

# Delacour Country Village Conceptual Scheme



A Conceptual Scheme for the development of:

East half of Sec 25-25-28 W4M

Bylaw 6828 Adopted September 29, 2009

**MUNICIPAL DISTRICT OF ROCKYVIEW NO. 44** 

Department of Planning and Community Services

### ROCKY VIEW COUNTY BYLAW C-6828-2009

A Bylaw of Rocky View County, pursuant to Divisions 7 and 12, Part 17 of the Municipal Government Act, to adopt the attached Schedule "A" referred to as the "Delacour Country Village Conceptual Scheme".

WHEREAS the Council of Rocky View County has received an application to adopt a Conceptual Scheme within the east half of 25-25-28-W4M as a policy framework to guide the subsequent development of a comprehensively planned, mixed use community comprised of country homes, single family detached dwellings, multifamily dwellings as well as commercial and institutional land uses comprising an area of ± 124.24 hectares (± 307 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, August 25, 2009 and Tuesday, September 1, 2009 in the Rocky View Weekly, a newspaper circulating in Rocky View County, advising of the Public Hearing for Tuesday, September 29, 2009; and

WHEREAS Council held a Public Hearing and have given consideration to the representations made to it in accordance with Section 230 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 be adopted to guide the subsequent development of a comprehensively planned, mixed use community comprised of county homes, single family detached dwellings, multifamily dwellings as well as commercial and institutional land uses comprising an area of ± 124.24 hectares (± 307 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: 05325001/002/003/004/005/006

**Application:** 2006-RV-719

First reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, on Tuesday, July 28, 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, September 29, 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, September 29, 2009, on a motion by Councillor Boehlke.

REEVE OR DEPUTY REEVE	MUNICIPAL SECRETARY

# SCHEDULE 'A' FORMING PART OF BYLAW C-6828-2009

A Conceptual Scheme affecting the area within the east half of 25-25-28-W4M consisting of approximately ±124.24 hectares (± 307 acres), herein referred to as the "Delacour Country Villago Conceptual Scheme" area.
Conceptual Concerne area.

# Delacour Country Village

# Conceptual Scheme

E ast ½ of Sec 25-25-28 W4M

#### Prepared for:

Municipal District of Rocky View No. 44
Planning and Community Services
911 - 32 Avenue NE, Calgary AB. T2E 6X6
Assigned Planner: Jared Kassel

#### Prepared By:

RGA Design Group Suite 012 - 2526 Battleford Ave S.W. Calgary, Alberta T3E 7J4 Tel. 403.243.1962

#### On Behalf of:

Genesis Land Development Corporation #200 3115 12 street NE Calgary, Alberta, T2E 7J2 Attn: Jeff Blair

Phone: (403) 265-8079 ext: 268

Fax: (403) 266-0746

Website: www.genesisland.com

#### Table of Contents:

Prologue  A Brief Note on the U se of the Word "Village"	
1.0 Introduction	2
1.1 Plan A rea / Location	
1.2 Purpose of Conceptual Scheme	
1.3 Objectives for the Conceptual Scheme	
2.0 Policy Context	Ε
2.1 Rocky View Municipal Development Plan	
2.2 Delacour Community A rea S tructure Plan	
3.0 Site A nalysis	
3.1 Natural E nvironment	
3.1.1 Topography and Drainage	
3.1.2 Soils	
3.1.3 Subsurface Conditions	
3.1.4 Vegetation and Wildlife	
3.2 Built E nvironment	
3.2.1 Delacour's History	
3.2.2 E xisting Land U se	
3.2.3 E xisting T ransportation Infrastructure	
3.2.4 E xisting U tility Infrastructure	10
3.2.5 Community Protective and E mergency S ervices	18
3.2.6 Wells and Pipelines	18
4.0 Public Consultation Process	20
5.0 Vision	21
6.0 Design Principles	22
6.1 Principles of S mart Growth	22
6.2 Sustainable Practices	22
6.2.1 Water	22
6.2.2 Drainage and Storm Water Management	22
6.2.3 A Iternative E nergy S upplies	23
6.2.4 Dark S ky Policy	23
6.2.5 Solid Waste Management	23
6.2.6 Site Layout and Design	
Incorporating equestrian trails into the design of the development.	6.2.7 Building Design23
6.2.7 Building Design	
6.2.8 Construction Practices	24
7.0 Concept Plan	25
7.1 Development Concept	
7.2 Land Use	25
7.3 Residential Development	20

	7.3.1 Housing I ypes	
	7.3.2 Housing Density	32
	7.3.3 Lot Orientation and Design	32
7.4	Commercial Development	34
7.5	Public A menities	35
	7.5.1 The Village Plaza	35
	7.5.2 Neighbourhood Cores	35
	7.5.3 Open Space	36
7.6	T ransportation Infrastructure	40
	7.6.1 Pedestrian Network	40
	7.6.2 Regional Road Network	40
	7.6.3 Internal Road Network	42
	7.6.4 Traffic Circles and Traffic Calming	44
	7.6.5 Public T ransportation O ptions	44
7.7	U tility S ervices	45
	7.7.1 Water	45
	7.7.2 Waste Water T reatment	46
	7.7.3 Shallow U tilities	
	7.7.4 Storm water	47
	7.7.5 Solid Waste, Recycling and Compost	49
7.8	Community, Protective and E mergency S ervices	
	7.8.1 S chool	
	7.8.2 Fire Protection and E mergency S ervices	
	Development Control - Best Management Practices & Design Guidelines	
7.10	Development Phasing	
	7.10.1 Phase One	
	7.10.2 Phase T wo	57
8.0 F	Plan Implementation	60
8.1	A pplication to Prepare a Concept S cheme	60
8.2	A doption of Concept S cheme	60
8.3	Land Use Re-Designation Application	60
8.4	Subdivision and Development	60
9.0 F	Regional Benefits	61
10.0 F	Policy S ummary	62
	f Figures:	
Figure	e1 - Plan A rea / Location	3
Figure	2 – Delacour Community ASPA rea	7
Figure	e 3 – Delacour Community ASP Land Use Concept	8
-	e 4 – S ite T opography	
	5 – E xisting Drainage	
•	e 6 – Site Soils	
-	27 – E xisting Land U se	
r igui e	: / - L AISTING FAND O SE	

Figure 8 – Existing Transportation intrastructure	
Figure 9 – E xisting Pipelines and U tilities	19
Figure 10 - Development Concept	26
Figure 11 – Land U se	27
Figure 12 – Concept Plan Drawing	
Figure 13 – Housing T ypes	30
Figure 14 – Open S pace	38
Figure 15 – Internal Road Network	43
Figure 16- Storm Water Management Concept	48
Figure 17 – Development Phasing Concept	53
Figure 18 - Potable Water Schematic: Phase One	55
Figure 19 – Sanitary Sewer Schematic: Phase One	56
Figure 20 - Potable Water Schematic: Phase One and 2	58
Figure 21 – Sanitary Sewer Schematic: Phase One and 2	59

#### Technical Support Documents Available Under Separate Cover

#### 1. Brief investigation of existing vegetation and ecology.

IRIS Environmental Systems Incorporated. Attn: Andrew MacInnis 635 - 36th Avenue N.E.

Calgary, Alberta, Canada T2E 2L8

Tel: (403) 543-4455, Fax: (403) 543-4459 E: andrew\_macinnis@irisenvironmental.ca

#### 2. Conceptual Servicing, Constraints and Opportunities Report

Clifton Associates Ltd. - Engineering, Science, Technology. Attn: Craig Clifton  $2222-30^{th}$  Avenue N.E.

Calgary, Alberta T2E 7K9

Tel: (403) 263-2556, Fax: (403) 234-9033

E: <a href="mailto:craig\_clifton@clifton.ca">craig\_clifton@clifton.ca</a>

#### 3. Preliminary S tormwater Management Plan

Clifton Associates Ltd. - Engineering, Science, Technology

Attn: Craig Clifton, E: <a href="mailto:craig\_clifton@clifton.ca">craig\_clifton@clifton.ca</a>

#### 4. Geo-technical Investigation

Clifton Associates Ltd. - Engineering, Science, Technology

Attn: Stephen Cross, E: Stephen\_cross@clifton.ca

#### 5. Preliminary Traffic Assessment

Clifton Associates Ltd. - Engineering, Science, Technology Attn: Craig Clifton, E: <a href="mailto:craig\_clifton.ca">craig\_clifton.ca</a>

#### 6. Phase I E nvironmental Site A ssessment

Clifton Associates Ltd. - Engineering, Science, Technology

Attn: Michael Walker, E: Michael\_walker@clifton.ca

# Prologue

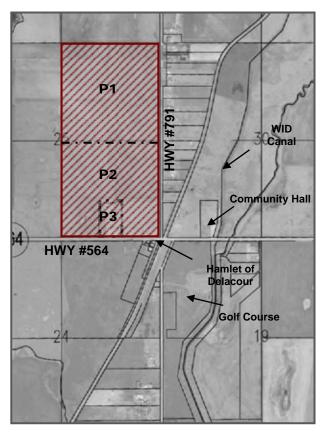
## A Brief Note on the Use of the Word "Village"

We have chosen to call this proposed development "Delacour Country Village" in order to convey the idea that it will be a complete community with commercial, recreational and institutional components in addition to the residential development. The desire is to incorporate design elements and functions that are typically found in a traditional village in order to create a sense of identity and a strong social fabric in the community. Delacour could become a place where families of every description are able to live, work and play. No implications that the development will endeavour to attain the legal status of a village under the Municipal Government Act are intended.

## 1.0 Introduction

#### 1.1 Plan A rea / Location

The proposed site for Delacour Country Village is a 305.7 acre (+/-) site owned by Genesis Land Development Corporation (Genesis); it is located on the west half of Sec.25- Twp.25- Rge.28-W4M. The particulars of the plan area are outlined in Table 1 - Plan Area. The plan area includes 3 parcels listed below. Genesis owns Parcel 1 and Parcel 2, but Parcel 3 is owned by others. There is also a road widening plan for 1.3 acres that have been deducted from Parcel 2. Thus the developable lands for the purposes of this concept plan are the 305.7 ac owned by Genesis.



T able 1 – Plan A rea				
Parcel #	Legal Land Description	Acreage (ha)	Acreage (ac)	Land Use
P1	N.E. ¼-Sec 25- 25-28 W4M	64.75	160.0	RF
P2	S.E. ¼-Sec 25- 25-28 W4M	58.97	145.7	RF
P3	0311727;1;2	5.261	13.0	F

RF - Ranch and Farm District, F - Farmstead District

The Plan Area is located in Division 5 of the Municipal District of Rocky View, 8km east of the City of Calgary limits on Hwy 564 (an extension of Country Hills Blvd) as shown in **Figure 1 - Plan Area/Location**. It is on the north side of Highway 564 adjacent to the existing Hamlet of Delacour. Along the east side of the study site (across Highway 791), there is an existing country residential development containing parcels of various sizes, between two and fifteen acres. There is a well-used community hall approximately 1km east and a golf course to the southeast and the Western Irrigation District (WID) Canal and Serviceberry Creek are located approximately 1km east of the proposed site.

Delacour is one of the areas of the Municipality that were identified by the *MD of Rocky View Economic Development Strategy - Updated 2003 Strategic Plan* as "experiencing strong and consistent residential growth."

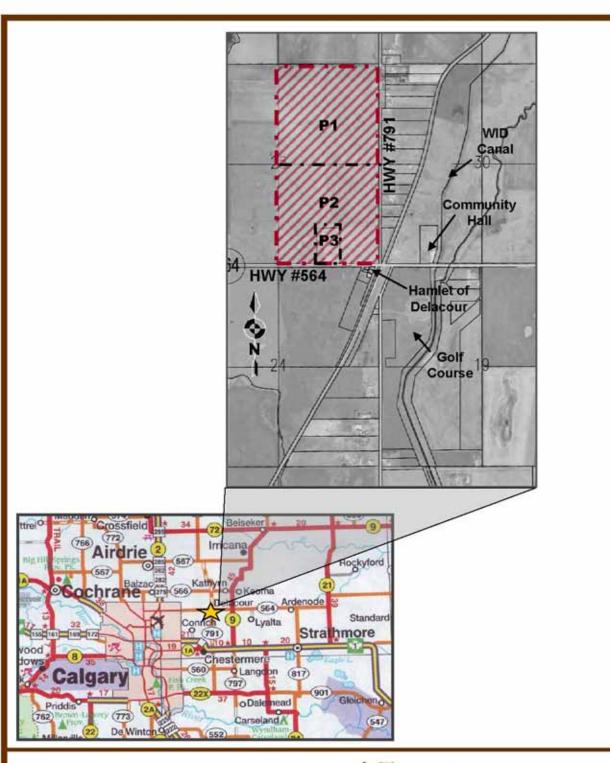


Figure 1:
Plan Area / Location
Delacour Country Village

### 1.2 Purpose of Conceptual Scheme

The Purpose of the Conceptual Scheme is to fulfill requirements of section 7.3 of the Rocky View Municipal Development Plan (MDP) and section 5.1 (c) of the Delacour Community ASP.

#### Section 7.3 of the Rocky View MDP states:

"Council may require a landowner to prepare a conceptual scheme in support of re-designation or subdivision application within or adjacent to a hamlet".

#### Section 5.1 (c) of the Delacour Community ASP states:

All re-designation and subdivision proposed in the Plan Area must prepare a Concept plan that shall include:

- 1. Storm-water Management Plan.
- 2. Municipal and Environmental Reserve dedication strategy.
- 3. Architectural controls and guidelines.
- 4. Transportation network illustrating access points and development standards.
- 5. Phasing for development, including density and potential urban overlay in anticipation of piped services.
- 6. Servicing strategy, demonstrating suitability of the land for individual water and wastewater services, provisions for connections for future tie in to piped regional services, methods of handling household waste materials, and methods of recycling.
- 7. Demonstration of how the new development will be compatible with existing hamlet development and/or residential development, community recreation sites and adjacent agricultural operations.
- 8. Population projections and indication of target market to determine impact on School District requirements.
- 9. Periphery landscaping and aesthetic details that will enhance the development area.
- 10. Addresses recreational uses, open space, sidewalks (if required) and potential pathway development for use by area residents. Such plans should include potential linkages and connections for remaining sections of the ASP area.
- 11. If applicable, fire design and fire hydrants should be developed on site with adequate flows.

# 1.3 Objectives for the Conceptual Scheme

This Conceptual Scheme is intended to provide a framework for the planning, design and development of the Delacour Country Village on the subject lands that include 305.7 (+/-) acres in parcel one (P1) and parcel two (2). While provisions for connection to lands in parcel three (P3) have been provided, no planning has been done for these lands. Any land use re-designation for these lands would require an amendment to this conceptual scheme.

In keeping with the Delacour Community ASP, these lands will begin to transition away from a primary agricultural use. The proximity of existing residential areas, available highway access and the necessity for

proper interface between the existing hamlet, existing country residential development (referred to as residential/infill policy area in the Delacour Community ASP) and surrounding agricultural lands all point to this site as an appropriate location for development.

#### The conceptual scheme will provide a framework for development by:

- 1) Evaluating the subject lands with respect to historical land use patterns, agricultural capabilities, topography, soil, vegetation, drainage and water supply, provision of utilities, transportation routes, and location of environmentally sensitive or desirable areas within the site.
- 2) Developing a clear vision for Delacour Country Village as a country lifestyle community.
- 3) Developing the outline for a set of Best Management Practices or BMP's that will facilitate preservation, conservation and recycling by establishing protocols for such matters as providing utilities, water and waste water management, lot configurations, building orientations, construction practices and household waste management.
- 4) Creating a conceptual design for the village that reflects both the BMP's and 'Smart Growth' principles.



