a part of the Peigan Trail Extension Joint Planning area, the purpose of which is intended to address the interface between industrial development in the Municipal District of Rocky View and residential development in the City of Calgary. The Annexation Agreement also addresses the future east/west alignment of Peigan Trai, which currently runs through the northern edge of the subject lands. The Agreement states: "Administration ensure that the future alignment ... does not unnecessarily bisect private property and allows for optimum land use as part of the joint planning work in this area ...".

2.3 Shepard Area Structure Plan

The Shepard Plan approved by the Municipal District of Rocky View as an Area Structure Plan (ASP) on May 29th, 2001, Bylaw C-5330-2001 includes the Frontier Park 2 area (Figure 1).

Figure B-1 Land Use Strategy in the Shepard Plan identifies the Frontier Park area as suitable for business development and suggests that this land should be developed as the third phase of development in the ASP area. The Frontier Park area is subject to the *Business Land Use Policies* of the ASP. Part 5 of these Policies states "...the Plan area consists of existing and approved Business Uses. The business areas are intended to consist of large, limited service business parcels existing in

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harmony with other land uses".

2.4 Land Use Bylaw

The Municipal District of Rocky View Land Use Bylaw (LUB) C-4841-97 currently designates the Frontier Park area as Ranch and Farm District (RF). The Purpose and Intent of this District is "to provide for agricultural activities as the primary land use on a quarter section of land or on large balance lands from previous subdivision". This is consistent with the current agricultural use of the land.

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3.0 SITE CHARACTERISTICS

3.1 Legal Description and Ownership

The legal description and land ownership for the subject site are indicated below.

Legal Description:

Meridian 4, Range 28 Township 24 Section 6 South East Quarter Section

3.2 Site Area

The subject site contains approximately 160 acres (64.5 ha).

3.3 Current Land Use Context

The lands to the north of the Conceptual Scheme are within the boundaries of The City of Calgary and are designated S-FUD (Special Purpose Future Urban Development). The ¼ section directly to the west is owned by the developer and has been planned as an Industrial Park and is designated B-2 (General Business District). The Conceptual Scheme for this ¼ section was adopted by the MD of Rocky View in October, 2007. The lands to the east are designated as RF with a parcel in the south west corner of ¼ section designated as DC (Figure 2). Directly south of the property is the CN rail line and below that is a parcel designated as a Direct Control District (DC), which houses and allows for industrial and general business uses. To the south and east is a parcel designated as AH (Agricultural Holding District). The land south of the DC district is designated as a General Business District (B-2) and RF.

The City of Calgary boundary is situated along the northern property line. Further to the west is the north-south Transportation and Utility Corridor (TUC) also referred to as the East Freeway. Future plans for the freeway include an extension of the Peigan Trail Expressway across the northern portion of the Conceptual Scheme area.

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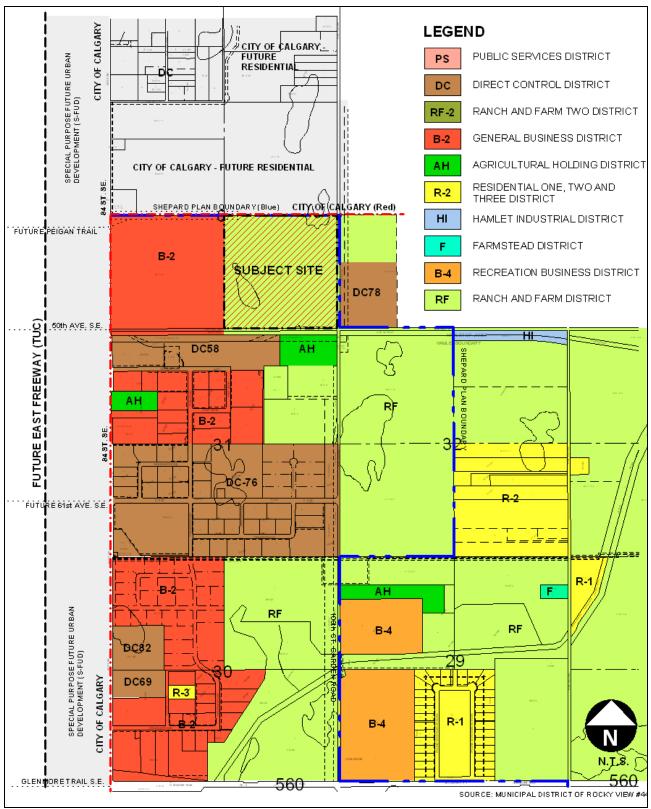


FIGURE 2: CURRENT LAND USE CONTEXT

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3.4 Land Form

The topography of the site is gently undulating prairie which has been cultivated. There are several low lying areas within the Plan area which contain a series of wetlands. The major concentrations of these low areas are shown in **Figure 3** below.



FIGURE 3: LAND FORM

3.5 Current Access

The subject lands are currently accessed from Garden Road (100th Street SE). This rural cross-section road is located along the east boundary of the plan area.

Access is also gained from TWP. Rd. 240 (50^{th} Avenue SE), a gravelled rural road located along the south boundary of the plan area.

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3.6 Environmental Considerations

Westhoff Engineering Resources, Inc. conducted a Wetland Assessment for the subject site in May 2007. Numerous wetlands were identified on the site, ranging in classification from Class I to V. Two locations were classified as Class V (Permanent Ponds and Lakes); four locations were classified as Class IV (Semi-permanent Ponds and Lakes) and two as Class III (Seasonal Ponds and Lakes). The remainder were Class I (Ephemeral Ponds) or Class II (Temporary Ponds). It should be noted that this quarter section was cultivated for Canola in the past and many of the wetlands show degradation as a result.

In closing the report made the following recommendation;

"Even due to the disturbed nature of many of the wetlands found on this property it was found that they still do provide certain ecological functions including habitat for a number of wildlife species. These wetlands are also being utilized as spring melt storage/retention areas and infiltration sites. The development of this property should be conducted with the use of best management practices and where possible these wetlands should be maintained and integrated into the overall site plan.

Should it become apparent that avoidance of any impact to these wetlands cannot be avoided or mitigated then compensation may be warranted."

A wetland assessment for this development area has been completed and a Water Act application has been submitted to Alberta Environment for off-site compensation.

Policy 3.6.1: The Developer shall apply to Alberta Environment to determine the required wetland compensation and make appropriate application under the Water Act.

3.7 Vegetation

This quarter section was cultivated for Canola in the past and the majority of the wetlands have been cultivated, therefore very little naturally occurring vegetation exists on the site.

3.8 Environmental Site Assessment

A Phase I Environmental Site Assessment, (submitted under separate cover), was performed by Cirrus Environmental Services Inc. in February 2007. The Assessment concluded that "...the potential for negative environmental conditions existing at the Subject Property is low – and, as a result, a Phase II ESA is not recommended for the site."

- **Policy 3.8.1:** Based on the Phase I Environmental Site Assessment no evidence of soil or groundwater contamination has been found and no further assessment of the subject site is required.
- **Policy 3.8.2:** Based on a search of the Alberta Energy and Utilities Board records, there are no petroleum wells, pipelines, and facilities on or within 100 metres of the subject land. Therefore no further assessment of the subject site is required beyond the normal circulation requirements of the subdivision application.

3.9 Existing Structures

There are no existing structures on the subject lands.

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3.10 Historical Resources

A Historical Resources Overview was conducted by Lifeways of Canada Limited in February, 2007 and has concluded "....there are no Historical Resource concerns for this project,...", and recommend "Historical Resources Act Clearance for this project". Alberta Tourism, Parks, Recreation and Culture have reviewed the Historical Resources Overview and issued on February 20th, 2007 a Historical Resources Act clearance to proceed with development.

