

## 2.10 MUNICIPAL SERVICES

### *Preamble*

The City of Fredericton owns and operates an excellent system of municipal infrastructure and the quality of the City's services is one of the features that distinguish Fredericton from other communities. The City's water and sanitary sewer systems are recognized as being among the best in the country and the utilities have adopted a strategy that balances the need for new infrastructure with maintaining existing facilities.

Fredericton is the largest community east of Ontario to rely entirely on an underground source of potable water. The Municipality is actively engaged in protecting this critical resource to ensure that adequate water supply of the highest quality is available for community needs.

The City also works with developers, other communities, and contractors to provide high quality wastewater, solid waste and storm water management services. These services are operated to provide high quality service while integrating environmental priorities to protect the City's natural environment through recycling and protection of the City's natural watercourses and features. The City also works with other utility providers to provide power, cable, communication, and natural gas services to residents and businesses.

Fredericton is a "Smart City" and the municipality has assumed responsibility for providing leading edge connectivity to the Internet and communications technology. Through "e-Novations", the City operates a municipal system of high-speed fibre that connects City institutions and businesses to the information highway. The City also is the first municipality in Canada to provide widely available and free wireless connectivity to the Internet through "Fred e-Zone" which provides unparalleled access for Fredericton residents to the Internet.

### 2.10.1 OBJECTIVES

- (1) To provide municipal services that meet the existing and future needs of the community and to maintain acceptable health and environmental standards, including:
  - (a) A water supply of good quality and of sufficient quantity and pressure;
  - (b) A sanitary sewer system including treatment facilities;
  - (c) A storm sewer system including storm water management.
- (2) To provide for solid waste collection and an effective recycling program.
- (3) To ensure that a co-ordinated approach is taken in the planning, upgrading and extension of municipal services and the planning and approval of new development.
- (4) To develop a municipal system of communications infrastructure that contributes to Fredericton's identity as one of Canada's "smart cities".
- (5) To work with other utility providers to provide for the necessary utilities to meet the requirements of City residents and businesses in a manner that minimizes conflicts with other land uses and the environment.

## 2.10.2 POLICIES

### ***General***

- (1) Council shall require that infrastructure costs associated with new subdivisions and in-fill developments are the responsibility of the developer/ property owner.
- (2) Council may require a developer/property owner to contribute towards or assume the full cost of off-site infrastructure upgrading required to facilitate the development proposal.
- (3) Council may, in areas of the City where substantial new urban development is planned, make strategic investment decisions to undertake the development of trunk service infrastructure in order to stimulate development.
- (4) Council shall pursue any available Provincial and/or Federal Government financial assistance in carrying out expansions and improvements to the water, sanitary sewer and storm sewer systems.
- (5) Council shall ensure that deficient components of the water, sanitary sewer, storm sewer systems are replaced and/or upgraded as required.
- (6) Council shall ensure that review of proposed developments includes an assessment of the impacts on the existing municipal infrastructure.
- (7) Council shall prepare and annually update a five year Capital Works Program identifying projected expansions and improvements to municipal infrastructure.
- (8) Council shall utilize the City's trail rights-of-way as utility corridors, where such use is logical and practical.

### ***Water***

- (9) Council shall ensure that a workable emergency water supply plan exists for the City.
- (10) Council shall identify and safeguard a water supply suitable for the City's long term needs.
- (11) Council shall ensure that every effort is made to avoid contamination of the City's ground water and shall:
  - (a) Ensure that appropriate restrictions are imposed in connection with land use activities having potential for contamination;
  - (b) Control activities and chemicals having significant potential for contaminating Fredericton's aquifers;
  - (c) Work with the Province of New Brunswick to establish hazardous goods routes which avoid the recharge area for the south Fredericton aquifer;
  - (d) Actively encourage the relocation of nonconforming and hazardous uses from the recharge area.
- (12) Council may require developers to contribute toward the cost of upgrading necessary infrastructure where fire flows are inadequate for specific developments.