View of Proposed Site Looking SW from Mid-point of East Side

# 2.0 Policy Context

This conceptual scheme, for the east half of section 25 - 25 - 28 W4M is subject to the planning and development policies, standards, and guidelines as outlined in both the *Rocky View Municipal Development Plan* and the *Delacour Community Area Structure Plan*.

### 2.1 Rocky View Municipal Development Plan

The Rocky View Municipal Development Plan (MDP) was enacted by The Municipal District of Rocky View No. 44, Bylaw C-4840-97 on July 6, 1998, in accordance with Section 632 of the Municipal Government Act.

Three of the goals stated in the Rocky View MDP are:

- To facilitate residential developments which create safe and livable environments,
- To encourage and facilitate appropriately-located business development, which contributes to the economy of the Municipality and,
- To facilitate the growth of certain hamlets in accordance with sound land use planning.

While the MDP states that preservation of agricultural lands is a priority, it also indicates that residential land use, in keeping with the rural character of the Municipality, may continue to be supported in areas of the Municipality where residential development is already concentrated and the land base has been fragmented, with the more intense development taking place within or adjacent to hamlets.

The Rocky View MDP states that hamlets are "an integral part of the Municipal settlement pattern, and serve as a community focus for rural residents". It is important, therefore, to ensure that hamlets "maintain their status as service centers with potential to offer a range of community facilities for residents."

### 2.2 Delacour Community A rea Structure Plan

In addition to being regulated by the Rocky View MDP, the subject land falls within the area of the Delacour Community Area Structure Plan (ASP) see Figure 2 – Delacour Community ASP Area.

The Delacour Community ASP was enacted by the M D of Rocky View No. 44, Bylaw C-6122-2005 on September 13, 2005 pursuant to Section 633 of the Municipal Government Act. It identifies "land use areas" within the Plan Area. These land use areas are outlined in **Figure 3 – Delacour Community ASP Land Use Concept**, it should be noted that the study site is designated as Agricultural Transition Area.

The Vision statement for the Delacour Community Area Structure Plan is as follows:

"The Delacour Community Plan Area is a place where people live and play in a rural setting. Future land uses are to be designed in concert with the historical Hamlet. Delacour offers a well-balanced community with residential recreational and business opportunities that respect agricultural values."

Section 3.3 of the ASP outlines "Principles for Development", some of these include:

- To provide a high standard of design and development for all components of the Plan Area including residential and recreational uses and methods of servicing;
- Address standards of servicing that, in the long term, are environmentally sustainable;
- To provide, where appropriate, residential and recreational uses within the plan area;
- To ensure the provision of Municipal Reserve;

- To provide a high level of services that will not detrimentally affect adjacent and downstream communities;
- To develop an efficient internal roadway system;
- To address future development in a logical and efficient manner.

Section 5.2, of the ASP outlines plan policies for the Agricultural Transition Area. It states that due to the proximity of existing residential areas and its location on Highway 564; it is anticipated that the Agricultural Transition Area lands will begin to transition away from a primary agricultural use. Acceptable uses for this area are identified as residential or local commercial. Furthermore, any development in the Agricultural Transition Area would require the following:

- 1. The proposed land use must be consistent with the policies in the M.D. of Rocky View M.D.P.
- 2. Any necessary road widening for Highway791 and Highway 564 must be fully dedicated from the lands identified within the Agricultural Transition Area
- 3. The proposed development is subject to the General Policy Section 5.1 of this plan requiring Concept Plans and
- 4. The proposed development must be supported by communal and/or piped, water and wastewater servicing.

In Section 5.3 of the Delacour Community ASP document, it is stated that through the public consultation process, it was determined that the Hamlet of Delacour had value to residents and that there was a desire to re-establish the Hamlet as a hub of the community. It follows that some hamlet expansion would be necessary for this to occur. The areas chosen for hamlet expansion in the ASP are located on the south side of Highway #564 this was done in order to promote efficient transportation and servicing linkages.

The Delacour Country Village Conceptual Scheme proposes a different phasing, with initial development taking place in the southern portion of the Agricultural Transition Area on the north side of Highway #564. This was done in order to facilitate a live, work, play comprehensive plan for a complete community on a large tract of land with a single owner. Moving the initial hamlet expansion area to these lands will also facilitate proper and environmentally sustainable servicing by allowing adequate lands for water and waste water treatment as well as storm water management. In addition, this suggested phasing will facilitate connections with the larger area of existing residential development and the Delacour Community Hall facilities which are both located on the north side of Highway #564.

Section 7.0 of the Delacour ASP pertains to institutional uses within the Plan Area. It states that future plans for expansion of the Hamlet of Delacour should include school site selection and accommodation in accordance with the Rocky View School Division.

Finally, there is desire expressed in the Delacour Community ASP that future residential development be linked to existing recreational areas through some sort of pathway system. This system should be both pedestrian and equestrian friendly.

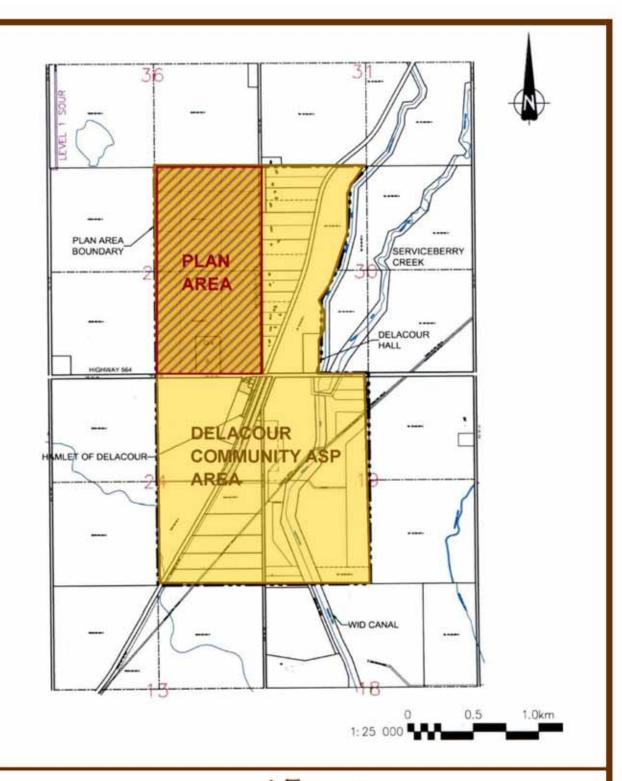
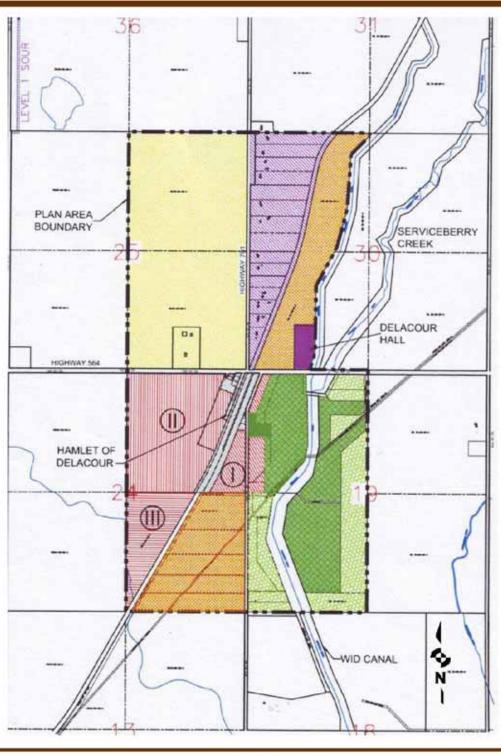
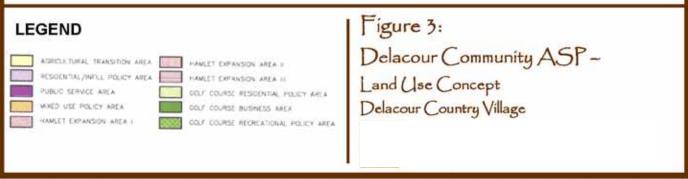


Figure 2:
Delacour Community ASP Area
Delacour Country Village





# 3.0 Site Analysis







E xisting Hamlet

Community Hall

Hwy 791 looking south

#### 3.1 Natural E nvironment

### 3.1.1 Topography and Drainage

The topography of the study site is flat to slightly rolling. The site has a gradual slope that averages about 1% from the north-west to the south-east with the high point of 1042.5 meters above sea level near the north-west corner of the site. The low point, near the south-east corner of the site is 1026 meters above sea level. As evident in **Figure 4 - Site Topography**, the portion of the site with the most significant slope is the east side of the S.E. quarter. The slope of the site does not exceed 5% at any point, and thus slope is not a barrier to development



The majority of the site currently drains to the south east corner, and then through a culvert to the Western Irrigation District canal in the SW 30-25-27, about 500 m east of the project boundary. The natural drainage includes several local potholes that interrupt the general slope and capture runoff from large areas of the site. **Figure 5 - Existing Drainage** illustrates the existing drainage pattern of the site.

Potholes capture spring run off

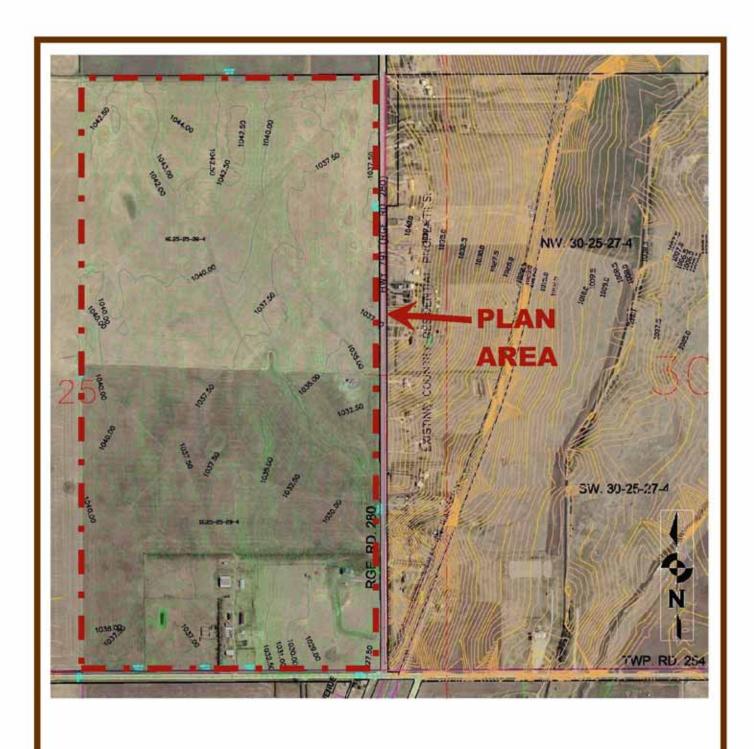
#### 3.1.2 Soils

Using the Land Suitability Rating System (LSRS), there are several different soil areas on the Delacour site. **Figure 6 – Site Soils** shows the soil ratings for the study area:

The study site is reasonable agricultural land, and has been in agricultural production for the past number of years. There are some limitations due to slope, soil structure and heat units as well as some drainage issues as evidenced by the numerous wet spots that were observed during site visits.



Site photo showing cultivated area



# **LEGEND**

- - PLAN AREA BOUNDARY

Figure 4: Site Topography Delacour Country Village

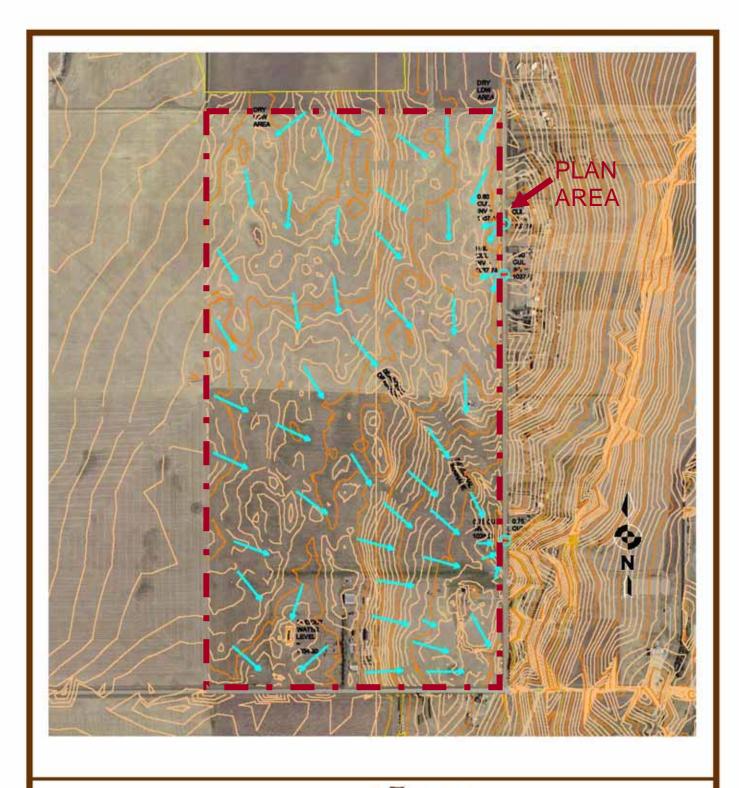


Figure 5: Existing Drainage Delacour Country Village

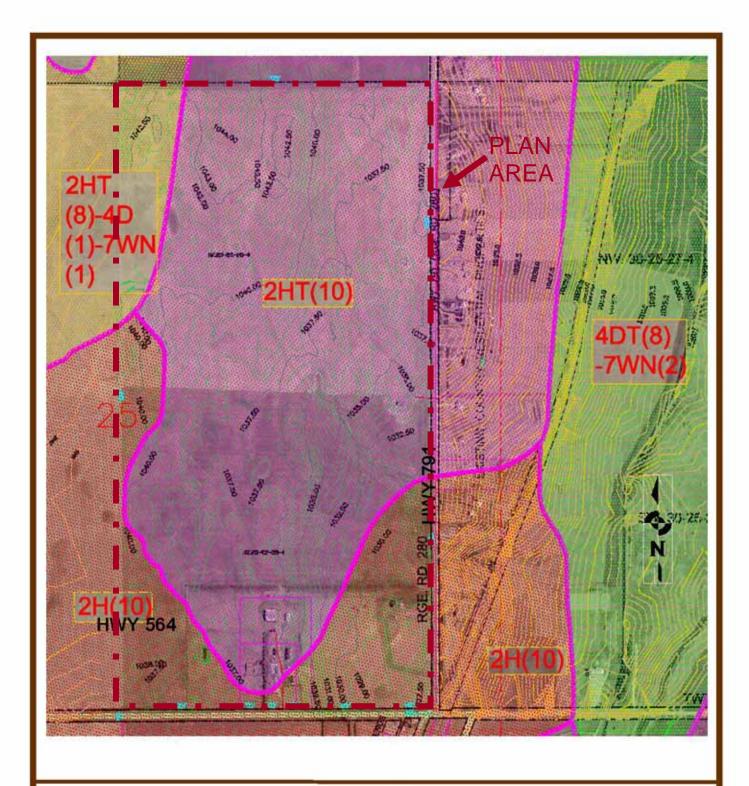


Figure 6: Site Soils Delacour Country Village

#### 3.1.3 Subsurface Conditions

Clifton Associates Ltd. completed a preliminary geotechnical investigation for the site of the proposed development (submitted under separate cover). The soils beneath the site were found to be variable with sand silt and clay layers. The thickness of the surface topsoil is variable from a few inches to more than one foot thick. Rolling topography suggests that thick layers of topsoil may be present in areas not investigated. During drilling, a hard layer that was deemed to be bedrock was encountered at depths varying from 2.1 meters (7 ft.) to 7.3 meters (24 ft). The bedrock was varied in composition from weathered sandstone to a shale layer.