Policy 3.10.1: Should any historical resources be encountered during construction, Alberta Tourism, Parks, Recreation and Culture are to be contacted immediately.

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4.0 DEVELOPMENT CONCEPT

4.1 The Shepard Plan - Development Phasing

Within the past seven to eight years the Transport Industrial Conceptual Scheme, the Boychuk Conceptual Scheme, the Patton Conceptual Scheme, the Kleysen Transport Conceptual Scheme, and Frontier Park 1, all situated along 84th Street SE, have been approved by the Municipal District of Rocky View Council and are under various stages of development (Figure 4). The Shepard Plan encourages businesses that enhance, strengthen and diversify the area's economy and recognizes the potential for limited services industrial land uses in the Plan area.

The Shepard Plan outlines three phases of industrial development in the Plan area. Frontier Park is located within Phase 3. Section 5.1c of the Plan recognizes that development may proceed out of sequence provided that the Municipality is satisfied with the rationale presented for doing so.

The rationale for developing out of Phase is based on a number of factors including the current market demand for limited serviced industrial land in the region and the limited amount of land available for this type of development. Frontier Park 2 is one of the last parcel of undeveloped land located along the fast developing 84th Street S.E. corridor, between Highway 560 (Glenmore Trail SE) and the future east/west Peigan Trail. Because it is being developed as an extension of Frontier Park Phase I, its development is a logical step from the previously approved developments along 84th Street. From a Municipal District of Rocky View perspective, the recent annexation removed a significant portion of land from the Shepard Plan area from the jurisdiction of the MD of Rocky View and transferred it to the City of Calgary thereby reducing the amount of business lands in this part of the MD. The annexation agreement identifies this area of the MD as an industrial growth corridor.

Frontier Park 2 will represent contiguous development, will be readily accessible and will be serviceable with the infrastructure necessary for the proposed land use. Furthermore, the planning and development of Frontier Park 2 will complete this segment of the Plan area and will contribute to the development and upgrading of the road network in the area.

Policy 4.1.1 Subdivision and development of Frontier Park 2 may occur out of the phasing sequence as shown in the Shepard Plan.

4.2 Development Concept

Based on the Developer's intentions, Municipal District of Rocky View Policy, market considerations and site characteristics, a Conceptual Scheme for the 160 acre Frontier Park 2 has been prepared for the site as illustrated in Figure 5.

The vision for this development is that it will eventually house a variety of users. Market research has indicated a need for smaller parcels to house such businesses as landscaping companies, single owner truckers, and limited manufacturing companies that cater to a niche market. Larger lots will appeal to companies requiring larger facilities and/or storage areas for their businesses.

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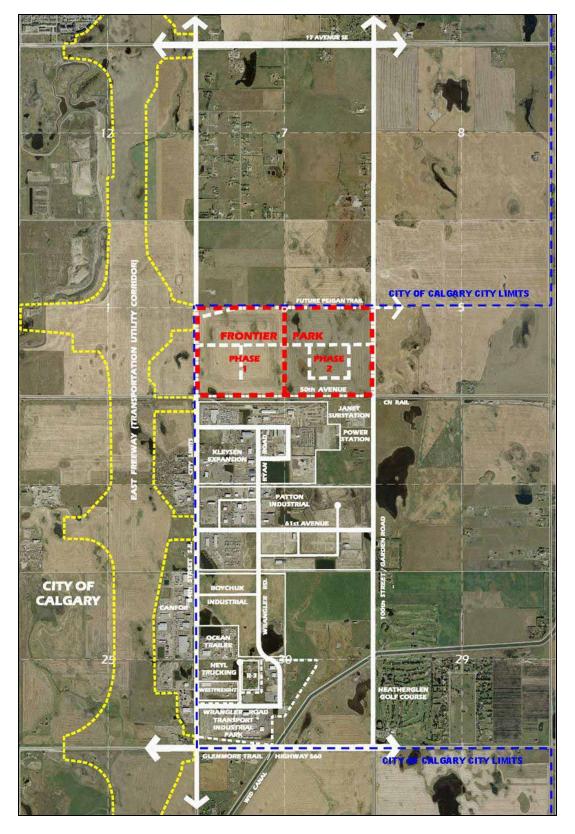


FIGURE 4: SITE CONTEXT (2003)

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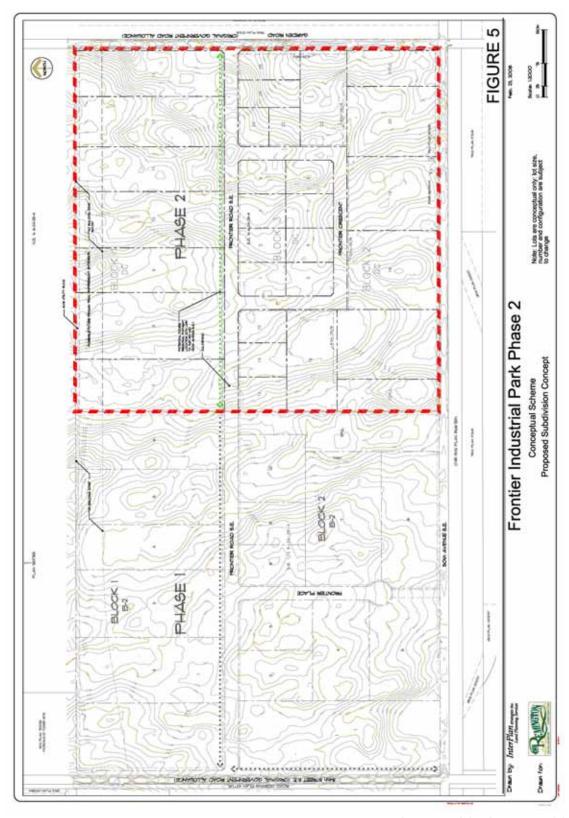


FIGURE 5: CONCEPTUAL SCHEME

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4.3 Land Use

As noted in **Section 2.2** of this report, Figure B-1 of the Shepard Plan identifies the subject site as Phase 3 "Business". Section 5 of the Shepard Plan indicates that "the business areas within the Plan are intended to consist of large, limited service business parcels existing in harmony with other land uses" and Section 5.1(a) acknowledges that "the Municipality encourages businesses that enhance, strengthen and diversify the Municipality's economy".

Section 5.1 of the Shepard Plan also contains appropriate business area land use policies.

In conformance with Section 5.0 of the Shepard Plan the Conceptual Scheme proposes to redesignate the subject site from Ranch and Farm Direct Control District (DC).

According to Municipal District of Rocky View Land Use Bylaw C-4841-97 (updated October 2007), Section 61, the purpose of the Direct Control District (DC) "is to provide for developments that due to their unique characteristics, unusual site constraints or innovative ideas, require specific regulations unavailable in other land use districts."

General Industry Type I and General Industry Type II are permitted uses within this Direct Control land use district. General Industry Type I and General Industry Type II are respectively defined as "those developments where activities and uses are primarily carried on within an enclosed building and no significant nuisance factor is created or apparent outside an enclosed building" and as "those developments in which all or a portion of the activities and uses are carried on outdoors, without any significant nuisance or environmental factors such as noise, appearance, or odour, extending beyond the boundaries of the site".

Policy 4.3.1: Land uses within the Conceptual Scheme area shall conform to the approved Land Use District contained within the Municipal District of Rocky View Land Use Bylaw C-4841-97 (updated October 2007) and with the Business Area Land Use Policies contained in Part B Section 5 of the Shepard Plan.

