

Section 4. INFRASTRUCTURE & TRANSPORTATION

The City’s physical *infrastructure* includes: water and sewage plants and systems; stormwater management; solid waste management; regulation of *individual on-site water and sewage services*; and, utilities such as gas, telecommunications, and electricity.

Providing a system of pedestrian sidewalks, crosswalks and pathways, cycling routes, transit, roads and parking structures and facilities is part of the *infrastructure* that physically supports the City and the achievement of its objectives. The promotion of active modes of travel is also addressed.

These services and facilities, often referred to as the hard services, are the *infrastructure* necessary to allow the City to function safely and efficiently and to support opportunities for further *development*. The City will strive to provide an appropriate range of *infrastructure* at a reasonable cost.

Goal:

To provide municipal infrastructure and co-ordinate utilities and private services in an orderly, environmentally sound, and fiscally prudent manner, in accordance with the policies of this Plan, so that reliable and safe service is provided to sustain the land use and development planned in the City for the term of this Plan. To increase sustainable means of travel and reduce reliance on the automobile, the City will promote a compact form of development within the Urban Boundary having a mix of uses that reduce the need for travel, and will also promote increased densities that are supportive of public transit alternatives. Increasing opportunities for active transportation and improving the maintenance of pedestrian and cycling routes will increase usage, safety and access for all.

4.1 GENERAL POLICIES

- New Development** **4.1.1.** New *development* will proceed only if the City is satisfied that adequate services, roads, and utilities are available, or can be made available, to serve the proposal adequately. In determining the adequacy of servicing, utility systems, or the transportation system, the City will consider not only the proposal, but also the potential for *development* that exists in the same service area.
- Capacity Limitations** **4.1.2.** Limitations in the capacity of service or utility systems or of the transportation system will be recognized as effectively constraining the timing of proposed *development*.
- Development Charges** **4.1.3.** *Development* charges and impost fees are levied by the City to offset the costs associated with servicing new *development*.
- Developer Responsibility** **4.1.4.** Developers are responsible for municipal services (including water, sanitary sewer and stormwater management), roads and other transportation rights-of-way or facilities within a plan of subdivision or condominium, or within a new *development* site until they are assumed by the City.

- Shared Use of Corridors** **4.1.5.** The multiple use or shared use of service and utility corridors and rights-of-way are encouraged to promote compact *development*.
- Legislation & Regulations** **4.1.6.** The City must ensure that all public works are carried out in accordance with the Environmental Protection Act, Ministry of Environment regulations, and any other applicable legislation, regulation or requirement.
- Transportation Master Plan** **4.1.7.** The City intends to maintain a comprehensive Transportation Master Plan, which will project future needs for the City’s transportation system.
- Provincial Highways** **4.1.8.** In addition to all applicable municipal requirements, all *development* located adjacent to provincial highways, and those applications located within the Ministry of Transportation’s area of permit control, are also subject to the requirements and permits of that Ministry.

4.2 MUNICIPAL WATER AND SEWAGE

The provision and operation of *municipal water and sewage services* are the responsibility of the municipality within the *Urban Boundary*, and the existing *Cana municipal water and sewage* system and the existing areas on *partial services* outside the *Urban Boundary*. It is the City’s intent to replace and upgrade older trunk services, expand the treatment capacity of existing water and sewage treatment plants, and extend *municipal water and sewage services* to areas of the City intended to accommodate growth. This must be done in an environmentally sound manner in accordance with the capital works budget. Schedule 6 shows water treatment plants, water storage facilities, water pollution control plants, major pumping stations, and the Cana communal servicing area in Kingston Mills.

Policies:

- Water and Sewage Treatment** **4.2.1.** To accommodate the growth provided by this Plan, the two water treatment systems may be linked, and the expansion of both sewage treatment facilities will be necessary. The City will provide adequate buffers to minimize the impact of these plants on adjacent uses.
- Sanitary Sewage Treatment** **4.2.2.** The City will undertake a level of sanitary sewage treatment to maintain acceptable water quality in Lake Ontario and the St. Lawrence River.
- Disposal of Biosolids or Sludge** **4.2.3.** Any site used for the disposal or drying of biosolids or sludge is subject to the applicable environmental regulations governing separation distances.

- Separate Sanitary and Storm Sewers** **4.2.4.** The City will continue to separate, when feasible, sanitary and storm sewers in areas where combined sewers exist, and to co-ordinate, when possible, a sewer separation program with road reconstruction.
- Pre-treatment** **4.2.5.** The City recommends that industries and institutions pre-treat sewage and dispose properly of chemicals or other hazardous waste in accordance with provincial legislation and regulations, and the municipality will work together with such users on abatement or disposal methods in order to protect the municipal sewage system and the environment.
- Phased Servicing** **4.2.6.** All lands within the *Urban Boundary*, as well as the Future Development Areas on Schedule 2, are planned to have *municipal water and sanitary sewage services*. These services will be provided, in a phased manner, in accordance with the Order of Development policies in Section 2.
- New Private Services Not Allowed in Urban Area** **4.2.7.** No new *development* based on *individual on-site water and sewage services* is permitted within the *Urban Boundary*. Replacements for existing wells or septic tanks are permitted if necessary.
- Limited Individual On-Site Services** **4.2.8.** No new *individual on-site water and sewage services* are permitted on, or in, publicly-held land or rights-of-way.
- Municipal Services Beyond Urban Boundary** **4.2.9.** Municipal services are not planned to be extended beyond the *Urban Boundary* as shown on Schedule 2 within the life of this Plan, unless warranted, following completion of the requirements of Sections 2.4.9 through 2.4.11 inclusive of this Plan.
- 4.2.10.** Permitted *development* beyond the *Urban Boundary* and outside the Future Development Areas may generally proceed by means of *individual on-site water and sewage services* subject to Section 4.4 of this Plan.
- Partial Services Within the Urban Boundary** **4.2.11.** Within the *Urban Boundary*, new *partial services* involving municipal water and *individual on-site sewage services* will be permitted only in areas where existing watermains have adequate distribution capacity and under the following circumstances:
- a.** where a lot service connection can be achieved without requiring a watermain extension and is designed in accordance with City Engineering Standards;
 - b.** for an existing lot of record where the City has determined that a connection is necessary due to health or environmental problems to replace an existing *individual on-site water service*; and,
 - c.** to allow for minimal infilling and rounding out of existing developed areas, provided that:
 - site conditions are suitable for the long term land use and the provision of adequate *individual on-site sewage services*; and,