It has been recommended by Clifton Associates Ltd. that further drilling and a laboratory program should be completed so that recommendations can be developed for construction of the proposed community.

#### 3.1.4 Vegetation and Wildlife

IRIS Environmental Systems Inc. conducted the preliminary evaluation of the site's existing vegetation and its function as wildlife habitat (provided under separate cover).

The bulk of the study site has been cultivated to either alfalfa or grain crops. A Caragana hedge extends part way across the south-east quarter of the section approximately 325 meters from the south edge and there is grass in the headlands. Some landscaping has been done around the existing houses and within the 13 acre farmstead. There are several low areas throughout the site that have ephemeral ponds. The site has limited available wildlife habitat. No sensitive areas were identified in the study area.

#### 3.2 Built Environment

#### 3.2.1 Delacour's History

The existing Hamlet itself dates back to before 1910, when it was established as a railway development. The Delacour station was named prior to 1909. It was named for the foreman (Mr. DeLacour) of the Grand Trunk Pacific Railway construction crew. The railway line itself became part of the Canadian National Railway in 1914.

At one time the Hamlet was home to a general store, post office and several grain elevators, in addition to the train station. The store was established as early as 1914. The First Community Hall was built in 1947. The Girl Guide Hall came into being in late 1957.

Presently, Delacour contains only a few residences and no businesses. The Girl Guide Hall still stands in its original location, and there is a well used and well maintained community hall just to the north-east of the Hamlet and is now also the site of the Delacour Pony Club.



Delacour Resident Moses Cleveland and Family 1916 (From Glenbow Museum Collection NA -4341-5)

#### 3.2.2 E xisting Land U se







E xisting Buildings on S tudy site (counter-clockwise from top left): Occupied Residence (A), Occupied Residence (B) and House on farmstead (C).

#### **Existing Land Uses:**

The majority of the study site has been cultivated for the past number of years. Adjacent and within close proximity of the site the following uses exist; see **Figure 7 - Existing Land Use** for the locations of the various uses in relation to the study site:

- The Hamlet of Delacour,
- Delacour Community Hall,
- Country residential development,
- A Canadian National Rail Line,
- "The Canals at Delacour" golf course,
- The Western Irrigation District (WID) canal,
- A cellular tower,
- agricultural uses,

#### **Existing Structures:**

Within the subject area, there are presently a number of structures:

- A. An occupied residence on the east edge approximately at mid point of the section
- B. An occupied residence located approximately 100meters from the east edge and 250 meters from the south edge of the site
- C. There are several buildings that are part of an existing homestead in the SE quarter of the section. The homestead is approximately 13 acres in size.

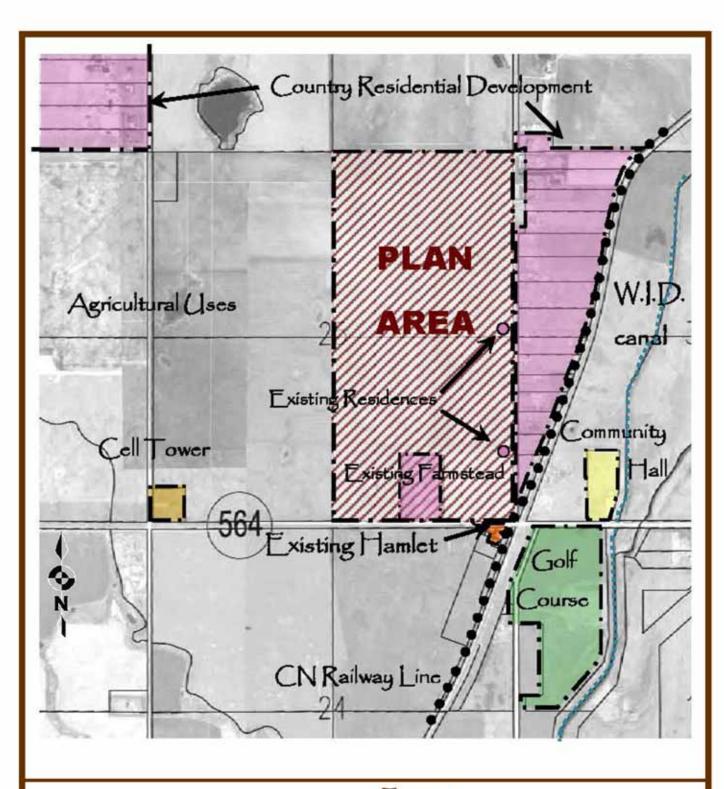




Figure 7:
Existing Land Use
Delacour Country Village

#### 3.2.3 E xisting T ransportation Infrastructure

The subject site is located at the intersection of Provincial Highway 564 and Range Rd. 280 (Highway 791). Highway 564 runs east-west along the south edge of the site. To the west of Delacour, Highway 564 eventually becomes Country Hills Boulevard as it enters the City of Calgary. Rge. Rd. 280 borders the site to the east and a CN rail line runs north-east to south-west intersecting the two highways where they meet at a point very close to the southeast corner of the site. The existing conditions are shown in **Figure 8 – Existing Transportation Infrastructure**.

The intersection of Hwy 564 and Hwy 791 was identified in the Delacour Community ASP as a significant constraint to development of the hamlet and adjacent lands. There are two main issues:

- The offset of Highway 791 at the intersection, and
- The setbacks required along Hwy 564.

Hwy 791 has a 100 meters offset at its junction with Hwy 564. This means that to cross Highway 564 while on Highway 791 one must navigate two "t" intersections separated by the CNR line. After a functional study of this highway in 2008, Alberta Transportation announced that this intersection and the role of Highway 791 in the regional context will be examined by AIT at a later date. In the mean time, preservation of the dedicated right-of-ways and associated set-backs will be the priority.



Hwy 564 is designated a provincial 'Major' 2-lane highway and as such will eventually require widening to a 60 meter right of way. Hwy 791 has been classified as a minor 2 lane highway with an ultimate right-of-way width of 50 meters. All development must make provision for the required setbacks taken from this ultimate width, regardless of whether or not dedication has occurred.

#### 3.2.4 E xisting U tility Infrastructure

#### **Electricity:**

Overhead electrical power lines bring power to the existing residences on the east side of the site, and there is power in the existing hamlet. There are also overhead power lines that run along the south and east sides of the proposed site.

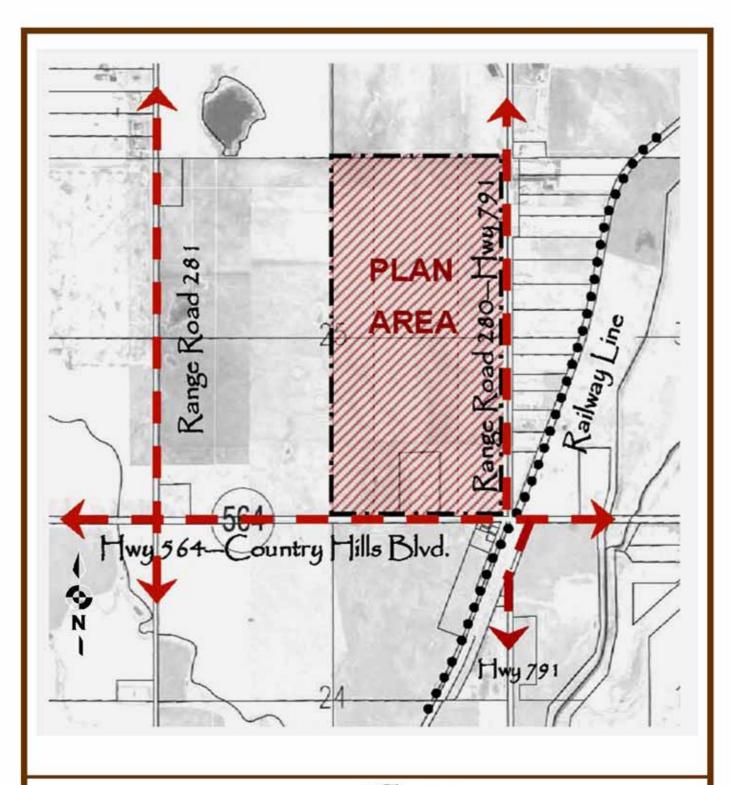


Figure 8:
Existing Transportation Infrastructure
Delacour Country Village

#### Natural gas service:

Existing residences on and adjacent to the study site are serviced with natural gas by the Rocky View Gas Co-op.

#### Water and Sewer:

All existing residences get water from private wells and have self-contained septic systems.

#### Solid Waste:

There is presently no solid waste (garbage) collection in the area.

#### Telephone/internet:

Existing residences in and adjacent to the concept scheme area have telephone service and access to internet service.

#### 3.2.5 Community Protective and E mergency Services

#### Schools:

The subject lands are located within the Rocky View School Division. The designated schools for Delacour and surrounding area are located in the town of Chestermere. Children from the area are currently bussed by the school division to schools in Chestermere. Until such time as population warrants the construction of an elementary school and/or a middle school within the village itself, children living in the proposed development will attend school in Chestermere.

#### Fire protection and emergency services:

The Municipal District of Rocky View provides emergency services for the Delacour area.

#### Police services:

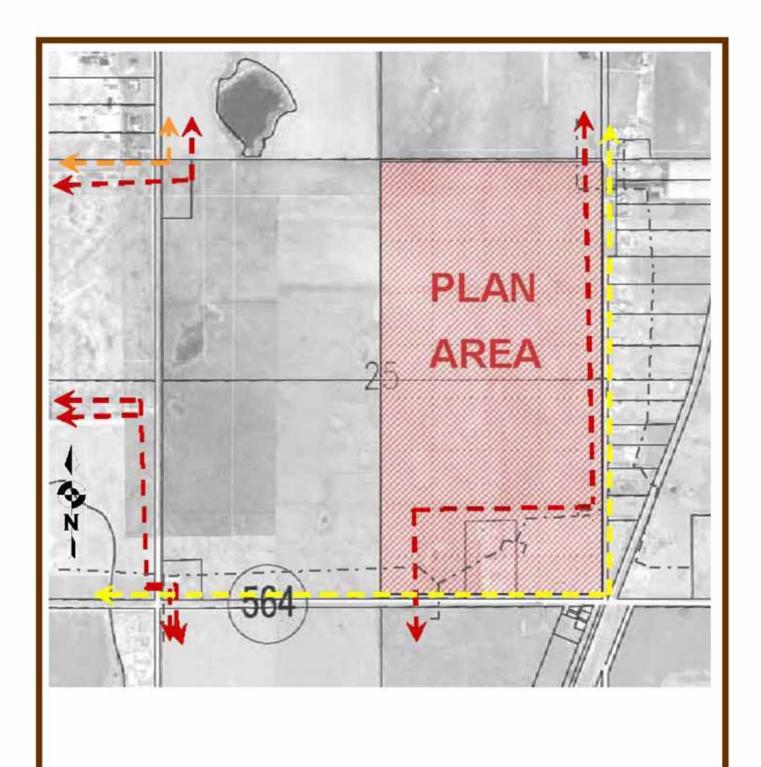
Police services for the Delacour area are provided by the R.C.M.P., through the detachments located at Airdrie or Strathmore. The Municipality also has its own protective services department with eight community peace officers who enforce selected government acts as well as municipal bylaws.

#### 3.2.6 Wells and Pipelines

Because the site is in an area where there are a significant number of wells and pipelines (including sour gas wells and pipelines), the location of any nearby facilities of this kind is of paramount importance. The Phase I - ESA prepared by Clifton Associates (refer to technical support document) describes the locations of the wells and pipelines in proximity to the site. The pipelines are illustrated in **Figure 9 - Existing Pipelines and Utilities**.

The EUB has indicated that there is a directionally-drilled sour gas well with a down-hole location of 3-25-25-28 W4 in the south west quarter section of Section 25. The surface location of this well is reported to be 8-26-25-28 W4. The well was licensed in January 2002 and has been on production since June 2002.

The setback for level 1 sour gas pipelines is 100m from the center of the pipeline to the edge of a dwelling. For pipelines carrying sweet gas, oil or refined products, setbacks are to the edges of the right-of-way. Development of the Delacour site must comply with minimum development setback requirements.



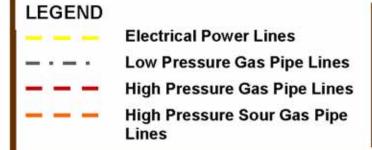


Figure 9:
Existing Pipelines and Utilities
Delacour Country Village

## 4.0 Public Consultation Process

Initial contact with the surrounding community regarding the development of the Village at Delacour was through a focused presentation of "Smart Development for Quality Communities" by Randall Arendt the evening of Tuesday November 28, 2006 at the Delacour Community Hall. This meeting was conducted prior to any design or development of the vision for the proposed community.

After a preliminary design had been developed, the team went back to the community for feedback. To facilitate this process a focus group was formed. The focus group consisted of several community members who were keen to have input into the future development, and was facilitated by members of the study team. They met for the first time Jan 23, 2007.

#### The role of the focus group was three-fold:

- 1). To represent the interests of the existing community of Delacour.
- 2). To review, augment and confirm the general needs of the community.
- 3). To preview, critique and provide input relative to the Conceptual Scheme as it developed.

Discussions with the members of the focus group, individually and together has proved most valuable in crafting a vision for the "Country Village of Delacour" and in developing the Conceptual Scheme in a manner consistent with that vision. Some key issues brought forward by the members of the focus team were as follows:

- The proposed community should have a rural feel. In particular the houses should not be too close together, but have generous space between them.
- It is desirable that the green spaces be connected to each other and to existing amenities (e.g. The community hall) by a pathway system.
- The pathways and the community in general should be "horse friendly"
- The proposed community should be linked to (an extension or expansion of) the existing community and should not be gated or exclusive.
- There was a concern relative to traffic on Hwy791, It was requested that significant traffic be either re-routed or slowed by appropriate physical measures.
- It was requested that the existing community residents have the option to hook on to the water/waste-water system.

The team worked to address all concerns brought forth by the focus group and presented a draft of the conceptual scheme to them for comment at a focus group meeting (Wed Nov 20, 2007), at the Delacour Community Hall.

Once the Delacour Country Village Concept Scheme is in circulation with the Municipality, a Town hall meeting will be held. This will allow the community at large to respond to the conceptual scheme as it has developed prior to the Concept going through the public hearing process. The Town hall meeting will provide a good barometer of the success of the project with respect to meeting the expectations and desires of the existing community.

### 5.0 Vision

The development concept for Dealcour Country Village was guided by the philosophy of the design team that developments should be designed to be sustainable - ecologically, socially and economically. There was consensus among the members of the design team as well as the land owners, that this project provided an opportunity to create a new style of community based on sound environmental practices creating a reduced environmental footprint and an idea of how communities can facilitate a healthy and sustainable lifestyle.