### ***Wastewater***

- (13) Council shall ensure that all wastewater treatment facilities process wastewater in accordance with Department of Environment and Local Government standards.
- (14) Council shall ensure that improvements and expansions are undertaken to wastewater treatment facilities where required to accommodate the growth and development of the City, pursuant to this Plan.
- (15) Council may require developers to contribute toward the cost of upgrading wastewater infrastructure in order to accommodate proposed developments.
- (16) Council shall ensure the approval of new development will be contingent upon available reserve capacity at the appropriate wastewater facility.

### ***Storm Water***

- (17) Council shall prepare and adopt a storm water management plan for the City.
- (18) Council shall protect the water quality of local streams, rivers and significant wetlands by ensuring that:
  - (a) The increase in run-off resulting from development is minimized through the use of storm water retention ponds and other appropriate storm water management techniques;
  - (b) All necessary Provincial approvals, including setback regulations from water courses and significant wetlands, have been obtained prior to the issuance of a building permit for development projects;
  - (c) Periodic monitoring of water quality entering the storm sewer system is undertaken and the appropriate by-law is enforced.
- (19) Storm water retention ponds shall be used wherever possible to minimize erosion and control flooding along natural drainage courses.
- (20) Council shall ensure that the downstream effects on the storm water system will be accounted for in the review of new projects.
- (21) Council may require developers to assume the cost of any necessary surface run-off remediation initiatives to ensure that the impact of storm water generation on natural drainage courses, abutting properties and infrastructure is minimized.
- (22) Council shall require that a lot grading plan be developed in new subdivisions and for in-fill development. Lot grading plans are to be completed to the satisfaction of the Director of Engineering and Public Works prior to registration of the final plan of subdivision..

### ***Unserviced Areas***

- (23) Council shall limit unserviced development to minimize the environmental and health risks and longer term economic costs associated with such development.
- (24) Council shall ensure that the subdivision of land for residential purposes involving five lots or more in areas not provided with City services shall be developed in accordance with the following standards:

- (a) Centralized water, sanitary and storm sewer shall be provided to each lot in the subdivision;
  - (b) Design and construction of the wastewater collection and treatment facilities shall conform to all provincial government requirements;
  - (c) The servicing system shall be subject to the approval of the Director of Engineering and Public Works and shall vest in the City of Fredericton after one year of successful operation;
  - (d) The water supply and distribution systems shall provide water volumes adequate to service the number of lots in the subdivision;
  - (e) Water quality shall satisfy the Canadian drinking water guidelines unless otherwise approved by the Director of Engineering and Public Works;
  - (f) The water and sewer systems shall be designed such that they can be connected to the City's trunk mains when these are extended to the subdivision in question;
  - (g) Land requirements and design capacities of waste water collection and treatment and water facilities shall be subject to the approval of the City;
  - (h) Over-sizing of such facilities may be required in order to service a larger area than that proposed by the subdivision in question and in order to minimize the number of facilities required;
  - (i) The subdivision shall be designed to meet all of the City's normal engineering standards and by-laws;
  - (j) The use of individual water or sewer facilities in such areas shall not be permitted.
- (25) Council shall ensure that the subdivision of land for residential purposes involving four lots or less in areas not provided with City services shall be developed with:
- (a) A minimum individual lot size of 1.6 hectares;
  - (b) Approval from the Department of Health and Wellness for the installation of septic tanks and tile fields.
- (26) Council shall co-operate with and encourage the Department of Health and Wellness to:
- (a) Stringently enforce standards with respect to installation of on-site water supply and waste water treatment systems;
  - (b) Explore the legislation and enforcement of mandatory maintenance of on-site wastewater treatment systems.
- (27) Council shall work with private property owners in unserved areas to extend central services.

***Solid Waste Disposal***

- (28) Council, in recognition that the existing regional landfill site has a limited operational lifespan, shall work with the Fredericton Region Solid Waste Commission and the Department of Environment and Local Government to identify an acceptable site to accommodate the region's long term solid waste disposal needs.
- (29) Council, in an effort to maximize the life span of the Fredericton Regional Landfill, shall:
- (a) Promote the development and implementation of an aggressive recycling program with a greater emphasis on the commercial/ industrial sectors;

- (b) Encourage the development of markets for recycled goods and materials;
  - (c) Encourage reduction, reuse and recovery alternatives.
- (30) Council may work with the Fredericton Region Solid Waste Commission to acquire lands in proximity to the existing landfill to accommodate the future needs of the facility and/or to provide additional buffering from adjacent development.