- any *infill* severance activity is limited, and avoids creating a fragmented lot pattern or isolated lots or water service extensions that may jeopardize orderly future *development*.

**Partial Services
Outside the Urban
Boundary**

4.2.12. Outside the *Urban Boundary*, new *partial services* involving municipal water and an *individual on-site sewage service* will only be permitted in areas where existing watermains have adequate distribution capacity and only under the following circumstances:

- a. where a lot service connection can be achieved without requiring a watermain extension and is designed in accordance with City Engineering Standards;
- b. for an existing lot of record where the City has determined that a connection is necessary due to health or environmental problems to replace an existing *individual on-site water service*; and,
- c. to allow for minimal infilling on vacant lands within existing registered plans of subdivision, provided that site conditions are suitable for the long term use and the provision of *individual on-site sewage services*.

**Public Works
Permitted Outside
the Urban Boundary**

4.2.13. Outside the *Urban Boundary*, existing municipal water services and towers, the Cana communal service area and the Ravensview Water Pollution Control Plant are recognized by this Plan and any public works that are required to maintain these systems are permitted.

4.3 STORMWATER MANAGEMENT

Stormwater management controls the quantity and quality of surface runoff, which reduces the difference in runoff before and after *development*. This is critical to protecting Kingston's *natural heritage system* and avoiding natural hazards of flooding and erosion. Stormwater quality control focuses on removing sediment and pollutants from the stormwater before it leaves the *development* site, since sediments and pollutants may have a wide array of *negative impacts* to the receiving water body.

Policies:

Purpose

4.3.1. Stormwater management techniques must be used in the design and construction of all new *development* to control both the quantity and quality of stormwater runoff. The degree of control will depend on the conditions in the downstream receiving water bodies. This is to minimize the *negative impacts of development* on the downstream aquatic environment.

**Levels of Stormwater
Management**

4.3.2. There are three levels at which stormwater management can be considered:

- a. a *watershed* plan, for any watersheds shown on Schedule 6, providing overall management objectives and targets which can be incorporated into this Plan;
- b. a master drainage plan prepared on a subwatershed basis and incorporated into secondary plans or amendments to this Plan; and,
- c. a stormwater management report prepared for each residential subdivision, or in support of a commercial/industrial/institutional site plan. It is the basis for detailed construction plans for control facilities and best management techniques.

Objectives

- 4.3.3.** The City requires that stormwater management be adequately studied and appropriately addressed in any *development* proposal in order to:
- a. ensure flood elevation or velocities upstream or downstream to the receiving waterbody are not increased, or are properly mitigated;
 - b. maintain base flow in receiving watercourses;
 - c. ensure erosion is not increased and sediment is not increased in the water column or the bed of the receiving waterbody during and after construction;
 - d. meet water quantity flow targets and water quality sediment, nutrient, bacterial, chemical and temperature targets, where identified;
 - e. ensure *fish habitat, wetlands* or other environmental features are not degraded; and,
 - f. increase, where possible, groundwater recharge in a manner that will not contaminate the resource.

Quality and Quantity of Water

- 4.3.4.** For urban *infill development* projects, the City will require the preparation of a stormwater management report to address the impacts of additional lot coverage or new uses of the site on the *quality and quantity of water*. Proponents must endeavour to improve the management of stormwater from the existing *development* areas.

4.4 INDIVIDUAL ON-SITE SERVICES

Development beyond the *Urban Boundary* and outside the Future Development Areas will be primarily based on private wells and private septic systems, referred to as *individual on-site water and sewage services*, and will only be permitted if conditions are adequate to support such systems.

Policies:

Groundwater Supply Assessment

- 4.4.1.** A Groundwater Supply Assessment in accordance with Ministry of Environment guidelines will be required for any *development* that is proposed for an area without municipal services.

- Groundwater Constraints** **4.4.2.** Broad areas outside the *Urban Boundary* have constraints to *development* on *individual on-site water and sewage services*, due to issues including limited well yields, high mineral levels and susceptibility to groundwater contamination. Groundwater constraint mapping is shown in Schedule 11. *Development* may be limited in areas shown on Schedule 11 with moderate to very high sensitivity for groundwater, pending the results of applicable studies.
- Hydrogeological Study Required** **4.4.3.** The City may request that a hydrogeological study be undertaken in any location and will provide guidance on the scope of the study. The hydrogeological study must be submitted to the City for approval and must satisfy provincial regulations and municipal policies as amended. Where a property has been identified with more than one level of constraint due to groundwater sensitivity, the more stringent level must apply.
- Terrain Suitability** **4.4.4.** A terrain analysis report for on-site wastewater treatment may also be required prior to the approval of any *development* application.
- Source Water Protection** **4.4.5.** The City is cooperating with the Cataraqui Region Conservation Authority in developing a Source Water Protection Plan. It is anticipated that this Plan will be amended to include the recommendations of the Source Water Protection Plan, when it has been completed and endorsed by Council.