4.4 Subdivision Layout

The proposed subdivision layout illustrated in **Figure 5** exemplifies a grid pattern which results in maximum efficiency and desired rectangular lots for industrial users. The layout results in 28 industrial lots ranging from ± 0.60 hectares (1.5 acres) to ± 4.88 hectares (12.0 acres) in size. The precise number of lots will be determined by market demand. Two Public Utility Lots (PUL) totalling ± 3.16 hectares (7.8 acres) are proposed to be utilized for storm water management. The PUL lots have been located in the south east and south west corners and are each ± 1.58 hectares (3.9 acres). The final sizes of the PUL lots will be determined at the subdivision stage. The estimated Conceptual Scheme land use statistics are summarized in **Table 1**.

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Table 1: Land Use Statistics

Land Use	Hectares±	Acres±	Percent	
Industrial ¹	56.08	138.6	86.5	
Public Utility Lots	3.16	7.8	5.0	
Roads ²	5.57	13.8	8.5	
Total	160.2	64.82	100.0	

The future Peigan Trail road is intended to run along the north side of the Conceptual Scheme area; however its precise alignment is not known at this time.

Due to the proximity of the intersections of TWP. Rd. 240 (50th Avenue SE) with 84th Street SE and Range Rd. 285 (Garden Road) to the Canadian National Railway crossing, the Plan proposes to provide an east–west collector standard street approximately 455m to the north of TWP. Rd. 240 (50th Avenue SE) at approximately Frontier Road SE. Figure 5 illustrates the future intentions for development of the internal road through lands owned by the developer of Frontier Park 1 situated immediately to the west of the Conceptual Scheme area and continuing east through the proposed Frontier Park 2.

All internal roads will be dedicated as public roads with the rights of way reflecting the appropriate road design and transportation requirements. The roads will be constructed to Municipal District standards.

The Plan also allows for the dedication of a 5.0m strip of land along the easterly edge of the site for the widening of Range Rd. 285 (Garden Road). An additional 3.0m strip will be provided by caveat in order to accommodate the required 8.0m R.O.W. widening. Along the south edge of the site, north of TWP. Rd. 240 (50th Avenue SE), an additional 5.0m dedication and 3.0m caveat will be provided to accommodate additional future road widening.

The Plan also provides for various easements to accommodate storm drainage conveyance and storage. The proposed storm water easements include:

- i) A 5m easement along the south boundary, between the Public Utility Lots.
- ii) A 8m easement along the east boundary of the Plan from Frontier Rd. SE south to the PUL lot at the south east corner.
- iii) A 8m easement from the west side of Frontier Crescent west to the PUL lot located in the south west corner.
- iv) A 8m easement from the east side of Frontier Crescent east to the PUL lot located in the south east corner.
- v) A 8m easement along the north edge of the property line.

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 $^{^{1}}$ Industrial includes \pm 4.80 Ha (11.87 Ac) situated in the future Peigan Trail right of way.

 $^{^2}$ Roads include \pm 0.84 Ha (2.07 Ac) of area for the widening of Range Rd. 285 (Garden Road) and TWP. Rd. 240 (50th Avenue SE)

Policy 4.4.1 The subdivision of the Plan area shall proceed in general accordance with the parcel configuration and road alignments illustrated in Figure 5 and the minimum requirements of the Municipal District of Rocky View Land Use Bylaw.

4.5 Open Space and Municipal Reserve

Pursuant to Section 666 of the Municipal Government Act, the Municipal District of Rocky View Council as the Approving Authority may require the owner of a parcel of land that is the subject of a proposed subdivision to provide up to ten (10) percent of the parcel as:

- i) land for municipal reserve, school reserve or municipal and school reserve,
- ii) money in place of municipal reserve, school reserve or municipal and school reserve, or
- iii) a combination of land or money.

The Shepard Plan indicates that open space and recreation areas should be created to serve the residents within the Plan area and that linkages with the existing linear park system in the City of Calgary and the Western Headwork's Canal pathway within the Plan area are encouraged.

In the City of Calgary Pathway/Bikeway Implementation Plan, a regional pathway alignment is identified along the 50th Avenue alignment and is intended to eventually connect with the Western Irrigation District Canal pathway system. As provided in Frontier Park I to the west, the pathway would be accommodated along the north side of Frontier Road SE. The regional pathway will be located within the 6.0m building setback as a 6.0m easement. A 2.5m paved walkway will be located in this easement. The regional pathway location is shown in **Figure 5**.

Given the nature of the proposed development, the need for non-linear open spaces providing recreation opportunities is not indicated, and the Conceptual Scheme proposes that the municipal reserve obligations be met by means of cash in lieu of reserve.

- **Policy 4.5.1:** Municipal Reserves for the Conceptual Scheme area will be provided as cash in lieu of Reserves in accordance with the provisions of the Municipal Government Act.
- **Policy 4.5.2:** A potential future regional pathway shall be accommodated in the Conceptual Scheme (as described below) that will ultimately provide a connection to the regional pathway that parallels the Western Irrigation District canal.
 - 1. The 2.5m pathway shall be accommodated in a 6m easement within the 6m building setback along the north side of the proposed east/west internal road (Frontier Road SE) connecting 84th Street SE to Range Rd. 285 (Garden Road).
- **Policy 4.5.3:** A Lot Owners Association shall be incorporated to manage and maintain the pathway system in accordance with the requirements of the MD of Rocky View.

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5.0 TRANSPORTATION

5.1 Transportation Context

Access to the industrial lands north of Highway 560 (Glenmore Trail is mainly provided off 84th Street SE and Range Road 285 (Garden Road) which connects to Highway 560 (Glenmore Trail) and Highway 1A (17th Avenue SE). Both are two-lane north-south rural roads, however 84th Street is under the jurisdiction of the City of Calgary and Garden Road is within the Municipal District of Rocky View. Twp. Road 240 (50th Avenue SE), a two-lane rural road on the south boundary of the site, currently provides an indirect route into the City.

The Transportation Utility Corridor (TUC) was originally planned by the Province of Alberta and the City of Calgary in the late 1970's and is commonly referred to as the Calgary Ring Road. The process is currently underway to build the northeast portion of the Ring Road, from Deerfoot Trail to Highway 1A (17th Avenue SE), with construction scheduled to be complete by the fall of 2009. It is anticipated that construction of the southeast portion of the Ring Road will follow within a five-year timeframe.

An access management study was undertaken by Albert Transportation to evaluate the impacts of the East Freeway construction on the 84 Street SE corridor. The classification of Peigan Trail east of the East Freeway has recently been downgraded from and expressway to a major road, therefore the access management study has indicated that an at-grade intersection will be maintained at 84th Street SE and Peigan Trail. The study has also determined that 84 Street will become discontinuous with direct access to Highway 560 (Glenmore Trail) removed as a result of the proximity to the gradeseparated interchange on the East Freeway. When this occurs, Range Road 285 (Garden Road) will become the north-south roadway that provides access to Highway 560 (Glenmore Trail) from this area. Ultimately, the at-grade intersection of Range Road 285 (Garden Road) / Highway 560 (Glenmore Trail) may be eliminated and an interchange introduced further east on Highway 560 (Glenmore Trail). 61st Avenue SE, a major road, is proposed to provide the direct main connection between 84th Street SE and Range Road 285 (Garden Road). In addition, 61st Avenue SE may be extended over the East Freeway into the City of Calgary via a grade-separated overpass in the future, however this is not a currently funded project. The east-west connection between 84th Street SE and Range Road 285 (Garden Road) will continue to be provided either at the existing TWP Road 240 (50th Avenue SE) or or by Frontier Road. However, TWP Road 240 (50th Avenue SE) will cease to extend west of 84th Street SE through the TUC. Peigan Trail is a long term future road on the north boundary on the site, which is proposed as an east/west connection between the Municipality and the City of Calgary. It will connect to the East Freeway via an interchange. With the construction of Peigan Trail, 84th Street SE will ultimately become discontinuous immediately adjacent to Phase 1 of Frontier Industrial Park.