#### **Delacour Country Village:**

A complete planned community created in harmony with natural processes and balanced with socio-economic sustainability - an exceptional community offering a 'quaint' rural lifestyle with a superior quality of life and a controlled environmental footprint.

Delacour Country Village is envisioned as an ecologically friendly urban village within a rural agricultural landscape. It will offer residents the ability to live, work and play in their own community. The Village will enhance the existing community by providing services and amenities to adjacent landowners, while respecting existing development and patterns of land use. It will become a hub of the community.

The goal is to create a residential community with a controlled environmental footprint. It will be compact in design, pedestrian oriented, and will include a variety of housing types as well as commercial and institutional uses. There will be a focus on conservation of land energy and resources. Recycling and composting will be encouraged. A strong community identity will be promoted. This community will develop into a highly liveable premier community within the Rocky View rural landscape, a model for future development in the area.



Some Elements of the Vision: traditional style houses, pedestrian friendly streets, ample open space, pathway systems, homes facing onto open spaces,

# 6.0 Design Principles

## 6.1 Principles of S mart Growth

The principles of Smart Growth were created by the Smart Growth Network, a non-profit agency in the United States. These principles have been utilized to create a number of award winning developments throughout North America.

Smart Growth planning principles encourage a mix of residential dwelling types, integrated local commercial and institutional land-uses, and interconnected open spaces to support a diverse population, a viable local economy, pedestrian oriented communities, healthy lifestyles, and a cohesive community fabric which preserves the environment.

#### 6.2 Sustainable Practices

Sustainable practices refer to alternative development strategies for infrastructure, building design and construction practices, which will reduce the environmental footprint of the development. Following are some principles that may be implemented in Delacour Country Village.

#### 6.2.1 Water

High levels of water consumption require increased infrastructure to supply, treat and distribute water. Better management of water systems may be achieved through conservation measures and innovation.

#### Reducing demand:

Some conservation methods being proposed for the development are:

- Metering and "increasing block rate structures" as opposed to a constant rate/volume charge,
- Encouraging Xeriscaping (landscaping that requires minimal water),
- Low-flow household appliances and fixtures.

In addition, Provincial policy regarding water re-cycling and re-use will be monitored for possible changes that might facilitate grey water re-use for toilet flushing and irrigation.

#### Exploring alternative means to supply water:

- Opportunities for water re-use will be explored and government policy changes will be monitored. It is hoped that with changes to provincial policy that eventually domestic water supply may be "borrowed" from a nearby agricultural or industrial operation, then used, treated and finally returned for re-use to the original owner.
- Storm water and snow melt may be harvested and stored through a system of storm water ponds then filtered and provided for non-potable uses.

#### 6.2.2 Drainage and Storm Water Management

Storm water in many contemporary communities is channelled off to a distant point of discharge. Such changes modify watershed patterns, and cause a decrease in the infiltration process creating dry soil conditions for vegetation.

In Delacour Country Village a more ecologically sensitive approach will be used; one that retains the moisture that falls on the site and controls it so that the rate and quantity of water discharge matches

that prior to the development. Some of the moisture will be harvested for re-use in the development, and the rest will be allowed to permeate into the soil, re-charging local aguifers.

#### 6.2.3 A Iternative E nergy Supplies

Completely replacing traditional energy sources in a new development may not be feasible, but complimenting these sources with alternative energy sources may be advantageous. Opportunities for alternative energy supply will be explored; Including generating electrical power through wind or other green technologies, and selling excess back to the local electricity provider.

#### 6.2.4 Dark Sky Policy

The International Dark Sky Association (IDA) provides a variety of information on the cost of light pollution and the benefits of implementing dark-sky policies. The IDA proposes the following measures to mitigate the problem of light pollution:

- Shield and lower the wattage of all outdoor lighting residential, commercial and municipal,
- Reduce illumination levels where possible,
- Use timers, dimmers, and sensors to darken unoccupied areas,

#### 6.2.5 Solid Waste Management

Disposal of waste is costly, incurring expenses associated with collection of waste, operation of landfill sites, and the restoration of fouled landscapes. One of the goals in sustainable development is clearly to reduce the amount of solid waste generated in a community. The following will be considered for Delacour:

- Providing composting and mulching equipment within the community,
- Providing a comprehensive recycling program to all community members,
- · Providing a central material recovery facility,
- Limiting the amount of waste that will be collected,
- Trash burn technology as an efficient solid waste management option,

#### 6.2.6 Site Layout and Design

The aim in the Village site design was to promote a less car-dependent life-style, to encourage pedestrian travel, facilitate social interaction, to maximise open spaces, to take advantage of solar and wind energy where possible, and to enhance the site rather than take away from it. The following were considered in the design for Delacour Country Village:

- Integrating existing landscape features into the overall plan.
- Creating a network of interconnected open spaces, pathways and nodes.
- Exploring opportunities for alternative street and lot designs.
- Providing ample green ways and open spaces which provide a variety of recreational opportunities both active and passive within the community.
- Providing convenient pedestrian access to daily needs.
- Incorporating equestrian trails into the design of the development.

#### 6.2.7 Building Design

More energy efficient buildings will reduce the overall environmental footprint of a development. Delacour will have a set of design guidelines that outline the sustainable building design elements that are required or desirable within the community. These will include such items as maximum building sizes, thermal insulation requirements, passive solar measures, energy and water efficiency ratings for mechanical the Village systems, appliances and fixtures and allowable building materials.

#### 6.2.8 Construction Practices

It is important that the construction phase of development be monitored to ensure the sustainable vision for the proposed development is maintained. The Design Guidelines for Delacour Country Village will outline acceptable construction practices and special requirements that builders will be expected to meet in the Village. It will address items such as erosion management, waste management, protecting vegetation, dust control and the prevention of water contamination during construction,



E xamples of some of the sustainable practices that could be implemented in the development including alternative energy, LID stormwater management and waste management

# 7.0 Concept Plan

### 7.1 Development Concept

The overall concept for the design of Delacour Community Village is illustrated in **Figure 10 – Development Concept**. It is laid out with a central core designed to function as a "main street". This core area incorporates mixed land use with open space, commercial and residential uses.

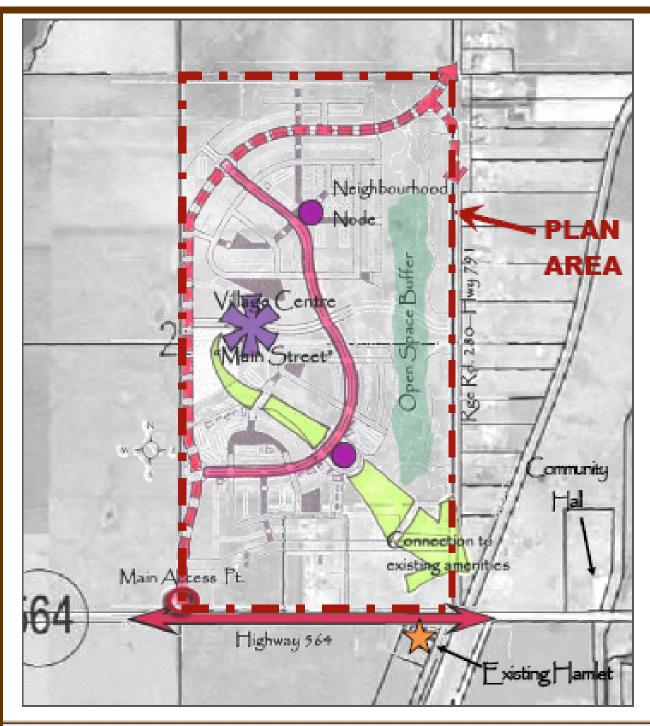
The majority of the Village's residential development is divided into two neighbourhoods. Each of these has a small centre, called a Neighbourhood Core, which serves a variety of neighbourhood functions such as a shuttle bus pick-up/drop-off, a recycling centre, and possibly a small building for meetings or a neighbourhood-run daycare facility. The Neighbourhood Cores are linked to each other and the main through-road with a collector road. A large open space runs through the village diagonally, from the east end of "Main Street" to the southeast corner of the village where a pedestrian link will be provided to the existing Delacour Community Centre.

#### 7.2 Land Use

In order to achieve a compete community; Delacour Country Village will have a mix of land uses. While the majority of the community will be residential with single family housing, multi family housing and planned urban development (PUD); there will also be institutional and commercial land uses. **Table 2 - Land Use Statistics** provides a statistical break- down of proposed land uses within the Plan Area, while **Figure 11 - Land Use**, shows the location of the various land-uses within the plan. There will be two areas of commercial land use within the Delacour Country Village. The initial commercial development will be located at the Village Centre with future commercial development to be located nearer to Highway 564. The overall plan for the Village illustrating locations of roads and open spaces as well as the two neighbourhood nodes, Main Street, and the fire hall school sites is shown in **Figure 12 - Concept Plan Drawing**.

Table 2 - Land Use Statistics				
Land Use	Area (ac)	Area (ha)	Percentage of Plan Area	
Residential	112.8	45.6	36.9	
Commercial/Mixed Use	13.0	5.3	4.3	
Open Space	91.7	37.1	30	
Storm water Management	11.1	4.5	3.6	
Fire Hall & School Site	15.8	6.4	5.2	
Roads	49.0	19.8	16	
Lanes	12.3	5.0	4	
Total	305.7	123.7	100 %	

Policy 7.2.a In order to achieve a complete community; a mix of land uses will be implemented, approximately as illustrated in Table 2.





Main Through Road

Collector - ring road

Community Node

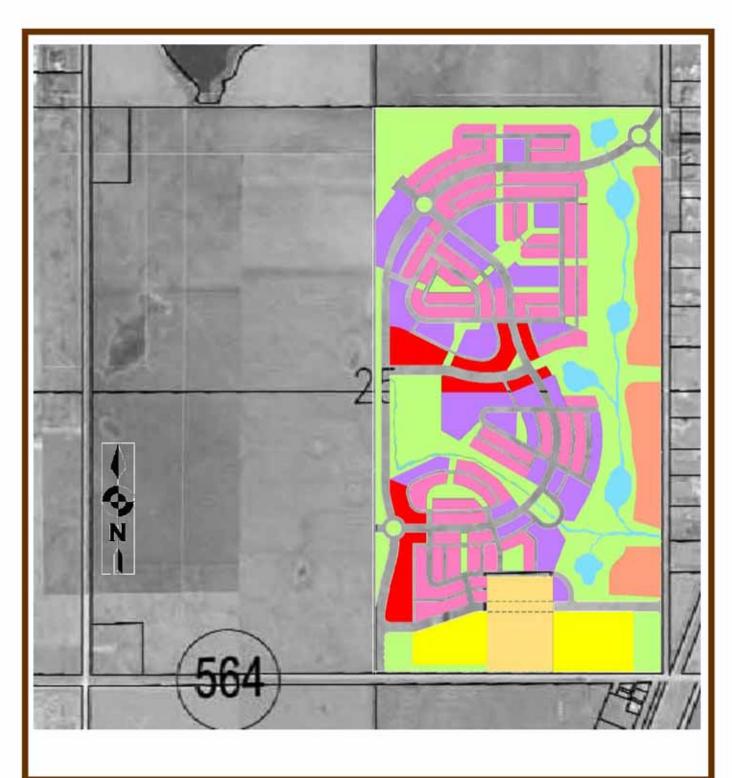
Open Space Network

# Figure 10:

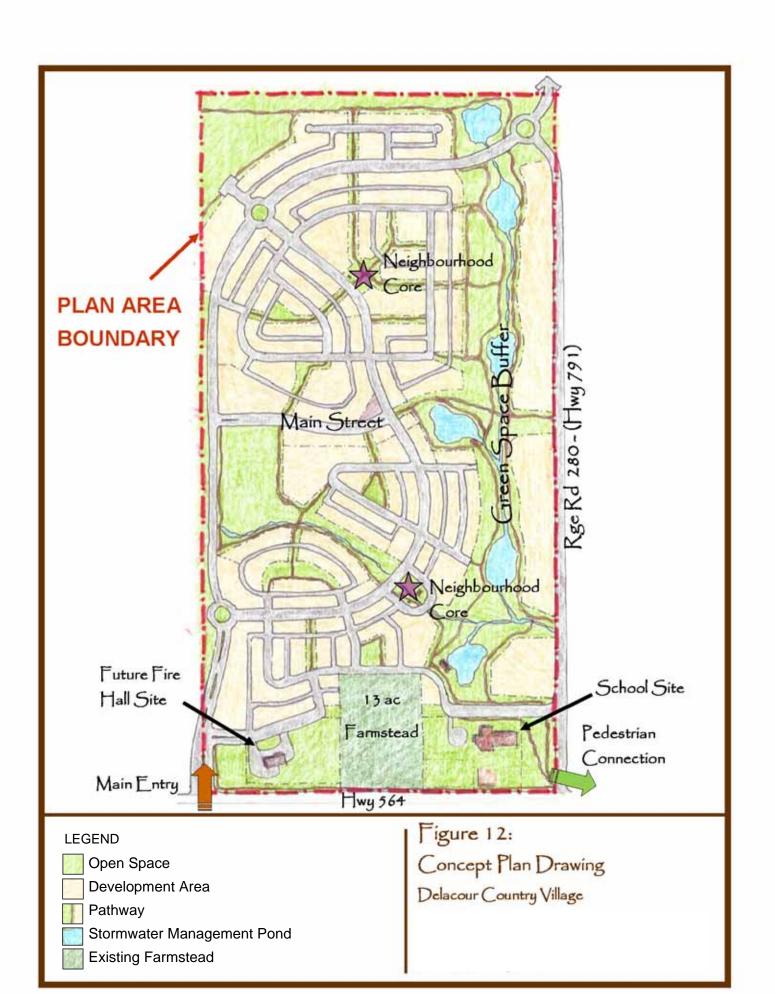
Development Concept

Delacour Country Village









# 7.3 Residential Development



Residential development makes up 35.6 % of the total area of the village.

**Table 3 - Residential Statistics** gives the proposed statistical breakdown for the different residential types in the Village. "Country homes" include all single family homes located in the "Estate" development on the east edge of the proposed development. "Prairie Homes", include all single family detached residential units that are not located in the "Estate" development area. "Multi-family and PUD" includes all low-rise attached dwelling units as well as auxiliary suites and apartments it may also include co-housing developments or groups of single family homes that are arranged in a PUD. A comparison of the housing types in table form is shown in **Figure 13 - Housing Types**.

Table 3 - Residential Statistics						
Residential Type	Units	Area(ac)	Area(ha)	Units per Acre (upa)	Percentage of Residential Area	Percentage of Total Area
Country Homes	15	23.0	9.3	0.65	20.4	7.5
Prairie Homes	669	53.5	21.7	12.5	47.4	17.5
Multi-Family & PUD	1054	36.3	14.7	29	32.2	11.9
Auxiliary Suites*	95	n/a	n/a	n/a	n/a	n/a
Total	1833	112.8ac	45.7ha	6.0 upa (overall)	100 %	36.9 %

<sup>\*</sup>Auxiliary suites - includes units above commercial development. Auxiliary suites are not included in the areas in Table 3 as they are ancillary to the main use.