4.5 UTILITIES

Kingston Hydro provides electric services, and Utilities Kingston provides gas services to the former City and portions of the former Township of Pittsburgh. Fibre optic services are provided by Utilities Kingston throughout the municipality. The balance of the former Townships of Pittsburgh and Kingston are provided with utilities from Hydro One, Eastern Ontario Power Inc. and Union Gas. Also, private companies provide telecommunication services, including telephone, internet, fibre optic, cable and satellite television services.

Policies:

- City Provision** **4.5.1.** The City will provide utilities under its direct jurisdiction to new *development* in a timely and cost-effective manner, and will co-ordinate their installation and improvement with providers of other utilities or telecommunications *infrastructure* where possible.
- Underground Installation** **4.5.2.** For new *development*, the City will encourage the underground installation of facilities where feasible, and will strive to minimize the impact of transmission lines, towers or other structures.
- Energy Generation** **4.5.3.** Energy generation is addressed in Section 6.2 of this Plan.

4.6 TRANSPORTATION

The transportation system consists of many modes of travel (including pedestrian modes, cycling, buses, rail, air, ferry, cars and trucks) and provides for the safe, efficient, and convenient movement of people and goods throughout the City, and between the City and more distant destinations. The City is committed to promoting transportation alternatives to the automobile that increase efficiency of travel, reduce energy consumption and pollution and enhance the *sustainability* of the City. A strong relationship exists between the transportation system and the various forms of *development* within the community. In order to accommodate future *development* in accordance with this Plan, future road widenings as set out in Table 1 will be protected, existing *infrastructure* will be improved, and multi-modal means of transportation are supported. Active transportation is encouraged for all residents, young and old.

The expansion of the City’s transportation system will be carried out in a systematic, logical and timely fashion to maximize the use of new facilities and minimize associated costs and disruption.

Goal:

To promote an integrated and diverse transportation system for the City through the encouragement of land use patterns, density, road and site design that supports walking, cycling, and transit, as well as commercial traffic, inter-regional travel, and private vehicles. It is the intent of the transportation policies that the system is safe, convenient, affordable, efficient and energy-conserving, while minimizing environmental impacts. This will ensure that community resources are accessible to all residents and the City’s health and sustainability are fostered.

Policies:

Strategic Direction

4.6.1. The Council-endorsed Strategic Direction “A New Direction” in the Kingston Transportation Master Plan (2004), as described in Section 2.5.10 of this Plan, is intended to foster *sustainability* within the City and to reduce reliance on the automobile by satisfying travel demand through the efficient use of the existing *infrastructure*, and by providing the facilities and services to encourage walking, cycling and transit as priority modes, before expanding the City’s road *infrastructure*.

Transportation Demand Management

4.6.2. The City recognizes the role of *transportation demand management* in promoting its Strategic Direction by making vehicular travel more sustainable, making more efficient use of the existing transportation *infrastructure*, and increasing transit use. Measures such as flexible work hours, and priority parking for car pool vehicles, can help to reduce peak travel volumes, which then optimize traffic capacity on the existing road *infrastructure*.

Pedestrian Facilities **4.6.3.** The reconstruction of existing roads and the construction of new roads within *settlement areas* are to include safe and convenient pedestrian facilities, such as sidewalks, corner ramps, pedestrian signals and crosswalks. The enhancement of roadways, sidewalks, sidewalk safety barriers, and transit facilities to maximize mobility and access for the physically challenged will be required in all construction and reconstruction projects.

Sidewalks Required **4.6.4.** On new roads and on reconstructed roads, sidewalks are to be provided where feasible on both sides of urban arterial and collector roads running adjacent to developed lands. On new or reconstructed local roads, sidewalks must be installed on at least one side of the road. Sidewalk safety barriers on structures such as bridges are recommended.

Improved Connections **4.6.5.** Sidewalks and walkways must be designed to provide direct access from the interior of neighbourhoods to transit locations, and are to be designed to connect commercial properties in order to encourage pedestrian movement.

Pedestrian Friendly Streetscapes **4.6.6.** The City supports the development of convenient and appealing streetscapes through such measures as providing wide sidewalks, street furniture, trees and amenities, including convenient transit stops.

4.6.7. The City supports the location of street front retail and personal service shops adjacent to the sidewalk in commercial areas.

4.6.8. Improving connections between schools, *recreational* facilities, shopping areas, and *areas of employment* is promoted.

Cycling Routes and Pathways **4.6.9.** It is the intent of the City to designate and develop bicycle routes and pathways on City streets, walkways, and in public open space areas to encourage cyclists to travel within the City. Such routes and pathways will be generally developed using the broad framework of routes shown on Schedule 5, and on the basis of the following principles:

- a.** the route system is continuous, well-signed and clearly visible to the public;
- b.** the route system provides links between major activity areas to encourage usage;
- c.** the system is designed to minimize conflicts between motorized and non-motorized travel, and between cyclists and pedestrians;
- d.** access points to any off-street pathway system are well-marked and clearly visible; and,
- e.** any cycling facilities are designed with regard to safety, emergency access, and maintenance functions.