A functional planning study for Peigan Trail east of the East Freeway is currently underway by the Municipal District of Rocky View. The study will address the alignment of Peigan Trail and the access management. Consistent with Phase 1 of Frontier Industrial Park, a 60 metre no build zone has been protected along the north boundary of Phase 2 to accommodate the future Peigan Trail, which will be purchased by the Municipal District of Rocky View.

5.2 Internal Vehicular Circulation & Access

Access to the subject site will be obtained through the extension of Frontier Road, an east-west collector road, from Phase 1 of Frontier Industrial Park to Range Road 285 (Garden Road). Frontier Road will intersect Range Road 285 (Garden Road) approximately 455 metres north of the existing

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TWP Road 240 (50th Avenue SE). No direct access is proposed from the subject lands to 50 Avenue. The intention of the proposed alignment of Frontier Road is to provide greater distance between the CN Rail line, which is located just south of TWP Road 240 (50th Avenue SE), and the intersection to allow the opportunity to implement roadway improvements without affecting the CN Rail line. Frontier Road, which links 84th Street SE to Range Road 285 (Garden Road), may provide the primary east-west connection instead of TWP Road 240 (50th Avenue SE).

No direct connection between the site and the future Peigan Trail is proposed. The site has been designed to efficiently accommodate industrial traffic including large tractor-trailer vehicles. The internal roadway system will be dedicated as a public roadway with the appropriate right-of-way and will be designed in accordance with the Municipal District of Rocky View Servicing Standards for Subdivision and Road Construction. All driveway approaches will be the responsibility of each individual purchaser of the lots and will be deferred to the development permit stage.

Policy 5.2.1 All driveway approaches shall be deferred to the Development Permit stage.

5.3 Traffic Impact Assessment

The Shepard Plan describes four major traffic-generating areas where a Traffic Impact Assessment is required prior to development occurring. The subject site is located in Area 1 – north of Highway 560 (Glenmore Trail).

A traffic impact assessment was prepared in support of the proposed Frontier Industrial Park. The main objectives of this transportation assessment, as outlined by the Municipal District of Rocky View, are to evaluate impacts of vehicular traffic generated by the proposed development on the adjacent roadway system at full build-out (2010) and to recommend appropriate improvements to roadways in the vicinity of the proposed development to mitigate any unacceptable impacts.

It is estimated that Phase 2 of the Frontier Industrial Park will generate in the order of 505 vehicles per hour (vph) in the AM peak hour, 515 vph in the PM peak hour and 4,175 vehicles per day. The entire Frontier Industrial Park (Phases 1 and 2) is anticipated to generate approximately 1,010 vph in the AM peak hour, 1,030 vph in the PM peak hour and 8,350 vehicles per day.

A review of existing conditions along Range Road 285 (Garden Road) and 84th Street SE in the immediate vicinity of the development was completed. The analysis indicates that there are currently some delays at the 84th Street SE / TWP Road 240 (50th Avenue SE) intersection as a result of high traffic volumes on 84th Street SE which is a two-lane roadway. Overall, the critical turning movements to/from TWP Road 240 (50th Avenue SE) are quite low. It should be noted that the proposed development does not add significant traffic to the critical movements at this intersection. The CN Rail line is located just south of Twp Road 240 (50th Avenue SE) which potentially precludes the opportunity to implement intersection improvement at 84th Street SE / TWP Road 240 (50th Avenue SE). The proposed plan creates a new roadway (Frontier Road) through the site which connects Range Road 285 (Garden Road) to 84th Street SE approximately 455 m north of TWP Road 240 (50th Avenue SE). The location of this new roadway allows the opportunity to implement intersection improvements without affecting the CN Rail line. Analysis of the 2010 post-development conditions indicates that a traffic signal is required at the proposed intersection of Frontier Road with 84th Street SE, in conjunction with the widening of 84th Street SE to accommodate a dedicated southbound left turn lane and a northbound right turn lane. These improvements are being constructed as part of Frontier Phase 1. The intersection of Frontier Road / Range Road 285 (Garden Road) is expected to operate at a good level of service with one lane per direction and stop control on Frontier Road.

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TWP Road 240 (50th Avenue SE) has been identified as forming part of the Municipality's Long Range Transportation Network. The Municipality has the goal of widening the right-of-way for this category of road to 30 metres and may require road dedication of 5m at the time of subdivision of land located along Regional Transportation roads.

A copy of the traffic impact assessment has been submitted to the Municipal District of Rocky View under separate cover.

- **Policy 5.3.1** Access to the Conceptual Scheme area shall be as conceptually illustrated in Figure 5.
- **Policy 5.3.2** A 5.0 m wide road dedication and an additional 3.0 m by caveat shall be provided for the widening of Range Road 285 (Garden Road).
- **Policy 5.3.3** A 5.0 m wide road dedication and an additional 3.0 m by caveat shall be provided for the widening of TWP Road 240 (50th Avenue SE).
- **Policy 5.3.4** The Municipality will require an updated Traffic Impact Assessment at the subdivision stage.
- Policy 5.3.5 Detailed traffic infrastructure requirements and improvements will be determined at the subdivision stage by the Municipality based on the data contained in the Traffic Impact Assessment (TIA) and will be in accordance with the MD's Servicing Standards.

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6.0 SERVICING SCENARIO

This Conceptual Scheme proposes a subdivision design and development concept based on limited servicing and maintains that further servicing, as a result of off-site improvements, should be addressed on an individual development permit basis.

Policy 6.0.1: A deferred servicing agreement shall be registered against each individual title created outlining the owner's requirements for future service extensions to the satisfaction of the Municipal District of Rocky View.

6.1 Storm Water Management

A Storm Water Management Plan (SWMP) for the proposed Frontier Park 2 will be submitted to the Municipal District of Rocky View under separate cover. The purpose of this report is to show how storm water runoff from the proposed development will be managed through the use of on-site (lot) storm water storage and a storm water detention pond.

The storm water management study for Frontier Park 2 by Westhoff Engineering Resources, Inc., recognizes that the ultimate regional solution is yet to be determined. The Sheppard Drainage Corridor Study was released in 2008 and identifies the need for a regional conveyance channel near Garden Road. However, the final solutions on storm water remains under discussion among the stakeholders. The proposed storm water management for Frontier Park 2 integrates Best Management Practices and incorporates two wet ponds that exist in the southeast and southwest corner of the site. All runoff resulting from a 1:100 year event is handled within the development, i.e., no spill to downstream system.

The SWMP describes how all runoff (including runoff generated by the 100 year return period event) must be contained on-site given there are currently no regional drainage facilities in the area (Figure 6). The report also describes how runoff will spill into the off-site roadside ditches and channels beyond the 100 year return period event. Each of the proposed industrial lots will require a self-contained on-site retention pond in order to control storm water, pond size will be based on both 1:100 year runoff volumes as determined by continuous modelling, the releases from which will be controlled such that the entire drainage system will make the post-development conditions "simulate" predevelopment conditions. Paramount to this stormwater management strategy is that the wet ponds in the southeast and southwest corners of the development area are to handle all of the runoff generated from the internal roads <u>and</u> may aid in the evaporation of releases from the on-site retention ponds.

