PLANNING AND GROWTH MANAGEMENT
URBANISME ET GESTION DE LA CROISSANCE

RIVERSIDE SOUTH COMMUNITY DESIGN PLAN

Publication No. 3-08
Approved June 22, 2016

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OTTAWA CITY COUNCIL
Wednesday, 22 June 2016
Andrew S. Haydon Hall, 110 Laurier Avenue West
10:00 AM

DISPOSITION 34

8. RIVERSIDE SOUTH COMMUNITY DESIGN PLAN UPDATE, OFFICIAL PLAN AND ZONING AMENDMENTS

COMMITTEE RECOMMENDATIONS AS AMENDED

That Council approve:

1. the Official Plan Amendment No. XX to the City of Ottawa Official Plan, implementing the Riverside South Community Design Plan update, as detailed in Document 3;
2. the Official Plan Amendment No. YY to the City of Ottawa Official Plan, implementing the Riverside South Community Design Plan update, as detailed in Document 4;
3. the amendments to the City of Ottawa Zoning By-law, as detailed in Documents 5, 6 and 7, as amended by the following revisions to Document 6 (as set out in supporting Document 1 below:
   - Addition of a new Item 13 stating that the 18.5 hectare parcel of land shown on the Land Use Plan in the Riverside South CDP as the District Park abutting the extension of Spratt Road and Earl Armstrong Road, be rezoned from Development Reserve (DR) to Major Leisure Facility (L2);
4. the changes to the Riverside South Community Design Plan, as detailed in Document 8;
5. the changes to the Community Core Urban Design Guidelines, as detailed in Document 10;
6. the use of the Environmental Resource Area Acquisition Reserve Fund for the purchase of up to 1.1 hectares of the Spratt Road Woodlot (UNA 99); and
7. that there be no further notice pursuant to Section 34 (17) of the *Planning Act*.

CARRIED as amended by the following Motion:

MOTION

Moved by: Councillor M. Qaqish
Seconded by: Councillor J. Harder

WHEREAS, at its meeting of June 14, 2016, Planning Committee considered and amended the “Riverside South Community Design Plan Update, Official Plan and Zoning Amendments report (ACS2016-PAI-PGM-0070) and directed staff to finalize a Memorandum of Understanding (MOU) with Riverside South Development Corporation and provide the recommended MOU to Council as part of the consideration of this item; and

WHEREAS a Memorandum of Understanding has been drafted, and is attached to this motion as Document 1;

THEREFORE BE IT RESOLVED that City Council receive and approve the Memorandum of Understanding between the City of Ottawa and the Riverside South Development Corporation, attached in Document 1, to be added as Document 9 to the staff report upon approval; and

BE IT FURTHER RESOLVED that City Council delegate the authority to the Chief, Development Review Services, in consultation with the City Clerk and Solicitor, to execute the provisions of the approved Memorandum of Understanding.

CARRIED

DOCUMENT 1

MEMORANDUM of UNDERSTANDING

City of Ottawa/Riverside South Development Corporation

The parties agree to continue working together to advance community benefits and recreational opportunities within Riverside South, subject to Council approval. Under this program:

1. Riverside South Development Corporation will convey the land for the two district parks, totalling approximately 13 ha and 10.7 ha as shown on the 2016 update to the Riverside South Community Design Plan to the City within 120 days of the Community Design Plan receiving final approval;

2. The City and Riverside South Development Corporation will enter into an Agreement of Purchase and Sale for the recreation centre lands (5.5 hectares of serviced land) identified for the future Recreation Complex in the 2016 update to the Riverside South Community Design Plan at a price of FOUR MILLION FIVE HUNDRED THOUSAND DOLLARS ($4,500,000) plus any applicable taxes, within 120 days of the Community Design Plan receiving final approval. The terms of this agreement will be in accordance with Council Policies and will provide for a closing date within one year of the 2016 update to the Community Design Plan being approved;

3. Riverside South Development Corporation will contribute TWO MILLION AND NINE HUNDRED THOUSAND DOLLARS ($2,900,000) to the City of Ottawa to support the early development of recreational and community facilities in Riverside South. These funds will be provided to the City at the time of closing for the Recreation Complex Lands as outlined above. The decisions on how this money will be allocated will be made by the City in consultation with the local Ward Councillor and Riverside South Development Corporation. In consideration of this contribution other home builders and land developers will be excluded from purchasing naming rights for recreation facilities within Riverside South for a period of 15 years from the opening of the first indoor recreation facility;

Any changes or amendments to this Memorandum of Understanding must be made in writing, agreed to and signed by both parties mentioned in this MOU.

We hereby accept and agree to the conditions above.

Dated at this ___ day_____of _____2016

RIVERSIDE SOUTH DEVELOPMENT CORPORATION

_____

_____
I/We have authority to bind the Corporation

Dated at this _____day_____of_____, 2016

CITY OF OTTAWA

_____
Jim Watson, Mayor

_____
Leslie Donnelly, Deputy City Clerk
We have authority to bind the Corporation

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1.0 Introduction

1.1 Riverside South Community Description

Riverside South is located south of the Ottawa Macdonald-Cartier International Airport and east of the Rideau River. It consists of two parts - the Developed Area which is the older part of the community and the Planning Area which is the area subject to this Community Design Plan. The Developed Area is generally bounded by the Rideau River, Earl Armstrong Road, Limebank Road and the Mosquito Creek valley. The Planning Area contains 1,480 ha (3,657 acres) of land and its boundaries are shown on Figure 2. For planning purposes, the Planning Area was divided into sectors as shown on Figure 3.

The community was within the former City of Gloucester, which became part of the City of Ottawa through amalgamation in 2001. The area enjoys significant natural features, such as the Rideau River, Mosquito Creek and large woodlots, which give the community an identity and offer open space amenities.

Existing roads provide connections from the community to the surrounding area. These roads include Earl Armstrong Road, Leitrim Road, Rideau Road, River Road, Spratt Road, Limebank Road and Bowesville Road.

The most significant elements of the Community Design Plan are:

- A rapid transit corridor and associated stations;
- An open space system that includes parks, linkages and natural features;
- Higher density development concentrated around the rapid transit corridor;

Figure 1: Townhomes by Spruceland Home, B.C.

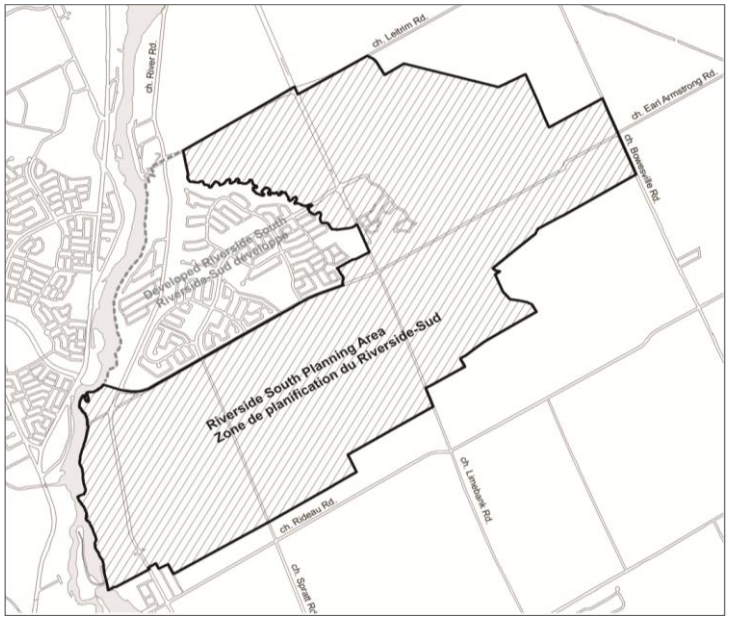

Figure 2: Riverside South Planning Area

- Residential areas organized around public spaces and community features;
- A community core that functions as a town centre for Riverside South based on transit-oriented, higher density development; and
- An employment area that acts as a transition area between the airport lands and the residential areas and provides employment opportunities for the local community.

These elements are described in detail in Section 2 of this Community Design Plan.

1.2 Preparation of the Community Design Plan

In 2005, Council approved this Plan to direct the long-term development of the community and provide guidelines for city staff for the day-to-day decision-making on land use planning in line with the community's priorities for the future. The Plan was amended in 2010 and again in 2016.

The Land Use Plan (Figure 45), which forms the basis for the CDP, has evolved from the previous Plan. The current Land Use Plan reflects, among other matters, the build-out of the initial phases of development within the northwest quadrant, more detailed plans for the rapid transit corridor and revised alignments for Earl Armstrong Road and Limebank Road resulting from Class Environmental Assessments. The Plan also reflects the reduction in woodlots, the relocation of the park and ride near the Community Core, a more direct southward routing of Canyon Walk and changes to parks, storm ponds and school locations. Changes were also made to reflect the desire for new suburban communities to be well designed as complete communities and sustainable through the efficient use of land and through measures to support use of sustainable transportation modes and Infrastructure Standards of Service adjustments as expressed in the 'building better and smarter suburbs' and infrastructure standards review initiatives (BBSS/ISR).

Various stakeholders' groups have been involved in the preparation of the CDP, through a consultative process that has taken place in the form of meetings and open house presentations. Participants in this process have included:

- Riverside South Community Association
- The landowners' group
- Area residents
- The Ottawa-Carleton English Public and Catholic, and French Public and Catholic, District School Boards
- Ottawa Forests Advisory Committee
- Ottawa Pedestrian and Transit Advisory Committee
- Ottawa Parks and Recreation Advisory Committee
- Ottawa Environmental Advisory Committee
- Built Heritage Advisory Committee
- Ottawa Airport Authority
- National Capital Commission and Parks Canada
- Rideau Valley Conservation Authority

A technical advisory committee, comprised of staff from various City departments and consultants, was also set up to guide the CDP process.

1.3 Policy Context

The original concept for the development of Riverside South dates back to 1992 when these lands were part of the former City of Gloucester. Since that time, Riverside South has formed part of the South Urban Community which has been part of the urban

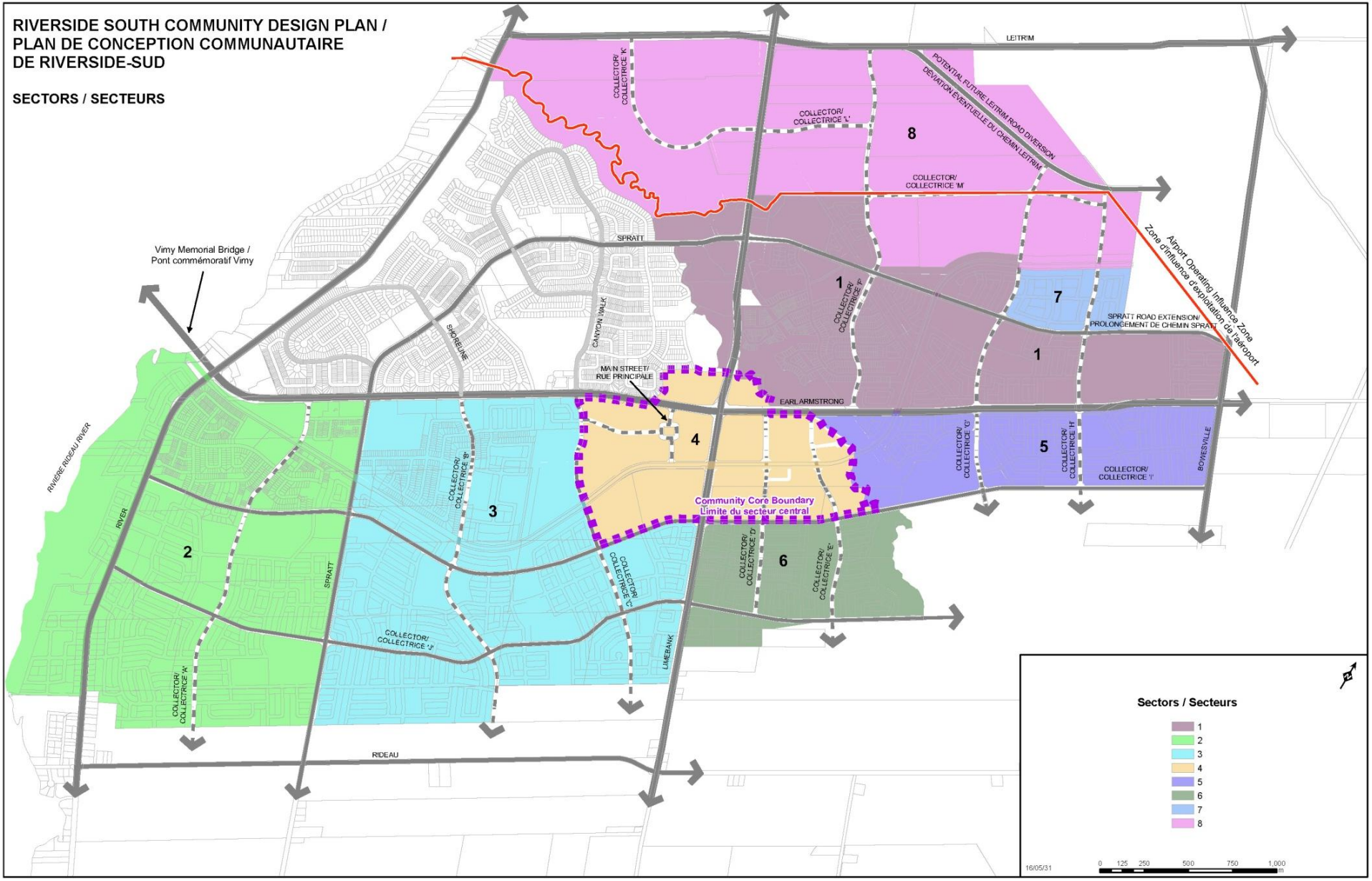

Figure 3: Sector Map

area in the former Regional Plan and the current Official Plan for the City of Ottawa. The South Urban Community also contains Barrhaven on the west side of the Rideau River with both sides linked together by the Vimy Memorial Bridge. Both Barrhaven and Riverside South have been planned and developed in accordance with key themes found in the Official Plan — livable communities, density and livability around transit stations and the elevated importance of walking and cycling in a suburban context.

The current Official Plan designates most of the developable land in Riverside South as either General Urban Area or Employment Area. There are also Major Open Space designations along the Rideau River and Mosquito Creek and Urban Natural Features associated with woodlots. The Community Design Plan translates these broader Official Plan designations and policies to the community scale and the process to adopt the CDP provides for collaborative community building and the opportunity for early input into how future development should occur.

In the most recent CDP update, two woodlots were reduced in size and a section of land (shown as Sector 7 in the Land Use Plan) was changed from Employment to Residential. This was deemed acceptable since these lands were not designated as Employment Area in the Official Plan and it has been determined that there are sufficient employment land left to meet the needs of the community. Another section, Area C on the Land Use Plan, has also been planned for development however this section can only be developed if and when these lands are re-designated as General Urban in the Official Plan.

The resulting Land Use Plan has truncated boundaries for the residential neighbourhoods located along the southern boundary of the CDP area. This boundary may be expanded southward through a future amendment to the Ottawa Official Plan and revision to the CDP.

1.4 Purpose

The CDP for Riverside South comprises the text included herein, the geographical description of land uses on the Land Use Plan, and supporting engineering, transportation, market demand and environmental studies.

The CDP has been prepared in accordance with the policies of the Ottawa Official Plan. It identifies: how the land use mix contributes to the balance of jobs and households for the area; a modified grid system of roads; and how the development pattern and built form achieves the design objectives as described in the Official Plan.

The CDP will provide guidance in the review of applications for development such as for subdivision and site plan and in the preparation and review of zoning by-law amendments. It is recognized that the build-out of Riverside South will occur over many years and it is to be expected that adjustments to the CDP (and, in particular, the Land Use Plan) will need to be made to reflect more detailed information, changes in market preferences, and external policy decisions, among other matters. Such adjustments should be consistent with the Vision and Objectives set forth in Section 2.1 of this CDP. Adjustments and revisions to this Plan are set out in Section 8 (“Implementation”).

1.5 Housing and Employment Targets

The Ottawa Official Plan provides the vision and policy framework for the City’s growth over the next 20 years. Much of this growth will take place in communities like Riverside South, located just outside the Greenbelt. In 2014 there were 4,855 dwelling units and 13,779 residents in Riverside South and, at build-out, it is expected that there will be 20,589 dwelling units or 55,024 residents. For further details, see Tables 5 and 6. To meet this target, the Official Plan encourages a compact form of development, and requires that

the average density for detached, semi-detached and townhouse units be 29 units per net hectare.

In terms of employment, the Official Plan designates a significant portion of Riverside South as Employment Area. Including the airport employment area, it is anticipated that 27,108 jobs can be created in this Area (Table 1). The extent of this designation is being confirmed through a comprehensive Employment Land Review (ELR) which is expected to result in adjustments to employment land designations across the City. The CDP affirms this area as Employment on the Land Use Plan until such time as the ELR is approved at which time the changes would be reflected in the CDP. The purpose of locating employment lands within communities is to achieve a good balance between housing and employment opportunities, so that residents can live and work in the same place.

1.6 Building Better and Smarter Suburbs

The 2015 Update to this CDP coincided with Building Better and Smarter Suburbs (BBSS) and associated Infrastructure Standards Review, City-led initiatives to improve urban design and make better use of land through sharing, co-location and the improved management of infrastructure, stormwater, schools, parks and City right-of-ways. The BBSS initiative was based on a series of strategic directions and action plans adopted by Planning Committee in March 2015 with the ISR initiative subsequently initiated to focus on the infrastructure standards flowing from the BBSS project. The 2016 update to this CDP provides an opportunity for advancing BBSS/ISR initiatives as they are eventually confirmed. It is recognized that some of the following initiatives are opportunistic and rely on a collaborative approach involving all parties including City operations and landowners:

Figure 4: Street-Facing Townhouses

Figure 5: Storm Water Management Pond

- Modifications to the Land Use Plan to show the co-location of schools with numerous City parks including the co-location of a central district park and a high school within the Community Core
- Reducing land requirements through the sharing of facilities (i.e. soccer fields located partly on school land and partly on City park land) where possible
- Facilitating the most common co-location opportunities, through the clustering of parks and schools
- The application of revised stormwater management standards which would reduce the need for dry ponds.
- The application of traffic calming measure as part of initial road construction.
- School bus lay-bys in the right-of-way at school sites
- Land use and design strategies that increase the supply of on-street parking.
- Other BBSS/ISR initiatives being pursued include: a) alternate/ reduced right-of-way standards for various classes of streets; and b) new standards for the planting of trees in marine clay soils to support urban forestry guidelines.