Walking, Cycling, and Transit – Intermodal Improvements **4.6.10.** Improving connections between the active modes of walking, cycling and transit will be required through such means as improved pedestrian amenities, connected on and off street cycling routes, bicycle

storage, improved transit routing and amenities, and such site plan control matters as locating building entrances near sidewalks and transit stops, and providing weather protection for pedestrians and transit users.

- Transportation Impact Study Requirements** **4.6.11.** The City may require the proponent of any *development* to prepare a traffic impact analysis or a transportation study to the satisfaction of the City to address the requirements of Sections 4.6.1 through 4.6.10, and to assess the influence of *development* on pedestrian and cyclist movement and vehicular flows and traffic volumes. Any such analyses will assess the impact of the proposal on the roadways and, if needed, will recommend improvements necessary to accommodate the proposal, to discourage excessive through traffic, provide traffic calming measures, and maintain satisfactory service levels for all modes of transportation on public streets. The City may determine that such analyses may be subject to a peer review at the cost of the proponent.
- Supports for Cycling** **4.6.12.** The City supports the integration of cycling and transit with the Rack'n'Roll program (which transports bicycles on buses), including the provision of adequate and secure bicycle parking at main commercial, employment and institutional *developments*.
- Inter-modal Coordination** **4.6.13.** The City supports improvements to an inter-modal transportation system to facilitate the integration of rail, inter-City bus, taxi, municipal transit service, park'n'ride facilities and active modes of travel.
- Transit** **4.6.14.** The City supports increased transit use by providing full-service, accessible transit, comprising high-frequency peak period service and extended off-peak service.
- Traffic Flow Controls** **4.6.15.** Traffic flows will be controlled within residential, shopping and employment areas through traffic management, traffic calming, design features, and other techniques.
- Road Standards, Design & Implementation** **4.6.16.** The road network is a key component of the transportation system. It is organized into the following hierarchy, which is shown on Schedule 4:
- a.** Freeways:
 - serve high volumes of long distance, inter-urban traffic;
 - have higher speed limits;
 - have limited access locations; and,
 - provide no direct access to abutting properties.
 - b.** Arterial Roads:
 - serve relatively high volumes of intra-urban traffic at medium to moderately high speeds;
 - link freeways to collector roads;
 - have limited access from abutting properties; and,
 - may have restrictions on stopping, parking and loading during peak hours.

- c. Collector Roads:
 - serve medium volumes of intra-urban traffic at low to medium speeds;
 - link freeways and arterial roads to the local road system;
 - permit full access to abutting properties; and,
 - have few parking restrictions during peak hours.
- d. Local Roads:
 - serve low volumes of traffic at low speeds;
 - provide access to collector road system from properties;
 - permit full access to abutting properties, subject to driveway regulations; and,
 - have few parking restrictions during peak hours.

Road Rights-of-Way **4.6.17.** Planned road rights-of-way (or road allowance) widths are indicated on Table 1 for new roads and for existing roads, where widening is planned. Adequate road rights-of-way must be protected to meet future needs.

Road Widening **4.6.18.** Additional widening beyond that shown in Table 1 may be required in the following circumstances:

- a. on approaches to major intersections, as required for channelization, extra turning lanes, or traffic control devices, an additional 20 metres of width for that portion of the road allowance within 60 metres of the intersection;
- b. at major intersections to provide for a 30 metre daylight triangle;
- c. along arterial roads to accommodate auxiliary turning lanes for sites which are high traffic generators;
- d. for transit priority lanes; and,
- e. in proximity to bridges or grade separations.

Acquisition of Road Widening **4.6.19.** Where additional road widening is required to meet the future needs of this Plan, the City will strive to acquire equal amounts of land on each side of the existing road allowance, wherever feasible. It may be necessary for more than half of the widening to occur on one side of the road due to topography, existing or proposed *development, infrastructure,* or other constraints.

4.6.20. Road widenings and new road rights-of-way will be obtained in accordance with the Planning Act and this Plan in a fair, equitable and reasonable manner.

4.6.21. The City may require the extension of a road or the dedication of additional road right-of-way width in accordance with Table 1 as a condition of approval of a consent, plan of subdivision or condominium, or site plan control review.

- Standard Right-of-Way** **4.6.22.** A 20 metre right-of-way for roadways is needed for emergency vehicle access, snow storage, boulevard, parking, walking and cycling. Therefore, it is the policy to recommend that a 20 metre right-of-way will become the standard for new roads. Only if there are justified circumstances requiring a reduced right-of-way will a lesser width be approved by Council in new subdivisions.
- Barriefield** **4.6.23.** The minimum right-of-way in the historic Barriefield community will be 12 metres.
- Future Development** **4.6.24.** *Development* that could interfere with a proposed road widening or dedication of a future road right-of-way that is specified in this Plan will not be supported by the City and will be prevented wherever possible.
- Dedication of Widenings** **4.6.25.** New *development* requiring planning approval by the City will be requested:
- a. to dedicate any proposed road widening or future right-of-way;
 - b. to provide for adequate pedestrian, cycling and vehicular linkages to the transportation system; and,
 - c. to design sites and buildings to accommodate the components of the transportation system that affect the site, in accordance with the Planning Act and other tools that the City may deem appropriate, including acquisition or other forms of compensation.
- Development Agreements** **4.6.26.** As a condition of *development* approval (to be formalized in a written agreement with the City), a *development* proponent may be required to construct, alter, improve or repair roads and intersections at the proponent’s expense or as a shared expense with the City, or as an expense shared with adjacent property owners.
- Street Trees** **4.6.27.** *Development* proponents may also be required to provide trees in the street boulevard, or in other locations as approved by the City, as a condition of *development* approval.