Runoff from adjacent lands to the north is managed by a perimeter ditch/berm that will allow for continuity of overland drainage to the downstream conveyance system at the intersection of Garden Road and 50th Avenue SE. This perimeter ditch is also tied to the north perimeter ditch of Frontier Phase I and will carry the flows intercepted by this ditch. Pre-development runoff from the external areas to the north will be handled by the wet pond in the southeast corner.

The internal drainage system comprises roadside ditches and swales between the individual lots and placed at property lines. All ditches and swales will be sized and designed to adequately convey the peak runoff and runoff volumes to the storm water wetlands that will be located in the proposed Public Utility Lots (PUL). These swales will be within drainage easements that will require registration by caveat on title.

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FIGURE 6: STORMWATER MANAGEMENT CONCEPT PLAN
Source: SWM Figure 2.2

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To ensure the SWMP is fully implemented through all stages of development, the Developer (Remington Development Corporation) has undertaken to engage the same stormwater consultant for all aspects of the projects. This includes the design and construction supervision of the on-site stormwater storage facilities on each of the lots at the Development Permit stage.

- **Policy 6.1.1:** The storm water management system shall incorporate, where feasible and practical, Best Management Practices as outlined in the Alberta Environment Guidelines for Storm Water Management for the Province of Alberta.
- **Policy 6.1.2:** The storm water management system within the Plan area shall be in general accordance with the SWMP supporting the Conceptual Scheme and as prepared by Westhoff Engineering Resources Inc.
- **Policy 6.1.3:** The Municipality shall require a detailed Stormwater Management Plan at the subdivision stage.
- **Policy 6.1.4:** The final configuration of the stormwater infrastructure including the Public Utility Lots (PUL), as well as the overland drainage easements, locations and widths shall be determined at the subdivision and development permit stage based on the recommendations of the SWMP and the Stormwater Engineer who authored the SWMP, and to the satisfaction of the Municipality.
- **Policy 6.1.5:** To ensure the intent of the submitted SWMP, the design and construction supervision of the on-site stormwater storage facilities on each of the lots shall be undertaken at the Development Permit stage by Westhoff Engineering Resources, Inc. or as directed by Remington Development Corporation, all to the satisfaction of the MD.
- **Policy 6.1.6:** The detailed SWMP shall show the design, function and operation of overland drainage system components, the activation of the emergency spillway, and will stipulate minimum elevations for first opening to buildings to mitigate potential damage due to flooding to the satisfaction of the Municipality.
- **Policy 6.1.7:** The Municipality recognizes that the required on-site facilities shall be altered, if necessary, upon completion of a regional Stormwater Master Drainage Plan, future agreements with Alberta Environment. Therefore, at the subdivision or development permit stage, the on-site stormwater storage requirements shall be altered, if necessary, subject to the submission of an updated SWMP, and to the satisfaction of the Municipality.
- **Policy 6.1.8:** A lot owners association shall be incorporated to manage and maintain the stormwater management infrastructure, which includes the Public Utility Lot, the fire suppression pond and the conveyance system in accordance with the SWMP and the requirements of the Municipality and Alberta Environment. The lot owners association will manage and maintain the infrastructure until such a time as the Municipal District of Rocky View may wish to take it over.
- **Policy 6.1.9:** An access agreement in the name of the Municipal District of Rocky View shall be registered on the title of each lot for the purposes of remedying any breach by the lot owner of any non-compliance in the construction, operation or maintenance of the lot owners' storm pond.

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6.2 Regional Storm Water Contribution

The 84th Street industrial area is bounded by the City of Calgary to the west, the future east/west Peigan Trial to the north and the Western Irrigation Headworks Canal that runs south-west to north-east. It comprises approximately 2800 acres of developed and undeveloped land. The existing developments in the area are experiencing problems with stormwater management.

For the 84th Street area to reach its full development potential there must be provision for the regional conveyance of stormwater out of the area. The Municipality is currently exploring a number of options all of which require significant capital expenditures. The developer for Frontier Phase 2 has indicated to the Municipality that it is prepared to contribute to a regional solution based on its proportionate share of the capital costs

Policy 6.2.1: Prior to subdivision approval, the developer shall make a one-time contribution towards a regional stormwater solution based on a scoping level engineering assessment of the capital costs and upon a proportionate acreage basis. This contribution may be financial or in combination with an easement.

6.3 Sanitary Sewer

Sanitary sewage will be contained and transported off-site for disposal.

Policy 6.3.1: Sanitary sewage shall be contained in pump out tanks and transported off-site for disposal.

6.4 Water Supply

Water will either be trucked into the plan area and stored in cisterns or obtained from individual wells on-site Data obtained from a number of wells in the area indicates that there is sufficient water available on-site to service the needs of a variety of industrial users. It is the MD's preference for industrial lots to use on-site cisterns for water servicing. However, if the landowners elect to obtain water by wells it must be in accordance with the Provincial Water Act.

Policy 6.4.1: In accordance with the Provincial Water Act, lot owners shall obtain a License to Divert Water from Alberta Environment prior to extracting water for commercial purposes should water be obtained from individual wells on-site.

6.5 Shallow Utilities

Electrical, telephone and natural gas utilities will be extended into the plan area. Electrical and telephone servicing will be provided via overhead joint utility poles. The alignments of the utilities are illustrated on Figure 7.

Policy 6.5.1: Electrical, telephone and natural gas utilities shall be provided within the plan to all lots at the sole expense of the Developer and to the satisfaction of the utility providers and the Municipality.

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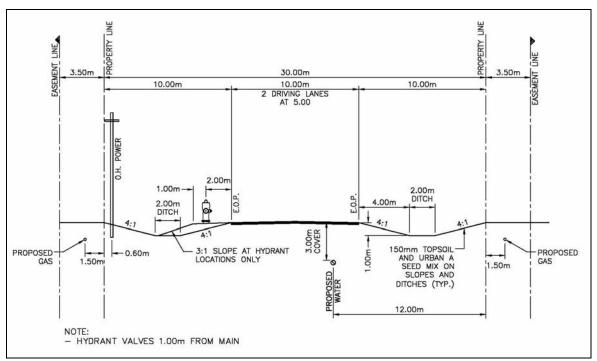


FIGURE 7: TYPICAL ROAD SECTION

6.6 Site Grading

Proposed road grades and drainage courses will take into consideration the existing topography to minimize grading requirements over the plan area. Upon approval of the Conceptual Scheme, the Owner is intending to rough grade the roadways and stormwater drainage facilities. Final stripping and grading of roadways, stormwater easements, PULs and common stormwater facilities will occur at the subdivision stage. Onsite grading within the lots will be completed by the lot purchasers at the time of Development Permit approval for the lot.

- **Policy 6.6.1:** Prior to stripping and grading of the site including roads, lots and stormwater facilities, a grading plan and an erosion and sediment control (ESC) report and plan shall be submitted to the satisfaction of the MD.
- **Policy 6.6.2:** Site grading is to take into consideration existing topography to minimize grading requirements over the plan area.
- **Policy 6.6.3:** The Municipal District of Rocky View may issue a Stripping and Grading Permit provided among other things the following conditions have been met:
 - (a) A Preliminary Grading Plan depicting road and swale grades including the Public Utility Lot area, a Stormwater Management Plan, Erosion and Sediment Control Plan, and Construction Management Plan are approved by the Municipal District of Rocky View and Alberta Environment.
 - (b) No topsoil shall be removed from the plan area without prior approval by the Municipal District of Rocky View.