2.0 Overview

2.1 Vision and Objectives

The Community Design Plan for Riverside South is guided by transit-oriented development principles and BBSS/ISR directions that seek to achieve efficient land use patterns, while creating a community where residents have access to open spaces, shops, schools, community services, and choices in dwelling types, in a high quality urban environment. Job opportunities in designated employment lands and throughout the community will help to achieve a balance between jobs and households in the new community.

Objectives

- To support transit-oriented development focused on the rapid transit corridor
- To create land use and road patterns that support various modes of transportation
- To maximize the benefits from existing natural features
- To create a network of open spaces accessible to residents and visitors
- To establish a range of residential densities and foster a mix of unit types
- To ensure consistent treatment of buildings, street edges, boulevards, landscape areas and open spaces
- To encourage the development of an attractive mixed use Community Core
- To advance BBSS/ISR directions

2.2 Structuring Elements

2.2.1 Transit-Oriented Development

One of the key structuring elements of the Riverside South Community Design Plan is the planned rapid transit corridor and associated transit services and facilities. Accordingly, development patterns and corresponding densities proposed in the Land Use Plan are intended to contribute to the creation of a transit-supportive community.

A key element of Transit-Oriented Development (TOD) is efficient land use patterns that offer choices of unit types, amenities and transportation modes to residents. Key features of the Riverside South CDP that support efficient land use patterns include:

- Unit types such as apartments, stacked townhouses, and townhouses are located in proximity to transit, while semi-detached and single detached dwellings are generally located further from transit.
- Amenities such as schools, parks and shopping areas are located to generate focal areas, centred and accessible to each neighbourhood. The intent is to reduce reliance on automobile transportation for as many local trips as possible, and foster the use of transit for longer trips.
- Most high schools and one District Park are located in proximity to transit stations.
- A Community Core that will accommodate a range of institutional, office, retail and residential development is located central to the community and the rapid transit corridor with two transit stations and a third immediately adjacent to the Core.

Density Distribution

As illustrated on the Land Use Plan (Figure 45) and the Transit-Oriented Development Map (Figure 6), a hierarchy of densities is distributed in accordance with proximity to higher-volume transportation corridors. The highest density land uses are located in proximity to the planned rapid transit corridor and collector roads.

Development densities within 600 m of the rapid transit corridor are generally in the medium and high density categories; however, they are intended to contain a variety of unit types, such as apartment buildings, stacked townhouses, townhouses, semi-detached and detached units. The areas around stations are also focal points that will accommodate a mix of uses, such as residential, retail and institutional.

Densities in parts of the community, further than 600 m from the rapid transit corridor, beyond the immediate service area of the transit stations, are generally lower. Lower density areas will include a mix of unit types, predominantly single detached and semi-detached units, but may also include townhouses. Notwithstanding the above, pockets of medium density residential are located near scenic or open space areas, local commercial areas or at the intersection of collector and arterial roads and small pockets of low density residential may be included in higher density areas in order to provide variety to the built form.

Transit-Supportive Road Network

The road network provides a grid for bus routes, located at regular intervals that ultimately connect to the rapid transit stations, thereby connecting neighbourhoods to the rapid transit corridor. Collector and arterial roads provide the main bus routes and are spaced at intervals of 400 m to 800 m. In order to facilitate bus stop access and minimize walking distances, local road intersections with collector roads, where local bus stops will generally be located, should be spaced 200 to 250 m apart.

To promote walking within the community, pedestrian facilities shall be provided as follows:

- Sidewalks on both sides of arterial roads, collector roads, bus routes and all roads (public and private) within the Community Core. Wider than standard right-of-way's may be required for local roads in the Community Core and would be determined with consideration to the BBSS/ISR directions.
- Sidewalks on one side of local roads that provide connections to transit, schools, parks, recreational centres, institutional uses and commercial and employment areas.
- In addition, sidewalks shall be provided to complete local walking loops within neighbourhoods.
- Off-road multi-use pathways along, within or around watercourses, open space areas, stormwater facilities, utility corridors and transit corridors as shown on the Land Use Plan and the Primary Open Space, Pedestrian and Bicycle Network. Multi-use pathway segments shall also be required within the development area in order to link sidewalks, pathways and cycling lanes together so as to create an interconnected network.
- Multi-use pathways may replace sidewalks where indicated on the Land Use Plan and/or as may be determined through the BBSS/ISR directions for higher order roads.

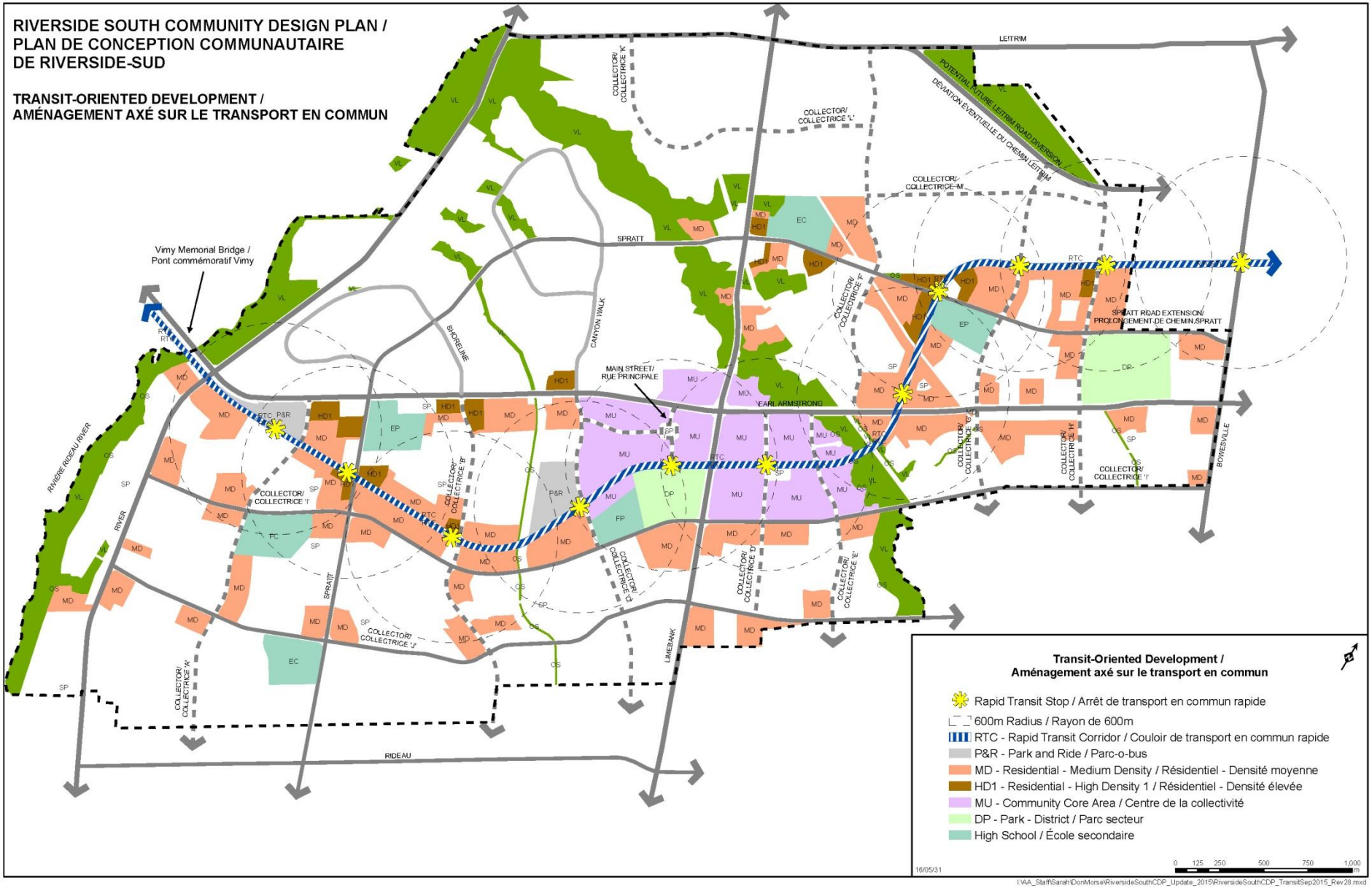

Figure 6: Transit-Oriented Development Map

Park N' Ride

Parking at strategically located transit stations is a key element of the transit system, particularly if it is a light rail corridor. The Riverview Park and Ride is located adjacent to the future BRT corridor connecting Riverside South to Barrhaven Town Centre. This existing facility has an ultimate capacity of approximately 1,000 spaces. A BRT/LRT transfer terminal station is proposed at a central location east of the Community Core. This transfer facility is planned to accommodate 1,600 customer parking spaces as well as facilitate the transfer of passengers between local transit services, the proposed BRT facility and the future LRT facility. A Park and Ride will also be located just outside of the CDP area, east of Bowesville Road which will serve as the terminus of the LRT (at least to 2031).

Access to Transit

Pedestrian access to transit and neighbourhood walkability is supported by grid block patterns that minimize dead ends and do not create circuitous circulation routes. The generally accepted standard for walking distance to local bus transit is 400 m, while for rapid transit; walking distance to the more frequent service available at stations can increase to 600-800 m. The 400 m walking distance is used to guide design of block and road layout of neighbourhoods, mixed use areas and employment lands. From within residential neighbourhoods, streets and walkways will provide the most direct routes possible to transit stops. In areas adjacent to the rapid transit stations, pedestrian walkways and bicycle paths must be incorporated into site plan design to provide linkages between stations and retail, office, institutional and residential sites.

2.2.2 BBSS/ISR Directions

The BBSS/ISR directions are supportive of the TOD principles that serve as an overarching direction for Riverside South. The directions focus on the following:

- Plan suburbs as complete communities.
- Design subdivisions to be convenient for residents and land efficient for buildings.
- Design subdivisions holistically for transportation, housing, employment, shopping, education, recreation and social life.

The Riverside South CDP embodies this vision and provides opportunities to showcase the key principles of BBSS/ISR. These principles envision that suburban communities are to be:

- Affordable with respect to long term operations and maintenance of infrastructure and services where up-front investments result in long term gains
- Land efficient and integrated
- Easy to walk, bike, bus and drive within well designed and sustainable neighbourhoods.

Key initiatives being pursued through the BBSS/ISR project that will be advanced through subdivision and site plan applications include:

- Achieving efficient use of land and compact built form
- Prioritizing pedestrian and cycling safety on streets around schools.
- Planning and designing schools sites as part of the open space system.
- Pursuing expanded shared facility agreements that lead to improved efficiencies between schools and parks.
- Introducing smaller parkettes as set out in the Park and Pathway Development Manual.
- Introducing opportunities for dry-ponds in park design.
- Open space connectivity and linkages.

- Improved tree retention in new plans of subdivision.
- Alternative Stormwater Management options that provide for emergency storage and reduced land requirements and that would be reflected in master Servicing Plans.
- New land-efficient cross-sections for various street types that respond to challenges with trees, utility placement, stormwater management, snow storage, design speeds, lane widths, and traffic calming.
- Balancing on and off-street parking within the context of complete streets that also include trees, sidewalks and other forms of active transportation.

2.2.3 Road Hierarchy

Improvements to the existing road network, within and external to Riverside South, necessary to support the proposed development, are set out in the Riverside South Transportation Update by Delcan Corporation, which was prepared in support of the CDP.

The road network for the Riverside South Community is based on a grid of east-west and north-south collector roads. The axis for the community's road system is the two existing arterial roads, Earl Armstrong Road and Limebank Road. The road hierarchy includes arterial, collector and local roads and is shown on Figure 19.

Arterial Roads

Arterial roads serving the Riverside South Community are River Road/Riverside Drive, Earl Armstrong Road, Limebank Road, and Leitrim Road.

- Riverside Drive will be widened to six lanes from Limebank Road north to Hunt Club Road in the medium term, and in conjunction with River Road, which will remain a two-lane scenic road, will act as a north-south corridor that will connect Riverside South to the Vimy Memorial Bridge.
- Earl Armstrong Road has been upgraded to accommodate four lanes of traffic, and will eventually be extended eastward to Bank Street. It is connected to Strandherd Drive, west of the Rideau River, via the Vimy Memorial Bridge.
- Limebank Road has been widened in part to four lanes from south of Earl Armstrong Road to its intersection with Riverside Drive/River Road north of the community and is to become the main north-south arterial linking Riverside South to the greater Ottawa area.
- In determining road widths, travel lanes and other elements included in ROWs, consideration shall be given to modified standards as developed through the BBSS/ISR project.

Collector Roads

Collector roads function as the community's traffic and bus transit connecting-links to the broader arterial roads and transit system. A grid of regularly-spaced collector roads helps disperse traffic, reducing the need for high capacity roads that contribute to poor urban environments.

Spratt Road acts as a community collector linking the existing neighbourhoods in the northwest quadrant to the future development areas to the south and east. Other future major and minor collectors within the new community will extend into other neighbourhoods to provide links to the arterial system.

In determining road widths, travel lanes, built-in traffic calming measures and other elements included in ROWs, consideration shall be given to modified standards as developed through the BBSS/ISR project.

Local Roads

Local roads constitute a significant proportion of the public space, providing access to dwellings and local amenities. Road design standards that support intensification while providing safe pedestrian, cycling and driving conditions are encouraged including the introduction of traffic calming measures into the initial road design as per the BBSS/ISR initiative.

2.2.4 Rapid Transit Corridor

In keeping with the City's Transportation Plan, a rapid transit corridor has been proposed that will traverse the community in an east-west direction. Transit stations along the corridor will be located approximately every 800 m, except through the Community Core area where they will be spaced approximately 500 m apart. The stations will be designed to provide high quality access for pedestrians, cyclists and local transit and, through the Core; the corridor will have at-grade signalized crossings. The protected width of the transit corridor is 43 metres through the Community Core and 40 metres through the rest of the planning area, except that the corridor may be widened to 43 m with respect to Area D on Figure 45.

2.2.4 Open Space System

The open space system is featured in the Primary Open Space, Pedestrian and Bicycle Network. It provides a range of active and passive recreational uses and linkages between natural features and parks, stormwater ponds and other open spaces.

Parks

Parks are distributed throughout the community in a manner that facilitates access by all residents. The park system as shown on the Land Use Plan and Primary Open Space, Pedestrian and Bicycle Network consists of:

- Two District Parks central to Riverside South, one being 10.7 ha, the other 18.5.
- Community Parks targeted to be approximately 3.2 ha each, most of which are located adjacent to schools in each neighbourhood.
- Neighbourhood Parks, targeted to be 1.5 ha in size, serving the surrounding residential areas.
- Parkettes, targeted to be approximately 0.6 ha in size.

An Area Parks Plan (APP) has been prepared concurrently with the latest CDP update and is based on the number and location of parks as shown on the Land Use Plan and the Primary Open Space, Pedestrian and Bicycle Network. For further information on parks and facilities within each park, refer to the APP. The final determination of park types and locations may change based on the future directions established through the BBSS/ISR initiative.

Mosquito Creek

The central spine of the open space system is the Mosquito Creek valleylands. The Creek is a significant asset to the community that has an educational and passive recreational value. Walkways on adjacent streets and open spaces will connect to clearly defined access points that lead to pathways within the valleylands. At entry points, signage will be used to inform and orient pedestrians.

Rideau River

The Rideau River is a major component of the open space system. A "green" corridor will follow the eastern side of the Rideau River along the top-of-slope, connecting the Long Island Locks property to Claudette Cain Park and, in the future, to points north along the River. The corridor will be acquired by the City at the time of development of adjacent lands. A future pathway link will be established within this corridor, with linkages to the broader bicycle and pedestrian trail system. Enhanced

landscaping and/or building height restrictions may be required along portions of the Rideau River to preserve the visual quality of the shore land.

Woodlots

Two tableland woodlots are retained as shown on the Land Use Plan and the Open Space System Plan in the CDP. One 13 hectare woodlot is retained north of Earl Armstrong Road in the older part of Riverside South (that is outside of the planning area) and a second smaller 3.2 hectare woodlot is retained south of Earl Armstrong along the Thomas Gamble Drain. A third tableland woodlot was originally intended to be preserved at the corner of Spratt Road and Collector I; however, for reasons of affordability, only a 0.8 ha portion has remained in conjunction with a parkette. The evaluation and identification of these woodlots was undertaken by Niblett Environmental Associates Inc. during the lead-up and preparation of the original CDP in 2005. In an effort to integrate other minor woodlots, certain community and sub-neighbourhood parks have been located so as to permit a portion of these features to be incorporated in the park design, where possible.

Hedgerows

There are a number of hedgerows in the Riverside South area along existing property or field boundaries. The most mature are located to the east of Spratt Road. Niblett Environmental indicates that the tree species within hedgerows include basswood, sugar maple, American elm, black cherry, white ash and green ash. Opportunities have been explored to incorporate hedgerows on the perimeters of school and park sites. Wherever possible, hedgerows will be incorporated in street medians and along rear property lines. It should be recognized that site grading as a result of development changes the moisture regime and, accordingly, the street and block layout may mean that it is impractical to retain certain hedgerows. Practical locations for the retention of hedgerows are to be determined at the time of subdivision approval through the preparation of a “Tree Preservation Plan”.