Table 1 OFFICIAL PLAN ROAD WIDENINGS			
DESIGNATED ROAD	FROM	TO	DESIGNATED WIDTH
Abbey Dawn Rd	Entire Length		20m
Best Chase Rd	South of C.N.R.		20m
Boundary Rd	South of 6 th Concession		20m
Butternut Creek Rd	Entire Length		20m
Canal Dr	Entire Length		20m
Caughey’s Rd	Entire Length		20m
Dane Rd	Entire Length		20m
Gore Rd	Cataraqui River	Gore Lot 3	36.5m
Jarvis Rd	Entire Length		20m

**Table 1
OFFICIAL PLAN ROAD WIDENINGS**

DESIGNATED ROAD	FROM	TO	DESIGNATED WIDTH
Jenson Rd	Entire Length		20m
Leo Lake Rd	Entire Length		20m
McCarey Rd	Entire Length		20m
McCarthy Rd	Entire Length		20m
McClements Rd	Entire Length		20m
McKendry Rd	Entire Length		20m
Mundell Rd	Entire Length		20m
Murray's Rd	Entire Length		20m
Kingston Rd 2 (Hwy 2)	Cataraqui River	Treasure Island	36.5m
Kingston Rd 2 (Hwy 2)	Treasure Island	Easterly City Boundary	30.5m
Kingston Rd 12 (Sunbury Rd)	Hwy 15	Easterly City Boundary	30.5m
Kingston Rd 13 (Sand Hill Rd)	Hwy 15	Easterly City Boundary	30.5m
Kingston Rd 14 (Middle Rd)	Kingston Rd 15	Kingston Rd 2	30.5m
Kingston Rd 15 (Hwy 15)	Kingston Rd 2	Hwy 401	36.5m
Kingston Rd 16 (Joyceville Rd)	Highway 2	Hwy 15	30.5m
Kingston Rd 21 (Kingston Mills Rd)	Rideau Canal	Hwy 15	30.5m
Bath Rd	Entire Length		42m
Sir John A. Macdonald Bv	King St	Princess St	36.6m
Sir John A. Macdonald Bv	Princess St	John Counter Blvd	29.0 – 40m
Sir John A. Macdonald Bv	John Counter Bv	Hwy 401	41.5 – 95.0m
Brock St	Alfred St	Sir John A. Macdonald Bv	20.1m
Concession St	West Bound Leroy Grant Dr	Princess St	39.6m
John Counter Bv	Division St	Princess St	30.5m
Division St	Concession St	John Counter Bv	26.2m
Division St	John Counter Bv	Hwy 401	45.7m
Johnson St	Palace Rd	Portsmouth Ave	26.2m
King St West	Portsmouth Av	Little Cataraqui Creek	26.2m
Montreal St	Railway St	Hwy 401	30.5m
Princess St	Lake Ontario	Westerly Limit of City	20 – 25m
Dalton Ave	Division St	Binnington Ct	30.5m
St. Remy Pl	Dalton Av	Termination	20m
Midland Av	Gardiners Rd	Princess St	20m
Montreal St	Stephen St	Railway St	26.2m
Palace Rd	Johnson St	Bath Rd	20.1m
Portsmouth Av	King St West	Bath Rd	26.2m
Portsmouth Av	Bath Rd	John Counter Bv	20.1m
Queen Mary Rd	Johnson St	Bath Rd	26.2m
Union St	King St West	Barrie St	20.1m
Arterial streets, not listed above			25 – 35 m
Collector streets, not listed above			20 – 25m
Local streets			20.0m
Other streets			20.0m

Street Landscaping

4.6.28. The City will augment its program of landscaping and street tree planting and replacement in many parts of the City to enhance the streetscape, particularly within the *Urban Boundary*.

- Site Reduction Due to Widening** **4.6.29.** Where the size of a property has been reduced due to a required road widening or improvement, the City may recognize the property as continuing to meet the standards of the zoning by-law through approval of a minor variance or rezoning, or as provided for in the general provisions of the applicable zoning by-law.
- Arterial Roads** **4.6.30.** The City will protect the carrying capacity of arterial roads by:
- a. restricting the number of intersecting streets and driveways;
 - b. encouraging internal access between adjacent commercial and/or residential *development* so as to limit the number of required road access points and encouraging a shared driveway access;
 - c. controlling access locations by means of a 0.3 metre reserve along roadways, except at approved driveway locations;
 - d. encouraging provision of local service roads or local “eyebrow” roads that support the arterial road by intersecting it at a perpendicular angle, and then running parallel to it on a loop connection with a landscaped boulevard separation and with lots facing the arterial road but limited to access from the loop;
 - e. reversing the frontages on lots located adjacent to arterial roads, in limited circumstances where existing lots cannot accommodate a local service or “eyebrow” road, recognizing that this is an option that isolates the arterial road, disconnects the road from the adjacent land use and raises safety concerns;
 - f. control of land use and access locations near major intersections, interchanges, at-grade rail crossings, grade-separated rail crossings, and bridge approaches;
 - g. designing cycling facilities as an integral component of the carrying capacity of the arterial road; and,
 - h. use of site plan control review.
- Road Construction and Maintenance** **4.6.31.** Road construction and maintenance methods must be reviewed on a regular basis, and where needed, a pavement management system will determine maintenance requirements and priorities.
- Truck Traffic** **4.6.32.** The City will minimize the *adverse effects* of truck traffic on the functioning of roadways and on the amenity of residential areas by:
- a. defining truck routes in the City and prohibiting truck movements on streets in residential areas, wherever warranted;
 - b. limiting hours of delivery in areas of congested traffic;
 - c. situating land uses that are likely to generate high levels of truck traffic to locations with suitable road and access conditions, having regard to compatibility with permitted uses;
 - d. encouraging trucks that provide service to industrial areas to travel within such areas and not through residential or commercial areas;
 - e. restricting home occupations that would generate truck activity;