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7.0 PROTECTIVE SERVICES

Police services will be provided by the Royal Canadian Mounted Police and the Municipal District of Rocky View Special Constables. The plan area will be serviced by 911 Emergency Service with an emergency locator system set up for each individual lot. Fire protection will be provided by the Municipal District of Rocky View.

The storm retention pond located in Frontier Park Phase I will be used to store sufficient water on-site to sustain fire flows for both phases. A pump station, located in close proximity to the storm pond, will force water eastward across the plan area through a pressurized water distribution system. Access to water will be via one of the fire hydrants located in the subdivision. Water mains and hydrants will be located within the road right-of-way in the alignments illustrated on Figure 7.

- **Policy 7.0.1:** All parcels within the plan area shall have water for fire suppression available at the lot line. Water is to be supplied to the fire suppression system from a storm retention pond. The pumping station shall be accessible by an all weather road. Fire hydrants shall also be installed as a condition of subdivision approval to the satisfaction of the Municipal District of Rocky View.
- **Policy 7.0.2** The Municipal District of Rocky View may at any time in the future choose to assume management and/or ownership of the fire suppression system including the pump station.
- **Policy 7.0.3:** Should a regional water system be constructed, capable of servicing the Conceptual Scheme area, the fire protection system shall be connected to it in order to provide full fire protection.
- **Policy 7.0.4:** An Emergency Response Plan shall be submitted by the Developer to the satisfaction of the Municipal District of Rocky View at subdivision stage.

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8.0 PHASING

The Frontier Park 2 development will include \pm 160 acres (64.8 hectares) of land that will be subdivided into two public utility lots and 28 industrial lots all of which are proposed to be developed as a single phase.

- **Policy 8.0.1:** The proposed Frontier Park 2 will be developed as a single phase.
- **Policy 8.0.2:** Notwithstanding Policy 8.0.1, multiple phasing may be permitted without amendment to this Conceptual Scheme provided adequate servicing, infrastructure and storm water management is available. If multiple phasing occurs all offsite and onsite improvements required for full build out may be required at the first phase.

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9.0 PUBLIC CONSULTATION

A public Open House was held on November 25, 2008 at the Prince of Peace Manor. Two people attended the Open House. The only comment received related to 101 Street, suggesting improvements to this roadway.

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10.0 PLAN IMPLEMENTATION

This Conceptual Scheme puts forward policies and objectives for the development of a second phase of a dynamic and functional Industrial centre on lands legally described as a portion of the SE¼ of Section 6-24-28 W4M. Frontier Park 2, will provide a high quality development that is consistent with the Shepard ASP, and meets the existing and future needs of the local community and regional industrial market.

Redesignation and subdivision of the Conceptual Scheme plan area shall be guided by the policies and objectives herein, and implemented through conditions of redesignation and subdivision approval by the Municipal District of Rocky View.

Policy 10.0.1: Redesignation, subdivision and development of lands within the Conceptual Scheme Planning Area shall be guided by the policies contained herein and implemented through the Land Use Bylaw, conditions of Subdivision Approval and the conditions of the Development Permit in consultation with the City of Calgary as required by the Shepard ASP.

10.1 Low Impact Development

Low Impact Development (LID) has the goal of replicating the pre-development hydrologic regime through the use of design techniques to create a functionally equivalent hydrologic site design. Within Frontier Park, LID initiatives could be implemented within the individual lots and/or along the public roadways. Potential LID initiatives within the individual lots could consist of the implementation of green roof systems, rainwater harvesting from roof areas, or the consumptive re-use of stormwater for irrigation purposes, wash water or process water. One benefit of this approach is that it reduces the land requirements for evaporation of excess runoff. In addition, it may reduce the potable water demand. If runoff from the individual lots is conveyed off-site through the implementation of a regional stormwater system, these LID initiatives would still serve to reduce the volume of water and contaminant loadings into the regional system or into the proposed wetland that will be built as part of the local stormwater management system.

Other initiatives that lessen the impact of development that are being proposed for the Frontier Park 2 Conceptual Scheme are listed below and discussed in greater detail elsewhere in the text.

- The creation of wet ponds to treat stormwater. Wet ponds deal with contaminants and stormwater discharge, but can also provide wildlife habitat,
- Consistent with Municipal policy the Developer will require the Lot Owners to use water saving devices and low flow plumbing fixtures. This will be implemented through the Developer's Building and Development Standards.
- Adoption of a night friendly lighting policy through the Developers Building and Development Standards.
- A Crime Prevention Through Design (CPTED) strategy as part of the subdivision design

Policy 10.1.1: The Developer will promote Low Impact Development techniques to the purchasers of individual lots through discussion regarding the options for stormwater design and the use of the Developers Building and Development Standards.

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10.2 Construction Management Plan

The Shepard ASP requires all applications of redesignation, subdivision, and/or development for business uses, within the context of a Conceptual Scheme; include a Construction Management Plan that includes Best Management Practices for storm water management throughout construction. Refer to *Policy 6.6.3* on page 24 of this document.

10.3 Performance Standards

The performance standards described below are intended to provide benchmarks for the management of potential nuisances that may result from industrial development within the plan area. The Municipal District of Rocky View will ensure that future subdivision and development applications within the plan area meet or exceed the performance standards determined by this Conceptual Scheme.

10.3.1 Weed Control Management Plan

The intention of the Weed Management Plan is to prevent the spread of noxious and restricted weeds pre-development, post-development and throughout all phases of site construction. Prior to the adoption of the Conceptual Scheme a Weed Management Plan is to be submitted to the Municipality for approval.

- **Policy 10.3.1** A Weed Management Plan shall be prepared by the Owner as a condition of subdivision, all to the satisfaction of the Municipality.
- **Policy 10.3.2** The Weed Management Plan shall be implemented at the subdivision stage and will become the responsibility of the Lot Owners Association after registration of the subdivision, all to the satisfaction of the Municipality.

10.3.2 Air Contaminants

No use or operation on the site shall cause or create air contaminants, visible emissions or particulate emissions beyond the site that produces them. Airborne particulate matter originating from storage areas, yards or roads shall be suppressed at all times either by landscaping, paving or other means considered appropriate by the Municipal District of Rocky View as defined in a development permit and in accordance with Alberta Environment guidelines.

10.3.3 Odorous Matter

No use or operation on the site shall cause or create the emission of odorous matter or vapour beyond the building or site that contains the use or operation in accordance with Alberta Environment guidelines.

10.3.4 Toxic Matter

No use or operation on the site shall cause or create the emission of toxic matter beyond the building that contains it. The handling, storage, clean-up, and disposal of any toxic or hazardous materials or waste shall be in accordance with Alberta Environment guidelines, as well as the Chemical Management Plan and/or Emergency Management and Response Plan required by the Municipal District of Rocky View Land Use Bylaw.

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10.3.5 Garbage Storage

All garbage and waste material accumulated on the site shall be stored in weatherproof and animal-proof containers and kept either within buildings or at the rear or side of buildings. All containers shall be screened from view by all adjacent properties and public thoroughfares. Mechanical waste compactors are encouraged.

10.3.6 Fire and Explosion Hazards

Any use or operation which stores, manufactures or utilizes materials or products which may be hazardous due to their corrosive, poisonous, flammable, reactive or explosive nature shall comply with provincial fire codes and the requirements of the Municipal District of Rocky View in accordance with the Emergency Management and Response Plan required by the Municipal District of Rocky View Land Use Bylaw. Fire protection measures, such as fire hydrants, shall also be provided to the satisfaction of the Rocky View Fire Chief and included in a development permit application.