Figure 7: Urban Parkette

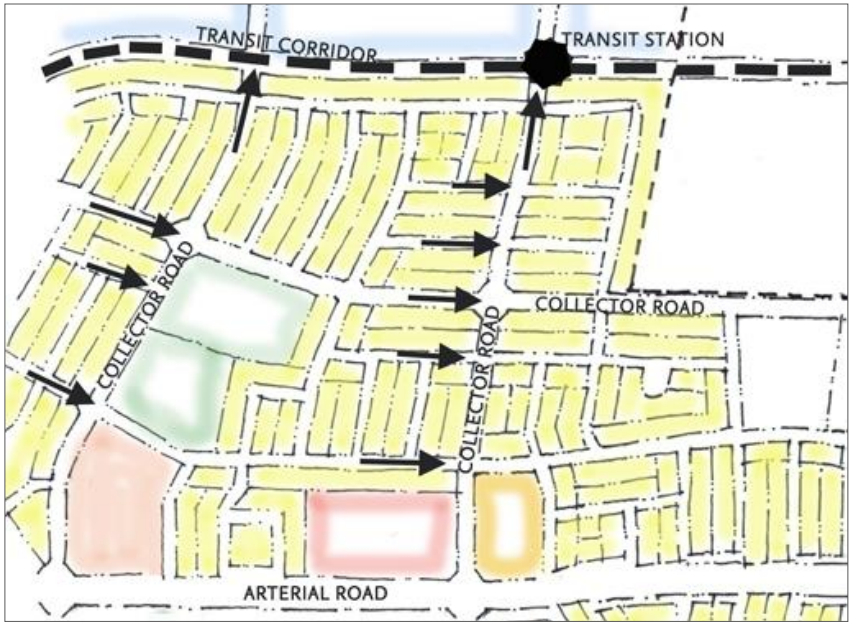

Figure 8: Structuring Elements of a Transit-Supported Road Network

2.2.5 Cultural Heritage Resources

Cultural heritage resources in Riverside South fall within four categories listed in the Official Plan:

a) Heritage Buildings and Areas;
b) River Corridors;
c) Scenic-Entry Routes;
d) Major Recreational Pathways.

In terms of heritage buildings and areas, 17 addresses within the CDP area were identified on an inventory of potential heritage resources undertaken by the former City of Gloucester and are now on the City's Heritage Reference List. The 17 addresses identify farmhouses and other buildings. Since the inventory was undertaken, several of the properties have been affected by demolition and alteration.

A comprehensive update to the inventory of heritage resources in the community should therefore be undertaken by or under the direction of the City to appropriately reflect these changes and to identify any new potential cultural heritage resources. Until this inventory update is carried out, an analysis of listed and other potential heritage resources will be undertaken on a property by property basis by the proponent of development at the subdivision or site plan stage. The potential for integrating these buildings and structures into the proposed development will be examined and adjacent development will be compatible with any heritage resources to be retained.

In addition to the buildings identified on the Heritage Reference List, the Long Island Locks form part of the Rideau Canal National Historic Site, administered by Parks Canada. A few structures dating back to the early 1800's have survived, including the lock chamber.

The Rideau River corridor, the River Road scenic-entry route and the area's major recreational pathways have been incorporated into Primary Open Space, Pedestrian and Bicycle Network Map as shown in Figure 25. As part of the latest update, the Nicholls Island Road was added as a Scenic Route to the Land Use Plan (Figure 45).

2.2.6 Residential Neighbourhoods

Residential neighbourhoods comprise approximately 75% of the community. Each residential neighbourhood is organized to provide accessible school and park areas. Institutional uses are located along collector roads, and local retail uses are generally located at collector road intersections.

Residential neighbourhoods vary in their housing type composition according to location. Further away from the rapid transit corridor, the predominant unit types are single and semi-detached, whereas the predominant unit types in the areas adjacent to the rapid transit corridor will be apartments, stacked townhouses and townhouses.

2.2.7 Employment Areas

The Employment lands are shown as BP on the Land Use Plan. These lands are located adjacent to the Airport lands in the northern portion of the CDP area. Initial calculations indicated that there could be as many as 17,703 jobs located on these lands. Concurrently with the latest CDP Update, the City has undertaken a city-wide review of designated employment lands to confirm whether there are opportunities to release certain employment lands from the employment designations. To the extent that this review results in changes to designated employment lands in Riverside South, these changes will be reflected in the CDP. Also, to avoid the potential requirement for future CDP amendments, the regulated employment targets and the relationship between the number of dwelling units and the number of jobs will be based on the existing and future

employment targets in the Official Plan as may be modified through the Employment Lands Review. The target for development in the BP Employment area as shown on the Land Use Plan is 80 jobs per net hectare and 120 jobs per net hectare on land within 600 metres of a rapid transit station.

Table 1: Jobs/Units Ratio

Total Dwelling Units (Existing + Neighbourhoods 1-7)	**20,469**
Jobs	
Employment Area (30.9 ha – 8% @120 jobs/ha)	5,544
Employment Area (165.2 ha – 8% @80 jobs/ha)	12,159
Mixed Use Area (30.7 ha @100 jobs/ha)	3,070
Commercial (9.8 @50 jobs/ha) *	535
Institutional (10.7 @3.3 jobs/ha) **	35
Schools (6 secondary @100 jobs ea, 13 primary@40 jobs) ***	1,160
District Parks (2@100 jobs ea) & Recreation Centre (50 jobs)	250
Home Occupations (10 jobs/100 residential units)	2,047
Airport Lands (38.9 ha – 8% @80 jobs/ha)	2,863
Total Jobs (Planning Area + Airport Employment Area)	**27,663**
Ratio Jobs/Units	**1.35**

* Includes 5.2 ha commercial area in existing community.
** Includes two institutional sites in existing community.
*** Includes three elementary schools in existing community.

The Employment Area could accommodate office-oriented employment, in keeping with Ottawa's high-tech and government services industries, while its strategic location close to the airport could also attract other trade-related businesses. The range of employment types and associated employment numbers that are projected to establish in Riverside South are set out in Table 1.

The jobs generated by businesses within the southerly portion of the Ottawa International Airport lands were used in the jobs per household ratio calculation (Figure 10). These businesses, along with employment from commercial, institutional and home occupation uses within the Riverside South Community, contribute to achieving the job target for Riverside South and the broader South Urban Area.

2.2.8 Community Core

The Community Core will function as a supplemental 'town centre' offering a mix of uses to serve the wider community, including retail stores, restaurants and entertainment facilities, office space, institutional facilities (including day care centres) and public spaces. A key component of the Community Core will be the higher residential densities and flexibility to encourage mixed-use and higher-profile apartment buildings. Permitting high-rise buildings will help contribute to the achievement of the density targets mentioned in this Plan and will encourage a pedestrian-oriented centre within a high quality public realm as the community develops. The Community Core will contain:

- A 'Main Street' with a central parkette/public square located west of and parallel to Limebank Road. Retail, office and mixed-use buildings will front onto this street.
- A 'Transit Street' along the east-west rapid transit corridor, with mixed-use buildings on the north side and residential and public buildings on the south side and providing retail and community uses at grade.
- A second parkette along the transit corridor east of Limebank Road will act as a central public space for the high density residential area on the south side of the transit corridor.

2.2.9 Development Phasing

Development of the Riverside South Community will be tied to the phasing and construction of the servicing infrastructure. The northwest quadrant of the community is currently undergoing the final stages of planning and development and is not part of the

CDP. The extension of the servicing infrastructure to the rest of the community will proceed simultaneously east of Limebank Road and south of Earl Armstrong Road.

2.2.10 Green Buildings

The City has been exploring ways to promote green building design and construction. Such construction techniques are at the leading edge of design and represent a more environmentally friendly approach. The goal of encouraging integrated environmental design in general is in line with the City's environmental efforts. While such construction techniques are encouraged throughout the CDP area, the greatest potential for their use is with larger buildings e.g. in the Community Core area, in institutional buildings, and in Commercial and Employment areas.

Where possible, development within the Community Core, the Commercial areas and the Employment areas is encouraged to undertake green building construction and integrated environmental design, with a goal to achieve a "LEED certified" standard of building construction, or better. The City will pursue the establishment of guidelines and incentives to encourage such construction techniques.

2.3 Land Use Plan

The "Land Use Plan" (Figure 45) identifies the distribution of land uses throughout the Riverside South planning area.

2.3.1 Density Distribution

The overall residential density for the Riverside South Community achieves the following targets: a maximum of 60% single/semi-detached dwellings, a minimum of 30% multiple dwellings and a minimum of 10% apartments, and an average density of 29 units per net hectare for ground-oriented units. Development densities throughout the community are distributed in a manner that supports intensification in areas adjacent to the rapid transit corridor and other major transportation corridors, in keeping with the Official Plan policies. The Community Core is a target for intensified, higher density development.

Within each residential density category illustrated on the Land Use Plan, the following unit types will be permitted:

a) Low Density – predominantly single detached dwellings, but may also include semi-detached and townhouse dwellings
b) Medium Density – predominantly townhouse dwellings, but may also include single detached, semi-detached and ground-oriented multi-unit dwellings, including stacked townhouse dwellings and, in the case of lands abutting a rapid transit station or stop, may include apartment dwellings
c) High Density I – predominantly ground-oriented stacked townhouse dwellings, but may also include townhouse and low and medium-rise apartment dwellings.
d) High Density II – non-ground-oriented stacked townhouse dwellings and low, medium and high-rise apartment buildings. This density category is intended to apply mainly to the residential component in the Community Core.

Within the Core Area, a mix of townhouses, stacked townhouses, apartment buildings and upper floor apartment units will be permitted.

Low Density

Low density residential areas are generally located furthest from the rapid transit corridor. They are comprised of residential lots and blocks, local roads, and walkways. Schools, parks, open spaces and local retail and institutional uses are separately

identified on the Land Use Plan and are distributed throughout the neighbourhoods. The unit types will range from single detached to townhouses, with single detached and semi-detached being the predominant types. Townhouses, predominantly in the form of on-street townhouses, may be interspersed throughout the area close to major roads and bus routes.

In order to achieve the Official Plan density target of 29 units per net hectare for ground-oriented units, an average net density of 22 units per hectare has been assumed for the low density category (detached and semi-detached). A variety and mix of lot frontages is encouraged.

Medium Density

Medium density areas are located in the vicinity of the rapid transit corridor within the Community Core and elsewhere in the planning area. The built form character of these areas is encouraged to be similar, in terms of heights and architecture, to the character of lower density residential areas. These areas will be comprised of a mix of unit types, primarily on-street and block townhouse units, interspersed with single detached, semi-detached and ground-oriented stacked townhouse units. Where a medium density area abuts a rapid transit station or stop or is located near the Community Core, low-rise apartment dwellings may also be permitted.

In conjunction with the housing targets set out at the beginning of this sub-section, an average net density of 38 units per hectare has been assumed for the Medium Density category in order to achieve the community-wide density target of 29 units per net hectare for ground-oriented units.

Figure 9: Low-Rise Apartments by Domicile

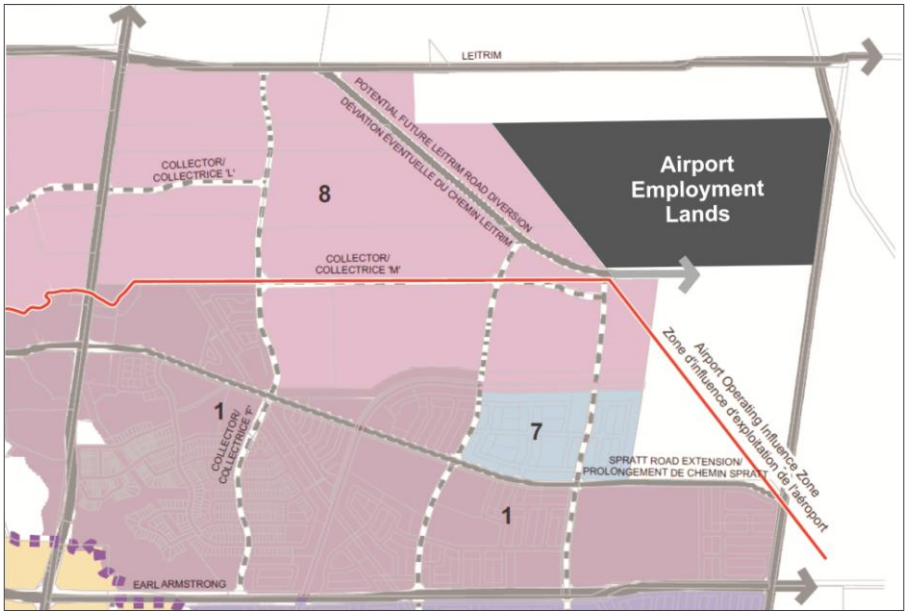

Figure 10: Airport Employment Lands

In addition to the medium density residential uses mentioned above, the following uses shall also be permitted at 4269 Limebank Road: an animal hospital, a medical facility, an animal care establishment and a personal service business.

High Density I

High Density I sites, intended primarily for ground-oriented stacked townhouse units, are located near transit stations and major roads and within the Community Core. In conjunction with the housing targets set out at the beginning of this sub-section, an average net density of 60 units per hectare has been assumed for the High Density I category in order to achieve the Official Plan density target of 29 units per net hectare for ground-oriented units.

High Density II

Higher densities in the form of apartments and non-ground oriented stacked townhouse units will be located in the Community Core, within walking distance of the transit stations. Mixed-use buildings in the Community Core may combine retail stores, offices and residential units (on upper floors). Compatibility in built form between residential and retail/commercial buildings is encouraged. An average net density of 80 units per hectare has been assumed for the High Density II sites in the Community Core in order to achieve the Official Plan target of 10% apartments. The average net density for the High Density II sites may be reduced correspondingly to take into account the development of apartment units in mixed-use buildings within the Community Core or the development of apartment buildings in Medium Density or High Density I areas outside of the Community Core in proximity of transit stations, provided the 10% target is achieved.

2.3.2 Community Core

The Community Core is centrally located within Riverside South and is envisioned to provide retail, office, entertainment, public and institutional services to the wider community. Built form and building heights are described in Section 5 of these Guidelines.

The mix of uses in the Community Core is expected to take place within individual blocks and/or single buildings. The residential component of the Community Core will help foster an active "town centre" by supporting the retail and institutional components.

2.3.3 Commercial Sites

There are five basic categories of retail commercial in Riverside South:

- Local retail
- Neighbourhood retail
- Community-wide retail/commercial within the
- Community Core (including large format retail uses)
- Street-related "Main Street" retail uses in the Community Core.

Local retail (LC) sites are located at the intersection of collector roads or at the intersection of collector and arterial roads. These sites are intended to serve the immediate residential area, provide convenience shopping and services and range in size up to approximately 3,000 sq.m. of gross leasable floor area. Institutional uses will also be permitted. Additionally, a small convenience store, either as a stand-alone use or combined with a residence, is permitted at the intersection of collector roads or at intersection of collector and arterial roads. A single minor commercial use at these intersections would provide convenience shopping within walking distance of residents in the surrounding area.

One local commercial site located in the Employment Lands at the corner of Leitrim and Limebank Roads (Figure 45) is intended to permit ancillary uses to employment including service commercial, health and fitness, child care and recreation consisting of small occupancies targeted to be no more than 700 sq.m. per occupancy.

Two neighbourhood retail (NC) sites (not including the existing neighbourhood retail centre at the northeast corner of Earl Armstrong Road and River Road) are located along arterial roads, convenient to the residential neighbourhoods east and west of Limebank Road — one at the southwest corner of Limebank Road and Spratt Road and the other on the north side of Earl Armstrong Road near Bowesville Road. These sites are anticipated to accommodate a wide range of retail and service facilities, possibly anchored by a supermarket.

The Community Core is intended to have a variety of retail and service commercial uses that provide specialized goods and services to the wider community. The Community Core will offer a wide range of apparel, household and food related products, as well as restaurants, entertainment and banking services among others. Retail and service uses within the Community Core may be located within mixed use buildings or in free-standing buildings.

Large format retail and service commercial uses totaling approximately 32,500 sq.m. of gross leasable floor area will be located within the Community Core. This floor space will primarily take the form of a large format retail centre to be located generally south of Earl Armstrong Road near the Limebank Road intersection. The large format centre will include large anchor stores (e.g. department stores, supermarkets) as well as smaller free-standing buildings which would range in size up to approximately 9,300 sq.m. containing single or multiple tenancies. Other large format commercial uses will be distributed to other locations within the Community Core in proximity to the Limebank Road/ Earl Armstrong Road intersection.

The northwest quadrant of the Limebank Road/Earl Armstrong Road intersection is intended to provide for up to approximately 18,600 square metres of gross leasable floor area in the form of large stores, such as building supply and home and auto supply stores, motor vehicle sales dealerships, and community level retail uses.

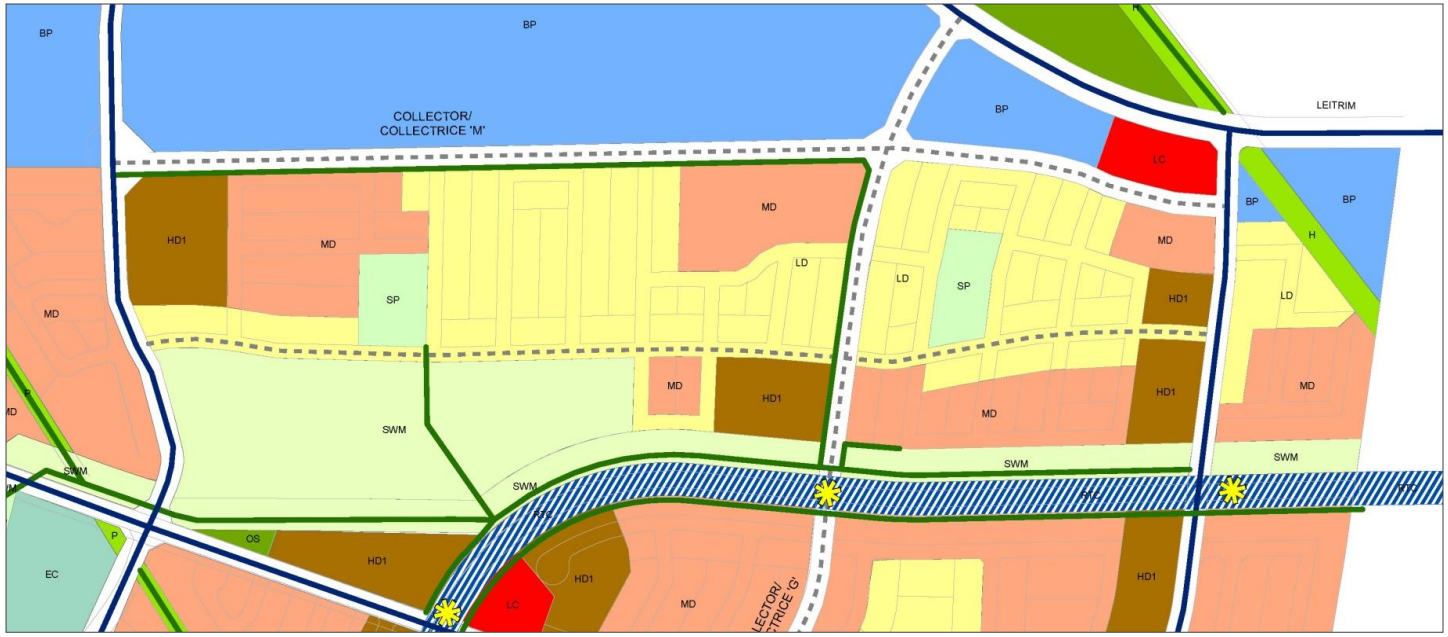

Figure 11: Alternate Land Uses for Area C

The Community Core will also include up to 15,300 square metres of street-related retail and service commercial uses, to be distributed throughout the area, but primarily along Main Street and Transit Street, and within the northeast quadrant of the Limebank Road/ Earl Armstrong Road intersection. Automobile-oriented uses (e.g. service stations, car washes, drive-through restaurants) will not be permitted on either Main Street or Transit Street. Retail and service commercial uses along Main Street and Transit Street will be complemented by ground related office and institutional uses (which are not included in the 15,300 square metres total).