#### 7.3.1 Housing Types

There are several types of residential development proposed for the residential areas of Delacour Country Village: "Country homes", located on large country lots; "Prairie Homes", single family detached homes; "Ranch Homes" or "Boomtown Homes", low-rise attached homes, and "Barns", low rise apartments. While Prairie homes will be the predominant housing type there will be clusters of multi-family homes and PUD around the Village Centre and each of the Neighbourhood Cores. It is proposed that auxiliary suites be allowed with some of the detached single family homes to offer a greater range of housing options. Suites auxiliary to commercial development will be addressed in a subsequent section of the document. All of these units will count in the overall residential density calculations.

Policy 7.3.1.a Delacour Country Village will have both single family and multi-family residential development.

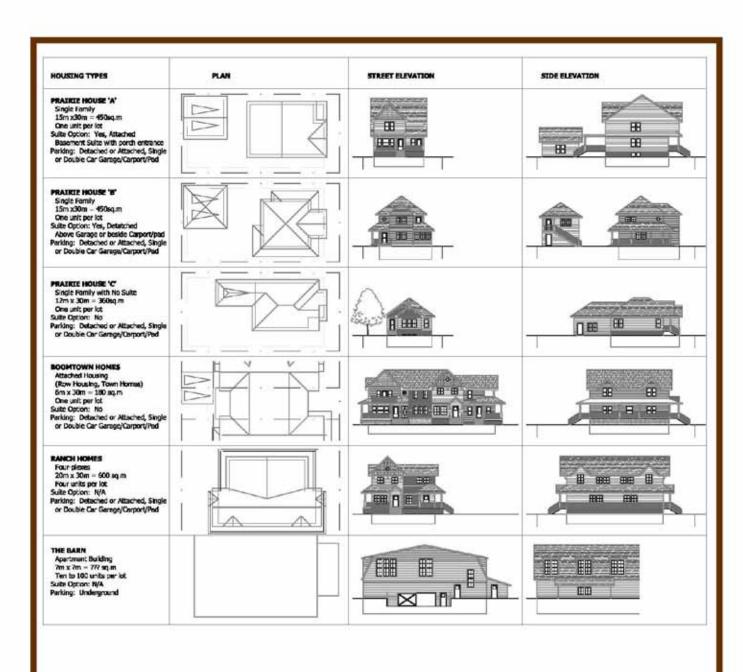


Figure 13:
Housing Types
Delacour Country Village

Policy 7.3.1.c The Direct Control Land-Use Bylaw for the development will allow for auxiliary suites on some detached single family homes.

#### SINGLE FAMILY HOMES:

Country Home - Large single family detached home on large country sized lots (2 to 3.5 acres in size) on the east side of the Village. These homes may have suite options (either attached or detached). These country homes, together with the open space buffer, will provide an appropriate interface between the existing low density country residential on the east side of the development and the proposed Village.

Prairie Home - Single family detached home. Some may have a suite option (either attached or detached). Like the Country Homes, Prairie homes will be zoned to allow home based businesses.



Ranch Homes - Low-rise attached homes. Ranch Homes are envisioned as a three or four-plex that has the appearance of a large two or three storey traditional country home. This housing form is gaining popularity as an alternative to a row house and is sometimes called an "apartment house". Ranch homes may have an attached or detached garage, but would not have a suite option.

Boomtown Homes - Low-rise attached homes in a row house or townhouse configuration. In order to maintain the pedestrian scale and rural character of the development, these row houses are designed with differentiated unit fronts as to appear as separate houses rather than one large building. Boomtown Homes may have an attached or detached garage, but do not have a suite option

The Barn – This is one suggested option for multi-family development in the village, it is a ruralised apartment building with enclosed parking that has the appearance of a large barn.

Planned Urban Development (PUD) - These will be combinations of the above multi family types, and may also include single family detached homes as part of a planned block of development - for example a co-housing development.











### 7.3.2 Housing Density

The average density for the Delacour Country Village development will be 4-6 units per gross acre at full build-out, yielding up to 1835 residential units in total. The densities and total numbers of units include single family detached homes, multi-family units, suites auxiliary to residential development and suites auxiliary to commercial development in mixed use land use areas. Residential lots will vary in size from approximately 270m² to 510m² (or approximately 1/14 ac to 1/8 ac) with a cluster of 13 larger "country estate lots" on the east side of the community.

While the overall density of the community will not exceed 6 units per acre, density may vary from one area to the next or from one neighbourhood to another.

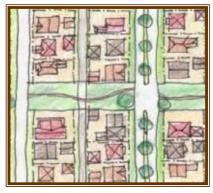
- Policy 7.3.2.a While the density of individual blocks may vary, the overall density of the proposed community will not exceed 6 units per acre.
- Policy 7.3.2.b Delacour Country Village shall not exceed 1835 residential units.
- Policy 7.3.2.c Higher density residential units will be clustered around the neighbourhood cores, the village centre, and the main roads leading through the community.
- Policy 7.3.2.d The exact distribution of residential units in each block of development will be determined at the subdivision stage of the approval process.

## 7.3.3 Lot Orientation and Design

To achieve a more pedestrian friendly streetscape; lots of varied sizes and shapes will be incorporated within individual blocks. Since the size and orientation of a house is influenced by the lot's size, orientation and shape, the introduction of varied lot styles will contribute to a vibrant and interesting streetscape. The design for Delacour Country Village incorporates lots with a variety of orientations: some lots will face onto streets; others will face onto green spaces; some will have vehicular access via a street; some via a laneway and some will have both.



Homes which front onto greenspace and back onto a laneway



Homes which front onto a street and back onto a laneway



Homes which front onto a street and back onto a greenspace

Lots in the development that face onto a street will have a laneway to facilitate garages at the rear. Front facing attached garages will generally be discouraged, however, when lot orientation necessitates a front

facing garage, recessed garages will be favoured. To facilitate recessed garages there may be shared driveways between lots to give access to the rear portion of the lot.

There will be some lots in the development which front onto green space rather than streets. This lot design is in part to encourage more pedestrian traffic and in part to create a more rural feel. Vehicular access to these lots will be via paved back laneways. For these lots, visitor parking will be provided in small paved "parking clusters" adjacent to laneways. Several innovative options exist for these paved parking clusters, as shown in the sketches below.



S ketches of public parking cluster options for homes that front onto walks, or green streets.

- Policy 7.3.3.a The Delacour Country Village community will contain a variety of lot sizes and shapes.
- Policy 7.3.3.b Lots adjacent to the park system, may front onto green spaces rather than streets.
- Policy 7.3.3.c Parking for lots facing onto green spaces will be served by communal visitor parking areas the configuration of which will be determined at the redesignation phase of the approval process.
- Policy 7.3.3.d Subsequent development approval applications will delineate the locations and types of lot configurations and designs.

# 7.4 Commercial Development



There will be two areas of commercial development in the Village: one in the Village Center and another along the main through road near the entry to the site. Commercial and mixed uses will account for approximately 4.2% of the development area. Commercial areas will be developed once a critical population base is established within the Village and neighbouring areas. Until development occurs, the commercial and mixed use lands will be left as "green field".













E xamples of "Main S treet" character

### "Main Street":

The Village Center will be located in the area between the main through-road off Hwy 564 and the natural area on the east side of the site. Rather than big box or high density commercial development, Main Street will portray a quaint village atmosphere with small-scale low rise buildings. Many of these will have residential suites above the street level, providing another housing option to residents of the community. Coffee-shops, convenience stores, specialty shops, professional offices, medical clinics, and galleries are envisioned for this mixed-use retail area.

#### "Gateway":

The second commercial area will be located near Highway 564 along the main through road. This area is envisioned as somewhat more utilitarian than the quaint Main Street area. The types of business in this area would be the quick stop on the way home: gas station, convenience store, dry cleaners, video rental store, perhaps a restaurant or fast-food outlet. The exact size and configuration of the lots will be determined at a later development stage.

- Policy 7.4.a There will be two distinct areas of commercial development in Delacour Country Village located as shown in Figure 11 Land Use
- Policy 7.4.b The "Main Street" commercial area will incorporate mixed uses including residential apartments above commercial uses.
- Policy 7.4.c The "Gateway" commercial area will incorporate local commercial uses and uses to serve the travelling public.

- Policy 7.4.d Commercial area lot sizes, configurations and layout will be delineated at the subdivision stage of the approval process.
- Policy 7.4.e Landscaping requirements and design guidelines to ensure visual quality of the commercial area will be detailed in the Design Guidelines document to be submitted at the re-designation stage of the development approval process.

### 7.5 Public A menities

A key component of the concept plan is the provision and accessibility of community amenities. Having amenities such as civic spaces and schools will foster a stronger sense of community in the Village. Having them located so that they are easily accessible especially from the pedestrian pathway system will help reduce the village's dependence on automobiles.

### 7.5.1 The Village Plaza

The Village plaza is an outdoor space of slightly less than 1000 m² located in the village centre. It is a flexible open space designed to serve a variety of community functions. The Plaza will be designed to easily house small civic events such as ceremonies and speeches or small performances. The plaza will have shade trees around it and benches for sitting on as well as some landscaping and hard-scaping and/or public art. It is a place where people can meet or eat their lunch in the fresh air. Larger public events such as festivals and outdoor markets can be held in the large green space on the west end of Main Street.

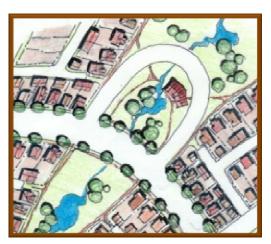


Policy 7.5.1.a The central village core will have a public plaza of approximately 100m<sup>2</sup>, the design of which will be submitted with the Open Space Plan at the subdivision stage of the approvals process.

### 7.5.2 Neighbourhood Cores

The plan for the Delacour Country Village includes two Neighbourhood Cores, one in approximately each quarter section of the proposed development. These neighbourhood nodes are approximately one acre in size and will serve a variety of functions, including but not limited to:

- Community shuttle bus pick-up/drop-off.
- Mail boxes.
- Recycling and composting collection and weekly pick-up.
- Optional day-care facility.
- Optional office and meeting room facility.
- Playground and park amenities.
- A small building for neighbourhood gatherings.



Illustrative Plan of a Neighbourhood Core

These cores will be designed to facilitate vehicular traffic adjacent to them (for shuttle bus and recycling drop-off/pick-up) and will be surrounded by a mix of single family residential homes and multi-family complexes. The two neighbourhood cores will be linked to one another and to the village centre by a network of pathways and walkways, and will be located such that all residential development has a neighbourhood core within a five minute walk. The total area dedicated to these two neighbourhood cores in the concept plan is approximately 2 acres, or approximately 1 acre for each neighbourhood core.



- Policy 7.5.2.a Two neighbourhood nodes each approximately one acre in size will be constructed.
- Policy 7.5.2.b The exact size and scope of the neighbourhood cores will be detailed in the Open Space Plan at the subdivision stage of the development approval process.

### 7.5.3 Open Space

The proposed scheme for Delacour Country Village has approximately 104 acres of open space, which is approximately 34% of the development's total area. The proposed development will incorporate open spaces that match the descriptions of most of the classifications outlined in the Municipality's Open Space/Trail Classification System adopted July 08, 2008 including regional parks, community parks, neighbourhood parks, school reserves, natural areas and greenways. For the purposes of this document we have divided them into just three types:

- Natural parks and community pasture lands
- · Recreational parks and fields
- Walks and greenways

Open spaces will be located approximately as illustrated in **Figure 14 - Open Space**. Open spaces will be designed to fulfill multiple functions, both active and passive; they will house pathways, playgrounds, resting spots, sports fields, benches, decorative plantings and gathering places. The open space system will also house elements of the storm water management system such as drainage courses and storm water retention ponds, these areas will be designated as public utility uses.

The pathway system will accommodate pedestrians, cyclists and equestrian uses it will also house elements of the storm water collection system. Pathways will traverse the entire development area and provide access to recreational parks, natural fields, greenways and neighbourhood parks. Equestrian friendly trails will be laid out in such a way that pedestrian safety is not compromised. The riding trails will be generally be limited to the periphery of the proposed development but will also provide access to the Village Centre. All community parks will be maintained and managed by a Community Association to be established by the developer.

A Detailed Open Space Plan that classifies each area according to the Municipality's guidelines and includes landscaping and trail plans will be developed following approval of the Delacour Country Village Conceptual Scheme.

- Policy 7.5.3.a A detailed Open Space Plan including landscaping and trail plans and will be provided to the satisfaction of the Municipality at the subdivision stage of the development approvals process.
- Policy 7.5.3.b Municipal Reserve will be provided pursuant to the provisions of the Municipal Government Act.
- Policy 7.5.3.c A portion of the open space equivalent to ten percent of the project lands will be dedicated as Municipal Reserve with the balance of open space dedicated as Public Utility Lot (PUL) or protected as community lands.
- Policy 7.5.3.d Municipal Reserve and PUL will be owned and maintained by the Municipality, while community lands will be owned and maintained by the Community Association.
- Policy 7.5.3.e Provision will be made for maintenance and upkeep of community owned open spaces through a Community Association established by the developer.
- Policy 7.5.3.f Open spaces will be designed to be sustainable, using durable pathway materials and plantings that are native to the area and drought tolerant.

### Natural Parks and Community Pasture Lands

Natural parks and community pasture lands will encompass approximately half of the total open space within the village, mostly distributed along the east side of the site. These natural parks will act as buffers to existing agricultural uses and country residential development.

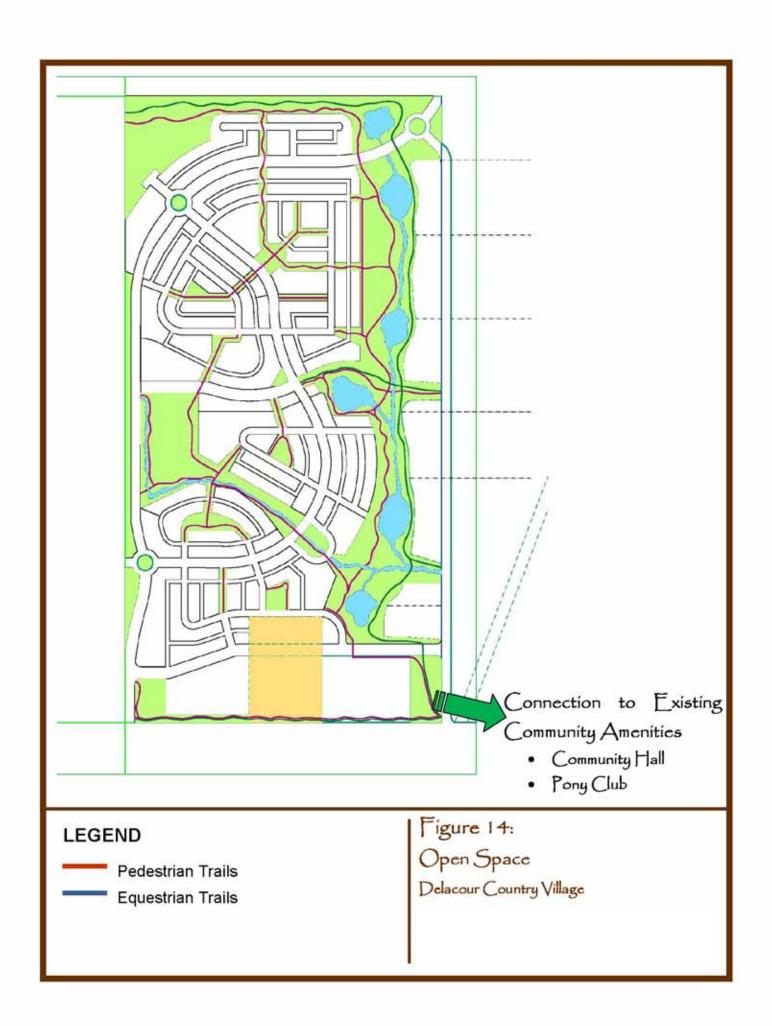
The natural parks may house elements of the storm water management system as they contain several dry low areas and an existing drainage path.