***Power/Telephone***

- (31) The location of power/telephone wires shall be at the discretion of private developers. Where above ground utilities are to be provided, the following shall apply:
- (a) Power lines and other facilities should generally be located to minimize aesthetic and environmental impacts. A policy of rear lot line servicing for above ground utilities should be implemented, where feasible;
  - (b) Major power utility corridors should avoid, where feasible, important gateways to the City and areas of unique aesthetic and environmental importance.
- (32) Council shall encourage the consolidation of major hydro transmission lines within existing corridors in the City. A public consultation process is recommended when major new utility corridors are being considered.

***Street Lighting***

- (33) Council shall work to provide efficient street lighting that minimizes glare and light pollution.

***Natural Gas***

- (34) Council shall work with the suppliers of natural gas to provide energy to property owners in the City.

***Communications Technology***

- (35) It shall be the policy of Council to ensure that Fredericton benefits from high quality communications infrastructure and maintains its status as one of Canada's "Smart Cities".
- (36) It shall be the policy of Council to provide communications technology through its municipal corporation, e-Novations.
- (37) The City shall maintain a network of fibre to provide internet connectivity for municipal and private applications.
- (38) Council shall endeavor to provide wireless internet connectivity, "wi-fi", to the City's major business areas through the Fred e-Zone initiative.

**2.10.2 PROPOSALS**

***General***

- (1) Council shall prepare master plans to identify and plan for strategic new residential development. Master plans shall include, but not be limited to:
- (a) Required trunk servicing;

- (b) Watershed-based comprehensive storm water management;
- (c) The identification of a collector and arterial road system;
- (d) The identification of potential medium and high density residential areas, and locations for institutional, industrial and commercial development;
- (e) Park and open space planning.

### ***Water***

- (2) It is proposed that Council undertake public education initiatives to encourage the conservation of the City's ground water supply.
- (3) Council shall adopt a system of wellfield protection to ensure that the City's supply of potable water is protected from contamination by restricting inappropriate land uses in close proximity to the City's wells.
- (4) It is proposed that Council consider providing incentives to relocate land uses that may pose a threat to the City's wellfields.
- (5) It is proposed that the City of Fredericton continue to develop a second municipal wellfield in the Queen's Square area to increase the supply of potable water for the City and to provide an alternate source of water.

### ***Storm Water***

- (6) Council may, in areas of the City where substantial new urban development is anticipated, prepare regional storm water management plans to facilitate a collective approach to the management of storm water to reduce costs for private developers and the municipality while improving the treatment and management of storm water.
- (7) Where a regional storm water management plan is adopted by Council, the City may participate in the implementation of the Plan and may require that private developers comply with the management plan.
- (8) It is proposed that Council study the potential of adopting "green" storm water management standards that would permit residential development using non-piped techniques.

### ***Street Lighting***

- (9) In accordance with the City's intention to meet the objectives of the Kyoto Protocol, it is proposed that Council, in co-operation with NB Power, examine ways to reduce energy usage and light pollution attributed to streetlights.
- (10) Council may facilitate the installation of decorative streetlights in residential neighbourhoods at the expense of the developer.

### ***Communications Technology***

- (11) It is proposed that Council consider expanding the fibre “ring” of communications infrastructure where deemed desirable to accommodate further use of the technology by the municipality, residents, and businesses.
- (12) It is proposed that Council consider expanding the City’s wireless network, Fred e-Zone, as opportunities arise, to provide additional access to City residents and businesses.
- (13) The City of Fredericton shall continue to maximize its use of municipal communications technology by developing new uses and applications.
- (14) Council shall investigate the desirability of providing underground conduit in municipal rights-of-way for the provision of communications technology.