Policy 10.3.3: In accordance with the guidelines established in the Conceptual Scheme, performance standards shall be implemented through the Subdivision Application, Development Permit process, the Land Use Bylaw and through the Developers Building and Development Standards.

10.4 Development Guidelines

The Development Guidelines described below are intended to provide procedures for the development of uses within the plan area. The Municipal District of Rocky View will ensure that future developments meet or exceed the development guidelines established by this Conceptual Scheme.

10.4.1 Access, Parking and Loading

Entrances shall be designed to accommodate the turning movement of tractor-trailers and shall be positioned to allow for safe and adequate site distances. Parking and loading facilities shall be in accordance with the applicable requirements of the Municipal District of Rocky View Land Use Bylaw. Loading and vehicle servicing areas shall be integrated into the site and building architecture, and provided at the rear or side of buildings. Parking areas for employees and visitors shall be provided for in clearly defined areas.

10.4.2 Signage

A Signage Plan shall be submitted to the Municipal District of Rocky View with a development permit application in accordance with the Land Use Bylaw. Temporary signage is prohibited with the exception of temporary signs required during development or building construction.

10.4.3 Lighting

The MD of Rocky View supports a night friendly lighting policy. All outdoor lighting shall be located, oriented and shielded to prevent light from being directed at adjoining properties, skyward, interfering with the use and enjoyment of neighbouring lands or disrupting the effectiveness of any traffic control devices. Similarly, all uses shall demonstrate adequate lighting that meets the provisions of an approved Crime Prevention Through Environmental Design (CPTED) strategy submitted as part of a

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development permit application.

10.4.4 Outside Storage

Outside storage including the storage of trucks, trailers and other large vehicles may be permitted adjacent to the rear or side of a building provided these storage areas are not located within a required rear or side yard setback. Storage areas shall be screened from any abutting residential land uses with a six-foot high wood or steel fence.

10.4.5 Outside Display Areas

Outside display areas shall be permitted provided they are not located within a required front, rear or side yard setbacks and are limited to merchandise related to industrial uses on-site.

10.4.6 Fencing

On-site fencing shall only be permitted when it is being used to screen outside storage areas, garbage enclosures or pieces of equipment for security purposes.

10.4.7 Landscaping

A Landscaping Plan for the Conceptual Scheme area shall be provided as a condition of subdivision. Individual lot landscape plans shall be submitted at development permit stage. Landscape plans will identify the location and extent of landscaped areas, the plant material proposed, and the methods of irrigation and maintenance of landscaped areas. A Landscaping Plan should also consider the following:

- The site area shall be landscaped in accordance with the Land Use Bylaw
- Tree species and other foliage shall be appropriate for dry prairie conditions. Natural prairie
 grass landscaping is preferred over high water consumptive non-native grass species. Where
 non-native grasses are used, low water species shall be required. All plant species shall
 conform to the standards of the Canadian Nursery Trades Association for nursery stock.
- Existing soft landscaping retained on-site may be considered in fulfillment of the total landscaping required.

Any areas subject to excavation, stripping or grading during the construction phases of development that are not identified as a landscaped area on the Landscaping Plan shall be seeded with native prairie grasses.

Policy 10.4.1 As a condition of subdivision, a landscaping plan shall be prepared to the satisfaction of the Municipality. This plan must illustrate the treatment along all entranceways, common landscaped areas and lands adjacent to storm ponds (PUL). It must also provide the overall thematic guidelines for landscaping that will be required at the Development Permit stage.

10.4.8 Residential Interface

The City of Calgary has identified the area north of the subject lands and north of the future Peigan Trail as a future residential area; therefore, the interface between these uses must be considered. A sound attenuation wall directly abutting the residential area, boulevard landscaping as part of the Peigan Trail extension as well as a consistent approach to rear yard landscaping and screening of the industrial sites abutting Peigan Trail are the combination of approaches which may be used to create the appropriate interface. Implementation of these interface components will occur incrementally after

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the final alignment of Peigan Trail has been determined.

- **Policy 10.4.2** As a condition of subdivision, a landscape concept plan shall be prepared for the rear building setback for all sites abutting Peigan Trail.
- **Policy 10.4.3** Once the final alignment and purchase of the Peigan Trail right-of-way has occurred, future industrial developments abutting Peigan Trail and the residential district to the north shall be screened and landscaped based on the landscape concept plan.

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11.0 PLAN SUMMARY

THE CONCEPTUAL SCHEME COMPLIES WITH THE INTENT AND POLICIES OF THE MUNICIPAL DISTRICT OF ROCKY VIEW MUNICIPAL DEVELOPMENT PLAN, THE MUNICIPAL DISTRICT OF ROCKY VIEW/CITY OF CALGARY INTERMUNICIPAL DEVELOPMENT PLAN AND THE SHEPARD PLAN, FITS WITHIN AN OVERALL CONTEXT AND DOES NOT UNDULY COMPROMISE THE DEVELOPMENT OF ADJACENT LANDS.

The following is a summary of policies that are contained in Frontier Industrial Park Phase 2 Conceptual Scheme:

- **Policy 1.1.1:** Policies contained within the Frontier Industrial Park Phase 2 Conceptual Scheme shall apply to all lands within the Conceptual Scheme plan.
- **Policy 3.6.1:** The Developer shall apply to Alberta Environment to determine the required wetland compensation and make appropriate application under the Water Act.
- **Policy 3.8.1:** Based on the Phase I Environmental Site Assessment no evidence of soil or groundwater contamination has been found and no further assessment of the subject site is required.
- **Policy 3.8.2:** Based on a search of the Alberta Energy and Utilities Board records, there are no petroleum wells, pipelines, and facilities on or within 100 metres of the subject land. Therefore no further assessment of the subject site is required beyond the normal circulation requirements of the subdivision application.
- **Policy 3.10.1:** Should any historical resources be encountered during construction, Alberta Tourism, Parks, Recreation and Culture are to be contacted immediately.
- **Policy 4.1.1** Subdivision and development of Frontier Park 2 may occur out of the phasing sequence as shown in the Shepard Plan.
- Policy 4.3.1: Land uses within the Conceptual Scheme area shall conform to the approved Land Use District contained within the Municipal District of Rocky View Land Use Bylaw C-4841-97 (updated October 2007) and with the Business Area Land Use Policies contained in Part B Section 5 of the Shepard Plan.
- **Policy 4.4.1** The subdivision of the Plan area shall proceed in general accordance with the parcel configuration and road alignments illustrated in Figure 5 and the minimum requirements of the Municipal District of Rocky View Land Use Bylaw.
- **Policy 4.5.1:** Municipal Reserves for the Conceptual Scheme area will be provided as cash in lieu of Reserves in accordance with the provisions of the Municipal Government Act.
- **Policy 4.5.2:** A potential future regional pathway shall be accommodated in the Conceptual Scheme (as described below) that will ultimately provide a connection to the regional pathway that parallels the Western Irrigation District canal.
 - 1. The 2.5m pathway shall be accommodated in a 6m easement within the 6m building setback along the north side of the proposed east/west internal road

