# Introduction

A multi-purpose transportation/utility corridor (TUC) has been designated within Strathcona County to accommodate crude oil pipelines, natural gas pipelines, product pipelines, water lines, wastewater mains, telecommunication sites, a road network and other utilities. Through the provincial designation of this corridor, the fragmentation of land is minimized and the integrity of the commodities transported within the corridor is maintained. Additional transportation/utility corridors, including a hydrocarbon pipeline corridor have been identified near the industrial developments in the northern portion of the County as well as adjacent to the Sherwood Park Urban Service Area. In 2005, Strathcona County distributed 31 million litres of water per day, and provided over 10 million litres of wastewater service per day.

Utility networks shall be incorporated into future growth areas. Policies support infill development in existing neighbourhoods to promote efficient use of the utility and to lower costs for services. Strathcona County will ensure that where possible, all residents within the County are provided with a reliable level of municipal services that are economically, socially and environmentally viable. The County will be supportive in introducing advanced technology relative to utility service delivery for its residents.

### Objectives

Strathcona County's utility systems objectives are to:

- 1) Promote the safe, efficient and economical development of utilities in Strathcona County and the Alberta Capital Region;
- 2) Maintain public health and enhance environmental integrity through the provision of quality services;
- 3) Provide a reliable water supply to County residents, businesses, industries and other customers where possible;
- 4) Where feasible, manage stormwater to minimize flood damage, traffic hazards, aesthetic, physical, chemical and biological impacts to receiving watercourses during a storm event, of a magnitude greater than that for which the primary or minor storm system is designed;
- 5) Maintain and enhance the integrity of utility/pipeline corridors to minimize the fragmentation of lands and to facilitate the development of compatible land uses;
- 6) Continue to reduce the amount of solid waste going into landfills by encouraging recycling programs in residences, businesses and industry; and
- 7) Promote alternative utilities such as innovative heating and energy systems (e.g. ground source heating).
- 8) Work with other municipalities, levels of government and service providers to improve efficiencies and minimize infrastructure costs. (Bylaw 42-2012)

## Policies

#### General

Strathcona County will:

- 16.1 Encourage and support research and technological enhancements to provide for safe, accessible, efficient and economical infrastructure development and operations;
- 16.2 Work with surrounding municipalities and utility companies to ensure integrated utility corridors are created and maintained;
- 16.3 Support the rationalization and development of pipeline/utility corridors in consultation with industry, utility companies, federal, provincial and municipal governments which:
  - a) Maintain and/or enhance the integrity of the existing pipeline/utility network;
  - b) Mitigate or minimize negative environmental effects;
  - c) Minimize existing and potential land use conflicts including land fragmentation;
  - d) Do not preclude future local or regional development opportunities; and
  - e) May parallel existing or future transportation systems.
- 16.4 Use pipeline/utility corridors as multiple use corridors to accommodate oil, natural gas, municipal utilities, electrical transmission lines, communications infrastructure, and pedestrian linkages;
- 16.4a Encourage that regional corridors and infrastructure as identified in the Capital Region Growth Plan will be integrated into common corridors wherever possible in order to protect these lands for their intended purpose; (Bylaw 42-2012)
- 16.5 Require the removal of the infrastructure associated with abandoned utilities, pipelines and well sites, as well as the rehabilitation of these areas once no longer utilized;
- 16.6 Improve information, education and communication programs relating to utility systems and their associated environmental requirements;
- 16.7 Reduce dependence upon fossil fuels by promoting utility facilities that employ renewable energy sources (eg: district energy or geothermal systems);
- 16.8 Decrease dependence upon chemicals and synthetic substances by promoting treatment facilities that use design approaches and regulatory systems that focus on pollution prevention, re-use and recycling; and
- 16.9 Ensure that utility activities do not encroach upon environmentally sensitive areas, where possible.

#### Water Service

Strathcona County will:

- 16.10 Investigate the feasibility of providing the owners of existing rural residences located in the Strathcona County Rural Water Service Area, with the opportunity to obtain piped water service on a full cost recovery basis;
- 16.11 Require new developments in the Urban Service Areas and new country residential developments in the Country Residential Policy Area to connect to the municipal water system, unless otherwise stated in the Country Residential Area Concept Plan; (Bylaw 57-2011)

- 16.12 Promote appropriate infill development to lower the costs for new and existing residences connecting to the County water system;
- 16.13 Investigate the feasibility of providing basic water service to hamlets which presently do not have community water supply systems;
- 16.14 Continue to support a regional approach for water demand management and the purchase of water at reasonable rates for County customers;
- 16.15 Monitor developments near water bodies that may affect the County's water supply;
- 16.16 Encourage water conservation by implementing programs that include water restrictions; and
- 16.17 Facilitate with Provincial agencies, the implementation of surface runoff management methods that address water quality issues.