2.3.4 Employment Areas

The primary land uses within the Employment Areas will include offices and industry, arranged in development blocks containing manufacturing, warehousing, and office buildings. Ancillary uses such as cafeterias, convenience retail, personal services and recreational uses intended to service employment areas will also be permitted in selected areas.

A comprehensive study of the Employment lands in the City of Ottawa was underway concurrently with the 2016 CDP Update. At the time the Update was approved, Area C, as shown on the Land Use Plan, was designated as Employment Area in the Official Plan. Initial discussions indicated that there was a possibility that Area C could be re-designated to General Urban. If the review of Employment lands determines that these lands are not required to meet the employment objectives for this community and the lands are re-designated in the Official Plan, then Area C may be developed for other purposes as shown on Figure 11 without an amendment to this Community Design Plan. The requirement for schools and parks will be determined at the time of subdivision.

Area C, as shown in Figure 11, includes: 53.2 ha gross area, 0.9 hectares LC, 4.7 ha HD1, 12.3 ha MD, 20.1 ha LD, 1.8 ha parkland, 8.5 ha SWM, 891 dwelling units, 2,260 residents and 89 home occupations. The shape and size of Area C and the distribution of land uses can be adjusted via a concept plan and without amending this Plan if: a) the location is generally the same as that shown in Figure 11; b) the spacing between the Leitrim Road intersection and the intersection of Collectors H and M is deemed acceptable from a transportation planning perspective as determined by the City; c) any additional lands are contiguous with the lands shown in Figure 11 and outside the Airport Operating Influence Zone; and d) the adjusted Area C conforms with the Employment Lands Review.

2.3.5 Institutional Sites

Institutional sites, principally anticipated for places of worship, are located at or close to main road intersections, complementing other local service/retail destinations, or reflecting existing institutional ownerships. These may also be candidate sites for day care centres, emergency services or other municipal facilities.

2.3.6 Schools

There are four School Boards that serve Riverside South: the English Public and Catholic Boards, and the French Public and Catholic Boards. The Land Use Plan identifies school sites assigned to each school board. Table 2 shows the targeted size of each school property. School sites will be dual-zoned for school and medium density residential purposes. In the event that school sites are not acquired for school purposes, they may be developed for residential purposes in accordance with the underlying residential zoning without an amendment to the CDP. School sites may be "traded" between two or more boards by written agreement of the affected boards without amendment to the CDP subject to the approval of the General Manager, Planning and Growth Management.

As part of the Building Better and Smarter Suburbs initiative, the City may partner with school boards and co-locate schools with parks, stormwater areas and other public or private facilities as deemed appropriate. In such instances, efforts will be made to

share facilities, thereby reducing the overall land requirements. Also, the BBSS/ISR initiative is determining opportunities for allowing interim use of school sites before they are developed.

2.3.7 Parks and Open Spaces

Active and passive recreational uses will be permitted on publicly accessible open spaces. Parks may include play areas, sports fields, community buildings (including day care centres) and recreational facilities, while natural areas (valleylands, woodlots, stormwater management areas) may include trails and low impact recreational uses, where appropriate. Activities associated with hard-surfaced urban plazas will be permitted in the two parkettes in the Community Core. Patios and gathering areas for commercial uses may also be permitted at these two locations.

As part of the Building Better and Smarter Suburbs initiative, the City may partner with school boards and co-locate schools with parks, stormwater areas and other public or private facilities as deemed appropriate. In such instances, efforts will be made to share facilities, thereby reducing the overall land requirements.

School and park sites will be encouraged to be developed as community hubs where various uses and activities are located to support community life.

Table 2: Schools by Sector/Neighbourhood

Sector	Schools	Area (ha)
1	English Catholic Elementary School (EC)	2.4
	English Catholic High School (EC)	8.0
	English Public Elementary School (EP)	2.8
	English Public High School (EP)	6.6
2	English Catholic Elementary School (EC)	2.4
	English Catholic High School (EC)	7.7
	English Public Elementary School (EP)	2.8
	French Public Elementary School (FP)	2.5
	French Catholic High School (FC)	8.8
3	English Catholic Elementary School (EC)	2.8
	English Public Elementary School (EP)	2.8
	English Public High School (EP)	7.8
	French Catholic Elementary School (FC)	2.4
4	French Public High School (FP)	5.3
5	English Public Elementary School (EP)	2.8
6	English Public Elementary School (EP)	2.8

2.3.8 Stormwater Management

In addition to Mosquito Creek and the Rideau River, there are three existing overland stormwater drainage channels in the CDP area. These have been maintained on the Land Use Plan (but may be relocated to accommodate land use patterns and road alignments) and will be used to connect the land drainage areas to eight stormwater management ponds. Six of these ponds are located within the CDP planning area and two are located within the older developed portion of Riverside South. Further information can be found in the Riverside South Master Drainage Plan, as updated as to also incorporate directions through the BBSS/ISR project.

2.3.9 Unit, Population and Use Summary

Based on the Land Use Plan and density distribution, the projected unit and population numbers for Riverside South are summarized in Tables 3 to 6. The tables demonstrate that the Land Use Plan will achieve a housing mix of up to 60% singles and semis, and a minimum of 30% townhouses (including ground-oriented stacked townhouses) and 10% high density (apartments and non-ground oriented stacked townhouses). In addition, a minimum net density of 29 units per hectare for ground-oriented units will also be achieved as required by the Official Plan.

Table 3: Riverside South Land Use Summary

Sector	Total Area (ha)	Residential			Mixed Use				Neighbourhood Commercial	Local Commercial	Instit.	Schools
		Low	Med.	High I	Medium	High I	High II	Comm.				
1	206.3	48.2	49.3	8.1					4.8	1.7	3.0	19.5
2	285.2	153	41.7	4.2						3.7	2.0	24.2
3	268.5	148.9	55.3	4.7						1.3	1.9	16.9
4	96.2				17.1	8.5	17.1	30.7				5.3
5	89.5	34.8	19.6							1.0	1.2	2.4
6	68.4	31.6	18.5							1.2	2.6	2.8
7	20.1	4.1	13.7	1.1								
8	285.9									1.8		
Sub-Total	**1,320 ha**	**420.6**	**198.1**	**18.1**	**17.1**	**8.5**	**17.1**	**30.7**	**4.8**	**10.7**	**10.7**	**71.1**
CDP Total *(includes Major Roads)*	**1,480 ha**											

Sector	District Park	Com'ty Park	N'hood Park	Parkette	Open Space			Wood Lots	Hydro	Pipeline	Employ-ment	Transit P&R
					Valleylands	SWM	OS					
1	18.5	5.6		0.9	31.2	4.7	0.2		3.5	2.2		5.0
2		7.6	1.0	2.8	25.4	8.1	1.9	0.8				8.8
3		2.0	4.1	2.5		12.3	1.6	3.5				13.4
4	10.7			0.8								6.8
5		2.5		0.8	8.3	13.3	1.7		1.7	0.7		1.5
6		3.2			7.8		0.7					
7			1.2									
8					49.9	28.1			5.8	1.6	196.1	2.5
Sub-Total	**29.2**	**20.9**	**6.3**	**7.9**	**122.6**	**66.5**	**6.1**	**4.3**	**11.0**	**4.5**	**196.1**	**38.0**

Table 4: Riverside South Residential Dwelling Unit Summary

Sector	Low Density Residential			Medium Density Residential			High Density I *(90% net area)*	Mixed Use Residential *(90% net area)*			Total Units
	Gross Area (ha)	Net Area (ha)*	Low @ 22 uph	Gross Area (ha)	Net Area (ha)*	Med @ 38 uph	High I @ 60 uph	Med @ 38 uph	High I @ 60 uph	High II @ 120 uph	
1	48.2	33.7	741	49.3	34.5	1,311	438				2,490
2	153	107.1	2,356	41.7	29.2	1,110	228				3,694
3	148.9	104.2	2,292	55.3	38.7	1,471	252				4,015
4								585	459	1,848	2,892
5	34.8	24.4	537	19.6	13.7	521					1,058
6	31.6	22.1	486.2	18.5	12.9	490					976
7	4.1	2.9	64	13.7	9.6	365	60				489
8											
Sub Total	420.6	294.4	6,476	198.1	138.6	5,268	978	585	459	1,848	15,614
Existing			*2,884*			*1,611*	*360*				*4,855*
Total Units			9,360			6,879	1,338	585	459	1,848	20,469

** 70% of Gross Area (ha)*

Table 5: Riverside South Population Summary

Sector	Low @ 3.2 ppu	Med @ 2.4 ppu	High I @ 1.9 ppu	Mixed Use			Total Population
				Med @ 2.4 ppu	High I @ 1.9 ppu	High II @ 1.9 ppu	
1	2,371	3,146	832	-	-	-	6,349
2	7,539	2,664	433	-	-	-	10,636
3	7,334	3,530	479	-	-	-	11,343
4	-	-	-	1,404	872	3,511	5,787
5	1,718	1,250	-	-	-	-	2,968
6	1,555	1,176	-	-	-	-	2,731
7	205	876	114	-	-	-	1,195
8	-	-	-	-	-	-	-
Sub Total	20,722	12,642	1,858	1,404	872	3,511	41,009
Existing	*9,229*	*3,866*	*684*				*13,779*
Total	29,951	16,508	2,542	1,404	872	3,511	54,788

Table 6: Riverside South Net Density by Unit Type

Unit Type	Net Area	Net Density	Units	% by Type
LD-Low Density *(Singles/Semi's)*	294.4	22	6,476	41%
MD-Medium Density *(Townhouses)*	138.6	38	5,853	37%
HD1-High Density I *(Stacked Towns)*	26.6	60	1,437	10%
HD2-High Density II *(Apartments)*	15.4	120	1,848	12%
Total	475	-	15,614	100%

3.0 Community Design and Streetscape Guidelines

3.1 Community Design

3.1.1 Community Identity

A cohesive community character within Riverside South can be achieved through consistent treatment of streetscape and landscape features.

- Fencing along arterial and collector roads, street light fixtures, directional signage, transit amenities and community gateway features should be selected from a similar design style to reinforce the community's distinct character. In turn, each neighbourhood may develop its own identity through selection of street trees, location of street trees in relation to the street edge, lighting fixtures, directional signage and neighbourhood gateway features.
- The Community Core's distinct identity will be reinforced with a design theme to be used on street furnishings such as light and directional poles, benches, waste receptacles, and on gateway and festive features.

3.1.2 Gateways

Gateway sites are the entries into the community and into neighbourhoods or districts. Subject to establishment of a City-wide policy on gateways, these features will primarily be located on private land, but may also be located on public land if the street intersection is at a park or a stormwater management area.

- These sites should be highlighted by special streetscape treatment such as low decorative walls, identity features and distinct lighting and planting, as well as by the architecture of buildings.

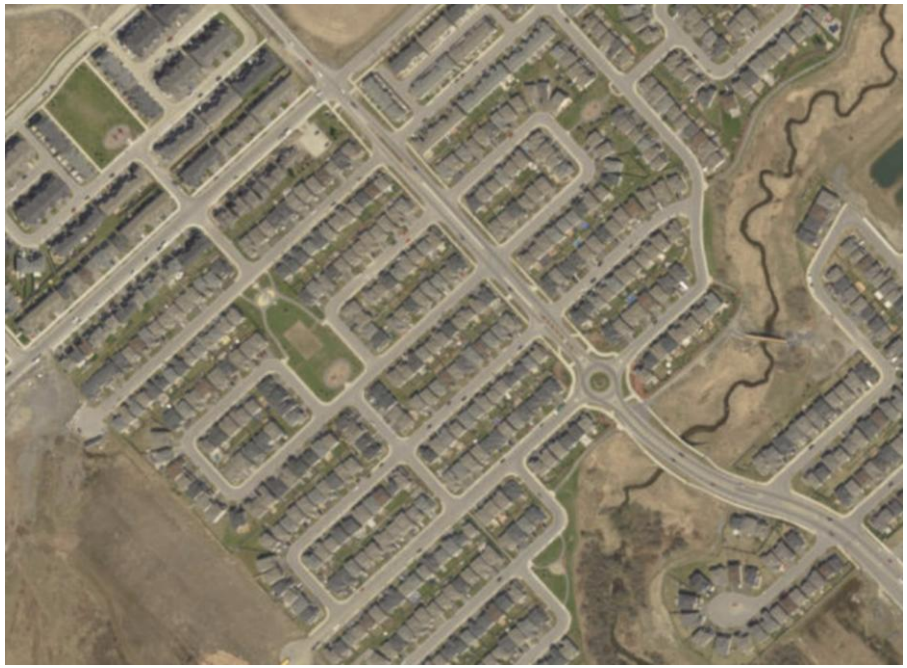

Figure 12: Modified Grid Pattern

Figure 13: Gateway Feature

- Gateway sites are typically located at the intersection of collector roads with arterials or with other collectors (Figure 16). Sufficient area should be provided within the right-of-way to allow for enhanced streetscaping.

3.1.3 Street and Block Pattern

In order to provide opportunities for residents to walk to local amenities, retail or to transit, blocks are designed to offer alternative routes and ease of orientation.

- Grid street patterns with walkable block lengths generally in the range of 150-200 m are used to facilitate access within the neighbourhoods to schools, parks and transit stops.
- A grid pattern can have a curvilinear form to adapt to topographical features and/or to create variety in views and vistas.
- Block orientation in areas adjacent to open spaces is used to create view corridors that terminate at the open space.
- Generally, public roads are located adjacent to natural features, such as the valleylands and woodlots, to allow public access and views into the features. In addition to single-loaded roads, crescents and cul-de-sacs are also used with open “windows” into the features at the ends of the streets. Refer to Figure 15.

3.1.4 Community Edge: Development Adjacent to Arterial and Collector Roads

Edges along arterial roads and collector roads will be treated to present the larger community with the identity and character of the Riverside South neighbourhoods. Edge treatment will allow views into the community and will be landscaped to reinforce an overall community identity. Refer to Figure 17.

- Fencing on arterial roads and on collector roads adjacent to intersections with arterial roads should be designed to allow views into the community, be visually interesting with a variety of materials and variation in setbacks, and provide a generous landscaped buffer to soften the edge.
- Walkways and open areas along arterials and collectors should be landscaped and be designed to provide pedestrian access into the neighbourhoods.
- Rear lotting should generally be avoided along arterial roads throughout the community; window streets (service roads), cul-de-sacs and block flankages are used as alternatives wherever possible.
- The use of acoustic (noise) fencing should be minimized, wherever possible, through alternative measures (e.g. unit and street orientation) as set out in the City’s updated environmental noise control guidelines.

3.1.5 Development Adjacent to Existing Residential Lots

Many homes exist in the community on properties with frontages on existing roads. The Land Use Plan provides for eventual redevelopment of these properties by locating local roads in one or more locations along their lot lines. The intent is that these properties would have frontage on the internal road system of the neighbourhood if and when they are redeveloped in the future.

In the interim, when an abutting subdivision or other development occurs, screen fencing and/or vegetative screening is to be provided abutting the property where required to reduce visual impacts. A 0.3 m reserve should be established along the right-of-way abutting the existing property to prevent legal public road frontage until the time of redevelopment approval.

3.1.6 Development Adjacent to the Rapid Transit Corridor

Development sites adjacent to the rapid transit corridor will be designed to mitigate noise and potential pedestrian, cycling and vehicular conflicts. However the use of noise fencing to mitigate noise shall be a last resort. Alternate layout arrangements including buildings facing the corridor and single-loaded roads shall be the first solution.

- Except for the approach to Mosquito Creek, fencing will not be permitted through the Community Core.
- If, as a last resort, noise fencing is required, a consistent design style is to be selected at the time of subdivision approval to avoid a “patchwork” of fence styles along the right-of-way. Refer to Section 3.2.5 for further details.

Figure 14: Tulsa Transit-Oriented Development

3.1.7 Focal Areas, Landmarks, Community Hubs and Focal Points

Focal areas, such as schools, parks, transit stations and institutional uses, serve as reference points and as community activity areas and when combined serve as hubs for community life; landmarks, such as natural features, significant mature trees, significant buildings and public spaces, serve to orient and give character to a community; and focal points are single elements such as architectural features, park entry features and natural vegetation.

Figure 15: Community Edge along Arterial Roads

- Focal Areas are reinforced through street orientation. Site layout and special landscaping may also be used to enhance their location.
- Community buildings, such as places of worship, libraries and community centres, should be sited so as to terminate a street view, wherever possible. A high standard of architectural and landscaping treatment will be required for such civic buildings in recognition of their contribution to the community's character.
- Landmarks have been incorporated in the Land Use Plan, by locating them at the end of view corridors or at significant intersections.
- Focal Points should be located at the end of view corridors, important intersections, or significant public spaces, where they enhance the streetscape.
- Parks and other open spaces should incorporate focal points such as a specially landscaped path intersection or 'green'.

3.2 Streetscape Guidelines

Streets provide the public with a general "experience of place". Streets are enclosed by buildings or landscape features and are defined by public spaces, such as boulevards and parks. Thus, the relationship between private and public spaces is important in generating streetscapes that are interesting and give a community its identity.