Areas where storm water will be stored will be designated Public Utility uses, with the boundary being equivalent to the High Water Level. The natural parks may house small horse pastures as well as riding trails. These fenced community pastures will be planted to grass suitable for grazing and could be leased to provide revenue to offset open-space maintenance costs.



Typical Example of Park Containing Storm Pond

- Policy 7.5.3.g Areas of open space that are designated as natural parks or community pasture lands will be outlined in the Open Space Plan.
- Policy 7.5.3.h Grazing by horses will be permitted on community pasture lands, but limited to maintain the integrity of the pasturelands.



#### Recreational Parks and Fields

Delacour Country Village will have a school site in the south-east portion of the development. The school site will have associated with it a large open space and sports fields. There will be other parks located throughout the development. Parks and fields will offer significant recreational opportunities, both active and passive within the Village.

Parks in Delacour will vary in size from small "pocket parks" to large sporting fields for soccer, football or baseball and other outdoor sports. They may contain benches, picnic tables and playground equipment. Recreational fields and public parks will be connected by a network of walking paths throughout the village.



Typical Example of Community Pocket Park

- Policy 7.5.3.i Parks will vary in size from small pocket parks to large sporting fields in accordance with Municipal standards.
- Policy 7.5.3.j Recreational parks and fields will be connected by a pedestrian network.

### Walks and Greenways

The plan for Delacour Country Village includes a network of walks and greenways. "Walks", are green streets accessible to pedestrians and emergency vehicles only.

Greenways are generally linear green spaces whose fundamental purpose is to connect the larger green spaces to one another and provide pedestrian (or bicycle) routes that are removed from the street and vehicular traffic. The proposed scheme utilizes greenways to facilitate pedestrian movement from residential neighbourhoods to the village centre to schools and to recreational areas throughout the village, as well as to the community centre located east of the proposed development. In addition, the greenways provide space for surface drainage corridors that will facilitate the collection and harvesting of storm water for use in the village. All storm water management facilities will be classified as having a public utility use.





Left: A greenway. Right: A "Walk"



T ypical example of a greenway

- Policy 7.5.3.k A pathway system will be established within the system of greenways, some of the pathways will be designated for pedestrians only, while others will be built to accommodate bicycle and equestrian traffic.
- Policy 7.5.3.1 The design of the pathway system will be included in the Open Space Plan to be provided at the subdivision stage of the development approval process.

# 7.6 Transportation Infrastructure

The transportation system within the Delacour Country Village will accommodate the necessary vehicular traffic and at the same time allow for a pedestrian-oriented village environment by providing direct pedestrian routes from residential neighbourhoods to village amenities as well as between neighbourhoods.

#### 7.6.1 Pedestrian Network

The pedestrian network is an important component of the plan for Delacour Country Village. It will have two components: the network of pathways located in the open space system described in Section 7.5.3; and paved sidewalks that will be constructed along residential streets. In some cases these sidewalks will be on one side of the street, in others on both sides. Traffic calming measures will be implemented throughout the development to ensure a safe pedestrian environment. Traffic calming measures are discussed in Section 7.6.4.

Policy 7.6.1.a In order to create an effective pedestrian network, sidewalks will be constructed along residential streets. The design and location of these will be specified at the subdivision stage of the development approval process.

#### 7.6.2 Regional Road Network

A full Traffic Impact Assessment will be completed in support of application for re-designation. In the mean time, a Preliminary Traffic Assessment (see technical support documents submitted with this application) completed by Clifton Associates suggests that:

- With some upgrades including intersection improvements, Highway 564 will remain adequate to handle post development traffic volumes.
- The proposed main access point for Delacour Country Village is the most suitable location for a major intersection.
- A speed limit reduction in proximity to the Village would be recommended.
- Traffic calming measures would be beneficial.
- A secondary access to the Village from Highway 791 is recommended.
- The road right of ways suggested in Section 7.6.3 of this document will be adequate especially in light of the pedestrian orientation of the development.

The main vehicular access to the site will be via Highway 564 on the south side of the proposed development at the quarter section line. Preliminary engineering completed indicates that this is the point with optimal sight distances. The intersection will be designed to accommodate traffic in and out of the Village as well as through traffic on Highway 564. Alberta Transportation has classified Highway 564 as a major two lane highway and as such it is anticipated that its right of way will increase from its present 30m to 60m. Future development along the highway will adhere to setbacks for the ultimate right of way.

Highway 791 will provide secondary access to the proposed development. Future development along this highway will adhere to setbacks for the ultimate right of way. The proposed access from Highway 791 is a traffic circle in order to provide traffic calming by the country residential development (existing and proposed) along Highway 791. This proposed intersection will need to be evaluated by Alberta Transportation.

- Policy 7.6.2.a Access to Delacour Country Village will be designed in accordance with Alberta Transportation and M.D. of Rocky View standards.
- Policy 7.6.2.b Development shall satisfy Alberta Transportation requirements for the protection of the right of ways for Highway 564 and Highway 791 as currently designated.
- Policy 7.6.2.c A formal TIA will be initiated following approval of the Conceptual Scheme. The TIA and any resulting design alterations will be submitted at the redesignation stage of the approval process.
- Policy 7.6.2.d The developer shall provide lands required for intersectional upgrades as a condition of subdivision.
- Policy 7.6.2.e The developer will enter into an agreement with the MD of Rocky View regarding a Transportation Off-Site Levy (or Transportation Infrastructure Fee) as a condition of subdivision approval
- Policy 7.6.2.f Development of the Village will be staged in accordance with improvements to regional roadways to accommodate traffic to and from the development.





#### 7.6.3 Internal Road Network

The road network within the Village is illustrated in **Figure 15 - Internal Road Network**, it is based on a hierarchy of roads: Main Through Roads, Collector Streets, Neighbourhood Streets, Laneways, and Walks. There are several different configurations of ditches, boulevards, medians, sidewalks and carriageways possible for each width of road. The configuration used will depend of the requirements at the individual location.

Main Through Roads ( ) - These roads provide access from outside of the Delacour County Village. They have a 30 metre right-of-way

Collector Street ( ) - The collector street connects the two neighbourhood cores and the village centre. It has a 25 metre right-of-way and may have a median. This road will have two full driving lanes and two parking lanes. It is anticipated that portions of the road will have a curb and gutter arrangement, and others will have ditches on one or both sides like a country laneway. This arrangement is common in many hamlets in the province and is consistent with the Municipality's servicing standards.

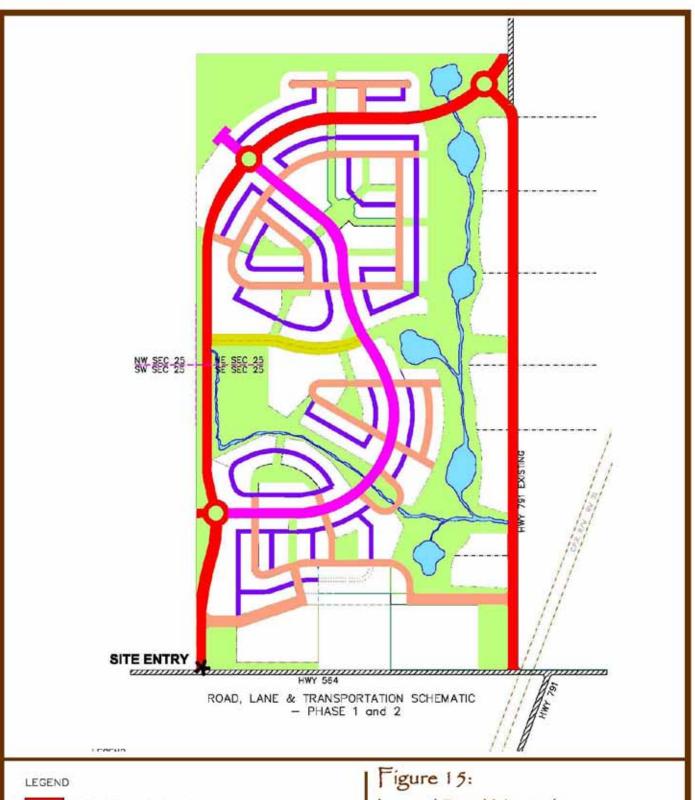
**Neighbourhood Streets** ( ) - These are local residential roads within the village they have a 17.5 metre right-of-way. They may have parking and sidewalks on one or both sides of the street and may incorporate utility right of ways.

Laneways ( ) - These rear lanes provide rear vehicular access to residential lots throughout the village. Lanes have a 10.0 metre right-of-way. The paved laneways allow garages to be built off the street, providing a more friendly and appropriately scaled streetscape.

**Walks** – These are essentially green streets accessible by pedestrians and emergency vehicles if required. Residential lots face onto these pedestrian walks.

MainStreet ( ) - This is the main commercial street in the Village. It will be designed to facilitate pedestrian movement, but also to create angled parking opportunities perhaps in the median. The precise layout will be described at a future stage in the development process.

- Policy 7.6.3.a The developer will enter into a development agreement with the M.D. of Rocky View regarding construction of internal roadways and any off site upgrades as required.
- Policy 7.6.3.b Design of road sections will meet M.D. of Rocky View Servicing Standards.
- Policy 7.6.3.c The developer will provide and maintain appropriate emergency vehicle access in accordance with Municipal standards.







### 7.6.4 Traffic Circles and Traffic Calming

There are several traffic circles within the road network of the Delacour Country Village at key intersections within the community as indicated in Figure 15. Traffic circles serve the same function as four-way stops, however they are a more efficient means of guiding traffic through the community. The exact size and nature of these traffic circles will be determined at the subdivision stage of the proposed development and will be in accordance with provincial and municipal standards.

In order to ensure a safe pedestrian environment and safe access to the community; physical traffic-calming measures will be implemented along the portion of Highway 564 that borders the study site and continues up to the Delacour Community Hall. Measures may include the addition of a treed median along the length of the development, a "gateway" at the west end of the development (signage or markers placed on either side of the road indicating to motorists that they are entering a residential area), trees along both sides of the road, and a reduction in speed limit.

Policy 7.6.4.a In order to ensure safety traffic calming measures will be implemented in and adjacent to the development subject to approval by the Municipality's Engineering Services Department and Alberta Transportation.



E xample of a T raffic Circle



I mage from: <a href="www.pedbikeimages.org">www.pedbikeimages.org</a>
E xample of a T reed Median

### 7.6.5 Public T ransportation Options

The road systems within the Village are laid out to facilitate a convenient shuttle bus transportation service. The Collector will offer an ideal route for a shuttle bus, which runs alongside the Neighbourhood Cores and past each end of main street.

As mentioned in Section 4.2.4, the proximity of the rail line to the study site offers an opportunity for a potential future commuter rail service to Calgary, perhaps even through an extension of Calgary's Light Rail Transit (LRT) system.

- Policy 7.6.5.a Areas will be designated to accommodate shuttle bus stops throughout the community.
- Policy 7.6.5.b Options for a potential commuter rail service will be explored and results submitted at the subdivision stage of the approval process.

# 7.7 U tility S ervices

Delacour Country Village will seek to incorporate innovative utility infrastructure technologies where appropriate to maintain the vision of Delacour as an eco-friendly community. The exact nature and source of these will be established at the subdivision stage of the approval process.

The Village will facilitate service connections for water and/or waste water for community members in the existing hamlet and on lands adjacent to the proposed development at cost.

Policy 7.7.a - The Developer will facilitate utility service connections for community members in the existing hamlet and lands adjacent to the plan area for cost.

#### 7.7.1 Water

Potable Water - Potable water will be supplied to the site from a licensed water treatment facility. The developer has secured a licence to transfer raw water to Delacour for domestic use. To enable this, the developer has an agreement with the Western Irrigation District (WID) to transport water from the Bow River to Delacour via the WID canal. The WID canal system runs through lands the developer owns adjacent to the proposed Delacour Country Village site. With over two Sections of land in and around the WID canal system, the developer has the opportunity for enough raw water storage to supply the full buildout of the Delacour community. On developer owned lands, in conjunction with this storage capacity, there is the opportunity to develop a water treatment facility that could integrate with a regional system. The intent of the developer is to design, build and operate a licensed water treatment facility to support a regional water supply system; one that could be administered by the Municipal District of Rocky View. Once the treated water is piped to the site it will be delivered to individual lots via an underground piped system for metered domestic use.

Non-potable Water - Non-potable water will be collected from storm water or snowmelt in the village. Rooftop run-off could be captured and stored in cisterns at each unit for on-site non-potable demands. Road (and other hard surface) run-off may be harvested using a series of drainage courses and collection ponds running along streets and through the village's green-space network. In the initial stages of development this water could be used for irrigation purposes. In the future, residents of Delacour Country Village may be supplied with both a potable and a non-potable supply. Non-potable water supply will be metered separately from the potable supply.

In order to maintain effective water management, we propose to meter and monitor all water use in Delacour Country Village.

- Policy 7.7.1.a Treated potable water will be delivered to the site from a private licensed water treatment facility to be constructed on adjacent lands owned by the developer.
- Policy 7.7.1.b Treated potable water will be delivered via an underground piped system for metered domestic use.
- Policy 7.7.1.c Water conservation measures for the Village will be outlined in detail in the Best Management Practices document to be submitted at the subdivision stage of the approvals process.

#### 7.7.2 Waste Water T reatment

Waste water within the Delacour Country Village will be collected via a conventional buried collection system, which uses gravity to move wastewater to a sewage treatment facility. There are two possible treatment options (the preferred option is to utilize the East Rocky View Wastewater Transmission Line):

East Rocky View Wastewater Transmission Line – The first option is to transport waste-water via forced main to the MD of Rocky View's newly constructed regional sewer main line that is located two miles west of the site. The waste water would then be conveyed to a treatment facility at Langdon. This option would most likely require a lift station located in the SE corner of the development.

On-site treatment facility – The second option is to treat waste-water in a new water treatment facility located on lands owned by the developer east of the subject lands. There are several alternative technologies available for on-site sewage treatment. Post treatment, water could be used to irrigate a golf course that could be constructed on the same parcel of land, or it could be transported to a suitable location to be used in agricultural irrigation or to an industrial user for use in industrial processes.

Regardless of which one of the above are chosen, it is proposed that a portion of the wastewater might be diverted to an onsite alternative treatment facility to be operated as a pilot project. This facility would use a process called "The Living Machine" to treat wastewater. A Living Machine is an Advanced Ecologically Engineered System (AEES), which uses a "natural-systems" approach to treat wastewater to advanced treatment standards. It is designed to take advantage of natural waste treatment ecology and in addition to being an ecologically sound method of treating wastewater, the living machine can be designed as a pleasant indoor conservatory.