- f. restricting the type of commercial vehicles, including trucks, that may be kept in a residential zone; and,
- g. including loading area requirements within appropriate zone categories for the Employment Area, Commercial, higher density Residential, and Institutional land use designations.

Capital Budget

4.6.33. The extension and improvement of City streets will be carried out in accordance with capital budget provisions, and wherever possible, must be coordinated with other public works including extensions or improvements to the water, sewer or gas distribution systems.

Level of Service

4.6.34. A high level of service that meets the needs of users must be maintained for the City's transportation system, including sidewalks, cycling routes, buses, roads and traffic signals.

Major Road Extensions

4.6.35. The City plans the following major road extensions, as referenced in the 2004 Development Charges By-law, subject to any necessary *Environmental Assessment Studies*, (not listed in priority):

- a. John Counter Boulevard widening from two to four lanes from Princess Street to Division Street;
- b. John Counter Boulevard Grade Separation;
- c. Centennial Drive new construction of a four lane road from Gardiners Road (southerly) to Princess Street;
- d. Third Crossing new construction of a two lane bridge extending from John Counter Boulevard to Gore Road;
- e. Wellington Street new construction as a two lane road from Bay Street to Montreal Street;
- f. Division Street widening from four to six lanes from John Counter Boulevard to Highway 401;
- g. Mid-Block Arterial new construction of a two lane road from Montreal Street to John Counter Boulevard;
- h. Highway 15 intersection/capacity improvements from Highway 2 to Highway 401;
- i. Gardiners Road widening from four to six lanes from Centennial Drive to North Ramp of Highway 401;
- j. City-wide intersection/corridor improvements;
- k. Cataraqui Woods Drive new construction of a two lane road from Sydenham Road to Princess Street;
- l. Leroy Grant Drive new construction of a two lane road from Elliott Avenue to Concession Street;
- m. Days Road new construction to align Gardiners Road and Days Road (taper from four to two lanes);
- n. John Counter Boulevard new construction from Division Street to Third Crossing (taper from four to two lanes);

- o. Princess Street Traffic Operations; and,
- p. Bayridge Drive new construction of a two lane road from Cataraqui Woods Drive to Creekford Road.

Buffering for Future Road Design

4.6.36. Adequate buffering in the form of berming, landscaping, fencing, and tree planting will be required as part of any future road design to minimize the potential impacts of any new road extension or road improvement. Native species of trees are also encouraged as a means to increase tree coverage.

Transit Service

4.6.37. The City supports the maintenance and expansion of a transit system that provides safe, convenient, affordable, efficient, and cost-effective service to all residents within the *Urban Boundary*, including those with disabilities. Para-transit may be made available in the Rural Area dependent on budget and demand for the service.

4.6.38. Specific means of encouraging transit use include, but are not limited to:

- a. the careful location, design and site planning of high intensity uses;
- b. the appropriate design of roads and intersections to accommodate transit vehicles;
- c. adequate and appropriate bus stops, which may include shelters, benches, and terminal transfer points; and,
- d. planning for transit stops within 300 metres of major activity centres, and 95 per cent of urban residences.

Bus Service

4.6.39. In conjunction with Section 4.6.13 of this Plan, the City supports continued bus passenger and freight service to and from the region and intends to work with private carriers in any consideration of the location, relocation or expansion of bus terminal facilities, to maintain a convenient location to residents and visitors.

Air Service

4.6.40. The City encourages the maintenance of air passenger and freight service to and from the City and will continue to upgrade facilities and level of service at Norman Rogers Airport. It is expected that all aircraft activity will focus at this location.

Taxi Service

4.6.41. The City encourages the operation of a safe, convenient, accessible and affordably priced taxi system, and the continuation of a Taxi Commission.

Ferry Service

4.6.42. The City recognizes the role of the Provincial government in providing ferry service to Wolfe Island, and the role of the County of Frontenac in providing the ferry service to Howe Island. The City encourages the ferry services to provide appropriate vehicle access, and areas for queuing and parking, as well as pedestrian and bicycle access routes that are integrated with the City's transportation system.

4.6.43. The City wishes to be consulted and to participate in the identification, survey, analysis and design of any ferry facility, expansion or alteration to service timing or carrying capacity that may affect the City's transportation system or that may involve land use impacts adjacent to the ferry service facilities.

Rail Service

4.6.44. The City supports the maintenance and expansion of passenger rail and freight service as a long term inter-urban means of travel, and as an alternative to the highway system, through market responsive, convenient and efficient scheduling.