The character of a street is structured by the roadway and its elements, such as width of the pavement, size of boulevard, and type of trees and light poles, as well as front yards and location of building façades and/or open spaces. These components of the streetscape and the building-to-street relationship will vary according to the function of the street.

3.2.1 Building-to-Street Relationship

- Generally, streetscape elements should provide enclosure to the roadway by locating buildings with a desirable separation distance across the street from each other (at a ratio of horizontal distance to height ranging from 3:1 in low density residential areas to 1:1 in more intensive locations, such as the Community Core), and locating light poles, trees and other features at a consistent distance from the curb.
- The fronts of buildings should, wherever possible, be oriented to the street, be articulated to provide interest, avoid blank walls and have pedestrian-scale architectural features, such as functional porches and recessed garage design.

3.2.2 Road Typologies

This section offers a summary of streetscape treatment according to road typologies as shown on Figure 19.

Arterial Roads

Arterial roads serve different purposes, depending on the land use adjacent to them and the modes of transportation they accommodate. Five main land use conditions can be identified adjacent to arterials in the CDP area: residential, retail/commercial, mixed-use, employment and open space. Additionally, transportation modes may include high volume transit, private vehicles, bicycles and pedestrians.

- Generally, tree species should be selected to form a canopy at maturity and be located at regular intervals. Special tree planting arrangements on Earl Armstrong Road, near the intersections with River Road and Bowesville Road, should be considered to signal an entry into the community. At gateway locations (Figure 16), tree planting should form groups and a 'signature' species should be chosen to highlight the gateway.

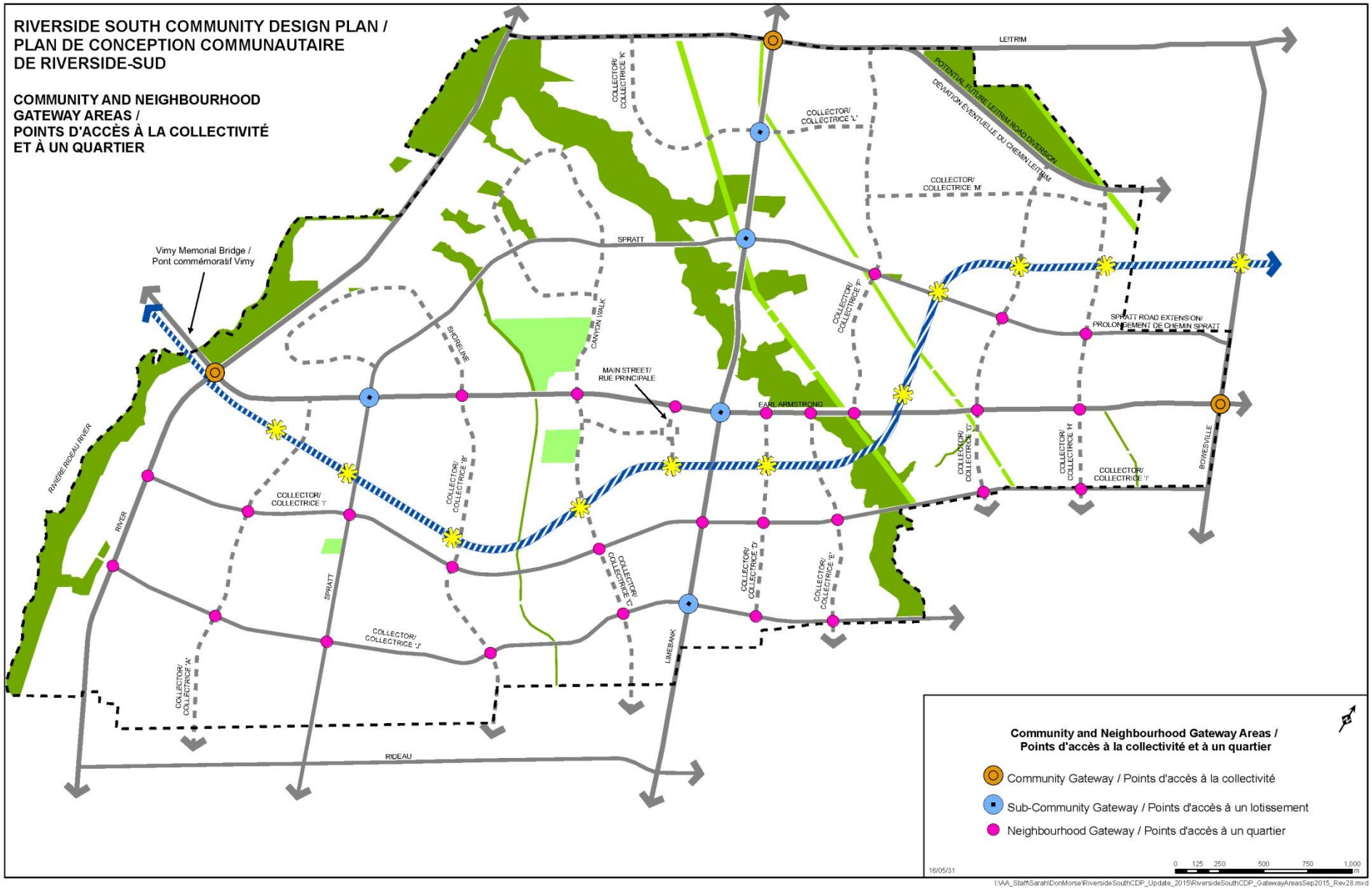

Figure 16: Community and Neighbourhood Gateway Map

- Trees should be located close to the curb to assist in creating a canopy over the street. In some cases, trees may need to be set back further in accordance with City standards to ensure protection from salt damage.
- Sidewalks will be provided on both sides of the street.
- Where possible, pedestrian-scale lighting should be provided at intersections and be coordinated in location and design with bus shelters, seating and other street furnishings such as waste receptacles.
- At important pedestrian crossings, pavement treatment should clearly mark the crossing by means of change in surface colour, texture and/or material.
- A pedestrian crossover may be installed across Earl Armstrong Road in line with the north-south pathway along the Thomas Gamble Drain
- Where a bicycle trail follows an arterial, the right-of-way should incorporate bicycle lanes, multi-use pathways or similar facilities in accordance with City standards.
- Noise attenuation fencing is to be a last resort to addressing noise mitigation for properties adjacent to arterial roads as set out in the City's environmental noise control guidelines. Where noise attenuation fencing is required, the impact of the fence should be minimized through upgraded fence design, edge planting and/or berming. High-quality, masonry fencing should be used along Earl Armstrong Road.

Collector Roads

- Collector roads act mainly as links within the community to local destinations and as links to the wider arterial road network. As such, pedestrian and cycling movements are an important consideration in their design. Most collector roads are designed with a degree of curvature to support a safe vehicular speed. Other traffic calming measures should be considered at the detailed design stage to advance the directions established through the BBSS/ISR project.
- Boulevards will be sodded, and will have trees planted at regular intervals in accordance with City standards. Tree location should be coordinated with street lights and sidewalks. Where possible, tree species should be selected to give each road a character with preference for high branching, large caliper trees.
- Sidewalks will be provided on both sides of all collector roads.
- Where possible, pedestrian-scale lighting should be provided where buildings front onto the street, at intersections and at bus stops.
- At gateway locations, special planting and landscape features will be considered.
- Where retail fronts the street, the boulevards should have wide sidewalks.
- Where a bicycle trail follows a collector road, bicycle lanes, multi-use pathways or similar facilities should be incorporated into the right-of-way in accordance with City standards.
- Reversed lotting and associated fencing is discouraged. Residential lots will be permitted to front on collector roads, except in proximity to arterial road intersections.
- Where the road is adjacent to an open space, the pedestrian environment should be reinforced through walkways, enhanced tree planting, and special landscape features such as park benches.
- The right-of-way will incorporate on-street parking wherever possible as a traffic calming measure to promote a safe pedestrian environment.

Local Roads

These roads constitute the primary neighbourhood pedestrian, cycling and vehicular access network, and provide linkages to local destinations such as parks and schools.

- Boulevards should be sodded and should have trees planted at regular intervals.
- Sidewalks will be located on both sides of all streets in the Community Core and on one side of local roads that provide connections to transit, schools, parks, recreational centres, institutional uses and retail, commercial and employment areas. In addition, sidewalks shall be provided to complete walking loops within neighbourhoods. Wider than standard right-of-ways may be required for local roads in the Core.
- Tree species should be selected to give each street/neighbourhood a distinct character, preferably using dense canopy trees.
- Tree species should be selected to give each street/neighbourhood a distinct character.
- Apply a woonerf format to the local street abutting the parkette that is located at the corner of Collector D and Transit Street.
- Traffic calming measures within the right-of-way should be considered near schools, parks and other high pedestrian activity areas.
- On-street parking also contributes to lower vehicular speed, and will be permitted on at least one side of all local roads.
- An additional 10 m shall be added to the north side of Nichols Island Road between the river and the first road intersection heading north. This is intended to provide a treed hedgerow as a screen to development.

Main Street

Located in the Community Core area, Main Street is envisioned as an active retail/commercial street, which will extend its function into the night as restaurants and entertainment centres continue to attract visitors. Together with the built form guidelines in Section 5, the intent is to create a unique environment that contributes to the overall community character.

- The character of Main Street will be reinforced through the use of a design palette for all streetscape elements such as light and directional poles, seasonal ornaments and street furnishings such as benches and waste receptacles. These elements will reflect a theme for the Community Core.
- Consider a woonerf format for the portion of Main Street surrounding the parkette.
- The right-of-way will include two traffic lanes, on-street parking on both sides, wide sidewalks on both sides, and special surface treatment at intersections.
- To create an inviting night ambiance, soft, white luminaries should be used for sidewalk lighting, complemented with light spilling from shop windows.
- Tree species will be selected to provide shading and an identity to the street and be planted paired on both sides of the street.
- Trees should be planted on a “retail module” of 8-10 m to allow views of store façade and signage. Narrow, high-branching trees are preferred.
- Main entrances to buildings will be located close to the public sidewalk and provide direct access for pedestrians.
- Continuous paved surfaces will connect building entrances to sidewalks. Pavers or other surface texturing is encouraged as a boulevard edge.

- At pedestrian crossing points, pavement treatment will clearly mark the crossing by means of change in surface colour, texture and/or material or by line painting.

Transit Street

Similar to Main Street, the 'transit street' within the Community Core is envisioned to be pedestrian-oriented, provide retail/commercial and residential functions and have a community-wide appeal. The roadway will accommodate the rapid transit corridor in the centre of the right-of-way as part of a highly urbanized environment. One-way traffic lanes and on-street parking will exist adjacent to the rapid transit corridor on both its north and south sides. The boulevards along the Transit Street will be sufficiently wide to accommodate pedestrian and cycling movements and be landscaped to give a sense of place to visitors and residents. These streetscape guidelines should be read together with the applicable built-form guidelines in Sections 5 and 6.

- Streetscape elements such as light and directional poles, and street furnishings such as benches and waste receptacles, will be coordinated with the overall design theme for the Community Core.
- Banners and seasonal ornaments such as flower baskets could be used to enhance the streetscape.
- Sidewalk lighting should consist of white, soft lighting, complemented with spilled light from interiors and shop windows. Tall, highway-scale fixtures with bright orange or yellow lights should not be used.
- Tree species will be selected to provide shading and an identity to the street, and be planted paired on both sides of the street. Trees should be planted on a "retail module" of 8-10 m to allow views of store façade and signage. Narrow, high-branching trees are preferred.

Figure 17: Road Pattern Adjacent to Natural Features

Figure 18: Woonerf Street in Calgary

- If trees are planted along the rapid transit corridor, they should be coordinated in location with trees at either side of the road.
- Main entrances to buildings will be located close to the public sidewalk and provide direct access for pedestrians.
- Continuous hard surfaces will connect building entrances to sidewalks. Pavers or other surface texturing is encouraged as a boulevard edge.
- At pedestrian crossing points, pavement treatment will clearly mark the crossing by means of change in surface colour, texture and/or material or by line painting.

BBSS Direction for Streets

Where practical, the final designs of all streets will incorporate and advance the directions emanating from the BBSS/ISR project. Where these differ from the directions as set out above, the focus will be to advance the BBSS/ISR directions for streets through subdivision and site plan applications.

3.2.3 Focal Points and View Termini

- Streetscape elements at focal points and view termini should be placed to frame the view.
- Trees and planting should be grouped to create a visual reference, enhance the area and provide shading.
- Where the focal point or view terminus is a public space, such as a park entry or a public building, pedestrian
- Lighting, directional signage and increased landscaping should be used, among other features.

3.2.4 Prominent Corners

Prominent corners include those at the intersections of collector roads and arterial roads.

- Where required, provide pedestrian lighting and directional signage, and be coordinated with bus stops.
- 'Signature' tree species should be selected and be coordinated on opposite sides of the road.
- Where open space is at a prominent corner, landscaping should provide clear direction to pathways, with planting reinforcing entries to the open space.

3.2.5 The Rapid Transit Corridor

The rapid transit corridor is shown in Figures 19 and 45. It consists of two parts. The first part (the majority of the corridor) is designed exclusively for transit within a 40 m wide right-of-way with noise fencing along both sides of the corridor and a multi-use pathway along the south side. The second part, in the middle section through the Community Core, is designed as a shared 43 m wide corridor with one-way streets and on-street parking on either side of an exclusive transit median and sidewalks and cycle tracks in the boulevard on either side. The Core profile is shown in Figure 20.

As an alternative, the following sections of the Rapid Transit Corridor may be changed to a shared format similar to the Core: a) from just west of Spratt Road eastward to the extension of Canyon Walk; and b) from Earl Armstrong Road north and east to the eastern boundary of the Planning Area. This alternate format may be applied once any required modifications are made to the Environmental Assessment for this transit corridor which would be funded through development. An amendment to this CDP would not be required. The purpose of this alternative is to better integrate the corridor with the surrounding neighbourhoods and to allow for the development of portions of the right-of-way at the

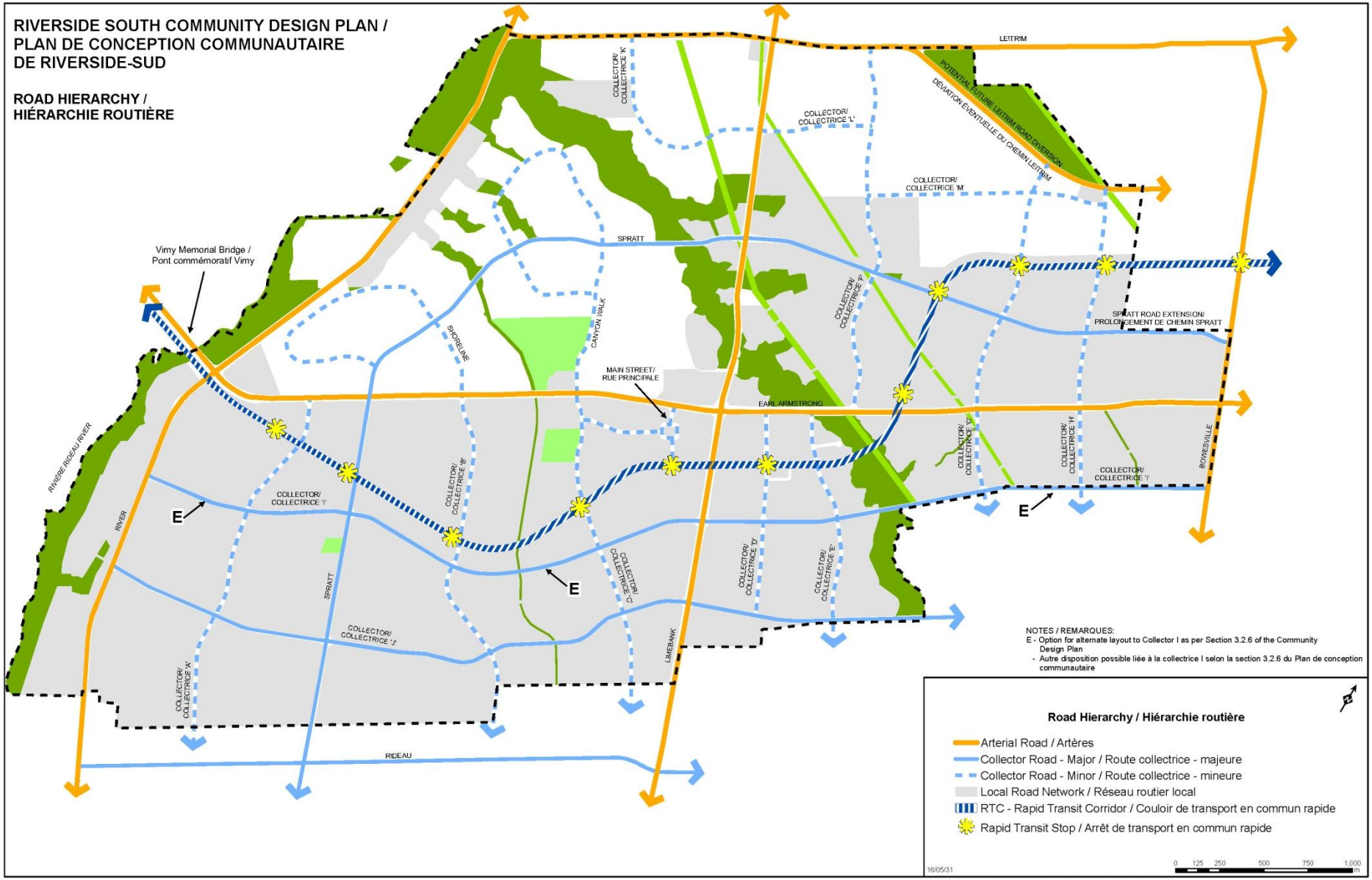

Figure 19: Road Hierarchy Map

same time as the surrounding homes are developed. This would permit sidewalks and cycle tracks to be put in place sooner for the benefit of the community. With the use of single-loaded roads and apartments that face the corridor, this form of development has the added benefit of avoiding noise fences which can act as barriers within a community. If a subdivision proceeds based on this alternate format, all subsequent development in either Section a) or b), as mentioned above, shall be required to use the alternate format and the original transit-exclusive format with noise fencing would no longer be an option.