- Policy 7.7.2.a Waste water will be collected via conventional buried pipe system.
- Policy 7.7.2.b There are two options for wastewater treatment:
  - Option a: Wastewater is transported through a lift station and forced main to the Rocky View Waste Water Transmission Line.
  - Option b: Wastewater is treated at a licensed private onsite treatment facility to be built on adjacent lands.
- Policy 7.7.2.c Provision of a finalized plan for waste water treatment to the satisfaction of the MD of Rocky View will be a condition of approval for subdivision.
- Policy 7.7.2.d A portion of the wastewater produced by the proposed development may be diverted to an onsite alternative treatment facility that will be operated as a pilot project.

#### 7.7.3 Shallow U tilities

Shallow utilities will extended to each lot within the development. Construction of shallow utilities will be the responsibility of the developer. They will be the located in utility right-of-ways.

- Policy 7.7.3.a Shallow utilities shall be provided at the expense of the developer within appropriate rights-of-way to be established at the subdivision stage of the approval process.
- Policy 7.7.3.b Alternative energy supply options for the Village will be explored and proposals submitted at the subdivision stage of the approval process.

#### 7.7.4 Storm water

The general concept of storm management will be to collect and harvest using a combination of gutters in the road ways and a system of "stream beds" or grassed swales contained mainly in the Village's open-space system. A detailed storm water management plan will be submitted at the subdivision stage of the approval process to the satisfaction of the Municipality.

**Storm water collection and storage** - The natural drainage patterns of the site described in Section 3.1.1 will facilitate storm-water collection ponds in several locations within the community. These low-lying areas will be used to collect and harvest storm water run-off and these collection areas will be formed into water features to provide an aesthetic enhancement of the open space areas. The conceptual plan for this storm water management system is illustrated in **Figure 16- Storm Water Management Concept**.

The ponds will be designed with shapes to provide deep forebays at the point of entry of concentrated flows to capture most of the solids in a small area for ease of maintenance when dredging becomes necessary. The ponds will have shallow shoreline areas to encourage emergent vegetation to assist in quality enhancement. The connecting storm water channels will provide meandering low flow channels and broad, grassed flood plains to capture solids from the water.

**Reusing storm water** - When runoff volumes and storage conditions permit, harvested storm water will be used for irrigation of public park areas to reduce demands on other water sources.

Flood control - The storm water management system will be designed to protect the site developments from flood damages. The minor system will contain storms up to the 1:5 year event and major flow paths for larger storms will be designed to prevent flood damages. The pond system will be designed with flood storage capacity sufficient to control peak flows at the outlet from this subdivision to predevelopment rates or less in events up to the 1:100 year storm, in accordance with municipal standards.

- Policy 7.7.4.a Detailed storm water management and harvesting plans for Delacour Country Village will be outlined in the Best Management Practices document to be submitted at the subdivision phase of the development approval process.
- Policy 7.7.4.b The storm water management and harvesting plans will be prepared using Low Impact Design (LID) Principles.
- Policy 7.7.4.c The storm water management plan will be prepared in accordance with Alberta Environment's Best Management Practices and with the MD of Rocky View's Servicing Standards for Subdivision and Road Construction.
- Policy 7.7.4.d Storm water management ponds and facilities will be located in Public Utility Lots and maintained and operated by a contractor hired by the Community Association.



Figure 16: Stormwater Management Concept Delacour Country Village

## 7.7.5 Solid Waste, Recycling and Compost

Solid waste management in Delacour Country Village will be the responsibility of the property owners in the Village through the community association. It proposed that a waste disposal company will be contracted by the community association to collects and dispose of residential solid waste in the community. In order to adhere to the vision of Delacour Country Village as a "green community" the following measures are suggested:

- Provide composting and mulching equipment within the community. This could take the form of
  providing communal compost bins within neighbourhoods, or by providing compost bins and
  equipment to community members at cost. There may be loans of equipment to community
  members through the community association.
- Provide a comprehensive recycling program to all community members, which may entail curb-side pick-up service or frequently placed drop off points (in the neighbourhood nodes for example).
- A community education plan could be implemented as part of the community web-site. Recycling and composting tips could be posted at neighbourhood nodes as well.
- Policy 7.7.5.a A detailed Waste Management Plan will be outlined in the Best Management Practices to be submitted at the subdivision stage of the approvals process.
- Policy 7.7.5.b Solid waste handling will be contracted to a solid waste disposal service through the community association.
- Policy 7.7.5.c A Deferred Servicing Agreement (DSA) will be registered against each individual title describing the land owner's obligation for participation in a communal solid waste handling program.
- Policy 7.7.5.d The reduction of solid waste will be encouraged in the proposed village through education, facilitating recycling and composting and by limiting the amount of solid waste that will be collected.

# 7.8 Community, Protective and Emergency Services

#### 7.8.1 School

The future school site will be located in the south east corner of the site along the diagonal green space that crosses the site. The school site will be approximately 10 acres in size and at build out will contain at least one multi-field and a playground area. It is likely that the school will house kindergarten to grade eight students. It will serve the new village and the surrounding area.



Policy 7.8.1.a A school site in the will be allocated in the south-east corner of the site to provide for the future construction of a school, subject to approval by the Rocky View School Division and the Municipality.

- Policy 7.8.1.b Design of the school site will be done in consultation with the Rocky View School Division and in accordance with their standards.
- Policy 7.8.1.c The school site will be dedicated as part of the Municipal Reserve dedication at the subdivision stage of the approval process.

## 7.8.2 Fire Protection and E mergency S ervices

Water for Fire Protection - For the initial phase of development, water supply for fire protection will be provided through a hydrant system on the main potable water line. It is anticipated that un-treated harvested storm water would be sufficient to supply the hydrant system, but until such time as this is proven out, fire protection will be provided through conventional means using the potable supply. To complement the fire hydrant system it is proposed that individual residences may be constructed with built-in sprinkler systems, this would be outlined in the Design Guidelines to be supplied at the subdivision stage of the development approvals process.

The Delacour Country Village plan has a designated area within the village for a fire hall based on indications that the increase in the population of the subject region may warrant the establishment of a local fire department. The Rocky View Fire Chief indicated that the proposed development is very well located to serve the area between Airdrie, Irricanna and Chestermere. The Delacour fire department would be of benefit to both the village and the surrounding rural community.

The need for augmented protective services will need to be examined at each phase of development by the Municipal District. It is possible that additional policing will be required at some point, whether it is through the existing RCMP detachments or a new detachment located within the hamlet. This would be decided by provincial and municipal authorities.

The future fire station site is a 6.5 ac parcel located in the southern portion of the development area close to the main site entrance. The location was chosen in order to facilitate quick access/egress for emergency vehicles. This site could house other emergency or protective services or village administrative functions as well. Delacour is well located to provide another regional hub for protective services.

- Policy 7.8.2.a A 6.5 ac site in the southern portion of the site will be allocated for the future construction of a fire hall and/or municipal building.
- Policy 7.8.2.b The fire station / municipal site will be dedicated as Municipal Reserve at the subdivision stage of the approvals process.
- Policy 7.8.2.c The developer will endeavour to collaborate with the Municipal District, the health region and emergency service providers in the provision of facilities related to emergency services.

# 7.9 Development Control - Best Management Practices & Design Guidelines

The primary purpose of development controls is to ensure that future development is in keeping with the vision of Delacour Country Village as a rural lifestyle community. This control will be exercised in part through the adoption of the Best Management Practices and in part through Design Guidelines. Both of these development control documents will be developed fully at the subdivision stage of the approval process, and will be submitted along with the subdivision application.

**Best Management Practices** - The Best Management Practices (BMP) document will outline site development and construction methods that are safe and ecologically sound. They will also outline how the development will be managed and maintained. They will address such issues as:

- Water and waste-water management
- Storm-water management
- Construction and management of utility infrastructure
- Solid waste management
- Ecological preservation and enhancement
- Construction practices

**Design Guidelines** - The Design Guidelines (DG) document will outline architectural guidelines for buildings, landscape guidelines for public parks, and urban design guidelines for streets and public plazas. It will also address guidelines for sustainable design in order to stay true to the vision of the Village as an eco-friendly community.

In general, the Delacour Country Village is envisioned as a collection of traditional looking neighbourhoods containing varied housing types and local commercial uses with residential units above. The architecture will be street oriented and of an appropriate scale. House designs will respond to site conditions. Buildings will be energy efficient and efforts will be undertaken to minimize the environmental footprint of the development. Streets character will be vibrant and diverse. The following are some examples of possible design guidelines that would facilitate the development of a community that is true to this vision:

- Zero lot lines may be utilized in order to provide for a useable space on one side of the lot line rather than a space too small to be of use on either side of every house and every property line.
- There will be a minimum width established for the side yards.
- Moderate front set backs will be encouraged.
- Porches and verandas will be encouraged.
- Alternative residential models will be supported, for instance, granny suites, basement suites, attic
  apartments or apartments over garages. This will facilitate the construction of a variety of
  housing options and encourage diversity in the population. It will also allow for a broader range in
  housing options and prices.
- In order to achieve a pedestrian oriented streetscape, front-facing attached garages will be discouraged unless significantly recessed.
- Footprints of all permanent structures on a site will not exceed a pre-determined percentage of the total area of the lot. Dwellings of a moderate size will be encouraged.
- The set back from lot front in commercial areas will be specified in order to maintain a consistent edge.
- Recessed entries, porches and awnings will be supported in commercial areas.
- Residential spaces above commercial uses will be encouraged to maintain an adequately dense core.
- A height restriction will be in effect for commercial buildings.
- A dark sky policy will be implemented in the community
- It is desired that commercial buildings in the development be reminiscent of early 20<sup>th</sup> century commercial buildings typical to small towns in Alberta. Specific guidelines may be developed using Main-street Canada's guidelines.

- Policy 7.9.a A detailed document outlining Best Management Practices for Delacour Country Village will be submitted at the subdivision stage of the development approval process.
- Policy 7.9.b A detailed document outlining Design Guidelines for residential and commercial buildings in Delacour Country Village will be submitted at the subdivision stage of the development approval process.
- Policy 7.9.c The Design guidelines will include sustainable design requirements for residential and commercial buildings.
- Policy 7.9.d Delacour Country Village will implement a Dark Sky Policy which will be outlined in detail in the Design Guidelines document.
- Policy 7.9.e The Design guidelines will include acceptable construction practices for residential and commercial buildings.
- Policy 7.9.f Development standards, construction practices and architectural guidelines described in the Best Management Practices and Design Guidelines documents will be registered against the title of all properties and shall be implemented by the developer and/or the Community Association.

## 7.10 Development Phasing

The development of the Village will be divided into four phases as outlined in **Figure 17 - Development Phasing Concept**. Each of these phases will be further divided into manageable blocks of development; the size of these blocks will be determined at least in part by market demand.

The water, waste water, utility and storm drainage systems will also be developed in phases. More detailed study will be required to determine precisely at which phases the water and wastewater service connections could be offered to existing residents adjacent to the proposed development. This will be addressed at the subdivision stage of the approval process.

- Policy 7.10.a Development will be in four phases, conceptually illustrated in Figure 17.
- Policy 7.10.b Each of the four phases will be further divided into manageable blocks of development of a size yet to be determined.
- Policy 7.10.c The development of servicing and utilities including water, waste water and storm water management will be in phases that correspond to the development phases.

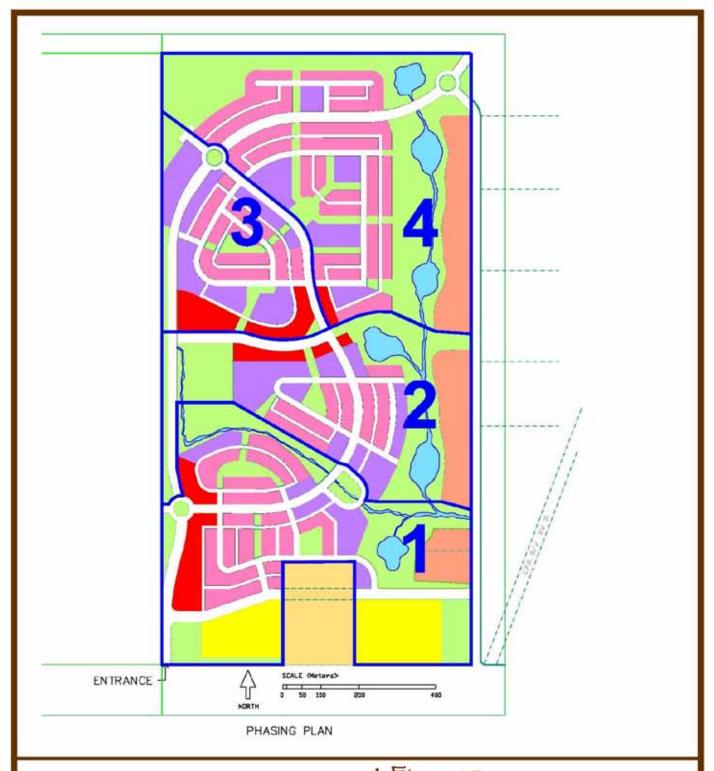


Figure 17:
Development Phasing Concept
Delacour Country Village

#### 7.10.1 Phase One

Phase One of development will involve approximately 95 acres, or 31% of the developable lands. It will encompass up to 175 single family residential units on 14 acres and up to 207 multi family units on 7.1 ac. Phase One also includes 5.3 ac of future commercial/Mixed use development. It is likely that this area will be left in Greenfield until a future phase of the project when commercial development is warranted. It is proposed that the areas of the site that are not included in Phase One, will continue to be leased to an agricultural operator and will remain in agricultural production until such time as their respective phases are ready to proceed; thus keeping the land in agricultural production as long as possible before development. This is in keeping with the Delacour Community ASP.

#### Open Space:

The open spaces shown in area one of Figure 17 will be developed in conjunction with the residential development, including the storm water management facilities. MR that is located in the Phase One area will be dedicated and put on separate Certificate of Title (C of T) at subdivision of Phase One.

#### **Transportation:**

The development of Phase One will require the building of all the roads that are located within the Phase One area of the Development Phasing Concept shown in **Figure 17**. It may also require intersection upgrades on Highway 564, this will be determined by the TLA to be completed prior to re-designation.

#### **Utilities:**

#### Water:

Potable water will be supplied to all lots in Phase One as outlined in Section 7.7.1 Water. An in-ground piped distribution system will be installed approximately as illustrated in Figure 18 - Potable Water Schematic: Phase One.

#### Waste water:

Infrastructure to provide waste water collection and treatment for all the lots in Phase One will be provided as outlined in Section 7.7.2 Waste Water. A buried collection system will be installed approximately as illustrated in Figure 19 - Sanitary Sewer Schematic: Phase One.

### **Shallow Utilities**

Lots constructed in Phase One will be services with telephone, natural gas and electricity to lot lines.

#### Storm water Management

Storm water management facilities located in area one as shown on Figure 17 will be constructed with Phase One of the development.

#### Solid Waste Management

Provisions will be made for solid waste management for Phase One of development as outlined in Section 7.7.5 Solid Waste, Recycling and Compost.

#### Community, Protective and Emergency Services

Phase One area includes the lands designated for the school site and the Fire Hall/Municipal Site. These will be dedicated at subdivision of Phase One.

Policy 7.10.1.a Phase One of the development will encompass approximately 95 acres as illustrated in Figure 17 - Development Phasing Concept.

Policy 7.10.1.b Phase One will encompass no more than 382 residential units.