#### Wastewater Service

Strathcona County will:

- 16.18 Require new developments in the Urban Service Area and new country residential developments in the Country Residential Policy Area to connect to existing municipal wastewater service systems, unless otherwise stated in the Country Residential Area Concept Plan; (Bylaw 57-2011)
- 16.19 Promote appropriate infill development to lower the costs for new and existing residences connecting to the County wastewater system;
- 16.20 Continue to cooperate in joint wastewater system planning, with the Capital Region Sewage Commission and the City of Edmonton;
- 16.21 Cooperate with the Alberta Capital Region Wastewater Commission in establishing a cost effective system, for controlling plant bypasses or overflows at the Regional Plant;
- 16.22 Promote gray-water reuse systems for industry and other applications; and
- 16.23 Seek support for the Infiltration/Inflow Reduction Program to reduce the amount of stormwater entering the wastewater system in the Urban Service Area and the Hamlets serviced by gravity sewers.

#### **Shallow Utilities and Communication Facilities**

- 16.24 Support the development of utility facilities that provide technological advances for residents;
- 16.25 Ensure developers co-ordinate with shallow utility companies, on servicing capacity in new developments;
- 16.26 Require new developments to provide the extension of other utility services such as gas, electrical and telecommunication lines in the Urban Service Area;
- 16.27 Support the extension of communication services into the Rural Service Area subject to review by the Approving Authority on location considerations;

- 16.28 Promote the introduction or extension of wireless communication facilities that consider good planning and design; that will have the least impact on the natural environment; and the least visual impact on nearby residents;
- 16.29 Work with Industry Canada to provide policies for locating communication facilities;
- 16.30 Encourage co-location of communication facilities; and
- 16.31 Require a public consultation process with the development authority to deal with local community concerns regarding the location of wireless communication facilities, as they are federally regulated.

#### **Stormwater Management**

Strathcona County will:

- 16.32 Continue to require a stormwater management plan for new developments;
- 16.33 Support the preparation of floodplain mapping for all creeks in the County to provide information needed to avoid development in the floodplains;
- 16.34 Prepare Master Drainage Plans for watersheds where development is actively proceeding or where significant natural or man-made land use changes are occurring, or are contemplated in the near future. More detailed drainage plans shall be prepared in conjunction with area concept plans, area structure plans and area redevelopment plans;
- 16.35 Recognize the importance of natural wetlands in the hydrology of a rural watershed and the existing natural habitat. These natural wetlands must be conserved or equivalent reconstructed wetlands developed, to the satisfaction of all Approving Authorities;
- 16.36 Continue to seek practical, innovative methods to enhance the quality of the stormwater in the Urban Service Area stormwater management facilities and monitor downstream impacts on water quality;
- 16.37 Develop stormwater quantity and quality monitoring systems for all creeks and major urban storm sewer outfalls;
- 16.38 Manage stormwater runoff to minimize damage to property which may occur as a result of a natural event;
- 16.39 Educate the development industry about the function and role of stormwater management facilities; and
- 16.40 Ensure that stormwater management facilities are recognized as utilities. See Chapter 9 Parks and Recreation regarding credit for municipal reserves.

#### Solid Waste

Strathcona County will:

- 16.41 Determine locations in advance of need, for new landfill sites;
- 16.42 Update the Solid Waste Management Plan as required;

- 16.43 Continue to encourage the reduction, reuse, and recycling of solid wastes and the development of an effective recycling infrastructure;
- 16.44 Continue to provide residential garbage pick-up in both Sherwood Park and the Rural Service Areas;
- 16.45 Continue to provide accessible waste-management initiatives such as:
  - a) Clear-bag program;
  - b) Large item pick-up program;
  - c) Great Strathcona Exchange;
  - d) Backyard composting program; and
  - e) Recycling stations.
- 16.46 Investigate curb side pick-up costs for recycling in the Sherwood Park Urban Service Area;
- 16.47 Work with surrounding municipalities on the planning and development of an integrated regional solid waste management system;
- 16.48 Promote home composting; and
- 16.49 Identify ways to improve existing landfills as well as increase their life spans.