3.2.6 Special Provisions for Collector I

If the Spratt Road to Collector C portion of the Rapid Transit Corridor shown as Area D on Figure 45 of the CDP is changed to a shared format as described in Section 3.2.5, then Collector I as shown on Figure 19 and 45 of the CDP may be changed to the following without amending this CDP:

- Minor Collector between River Road and Spratt Road.
- Local Road or Minor Collector between Spratt Road and Collector C.
- Minor Collector between Collector C and Collector E
- Local road or no roadway between Collector E and Collector G on condition that the roadway be replaced with a footbridge over Mosquito Creek with all costs, including installation, to be born by the developer with no Development Charges to apply.
- Minor Collector between Collector G and Bowesville Road.

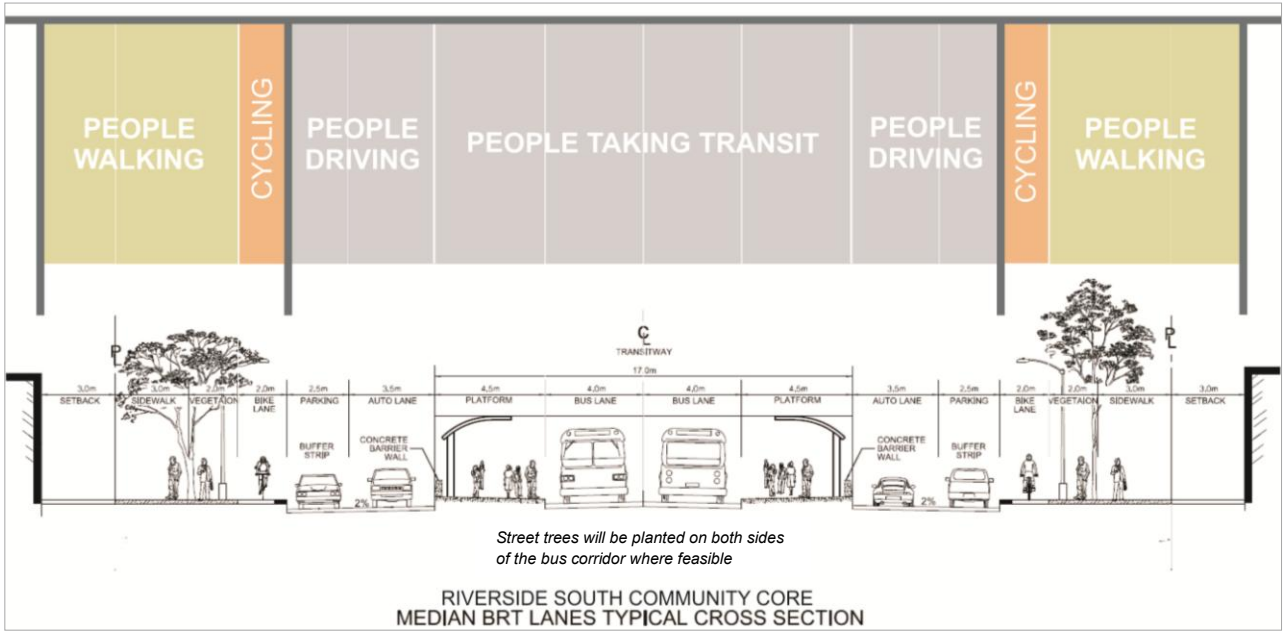

Figure 20: Transit Street Cross-Section with Median BRT Lanes in Riverside South Community Core

4.0 Open Space Guidelines

The primary open space network provides both spaces and connections between the spaces that foster active and passive recreational uses. The components of the open space network include: parks, valley lands, storm water management areas, woodlots, hydro and pipeline corridors, primary pedestrian and cycling network, scenic routes and multi-use pathways.

4.1 Parks

4.1.1 Parkland Requirements

Parkland within the CDP area is shown on the Land Use Plan and the Primary Open Space, Pedestrian and Bicycle Network Plan. Further information on parks and the facilities provided are contained in the Area Parks Plan for Riverside South. Parkland will be provided in accordance with the Ottawa parkland dedication by-law as amended from time to time and in accordance with the Area Parks Plan. The total parkland targeted for Riverside South, as shown on the Land Use Plan, is 64.3 hectares and is reflected in Table 7.

4.1.2 District Parks

Two district parks offer indoor and outdoor recreational facilities and fields. Both are centrally located, at the intersection of major roads, within walking distance of a transit station and have at least three open frontages on abutting roads. The District Park located at the intersection of Earl Armstrong Road and Collector H contains approximately 13 hectares of park land and 5.5 hectares of land for a pool/arena complex. This site is developable sooner than other possible locations and it meets many of the locational criteria for a district park.

Figure 21: Play Structure Abutting Forest

Figure 22: Parkette

Table 7: Parks by Sector in Hectares

Sector	District Park DP	Community Park CP	Neighbourhood Park NP	Parkette SP	Total
1	1 @ 13.0 (plus 5.5 for Rec Complex)	1 @ 3.2 1 @ 2.4 (existing)		1 @ 0.4 1 @ 0.5	25
2		1 @ 3.2 1 @ 2.4 1 @ 2.0 (existing)	1 @ 1.0	1 @ 0.4 1 @ 0.8 1 @ 0.8 1 @ 0.8	11.4
3		1 @ 2	1 @ 1.1 1 @ 1.4 1 @ 1.6	1 @ 0.8 (existing) 1 @ 0.6 1 @ 0.5 1 @ 0.6	8.6
4	1 @ 10.7			1 @ 0.3 1 @ 0.6	11.6
5		1 @ 2.5		1@0.8	3.3
6		1 @ 3.2			3.2
7			1@1.2		1.2
8					
Total	29.2 ha	20.9 ha	6.3 ha	7.9 ha	64.3 ha

**For more information, refer to the Area Parks Plan*

The District Park in the Community Core is targeted to have active sports fields, a skateboard park, a passive recreational area, a community centre and a library. If built, the preferred location for the Community Centre would be the end of the Mainstreet just south of the transit corridor and would serve as the main southward vista looking from the mainstreet parkette.

- Park entries should be highlighted with enhanced planting, landscape features such as pergolas and gazebos, special paving, and directional signage.
- Pathways should connect to sidewalks at intersections and other pedestrian crossings.
- Natural features should be protected by: locating high activity play in locations away from the natural features, carefully planning pathways to minimize disruption of natural functions within the area and providing transitional planting areas which use indigenous plant species where possible.
- Crime Prevention through Environmental Design (CPTED) principles should be applied to site layout, lighting and plant selection. Vegetation should not restrict visibility into the park, and active park uses should be located within view of passive areas.
- Night lighting for sports fields should be directed away from nearby residential areas.
- Seating and children's play areas should be planned taking into consideration shaded areas and opportunities for overview from nearby residences and/or adjacent streets.
- Park design should provide focal areas.
- Landscaping should be used to enhance parking areas, while allowing views for safety.
- Opportunities should be explored for shared-use parking with abutting development.

4.1.3 Community Parks

Each community park will provide facilities in accordance with the Area Parks Plan. The targeted size for community parks will be approximately 3.2 hectares. Most community parks will be located adjacent to schools to combine open space opportunities in each neighbourhood. The programming and maintenance of sports fields will require co-ordination between the City and the various school boards. Community parks have at least two open frontages on abutting roads.

- Where possible, the design of abutting school/park blocks will be coordinated. Landscape elements such as trees, fencing, park furniture and pathways should provide visual continuity from one block to another.

- To optimize site layout, overlap of sports fields between park and school blocks will be considered.
- Pedestrian connections should be provided to link school and park blocks.
- School and park vehicular parking areas should be joint use where possible.
- Pathways should connect to sidewalks at intersections and other pedestrian crossings.
- Natural features should be protected by: locating high activity play in locations away from the natural features; carefully planning pathways; and providing transitional planting areas.
- Groups of trees should be planted to provide opportunities for shade.
- Crime Prevention Through Environmental Design (CPTED) principles should be applied to site layout, lighting and plant selection; vegetation should not restrict visibility into the park, and active park uses should be located within view of passive areas.
- If night lighting is provided for sports fields, it should be directed away from nearby residential areas.
- Park entries should be defined with enhanced planting, landscape features such as pergolas and gazebos, special paving, and directional signage.
- Where community mail boxes are located in parks, these should be incorporated into a feature such as a pergola. Pedestrian lighting, benches and waste receptacles should be placed in these areas.
- Seating and children's play areas should be planned taking into consideration shaded areas through trees located in proximity to the play area and opportunities for overview from nearby residences and/or adjacent streets.
- Focal areas within the park should be provided e.g. a circular 'green' space with seating and trees.
- Landscaping should be used to enhance parking areas, while allowing views of cars for safety.

Figure 23: Well-Maintained Playfield

Figure 24: Typical Landscape Plan for a Community Park

4.1.4 Neighbourhood Parks and Parkettes

These local parks supplement the broader open space system by being located to provide open space amenity within convenient walking distance (approximately 400m) of residences in the community. Neighbourhood parks are approximately 1.5 hectare in size, while parkettes are approximately 0.6 hectares.

These parks are located at the terminus of 'T' intersections, or at highly visible road edges. Significant road frontage is provided to the parks. Where possible, these parks have been located so as to incorporate significant hedgerows.

Guidelines:

- Provide open frontage on at least two streets surrounding the park, with adjacent uses oriented toward the park.
- Apply CPTED principles to site layout and plant selection; vegetation should not restrict visibility into the park, and active park uses should be located within view of passive areas.
- Parking should be accommodated in the public right-of-way, and not on-site.
- Reflect the community identity in lighting, site furnishings, landscape details and planting.
- Plan seating and children's play locations taking into consideration shaded areas and opportunities for overview.
- The two parkettes in the Community Core that abut the Main Street and the Transit Street should be treated as urban parks with greater use of hard surfaces and with greater emphasis on providing year-round gathering places for the community. Both should be integrated with the surrounding uses via a woonerf-style treatment of the surrounding local roads. Developers should expect to spend more money on the development of these roads and parkettes.

4.2 Natural Features (woodlots, valleylands)

In addition to woodlots located along the Rideau River and Mosquito Creek, two reduced woodlots have been retained in the Planning Area. In addition, another larger woodlot was retained as part of the older Developed Area. Other minor woodlots throughout the community may be integrated into valleylands and in portions of parks. A Forestry Management Plan will be prepared for the woodlots to be retained.

Regarding the two reduced woodlots, one is located just west of the Community Core and is part of what has been known as the T-Woodlot. It is approximately 3.6 hectares. The second is known as the Spratt Woodlot. It is approximately 0.8 to 1 ha and is located near Spratt Road and Collector I. While the City was not able to obtain all of the wooded portions of these two woodlots, efforts will be made to retain as much as possible through site plan control and other processes as applicable.

The limits of development adjacent to the valleylands will be determined at the time of subdivision approval based on an Environmental Impact Study (EIS) and a geotechnical study.

Where woodlots are to be preserved, an EIS will determine if a perimeter buffer is required. The limit of the Open Space corridor at the northeast limits of the Employment Area will be determined at the time of subdivision/ development approval.

- Indigenous tree species should be used for tree planting on lots adjacent to woodlots to reduce windthrow and the introduction of alien species in the woodlot.
- An appropriate transition in distance and grade change between the natural features and urban development should be considered.
- Subject to an arborist report/forestry management plan, access restrictions may be required to protect trees from damage where woodlots are adjacent to park areas and residences.

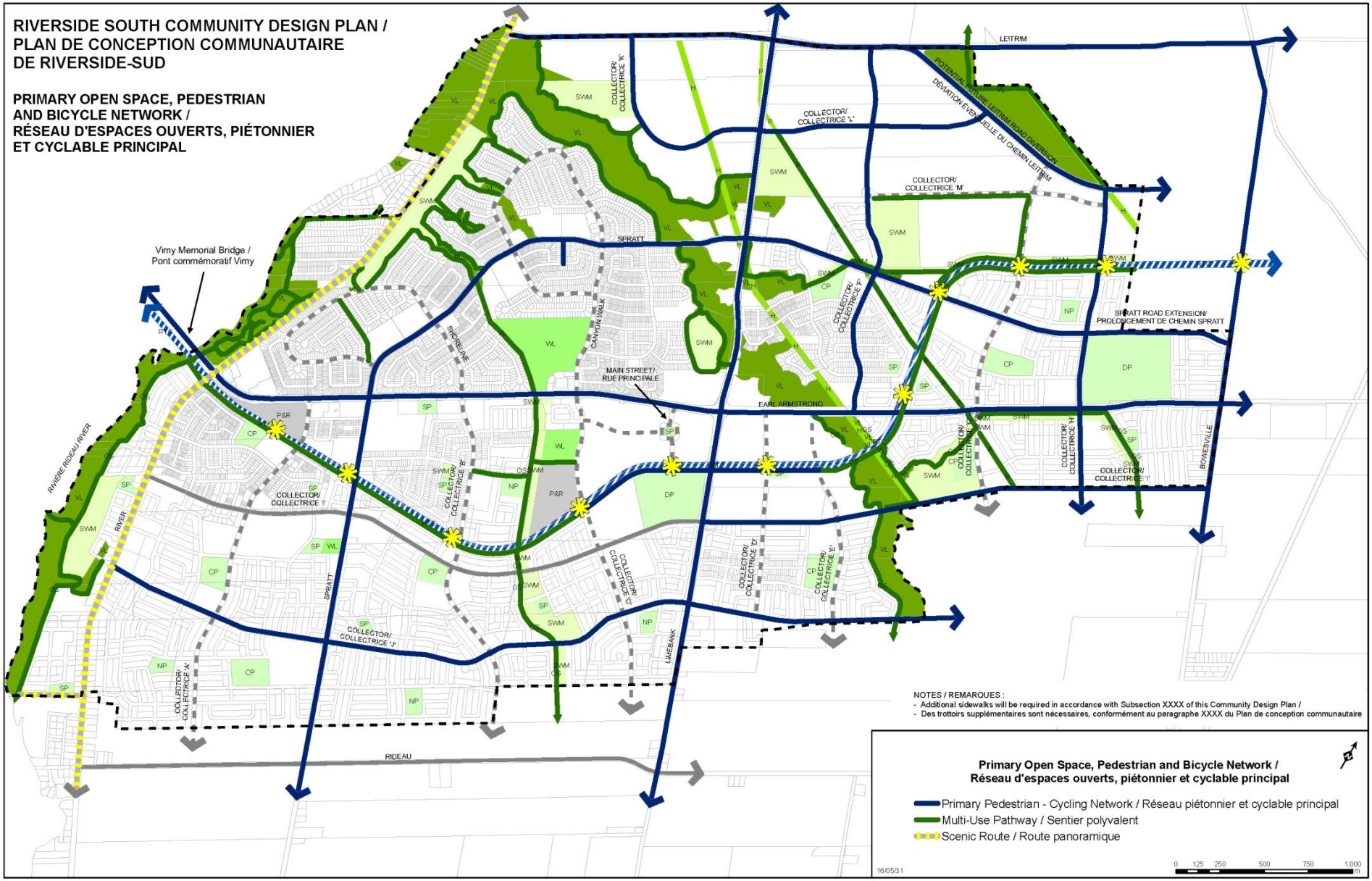

Figure 25: Primary Open Space, Pedestrian and Bicycle Network Map

4.3 Stormwater Management (SWM) Ponds and Corridors

SWM ponds are community amenity features that add recreational, ecological and aesthetic value to development.

- Pond design should integrate safeguards to ensure public safety while allowing access where considered appropriate.
- Naturalized design of SWM corridors should be used, including variable side slopes, sinuous contours, and low maintenance post-construction activities and materials.
- Where possible, pond landscaping should reflect the character of nearby treed areas.
- Retain existing vegetation where possible and use native flood-tolerant species to stabilize banks.
- Opportunities for pathways and integration into the recreational trail system will be undertaken at the detailed design stage of the SWM facility.
- Fencing should be avoided where possible.
- Where feasible, SWM ponds should be located with at least one open frontage on an abutting road, with homes and other buildings facing onto the pond.
- The shape and size of the stormwater management blocks will be finalized at the time of development approvals.
- Four stormwater management areas; three located in Sector 8 and one located in Sector 3, may be relocated within the sector based on: a) the recommendations of the Riverside South Master Drainage Plan (as amended); and b) an approved concept plan showing how the lands affected are to be organized and used. In this instance, an amendment to this CDP will not be required however the concept plans must be approved by the Planning and Growth Management. The four stormwater management areas are identified with a B on the Land Use Plan.
- To the extent possible, the master Drainage Plan will reflect the principles and levels of service as determined through the BBSS/ISR project.

4.4 Bicycle and Pedestrian Trail System

Recreational cycling and pedestrian pathways will add to a sense of community by linking neighbourhoods, parks, natural features, community facilities, schools, and retail destinations. The Primary Open Space, Pedestrian and Bicycle Network identifies the primary on-street and off-street routes. These routes incorporate and connect to those identified on schedules to the Official Plan. Homes will be connected to the pathway/ cycling routes via neighbourhood streets.

Two north-south trails will also follow the recommended locations along the Mosquito Creek Valley and the Rideau River Valley. The trail along the Rideau River (shown conceptually in the Open Space System Plan) will be subject to further detailed study. The land required for these trail systems will be acquired at the time of development of abutting lands. On-street connections may be required in the interim until all necessary land along the Rideau River trail has been acquired by the City.

The main east-west trail connects the greenbelt northeast of the community to the Rideau River on the west, along a route that follows the rapid transit corridor, utilizing open spaces, schools, roads and pathways.

Where a cycling route extends beyond the park and open space system into the street network, the route will be located within the defined right-of-way.

- Cycling routes should be designed to use the perimeter of natural areas to minimize disruption of features and functions within the natural areas.
- All routes should be mapped, designed and signed as pathways/cycling routes.
- Seating and shaded areas should be provided along pathways.
- High-use pathways and open space entries will be designed where required in accordance with CPTED principles including consideration of lighting.
- Routes should be planned for scenic interest and ease of linkage between open spaces.
- Routes should have universal accessibility.
- Street crossings should be clearly indicated and highlighted through special pavement treatment.

BBSS Direction for Parks and Open Spaces

Where practical, the final designs of all open spaces will incorporate and advance the directions emanating from the BBSS/ISR project. Where these differ from the directions as set out above, the focus will be to advance the BBSS/ISR directions for streets through subdivision and site plan applications.