Grade Crossings/Separation

4.6.45. The City supports the improvement of grade crossings and will employ the use of sight triangles or other measures to improve safety. The City supports grade separations of dangerous crossings, particularly on arterial roads.

Abandoned Rail Rights-of-Way

4.6.46. The City supports the acquisition of abandoned rail rights-of-way for public uses, including pedestrian and cycling pathways or roads, and encourages the removal of railway tracks from portions of the right-of-way that are not used.

Parking

4.6.47. It is the intention of this Plan to encourage a balance between providing sufficient parking to address existing or future requirements, and not oversupplying parking to the detriment of public transit usage, cycling or pedestrian traffic.

4.6.48. Parking areas will be provided for any land use in the City as specified by the zoning by-law. Special provisions to accommodate those with disabilities will be provided in all zones.

4.6.49. The City may establish such design, landscaping, and usage policies as are appropriate to provide for the aesthetic and functional relationship of parking lots and structures within the land use system.

4.6.50. New parking lots that are not an *accessory use* to a waterfront park and facility will be prohibited in waterfront areas designated for public access, waterfront pathway or waterfront protected views.

4.6.51. Parking area expansion that displaces open space and landscaping is discouraged. Any parking in public open space areas must be an *accessory use* to the permitted open space use.

Cash-in-Lieu and Alternative Provisions

4.6.52. The City will generally require off-street parking to be provided on-site in accordance with the zoning by-law. However, in certain circumstances, the City may:

- a.** pass a "Cash-in-Lieu" By-law pursuant to the Planning Act and in accordance with Section 9.5.11 of this Plan;

- b. provide alternative parking in accordance with the policies of the Central Business District or Main Street Commercial areas;
- c. establish areas of differentiated parking policies and regulations based on land use characteristics and user requirements; and,
- d. permit shared or reduced parking for uses with *compatible* operating characteristics provided that:
 - shared parking is on the same side of the street on Arterial or Collector roads;
 - buildings that are located close to public transit, are designed to be supportive of transit uses, and are able to demonstrate lower parking need;
 - through a traffic analysis, it can be demonstrated that there is a long term mutual relationship between uses, and that pedestrian movements can be accommodated safely; and,
 - adequate visitor parking is provided.

Municipal Public Works

4.6.53. The City may undertake public works as necessary to develop parking lots, structures, and on-street parking spaces and loading zones designed to augment private off-street facilities.

Partnerships

4.6.54. The City may participate with private enterprise, individual property owners, major institutions or groups such as the Downtown Kingston BIA in planning and developing parking facilities, strategies or studies, and in implementing enforcement programs or implementation programs.

Temporary Parking Lots

4.6.55. Temporary parking lots may be permitted subject to a Temporary Use By-law as established in the Planning Act, and site plan control review.

On-street Parking

4.6.56. On-street parking will be regulated and monitored by the City to allow for safe, convenient and efficient movement of traffic, and to protect the carrying capacity of the road network.

Parking Studies

4.6.57. The City will periodically undertake parking studies to ensure:

- a. that adequate parking is provided, particularly in the Central Business District;
- b. that the carrying capacity of the road network is protected;
- c. that adequate residential parking is available, particularly in older areas of the City;
- d. that on-street parking does not pose a safety hazard or undue nuisance; and,
- e. that parking rates support the strategic direction of the Kingston Transportation Master Plan.

4.6.58. The City intends to undertake special parking studies from time to time to address concerns that arise in a selected area or on an issue basis.

**Front Yard Parking
for New Development**

4.6.59. Front yard parking in residential areas has the potential to affect the visual amenity of the streetscape and the residential character of a neighbourhood by displacing landscaping, open space, outdoor amenity areas, public parking, and drainage patterns.

When new residential *development* is being assessed, the following policies apply:

- a.** new low density *development* or *redevelopment* with at-grade access, such as single-detached houses, semi-detached and row houses, will not have front yard parking except for parking in a driveway leading to a permitted parking space in a garage, side or rear yard; and,
- b.** new medium or high density *development* or *redevelopment* with grade-separated access, such as apartment buildings, mixed use buildings or walk-up apartment buildings, are not permitted to have front yard parking unless it is buffered from the streetscape by distance, landscaping, berming, screening, fencing or similar features.

**Front Yard Parking in
Existing Residential
Areas**

4.6.60. For existing residential areas, it is the intent of this Plan to discourage front yard parking spaces in all residential areas. Off-street parking spaces are restricted to rear yards, side yards and garages. The intent of this Plan is to preserve the character of existing neighbourhoods and maintain the designed character of new neighborhoods. However, consideration may be given to allow front yard parking in exceptional circumstances such as:

- a.** for existing residential properties located in the former Township of Kingston and former Township of Pittsburgh planning areas where front yard parking was permitted in a driveway;
- b.** for existing properties without access to a garage, side or rear yards, consideration may be given to allowing one front yard parking space. Access may be limited by circumstances such as irregular lot configuration, lot size or lot coverage and location of existing buildings. This policy is intended to apply to low density, grade access developments; and,
- c.** for multi-unit buildings that were developed in accordance with past regulations that do not comply with the existing parking requirements, consideration may be given to allowing limited front yard parking spaces.