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- (Frontier Road SE) connecting 84th Street SE to Range Rd. 285 (Garden Road).
- **Policy 4.5.3:** A Lot Owners Association shall be incorporated to manage and maintain the pathway system in accordance with the requirements of the MD of Rocky View.
- **Policy 5.2.1** All driveway approaches shall be deferred to the Development Permit stage.
- **Policy 5.3.1** Access to the Conceptual Scheme area shall be as conceptually illustrated in Figure 5.
- **Policy 5.3.2** A 5.0 m wide road dedication and an additional 3.0 m by caveat shall be provided for the widening of Range Road 285 (Garden Road).
- **Policy 5.3.3** A 5.0 m wide road dedication and an additional 3.0 m by caveat shall be provided for the widening of TWP Road 240 (50th Avenue SE).
- **Policy 5.3.4** The Municipality will require an updated Traffic Impact Assessment at the subdivision stage.
- Policy 5.3.5 Detailed traffic infrastructure requirements and improvements will be determined at the subdivision stage by the Municipality based on the data contained in the Traffic Impact Assessment (TIA) and will be in accordance with the MD's Servicing Standards.
- **Policy 6.0.1:** A deferred servicing agreement shall be registered against each individual title created outlining the owner's requirements for future service extensions to the satisfaction of the Municipal District of Rocky View.
- **Policy 6.1.1:** The storm water management system shall incorporate, where feasible and practical, Best Management Practices as outlined in the Alberta Environment Guidelines for Storm Water Management for the Province of Alberta.
- **Policy 6.1.2:** The storm water management system within the Plan area shall be in general accordance with the SWMP supporting the Conceptual Scheme and as prepared by Westhoff Engineering Resources Inc.
- **Policy 6.1.3:** The Municipality shall require a detailed Stormwater Management Plan at the subdivision stage.
- **Policy 6.1.4**: The final configuration of the stormwater infrastructure including the Public Utility Lots (PUL), as well as the overland drainage easements, locations and widths shall be determined at the subdivision and development permit stage based on the recommendations of the SWMP and the Stormwater Engineer who authored the SWMP, and to the satisfaction of the Municipality.
- **Policy 6.1.5:** To ensure the intent of the submitted SWMP, the design and construction supervision of the on-site stormwater storage facilities on each of the lots shall be undertaken at the Development Permit stage by Westhoff Engineering Resources, Inc. or as directed by Remington Development Corporation, all to the satisfaction of the MD.
- **Policy 6.1.6:** The detailed SWMP shall show the design, function and operation of overland drainage system components, the activation of the emergency spillway, and will stipulate

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- minimum elevations for first opening to buildings to mitigate potential damage due to flooding to the satisfaction of the Municipality.
- **Policy 6.1.7:** The Municipality recognizes that the required on-site facilities shall be altered, if necessary, upon completion of a regional Stormwater Master Drainage Plan, future agreements with Alberta Environment. Therefore, at the subdivision or development permit stage, the on-site stormwater storage requirements shall be altered, if necessary, subject to the submission of an updated SWMP, and to the satisfaction of the Municipality.
- **Policy 6.1.8:** A lot owners association shall be incorporated to manage and maintain the stormwater management infrastructure, which includes the Public Utility Lot, the fire suppression pond and the conveyance system in accordance with the SWMP and the requirements of the Municipality and Alberta Environment. The lot owners association will manage and maintain the infrastructure until such a time as the Municipal District of Rocky View may wish to take it over.
- **Policy 6.1.9:** An access agreement in the name of the Municipal District of Rocky View shall be registered on the title of each lot for the purposes of remedying any breach by the lot owner of any non-compliance in the construction, operation or maintenance of the lot owners' storm pond.
- **Policy 6.2.1:** Prior to subdivision approval, the developer shall make a one-time contribution towards a regional stormwater solution based on a scoping level engineering assessment of the capital costs and upon a proportionate acreage basis. This contribution may be financial or in combination with an easement.
- **Policy 6.3.1:** Sanitary sewage shall be contained in pump out tanks and transported off-site for disposal.
- **Policy 6.4.1:** In accordance with the Provincial Water Act, lot owners shall obtain a License to Divert Water from Alberta Environment prior to extracting water for commercial purposes should water be obtained from individual wells on-site.
- **Policy 6.5.1:** Electrical, telephone and natural gas utilities shall be provided within the plan to all lots at the sole expense of the Developer and to the satisfaction of the utility providers and the Municipality.
- **Policy 6.6.1:** Prior to stripping and grading of the site including roads, lots and stormwater facilities, a grading plan and an erosion and sediment control (ESC) report and plan shall be submitted to the satisfaction of the MD.
- **Policy 6.6.2:** Site grading is to take into consideration existing topography to minimize grading requirements over the plan area.
- **Policy 6.6.3:** The Municipal District of Rocky View may issue a Stripping and Grading Permit provided among other things the following conditions have been met:
 - (c) A Preliminary Grading Plan depicting road and swale grades including the Public Utility Lot area, a Stormwater Management Plan, Erosion and Sediment Control Plan, and Construction Management Plan are approved by the Municipal District of Rocky View and Alberta Environment.
 - (d) No topsoil shall be removed from the plan area without prior approval by the

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Municipal District of Rocky View.

- **Policy 7.0.1:** All parcels within the plan area shall have water for fire suppression available at the lot line. Water is to be supplied to the fire suppression system from a storm retention pond. The pumping station shall be accessible by an all weather road. Fire hydrants shall also be installed as a condition of subdivision approval to the satisfaction of the Municipal District of Rocky View.
- **Policy 7.0.2:** The Municipal District of Rocky View may at any time in the future choose to assume management and/or ownership of the fire suppression system including the pump station.
- **Policy 7.0.3:** Should a regional water system be constructed, capable of servicing the Conceptual Scheme area, the fire protection system shall be connected to it in order to provide full fire protection.
- **Policy 7.0.4:** An Emergency Response Plan shall be submitted by the Developer to the satisfaction of the Municipal District of Rocky View at subdivision stage.
- **Policy 8.0.1:** The proposed Frontier Park 2 will be developed as a single phase.
- **Policy 8.0.2:** Notwithstanding Policy 8.0.1, multiple phasing may be permitted without amendment to this Conceptual Scheme provided adequate servicing, infrastructure and storm water management is available. If multiple phasing occurs all offsite and onsite improvements required for full build out may be required at the first phase.
- **Policy 10.0.1:** Redesignation, subdivision and development of lands within the Conceptual Scheme Planning Area shall be guided by the policies contained herein and implemented through the Land Use Bylaw, conditions of Subdivision Approval and the conditions of the Development Permit in consultation with the City of Calgary as required by the Shepard ASP.
- **Policy 10.1.1:** The Developer will promote Low Impact Development techniques to the purchasers of individual lots through discussion regarding the options for stormwater design and the use of the Developers Building and Development Standards.
- **Policy 10.3.1** A Weed Management Plan shall be prepared by the Owner as a condition of subdivision, all to the satisfaction of the Municipality.
- **Policy 10.3.2** The Weed Management Plan shall be implemented at the subdivision stage and will become the responsibility of the Lot Owners Association after registration of the subdivision, all to the satisfaction of the Municipality.
- **Policy 10.3.3:** In accordance with the guidelines established in the Conceptual Scheme, performance standards shall be implemented through the Subdivision Application and Development Permit process, the Land Use Bylaw and through the Developers Building and Development Standards.
- Policy 10.4.1: As a condition of subdivision, a landscaping plan shall be prepared to the satisfaction of the Municipality. This plan must illustrate the treatment along all entranceways, common landscaped areas and lands adjacent to the storm ponds (PUL). It must also provide the overall thematic guidelines for landscaping that will be required at the

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Development Permit stage.

- **Policy 10.4.2** As a condition of subdivision, a landscape concept plan shall be prepared for the rear building setback for all sites abutting Peigan Trail.
- **Policy 10.4.3** Once the final alignment and purchase of the Peigan Trail right-of-way has occurred, future industrial developments abutting Peigan Trail and the residential district to the north shall be screened and landscaped based on the landscape concept plan.

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