Figure 26: Park Edge with a Double Row of Trees

Figure 27: Sitting Area

5.0 Community Core Guidelines

Development of the Community Core will take place by plan of subdivision and site plan approval. It will occur in a phased manner that will reflect the timing of residential and commercial development as well as the implementation of the transit corridor. The site and built form guidelines outlined below should be read in conjunction with the streetscape guidelines in Section 3.2.2 (d) and (e) and the Community Core Demonstration Plan as shown in Figure 30.

5.1 Site Plan Guidelines

5.1.1 Street and Block Pattern

Block configuration will allow intensification as the Core matures over time to create a grid that is in keeping with traditional city blocks. Primary roads are to be constructed as public streets with a high level of pedestrian amenity as part of the initial phase of development on adjacent lands. Secondary roads will be shown as blocks on plans of subdivision to provide for the construction of a public road in the future at the time of significant intensification or redevelopment. In the interim, the blocks may be used for private driveways and parking. Loading, garbage storage and service facilities will be oriented to secondary roads.

- A typical block size to support a pedestrian-scale grid should have a maximum length of 200 m. It is expected that some block lengths in the initial stages of development may be greater (in the order of 300 m), but that these blocks will be further subdivided in the future as internal driveways are converted to public streets as part of the process of full build-out.

Figure 28: Main Street Plaza

Figure 29: Walk-Up Condos in Montreal

5.1.2 Parking Areas

Parking requirements in the Community Core should reflect the transit-oriented development approach. Reduced minimum and maximum parking ratios for retail, office commercial and residential will be encouraged at the time of zoning in accordance with the City of Ottawa Zoning By-law for lands within the Core.

Parking areas are expected to evolve as blocks develop and transit becomes fully functional. Driveways within large blocks that provide through access at mid-block will be designed so that they can eventually form part of the public street grid. As blocks become fully developed over time, and the Community Core matures as an urban area, surface parking areas could be redeveloped for buildings and required parking could be consolidated into structures. One possible way that this process could be realized is illustrated in the Fifty Year Demonstration Plan as shown in Figure 32.

- Main parking areas will generally be located within the interior of blocks.
- Large surface parking areas will be broken into smaller areas by landscaped aisles and/or medians.
- Tree planting within medians and other planting areas will be required in parking lots.
- Pedestrian circulation will be clearly marked as pathways within parking areas. Pedestrian pathways will connect to building entries, walkways and/or sidewalks.
- Access points for adjacent commercial and retail developments will be consolidated to reduce the number of driveways connecting to the public road system.
- Comprehensive design of parking areas for each block will co-ordinate driving aisles, driveway entries and, where appropriate, landscaped buffers between separate ownerships.
- Where parking abuts the street, a landscape buffer will be required to partially screen parking areas. A combination of low manicured hedges, planters, decorative fences or walls and/or change in grade through a low retaining wall may be used.
- Parking structures will be designed to integrate into the street elevation by using similar materials, colours, floor heights and window lines as adjacent buildings.
- Frontages of parking structures along public streets will be occupied by active uses at grade such as retail and service commercial.
- Parking areas will be lit in accordance with CPTED principles for pedestrian safety and comfort.
- Parking lot lighting will be directed away from adjacent residential areas and/or dwelling units located above ground floor commercial uses.
- To reduce the visual impact of large surface parking areas for higher density residential uses, a minimum of one-half of required parking for apartment buildings greater than five storeys in height shall be underground.
- Loading and garbage storage areas are not permitted between the building and the streetline along arterial roads and all roads in the Community Core.

5.1.3 Walkways

Pedestrian movement throughout the Community Core will be facilitated by walkways that connect parking and other public areas to public street sidewalks.

- On retail/office sites, walkways will be well lit and wide enough to allow ease of movement and overview from street. Niches and other possible hiding places should not be used along the walkways. Directional signage should indicate walkway entrances, parking locations, main building entrances, etc.
- Wide sidewalks will be included on both sides of all public streets in the core.
- Walkways must be indicated on site plans.

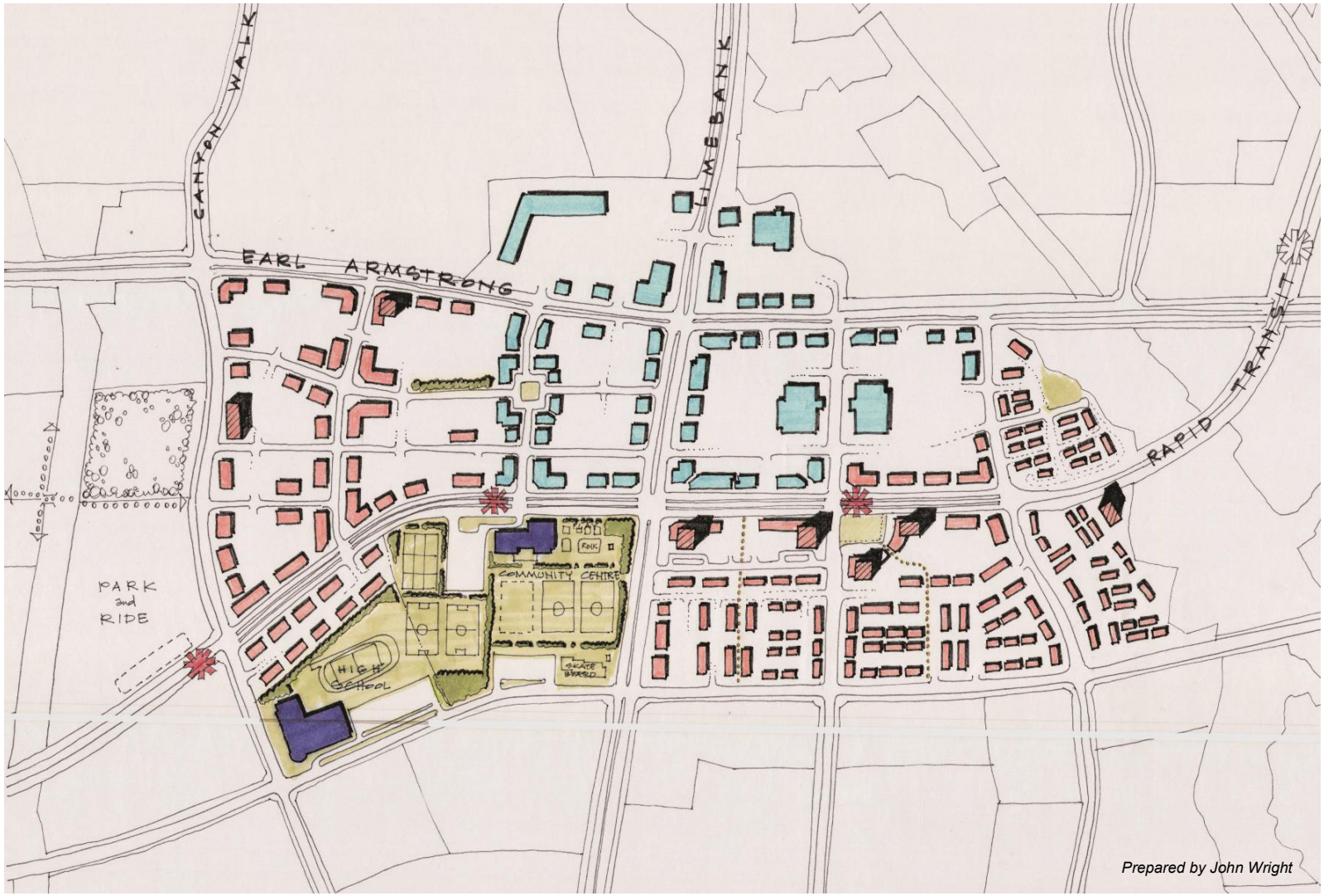

Figure 30: Community Core Demonstration Plan

5.2 Building-to-Street Relationship

Prior to development occurring in the Community Core, a theme for street elements, such as light poles, directional signage and street furniture, and for tree planting and design of public squares will be developed. The theme should be continued in the style of storefront signage. There are four principal street types in the Core:

5.2.1 Main Street

Development of Main Street will result in a cohesive street frontage, with approximately two to six storey heights and compatible architectural styles. Taller buildings may be located away from the Mainstreet. The objective is to create an attractive destination for residents and visitors that has an identifiable character. Primary uses should be retail and restaurant/ entertainment that will generate activity at all times of the day.

- A close building relationship with the street is required.
- Building elevations should be articulated and will include windows and functional entrances to animate the street.
- Windows on street elevations and primary entrances to buildings from the street are required, and patios are desirable to produce an active street. Secondary building entrances from rear or side parking areas are also permitted.

5.2.2 Transit Street

Transit Street is envisioned to be pedestrian-oriented, generally fronted by mixed-use buildings, with primarily retail uses at grade. Generally, such buildings will be encouraged to be low high-rise with targeted heights of between two and 12 storeys.

- Buildings will provide enclosure to the roadway while offering pedestrian scale and comfort.
- A close building relationship with the street is required.
- Building elevations should be articulated and will include windows and include functional entrances to animate the street.
- Windows on street elevations and primary entrances to buildings from the street are required, and patios are desirable to produce an active street.
- Secondary building entrances from rear or side parking areas are also permitted.

5.2.3 Edge Streets (Limebank, Earl Armstrong)

- Buildings on edge streets should be located to provide a consistent street edge.
- Building elevations facing edge streets will have or will emulate a front façade with windows and doors and include functional entrances to animate the street and avoid blank walls.
- To provide a suitable transition, buildings along Earl Armstrong Road and Collector I in the Community Core should step back from mid-rise to high-rise.
- Yards between the building and the street line should generally be landscaped with soft surfaces and planting; only driveways, walkways and building forecourts should be hard surfaced.
- No parking, loading or garbage storage areas will be located between the street and adjacent buildings.

5.2.4 Collector and Local Roads

- Buildings should be located to provide a consistent street edge.
- Setbacks should be used, in combination with grade relationships, to achieve satisfactory privacy for residential units.
- Where retail is the predominant use, Figure 30 shows buildings located as close to the street line as possible, preferably at, or near the lot line.

5.3 Parking and Driveways

Large development blocks (± 300 m in length) shall have either public streets or private driveways located at midblock to provide access and connect to the interior parking lots. Mid-block private driveways shall provide sufficient right-of-way to allow them to evolve into public streets in the future, as infill development and parking structures become economically feasible. The implementing zoning may provide that no buildings will be permitted in locations identified for future public streets. On-street parking will be incorporated into the rights-of-way of public streets within the Community Core. On-street parking is vital to street-related retail and is an effective safety and traffic calming measure.

On-street parking on Main Street and along the Transit Street is required and will be located within parking bays, which if feasible should have a special surface treatment. Site layout should include careful differentiation of entries and parking areas to individual uses within mixed-use buildings/sites. Residential parking should be clearly distinguished from the commercial parking. However, adjacent properties with compatible uses should share parking facilities as part of a comprehensive parking strategy.

Figure 31: 12-Storey Condominium, Burnaby, B.C.

Figure 32: Fifty Year Demonstration Plan

5.4 Distribution of Uses

Although the shapes of the buildings are conceptual, the Community Core Demonstration Plan (Figure 30) distributes residential, commercial, institutional and open space uses in a manner that reinforces the intended function of the streets and that reflects the convenience of access to transit. Activity nodes around stations are intended to become focal points in the Core with public and quasi-public spaces, institutional or civic buildings, and mixed retail/residential buildings in addition to the station buildings.

Buildings along Main Street, north of the Transit Street will be predominantly commercial with parking areas located within the interior of blocks. South of the Transit Street, buildings will have mixed or single residential/commercial/public uses.

Buildings along the Transit Street will contain a mix of commercial/ residential/public uses with retail, public and service commercial uses at grade.

A wide variety of commercial uses, including office, retail and entertainment buildings, could be located along the arterial roads, where high commercial exposure could be a factor in the decision to locate.

Low, medium and low high-rise buildings will be located throughout the Community Core with the higher buildings located adjacent to the transit corridor. To complement the civic aspect of the Community Core, a district park and high school are located within the southwest quadrant of the Core.

A high standard of architectural and landscaping treatment will be required for such civic buildings in recognition of their importance in establishing the character of the Community Core area.

5.5 Open Space System

5.5.1 Public Squares

Public square locations are shown on Figure 30. Design of the squares should reflect their relevance as gathering spaces.

- Squares should be designed to incorporate a focal area and focal point(s) such as kiosks, water fountains, art display areas, etc.
- Opportunities for gathering should be provided in open areas, where activities such as a farmers' market or festivals can take place.
- Public squares should incorporate hard surfaced areas, trees and may also include sodded/planted areas.
- Walkways provide opportunities for continuous stroll and for connections to street sidewalks and building entrances (where buildings front onto the square).

5.5.2 Private Plazas and Patios

Spaces such as restaurant patios and building forecourts offer informal gathering spaces and opportunities for rest. They will be designed and approved as part of the site plan process.

- Entry into private spaces should be indicated through a change in walkway treatment, planting, signage and/or lighting.
- Where possible, public art display areas should be incorporated.
- Pedestrian lighting should be enhanced.
- Where proposed, fencing should be low and have a decorative character.

5.6 Large Format Retail

The large format retail development planned for the intersection of Limebank Road and Earl Armstrong Road has been carefully sited and designed in order to complement the Community Core design and to support the transit orientation of the Community Core.

- Larger buildings (e.g. a department store) have generally been located at the greatest distance from the transit station and the Transit Street.
- More intensive and/or smaller-scale uses and building forms which form part of the large format retail development (e.g. restaurants, book stores and convenience stores) have been located in proximity to the transit station and the Transit Street.
- Façade and landscape treatment will incorporate the design theme established for the Community Core area. Typical corporate façade treatments should be modified to reflect the design theme.

Figure 33: Transit Street

5.7 Built Form

5.7.1 Frontage

- Buildings will be placed to maximize continuity of frontages. The preferred design is reflected in the Community Core Demonstration Plan (Figure 30) which provides for buildings occupying a minimum of 70% of the street frontages both along Main Street and along Transit Street.
- As Main Street and Transit Street will likely be built out in stages, it is recognized that the 70% frontage is a target that will be achieved over time. In order to reserve the street frontages for future buildings, the Zoning By-law will provide that surface parking will not be permitted within a depth of 25 metres extending back from the frontage of either Main Street or Transit Street and will require buildings to be built close to the street frontage.

Figure 34: Calgary Main Street

- Where there are no buildings, the street edge should be defined through the use of low walls, fencing and/or other landscaping elements.
- Any fencing will be similar in design throughout the Community Core.

5.7.2 Setbacks

- For commercial and mixed-use buildings, Figure 30 shows buildings located as close to the street line as possible. A maximum setback of 3 metres will generally be permitted along Main Street, Transit Street and internal local and collector roads. However, a greater setback may be permitted along minor sections of a building façade to provide for articulation in building façades, forecourts and opportunities for outdoor amenity spaces such as patios. No minimum setback will be required.
- Along arterial roads, a maximum setback of 6 metres will be permitted. No minimum setback will be required. The setback area shall be used for landscaping or building forecourts.
- Where residential buildings front the street, buildings will be located close to the street line. Setbacks should be used, in combination with grade relationships, to achieve satisfactory privacy for residential units; a minimum setback of 3 metres, in combination with a setback of 6 metres generally, is desirable to maintain a strong street relationship. Greater setback may be permitted along minor sections of building façade to provide for recessed garages, deep porches and articulation of building façades.

5.7.3 Building Heights

- Low-rise commercial buildings fronting on Transit Street should have a minimum two-storey building height. This can be achieved as two complete storeys or through the provision of mezzanines and roof elements to create an apparent building height of at least two storeys.
- Mixed-use buildings on Transit Street should be permitted a range of building heights from two to 12-storeys.
- A height of two to six storeys is encouraged along Main Street, with taller buildings up to 12 storeys stepped back from the street.
- Apartment buildings will generally have a height of between four and 12 storeys with taller buildings within walking distance of a transit station in order to achieve minimum density requirements.
- Buildings exceeding three storeys in height should have elevations that define a building base through the use of cornice lines, change of material, and/or setback.
- Medium density residential buildings, i.e. townhouse built form, should generally be two-three storeys in height.
- Where a mix of office and residential buildings front onto the same street, similar building dimensions and setback should be applied. Adjacent buildings should have complementary architectural features.

5.7.4 Signage

- Signage should be incorporated into building façades and should reflect a “Main Street” image.
- The size of fascia signs will be proportional to the building façade.
- Pylon signs will not be permitted on Main and Transit Streets.
- Larger portable message board signs will not be permitted; however, smaller “sandwich” board signs along the sidewalk would be permitted.

6.0 Site and Built Form Guidelines

6.1 Residential Built Form

6.1.1 Detached and Semi-Detached Dwellings

Siting Criteria

- Consistent front yard setbacks are desirable in order to produce a defined street edge. Where blocks are long and straight (i.e. over 150 metres in length), variation in front yard setback to a group of units at mid-block can be used to break up a monotonous streetscape.
- Setbacks from the main wall of dwellings (or porches) to the street line should achieve satisfactory privacy for residential units and adequate front yard landscaping. Generally, setbacks from the streetline should be minimized to maintain a strong built form relationship to the street.
- Dwelling units at gateway and corner lots should locate garages and driveways as far as possible from the corners.
- Where possible, dwelling units sited at the end of view corridors, such as at "T" intersections and cul-de-sacs, should use landscaped areas and unit façades rather than driveways and garages to provide a view terminus.

Building Elevations

- Dwellings should be designed to emphasize views to and from the street from main windows and front doors and to minimize the visual impact of garages.
- A sufficient number of model and elevation designs, exterior colours and materials should be offered in order to ensure a varied streetscape.