The review of requests to establish front yard parking spaces must address the following criteria:

- the unique circumstances of the proposal in the neighbourhood are to be established;
- the lack of parking space has a negative impact on the neighbourhood;

- the parking spaces shall not create a hazard or danger to the use of the roadway or sidewalk by vehicles or pedestrians;
- the parking area will minimize the front yard area used for parking and in no case shall the parking area cover the entire front yard area;
- the front yard parking space(s) shall meet the size, dimension and surface treatment standards of the zoning by-law;
- there is no loss of on-street parking;
- the residual portion of the front yard shall be landscaped and consist of grass or similar groundcover, trees, or shrubs to provide for suitable streetscape enhancement, buffering from adjacent properties and visual relief from the paved areas;
- the parking space(s) are located entirely on the same lot as the subject building or *residential unit*;
- clear separation is provided between the parking area and the road, and where necessary, a change of material at the City sidewalk must indicate to pedestrians and vehicles the potential for vehicular activity nearby; and,
- permission to locate parking within the front yard shall receive appropriate zoning permission through minor variance or zoning by-law amendment.

(Amended by By-Law No. 2011-89, OPA #6)

Private Road Policies

4.6.61. Private roads are those roads which are not assumed by by-law, not a part of a plan of condominium, or maintained on a year round basis by a public road authority. All new lots should abut and have direct access to a public road. The following policies will apply:

- a. persons using private roads to gain access to property do so at their own risk. The City is under no obligation to provide any road dependent service such as maintenance, snow plowing or emergency vehicle access on any private road;
- b. when a private road has been reconstructed to the approval standard required by the City, the City may assume the road by by-law only if it directly abuts an existing public road which is maintained on a year round basis by a public road authority; and,
- c. the *development* of existing lots on private roads may be permitted for residential use. The conditions under which any *development* of such lots may occur, including the construction of a new dwelling, conversion of existing seasonal dwelling to year round use or the expansion of an existing dwelling, are subject to the following policies:

Lot Development on Private Roads

Zoning

- an appropriate zone should be established in the zoning by-law to identify affected properties. Its effect is to allow for the construction, alteration or addition to dwelling houses where access is by private road only.

Holding By-laws

- the lots will be placed in a Holding category pursuant to the Planning Act, signified by the addition of an “H” symbol indicating that a private road agreement must be entered into with the City. Upon application by the owner, the Holding symbol will be removed by Council in accordance with the policies of Section 9.5.21 of this Plan.

Support for Other Guidelines

4.6.62. Guidelines such as ‘Promoting Sustainable Transportation Through Site Design’, recommended by the Canadian Institute of Transportation Engineers, the ‘Child and Youth Friendly Land Use and Transport Guidelines’, endorsed by the Canadian Institute of Planners, and standards recommended by the Transportation Association of Canada will provide guidance for transportation planning in the City.

4.7 SOLID WASTE MANAGEMENT

Provincial policy requires municipalities to plan waste management systems that are of an appropriate size and type to accommodate present and future requirements, and also to facilitate, encourage, and promote reduction, re-use and recycling objectives. The City’s solid waste system involves such facilities as waste transfer stations, landfill sites, recycling centres, hazardous and special waste facilities, and composting and brush storage areas. The system involves both public and private facilities and operators.

Goal:

To develop an integrated waste management system that is appropriate to the City’s environmental, social and economic conditions and that maximizes waste diversion from landfills, controls or reduces overall system costs, creates new economic opportunities, and preserves the natural environment through reduced consumption of natural resources, reduced emissions to air and water, and reduced greenhouse gas emissions.

Policies:

Diversion Target

4.7.1. The area of solid waste management is subject to continual monitoring and adjustments to increase waste diversion in order to meet its projected diversion target rate of 65% by 2012, or as otherwise amended.

Integrated Waste Management Study

4.7.2. The City’s Integrated Waste Management Study is intended to provide short-term guidance in areas of:

- defining long-term waste management system objectives;
- identifying a preferred long-term management system approach;
- identifying a preferred system technology and practices; and,
- developing a preferred system implementation strategy.

- Reduce, Reuse, Recycle** 4.7.3. The City intends to encourage the reduction, reuse and recycling of waste through programs aimed at educating consumers. The City will promote such programs to reduce the amount of residential waste that goes to landfills and to meet market demands for recyclables.
- Business Initiatives** 4.7.4. Businesses are encouraged to develop safe, cost-effective and innovative ways to deal with waste materials in order to divert waste matter from landfill.
- Partnerships** 4.7.5. The City intends to cooperate with adjacent municipalities, senior government agencies and private enterprises in investigating and developing alternative methods and technologies for solid waste disposal.
- Waste Transfer Station** 4.7.6. The City utilizes a private waste transfer station to transport much of its solid waste to the operator's approved, licensed and regulated landfill.
- Pittsburgh Landfill** 4.7.7. The former Pittsburgh landfill, which is scheduled to be closed in the near future, is shown on Schedule 6.
- Former Waste Disposal Sites** 4.7.8. Once all, or a portion of an area used for waste disposal purposes ceases to function, no further use may be made of the area without the approval of the Minister of the Environment, in accordance with the Environmental Protection Act and relevant Ministry Guidelines with respect to waste disposal sites and *sensitive land uses*.
- Requirements for New Development** 4.7.9. All new multi-residential, commercial, industrial and institutional *development* must incorporate appropriate vaults, central storage, collection areas and other facilities and enclosures for the storage of garbage and other waste materials in order to facilitate sustainable waste management practices. All such facilities for the storage of garbage and other waste materials must be shown on site plan control applications, as required under Section 9 of this Plan.