Potable Water Pipe / Fire Main



10" Potable Water Pipe

# Figure 18:

Potable Water Schematic:

Phase 1

Delacour Country Village



Figure 19: Sanitary Sewer Schematic: Phase 1 Delacour Country Village

#### 7.10.2 Phase T wo

The area for Phase Two of development is illustrated in Figure 17. This phase of development will involve approximately 67 acres, or 22% of the developable lands. It will encompass up to 91 single family residential units on 7.3 acres and up to 310 multi family units on 10.7 ac. Phase Two also includes 2.15 ac of commercial/mixed use development mostly located along the south side of the future "Main Street". This mixed use development could include up to 20 units of auxiliary suites.

#### Open Space:

The open spaces shown in area two of **Figure 17** will be developed in conjunction with the residential development, including the storm water management facilities. MR that is located in the Phase Two area will be dedicated and put on separate Certificate of Title at subdivision of Phase Two.

#### Transportation:

The development of Phase Two will require the building of all the roads that are located within the Phase Two area of the Development Phasing Concept shown in Figure 17. Enhancements or upgrades to adjacent roadways may be required. This will be determined by the TLA to be completed prior to re-designation.

#### **Utilities:**

#### Water:

Potable water will be supplied to all lots in Phase Two as outlined in Section 7.7.1 Water. An inground piped distribution system will be installed approximately as illustrated in Figure 20 - Potable Water Schematic: Phase One and 2.

#### Waste water:

Infrastructure to provide waste water collection and treatment for all the lots in Phase One will be provided as outlined in Section 7.7.2 Waste Water. A buried collection system will be installed approximately as illustrated in Figure 21 - Sanitary Sewer Schematic: Phase One and 2.

#### **Shallow Utilities**

Lots constructed in Phase One will be services with telephone, natural gas and electricity to lot lines.

#### Storm water Management

Stormwater management facilities located in area one as shown on **Figure 17** will be constructed with Phase One of the development.

#### Solid Waste Management

Provisions will be made for solid waste management for Phase One of development as outlined in Section 7.7.5 Solid Waste, Recycling and Compost.

- Policy 7.10.2.a Phase Two of the development will encompass approximately 67 acres as illustrated in Figure 17 Development Phasing Concept.
- Policy 7.10.2.b Phase Two will encompass no more than 421 residential units.







8" Potable Water Pipe / Fire Main



10" Potable Water Pipe

# Figure 20:

Water Schematic: Phases 1 and 2 Delacour Country Village





Figure 21:
Sanitary Sewer Schematic:
Phases 1 and 2
Delacour Country Village

# 8.0 Plan Implementation

As outlined in the previous section, it is proposed that the site would be developed in four major phases. Each of these phases would likely be further divided into blocks of development dictated primarily by market demand. The overall development plan implementation can be described as follows:

# 8.1 A pplication to Prepare a Concept Scheme

An application to prepare a Concept Scheme for section 25-25-28-W43M was submitted and accepted by the Municipal District of Rocky View in the initial stages of the project. This initiated the approvals process with the MD, and work was begun on the concept scheme and the planning of the development.

# 8.2 A doption of Concept Scheme

The Concept Scheme for Delacour Country Village will be submitted to Council for consideration. If the Concept Scheme is adopted, then an application for land-use re-designation can be submitted to Council.

## 8.3 Land Use Re-Designation Application

After the adoption of the concept scheme, an application for land-use re-designation will be submitted to the MD of Rocky View. It is anticipated that a request for a change to DC or Direct Control District will be made in four phases as outlined in **Figure 17 – Development Phasing Concept**. This re-designation of land use will facilitate the development of the type of mixed-use community that is envisioned by the concept plan.

# 8.4 Subdivision and Development

Following the approval of the land use re-designations, the next step will be application for subdivision of the four phases of the project followed by development of the project lands.

Subdivision application will be made in four phases as outlined in **Figure 17 - Development Phasing Concept**. For construction, the four phases will most likely be further divided into development blocks of a size and configuration deemed appropriate by the developer.

# 9.0 Regional Benefits

There are a number of benefits that would be realized by the existing residents of the region surrounding the proposed development some are concrete, such as the availability of shopping close to home, others are more about the perception of Delacour as a vibrant and cohesive community:

- There would be a variety of local commercial development in close proximity offering products and services that they would otherwise have had to travel to nearby centres to access.
- As a result of the proposed commercial development, there will be local jobs created, offering
  potential employment close to home.
- The development will require construction of local water and wastewater utilities, utilities that could potentially be accessed by nearby residents as well.
- The village's pathway system would provide recreational opportunities for residents to walk cycle and horseback-ride on public trails safely away from vehicular traffic.
- The increase in the population and the addition of commercial development would make it possible for Delacour to become a recognized hamlet or even a village.
- The larger population in conjunction with the construction of recreational facilities will facilitate the formation of local sports teams.
- The development of a village centre with postal services and municipal services will provide
  opportunities for interaction between community members fostering a sense of belonging and a
  strong social fabric.



# 10.0 Policy Summary

- Policy 7.2.a In order to achieve a complete community; a mix of land uses will be implemented, approximately as illustrated in Table 2.
- Policy 7.2.b Arrangement of the land-Use areas will be in general conformance with that illustrated in Figure 11 Land Use.
- Policy 7.3.1.a Delacour Country Village will have both single family and multi-family residential development.
- Policy 7.3.1.b The Village will contain a variety of housing forms, the exact location and nature of these will be outlined at the subdivision stage of development.
- Policy 7.3.1.c The Direct Control Land-Use Bylaw for the development will allow for auxiliary suites on some detached single family homes.
- Policy 7.3.2.a While the density of individual blocks may vary, the overall density of the proposed community will not exceed 6 units per acre.
- Policy 7.3.2.b Delacour Country Village shall not exceed 1835 residential units.
- Policy 7.3.2.c Higher density residential units will be clustered around the neighbourhood cores, the village centre, and the main roads leading through the community.
- Policy 7.3.2.d The exact distribution of residential units in each block of development will be determined at the subdivision stage of the approval process.
- Policy 7.3.3.a The Delacour Country Village community will contain a variety of lot sizes and shapes.
- Policy 7.3.3.b Lots adjacent to the park system, may front onto green spaces rather than streets.
- Policy 7.3.3.c Parking for lots facing onto green spaces will be served by communal visitor parking areas the configuration of which will be determined at the redesignation phase of the approval process.
- Policy 7.3.3.d Subsequent development approval applications will delineate the locations and types of lot configurations and designs.
- Policy 7.4.a There will be two distinct areas of commercial development in Delacour Country Village located as shown in Figure 11 Land Use
- Policy 7.4.b The "Main Street" commercial area will incorporate mixed uses including residential apartments above commercial uses.
- Policy 7.4.c The "Gateway" commercial area will incorporate local commercial uses and uses to serve the travelling public.

- Policy 7.4.d Commercial area lot sizes, configurations and layout will be delineated at the subdivision stage of the approval process.
- Policy 7.4.e Landscaping requirements and design guidelines to ensure visual quality of the commercial area will be detailed in the Design Guidelines document to be submitted at the subdivision stage of the development approval process.
- Policy 7.5.1.a The central village core will have a public plaza of approximately 100m<sup>2</sup>, the design of which will be submitted with the Open Space Plan at the subdivision stage of the approvals process.
- Policy 7.5.2.a Two neighbourhood nodes each approximately one acre in size will be constructed.
- Policy 7.5.2.b The exact size and scope of the neighbourhood cores will be detailed in the Open Space Plan at the subdivision stage of the development approval process.
- Policy 7.5.3.a A detailed Open Space Plan including landscaping and trail plans will be provided to the satisfaction of the Municipality at the subdivision stage of the development approvals process.
- Policy 7.5.3.b Municipal Reserve will be provided pursuant to the provisions of the Municipal Government Act.
- Policy 7.5.3.c A portion of the open space equivalent to ten percent of the project lands will be dedicated as Municipal Reserve with the balance of open space dedicated as Public Utility Lot (PUL) or protected as community lands.
- Policy 7.5.3.d Municipal Reserve and PUL will be owned and maintained by the Municipality, while community lands will be owned and maintained by the Community Association.
- Policy 7.5.3.e Provision will be made for maintenance and upkeep of community owned open spaces through a Community Association established by the developer.
- Policy 7.5.3.f Open spaces will be designed to be sustainable, using durable pathway materials and plantings that are native to the area and drought tolerant.
- Policy 7.5.3.g Areas of open space that are designated as natural parks or community pasture lands will be outlined in the Open Space Plan.
- Policy 7.5.3.h Grazing by horses will be permitted on community pasture lands, but limited to maintain the integrity of the pasturelands.
- Policy 7.5.3.i Parks will vary in size from small pocket parks to large sporting fields in accordance with municipal standards.
- Policy 7.5.3.j Recreational parks and fields will be connected by a pedestrian network.
- Policy 7.5.3.k A pathway system will be established within the system of greenways, some of the pathways will be designated for pedestrians only, while others will be built to accommodate bicycle and equestrian traffic.

- Policy 7.5.3.1 The design of the pathway system will be included in the Open Space Plan to be provided at the subdivision stage of the development approval process.
- Policy 7.6.1.a In order to create an effective pedestrian network, sidewalks will be constructed along residential streets. The design and location of these will be specified at the subdivision stage of the development approval process.
- Policy 7.6.2.a Access to Delacour Country Village will be designed in accordance with Alberta Transportation and M.D. of Rocky View standards.
- Policy 7.6.2.b Development shall satisfy Alberta Transportation requirements for the protection of the right of ways for Highway 564 and Highway 791 as currently designated.
- Policy 7.6.2.c A formal TIA will be initiated following approval of the Conceptual Scheme.

  The TIA and any resulting design alterations will be submitted at the redesignation stage of the approval process.
- Policy 7.6.2.d The developer shall provide lands required for intersectional upgrades as a condition of subdivision.
- Policy 7.6.2.e The developer will enter into an agreement with the MD of Rocky View regarding a Transportation Off-Site Levy as part of the development agreement.
- Policy 7.6.2.f Development of the Village will be staged in accordance with improvements to regional roadways to accommodate traffic to and from the development.
- Policy 7.6.3.a The developer will enter into a development agreement with the M.D. of Rocky View regarding construction of internal roadways.
- Policy 7.6.3.b Design of road sections will meet M.D. of Rocky View Servicing Standards.
- Policy 7.6.3.c The developer will provide and maintain appropriate emergency vehicle access in accordance with Municipal standards.
- Policy 7.6.4.a In order to ensure safety traffic calming measures will be implemented in and adjacent to the development.
- Policy 7.6.5.a Areas will be designated to accommodate shuttle bus stops throughout the community.
- Policy 7.6.5.b Options for a potential commuter rail service will be explored and results submitted at the subdivision stage of the approval process.
- Policy 7.7.a The Developer will facilitate utility service connections for community members in the existing hamlet and lands adjacent to the plan area for cost.
- Policy 7.7.1.a Treated potable water will be delivered to the site from a private licensed water treatment facility to be constructed on adjacent lands owned by the developer.

- Policy 7.7.1.b Treated potable water will be delivered via an underground piped system for metered domestic use.
- Policy 7.7.1.c Water conservation measures for the Village will be outlined in detail in the Best Management Practices document to be submitted at the subdivision stage of the approvals process.
- Policy 7.7.2.a Waste water will be collected via conventional buried pipe system.
- Policy 7.7.2.b There are two options for wastewater treatment:
  - Option a: Wastewater is transported through a lift station and forced main to the Rocky View Waste Water Transmission Line.
  - Option b: Wastewater is treated at a licensed private onsite treatment facility to be built on adjacent lands.
- Policy 7.7.2.c Provision of a finalized plan for waste water treatment to the satisfaction of the MD of Rocky View will be a condition of approval for subdivision.
- Policy 7.7.2.d A portion of the wastewater produced by the proposed development may be diverted to an onsite alternative treatment facility that will be operated as a pilot project.
- Policy 7.7.3.a Shallow utilities shall be provided at the expense of the developer within appropriate rights-of-way to be established at the subdivision stage of the approval process.
- Policy 7.7.3.b Alternative energy supply options for the Village will be explored and proposals submitted at the subdivision stage of the approval process.
- Policy 7.7.4.a Detailed storm water management and harvesting plans for Delacour Country Village will be outlined in the Best Management Practices document to be submitted at the subdivision phase of the development approval process.
- Policy 7.7.4.b The storm water management and harvesting plans will be prepared using Low Impact Design (LID) Principles.
- Policy 7.7.4.c The storm water management plan will be prepared in accordance with Alberta Environment's Best Management Practices and with the MD of Rocky View's Servicing Standards for Subdivision and Road Construction.
- Policy 7.7.4.d Storm water management ponds and facilities will be located in Public Utility Lots and maintained and operated by a contractor hired by the community association.
- Policy 7.7.5.a A detailed Waste Management Plan will be outlined in the Best Management Practices to be submitted at the subdivision stage of the approvals process.
- Policy 7.7.5.b Solid waste handling will be contracted to a solid waste disposal service through the community association.

- Policy 7.7.5.c A Deferred Servicing Agreement (DSA) will be registered against each individual title describing the land owner's obligation for participation in a communal solid waste handling program.
- Policy 7.7.5.d The reduction of solid waste will be encouraged in the proposed village through education, facilitating recycling and composting and by limiting the amount of solid waste that will be collected.
- Policy 7.8.1.a A school site in the will be allocated in the south-east corner of the site to provide for the future construction of a school, subject to approval by the Rocky View School Division and the Municipality.
- Policy 7.8.1.b Design of the school site will be done in consultation with the Rocky View School Division and in accordance with their standards.
- Policy 7.8.1.c The school site will be dedicated as part of the Municipal Reserve dedication at the subdivision stage of the approval process.
- Policy 7.8.2.a A 6.5 ac site in the southern portion of the site will be allocated for the future construction of a fire hall and/or municipal building.
- Policy 7.8.2.b The fire station / municipal site will be dedicated as MR at the subdivision stage of the approvals process.
- Policy 7.8.2.c The developer will endeavour to collaborate with the Municipal District, the health region and emergency service providers in the provision of facilities related to emergency services.
- Policy 7.9.a A detailed document outlining Best Management Practices for Delacour Country Village will be submitted at the subdivision stage of the development approval process.
- Policy 7.9.b A detailed document outlining Design Guidelines for residential and commercial buildings in Delacour Country Village will be submitted at the subdivision stage of the development approval process.
- Policy 7.9.c The Design guidelines will include sustainable design requirements for residential and commercial buildings.
- Policy 7.9.d Delacour Country Village will implement a Dark Sky Policy which will be outlined in detail in the Design Guidelines document.
- Policy 7.9.e The Design guidelines will include acceptable construction practices for residential and commercial buildings.
- Policy 7.9.f Development standards, construction practices and architectural guidelines described in the Best Management Practices and Design Guidelines documents will be registered against the title of all properties and shall be implemented by the developer and/or the Community Association.
- Policy 7.10.a Development will be in four phases conceptually illustrated in Figure 17.

- Policy 7.10.b Each of the four phases will be further divided into manageable blocks of development of a size yet to be determined.
- Policy 7.10.c The development of servicing and utilities including water, waste water and storm water management will be in phases that correspond to the development phases.
- Policy 7.10.1.a Phase One of the development will encompass approximately 95 acres as illustrated in Figure 17 Development Phasing Concept.
- Policy 7.10.1.b Phase One will encompass no more than 382 residential units.
- Policy 7.10.2.a Phase Two of the development will encompass approximately 67 acres as illustrated in Figure 17 Development Phasing Concept.
- Policy 7.10.2.b Phase Two will encompass no more than 421 residential units.