Figure 35: Richcraft Bungalow

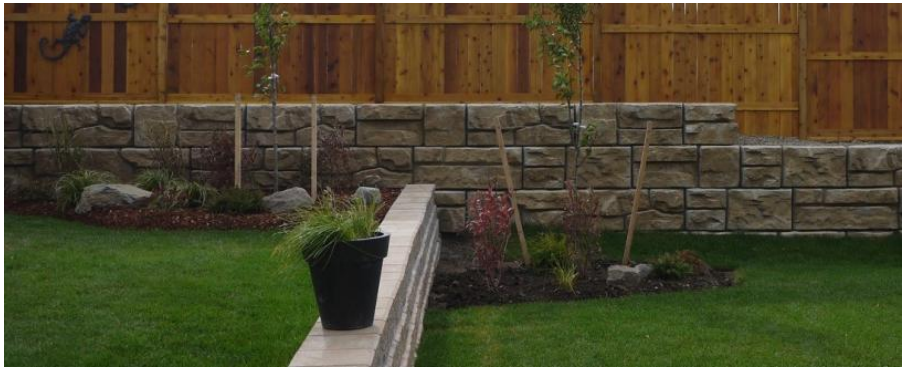

Figure 36: High-Quality Retaining Wall

- Functional porches and/or entry features are encouraged. Consider the use of second storey cantilever designs to assist in providing deeper front porch space.
- Adjacent units should be coordinated in terms of building height, roof pitch and building materials to ensure a harmonious relationship.
- Side and rear elevations facing parks or walkways should have similar wall materials as front elevations.
- On corner lots, all elevations visible from public roads should have a similar level of articulation, window detailing and use of materials. Designs that incorporate wrap-around porches and main entries from the flanking street are desirable.
- Rear elevations that are in public view (e.g. from a park or public road) should not form a continuous flat wall of identical elevations.
- For units at the end of a street, headlight glare should be taken into consideration in determining window locations.
- Where a single storey dwelling is sited next to a two storey dwelling, its roof pitch should be steeper to ensure compatibility in roof height.
- The use of dormers and other roof elements is encouraged to break up the mass of large roofs facing the street.

Garages

- Attached garages should be designed as an integral element of the façade, using the same materials and wall detailing as the main body of the unit.
- Attached garages should generally not protrude more than 2 metres beyond, and preferably should be flush or set back from, the main front wall or front porch.
- Detached garages should be designed to reflect the architecture of the main building.
- Wherever possible, driveways should be paired to maximize on-street parking.
- Where double car garages are provided, design measures should be used to minimize the mass of the garage, including door glazing, brick piers dividing garage doors and/or staggering the setback to the garage doors.

6.1.2 Street Townhouse Dwellings

Siting Criteria

- Buildings within a block should be placed at a consistent distance from the street line. However, variation of unit entry setback within a townhouse building is acceptable to produce façade interest.
- Setbacks from the main wall of dwellings (or porches) to the street line should achieve satisfactory privacy for residential units and adequate front yard landscaping. Generally, setbacks from the streetline should be minimized to maintain a strong built form relationship to the street.
- On corner lots, integral garages may be located along the flankage.

Building Elevations

- Front entries should be visible from the street.
- Side and rear elevations visible from a public space, such as a road, walkway or park, should have similar architectural treatment as the front elevation.
- A variety of window sizes within a block of townhouses should be used to add interest.
- Townhouse buildings on a block should have cohesive rooflines, corbelling, window and entry placement.

Garages

- Attached garages should be designed as an integral element of the façade, using the same materials and wall detailing as the main body of the unit.
- Attached garages should generally not protrude more than 2 metres beyond, and preferably should be flush or set back from, the main front wall or front porch.
- Detached garages on lanes or flankage streets should be designed to reflect the architecture of the main building.
- On corner lots, garages may include windows that are similarly detailed as the ones on the unit's flankage elevation.
- Driveways should be paired to maximize on-street parking, unless pairing interferes with snow storage distribution.
- Flat garage roofs are discouraged unless they form a balcony.

6.1.3 Apartment Buildings

Siting Criteria

- Buildings should be oriented to a public street.
- Main building entries must face onto the public sidewalk and be directly accessible from the sidewalk.

Building Elevations

- Building façades should be highly articulated; entry features, window detailing, variation of rooflines and change of planes should be used.
- Within mixed-use areas, façade materials and colours should reflect the residential nature of the building.
- All elevations should have the same degree of architectural treatment.

Figure 37: Urbandale Medium Density Residential

Figure 38: Front Gardens

6.2 Neighbourhood Commercial Built Form

Siting Criteria

- Building fronts should be oriented to a public street and be located close to the street line, with main parking areas generally located behind or beside the building.
- Buildings on corner sites should highlight the corner through massing and the use of special architectural features, such as towers, change of planes and/or change in material and colours.
- On retail streets, buildings should be coordinated in architectural design, including materials, colours and height.
- Buildings on corner sites should be located close to the corner to reinforce the street edge. Alternatively, a landscape area or forecourt may be used to define the street edge.
- Walkways should connect entries to parking and to the public sidewalk.
- Loading areas and garbage enclosures are not permitted in any front or flankage yard.

Building Elevations

- Building elevations along or in proximity to a public street shall have a functional building frontage, or emulate a functional frontage with windows and doors.
- Entries, windows and/or other glazed surfaces on building façades at the street level are desirable from an aesthetic and safety design perspective.
- Corner buildings should have similar architectural treatment on both street façades. Buildings should highlight the corner through massing and the use of special architectural features, such as towers, change of planes and/or change in material and colours.
- Entries should be clearly articulated, and entrances to upper level uses should be differentiated.
- Elevations should be articulated to avoid large flat façades by using texture, fenestration, punctuation, canopies, projections, change in planes, and/or expressing structural elements such as columns and floor changes.
- Elevations on walkways should be a continuation of the front façade and have windows facing the walkway.
- Elevations facing a parking area should have windows to allow casual surveillance.
- Signage should be integral to the building design. Freestanding directory signs should reflect the architecture of the buildings and be consistent in the use of lettering.

Parking

- The majority of parking areas should be located to the interior of the block. However, where a portion of the parking area is located adjacent to the street line, a landscaped buffer should be provided to enhance and partially screen the parking.
- Large parking surfaces should be broken into smaller areas by landscaped aisles and/or medians. Tree planting within parking lots and along walkways within parking lots is encouraged.
- Pedestrian circulation within vehicle parking areas should be clearly marked with signage and line painting.
- Access points for adjacent commercial/retail developments should be consolidated and parking areas linked to reduce the number of driveways to public streets.

- Parking structures should be designed to integrate into the street elevation by using similar materials, colours, floor heights and apparent window lines.
- Opportunities should be explored in the design of parking structures to allow retail uses at grade, as well as access driveways.
- Parking areas should be well lit for pedestrian safety and comfort. Parking lot lighting should be directed away from adjacent residential areas and/or units located above retail/office floors.
- On retail/commercial, institutional and mixed-use sites, front yards should be landscaped to enhance the street and should not have paved surfaces, other than driveways, walkways and patios. However, a maximum of one row of parking and driveway, with a landscaped buffer, may be considered on small retail sites. Parking areas visible from the road should be partially screened with landscaping.
- Gas bars and service stations should be designed so as to locate pump islands behind the station's kiosk/convenience store, rather than along the street frontage.

6.3 Employment Areas Built Form

The Employment Area is located in the northerly portion of the Community. As shown on the Land Use Plan (Figure 45), the northerly portions of the Employment Areas are subject to the approach and transitional "surfaces" to the existing and planned Airport runways. These "surfaces" limit maximum building heights and therefore the maximum permissible building height must be determined on a site-by-site basis in consultation with the Airport Authority.

Figure 39 shows a simplified series of height limits by development blocks in order to assess the extent to which airport height limits might act to constrain development within the Employment Areas.

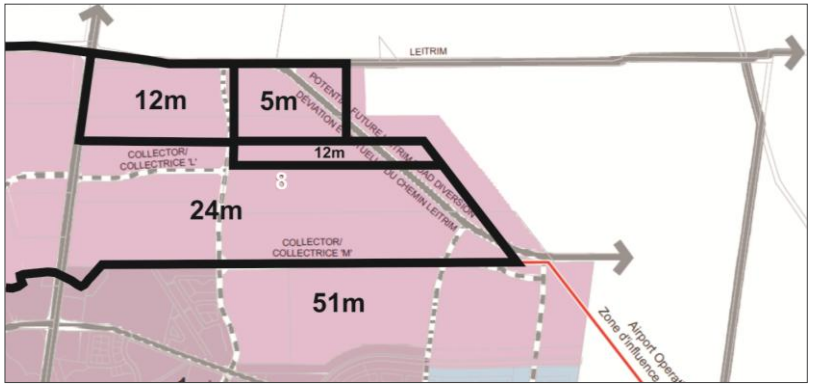

Figure 39: Height Limits in Employment Area

Figure 40: Examples of Retail and Office Buildings

On this basis, average net densities of up to 1.0 to 1.5 Floor Space Index (FSI) would be achievable across the Employment Areas. It is anticipated that average development densities would in fact be considerably lower, except in proximity to transit stations. An average density in the order of 0.3 FSI would be consistent with the assumed employment density of 80 jobs per net hectare, assuming a mix of about 30% industrial employees (at 74 square metres per employee) and 70% office/commercial employees (at 23 square metres per employee).

Siting Criteria

- A consistent build-to line should be established to generate a street edge.
- Buildings should be set back sufficiently from the street line in order to provide landscaping and a forecourt to entries. A setback of 6 metres is generally desirable.
- Walkways should connect entries to parking and the public sidewalk.
- Enhanced landscaping and visual buffers should be provided between employment uses and Mosquito Creek stormwater management areas, as well as along the open space link in the northeast corner of the Employment Area.
- Loading areas, service areas and employee parking should be located to the rear or sides of buildings.
- Visitor parking may be located within front yard areas.

Building Elevations

- Elevations should be articulated to avoid long flat walls by using texture, fenestration, punctuation, change in planes, and/or expressing structural elements such as columns and floor changes.
- For industrial buildings, office uses should be oriented to the street.
- Corner buildings should have the same architectural treatment on both street façades. Buildings should highlight the corner through the use of special architectural features, such as towers, change of planes and/or change in material and colours.
- Entries should be clearly articulated.
- Elevations facing a parking area should have windows to allow casual surveillance.

Signage

- Signage should be integral to the building design. Free-standing directory signs should reflect the architecture of the buildings and be consistent in the use of lettering.

Building Height

- Within the northerly portion of the Employment Areas, building heights will be subject to Airport zoning regulations (Figure 39).
- Maximum permissible building heights will be determined on a site-by-site basis, in consultation with the Airport Authority.

Lot and Block Sizes

- A variety of lot and block sizes is encouraged. To achieve this result, the deletion and/or addition of local roads at the time of subdivision is expected.

6.4 Institutional Built Form

Institutional buildings (e.g. places of worship, community centres and libraries) have the potential, and the responsibility, to act as focal areas and landmarks for the Community. As a result, special attention is required to their siting, architectural design and landscaping.

Siting Criteria

- Buildings should be oriented to the street.
- Where deemed necessary to provide a quasi-public space, buildings may be set back sufficiently to provide a generous landscaped area, forecourts and other open spaces. Open spaces on corners should have landscape elements to create a feature at the corner and define the street edge.
- Wherever possible, buildings should be located at major street intersections, or alternatively, at the end of street view corridors.
- Walkways should connect entries to the sidewalk.
- Parking should be located to the sides or rear of buildings. Bus loading areas may be located in the front yard or flankage side yard where necessary.

Building Elevations

- Elevations should be of high quality architectural design.
- Corner buildings should have the same architectural treatment on both street façades. Buildings should highlight the corner through the use of special architectural features, such as towers, change of planes and/or change in material and colours.
- Entries should be highly articulated.
- Elevations facing a parking area should have windows to allow casual surveillance.

Figure 41: Steve McLean Public School

Figure 42: St. Francis Xavier Catholic High School

Figure 43: École Élémentaire Bernard-Grandmaitre

6.5 Schools Built Form

Siting Criteria

- Building fronts should be oriented to the street line.
- Walkways should be used to connect entries to parking areas, bus loading areas and to the public sidewalk.
- Parking areas are to be located at the rear or sides of buildings, preferably in view from the street. Consistent with BBSS directions, bus loading will be provided through lay-bys within road ROW's. Where this cannot be achieved, bus loading areas may be located in the front or flankage side yard where necessary.
- Buildings on corner sites should be located close to the corner to reinforce the street edge.

Building Elevations

- Elevations should be of high quality architectural design.
- Entries should be highly articulated.
- Elevations facing a parking area should have windows to allow casual surveillance.

7.0 Background Studies

The background studies (summarized below) form part of the CDP.

7.1 Transportation

The Riverside South Transportation Update by Delcan Corporation (dated April 6, 2004) concludes that a population of approximately 56,000 in approximately 18,300 dwelling units can be achieved without the need for any additional major road system capacity over that identified in the new City of Ottawa Official Plan and the Transportation Master Plan.

The report identifies that the provision of transportation services to the Riverside South/Leitrim growth centres, as well as the infilling of urban growth areas north of Hunt Club Road, will require the achievement of dramatic increases in travel by transit at all the critical screenlines by 2021. The rapid transit corridor through Riverside South has been established as shown on the Land Use Plan and the Road Hierarchy map as contained in this Plan.

Internally, the proposed spacing of signalized intersections on the arterial road network within the Riverside South Community Design Plan is considered acceptable for traffic progression and community mobility purposes. In the vicinity of the Community Core area, where pedestrian and cyclist activity will likely warrant additional signalization at minor intersections, and where vehicle speeds are likely to be lower, safety requirements should override traffic progression considerations.

7.2 Water Distribution Analysis

The required water distribution supply for the Riverside South Community has been reviewed in a number of municipal studies dating back to 1994. The development area presently resides in Pressure Zone 2C which is fed by the Zone 2W Rideau River watermain and the Ottawa South Pumping Station. A pressure zone reconfiguration is planned for the majority of the South Urban Community, including the Riverside South development area. The reconfiguration involves a major expansion of Zone 3C, which will service the Riverside South development.

Figure 44: The Vimy Memorial Bridge

In support of the latest update to the Riverside South Community Plan, the 2008 Riverside South Community Infrastructure Servicing Study was updated. Through the analysis, the following water distribution upgrades were identified to support the proposed Community Design Plan:

- Configuration of pressure zone 3C.
- Increase capacity in the Ottawa South and Barrhaven South pumping stations.
- Provide the connection to Manotick community.

The analysis also identified the need for a link from the Ottawa South pumping station to the Riverside South development to provide a second feed to the community.

7.3 Sanitary Sewer System

The existing Riverside South Community is provided with sanitary service through a temporary sanitary pump station and forcemain which crosses under the Rideau River and outlets to the existing West Rideau Collector sewer. At the full build out of the Riverside South Community, the flow will be directed to the three barrel inverted siphon sewer pipe crossing the Rideau River and connected to the West Rideau Collector sewer. The temporary pump station will be decommissioned. The existing Rideau River crossing has capacity to service the entire development proposed in the Community Design Plan.

The Community Design Plan area will be serviced through an expansion of the existing gravity sanitary sewer system to the Rideau River crossing. An analysis was undertaken to confirm downstream capacity in the West Rideau Collector sewer to support the additional population in the Riverside South Community as well as proposed development in the Nepean portion of the South Urban Area. The analysis was undertaken using monitored flows for the existing development and City of Ottawa design parameters for the build-out of both the Nepean portion of the South Urban Area and the Riverside South Community.

The analysis indicates that capacity is available in the West Rideau Collector to accommodate development in the Riverside South Community as shown in the Community Design Plan. The analysis further identifies that, should additional capacity be required, flows currently tributary to the West Rideau Collector in Barrhaven could be directed through a new sewer on Greenbank Road to the Lynwood Collector, thereby providing additional capacity in the West Rideau Collector. The analysis also recommends that future developments introduce measures to control extraneous flows in the system and that long-term monitoring of sanitary flows continue.

7.4 Stormwater Management

Significant analyses have been completed for the Riverside South Community over the past 18 years, including: a) an update to master drainage plans and the infrastructure servicing studies; and b) detailed engineering drawings for individual subdivisions. In 1992, a master drainage plan was prepared by the City of Gloucester to support development in the Riverside South Community. This study was updated in 2008 and again in 2016/17.

Concurrently with the preparation of the 2016 CDP update, the City reviewed its infrastructure standards with a view to modifying acceptable levels of service for SWM areas. This is expected to result in the need for smaller pipes for conveyance and possibly smaller SWM retention facilities so as to reduce the overall land requirement. The Master Drainage Plan for Riverside South may be modified to incorporate some of the new directions being determined through the ISR project related to SWM.

The pond identified as Pond 1, located east of the Rideau River and south of Mosquito Creek, was constructed and provides a quality control facility for the existing development in the northwest quadrant of the Riverside South Community. Also, Pond 2 was located in the centre of the Riverside South Community to provide quality and quantity control for the development in the area.

In support of the Community Design Plan, an update to the Master Drainage Plan was undertaken. Proposed stormwater management facilities are intended to provide quality and quantity control of stormwater, to the Ministry of the Environment's Rideau River non-degradation policies, to protect receiving streams from erosion, to protect existing fish habitat and to prevent downstream flooding.

Within the Community Design Plan area, the stormwater management facilities are to provide tributary lands protection from flooding from storms up to and including a 1:100 year event. A preferred alternative was developed, incorporating five new storm ponds within the Community Design Plan area, which forms part of the Land Use Plan.

7.5 Environmental Study

Niblett Environmental Associates Inc. (NEA) prepared an update of its previous study of significant woodlots within the Riverside South Community (May 31, 2004). The updated study concluded that, of the woodlots within the CDP area, eight were considered significant. Four of the significant woodlots are located within the valleylands of the Mosquito Creek and its tributaries. They have been identified as Open Space (valleylands) on the Land Use Plan and would be retained. The other four significant woodlots were originally shown in the 2005 land use plan as three, as two were merged together to form the T-shaped woodlot. Of these three tableland woodlots, one was in the existing northwest quadrant of the Community, while two were located in the area south of Earl Armstrong Road, between River Road and Limebank Road. However, for reasons of affordability, the former T-shaped woodlot has since been reduced in size and shape (it is no longer T-shaped) and the woodlot located immediately west of Spratt Road has been eliminated from the Official Plan. However a portion of the Spratt woodlot will be retained and co-located with a parkette.

Of the other woodlots identified by NEA within the Planning Area, this CDP provides direction for the retention of existing trees where practicable. Similarly, the NEA update report also discusses hedgerows within the Planning Area and this CDP provides direction for addressing these in development plans.

7.6 Market Demand Study

A market demand study was originally prepared by Market Research Corporation as part of the original 2005 CDP. It identified commercial land needs as a component of the Community Design Plan. On the basis of an analysis of existing and planned population, per capita income and expenditure patterns and potential capture by retail facilities within the Community, Market Research Corporation determined that there would be market support for 1,270,000 sq. ft. of retail/commercial space within the Community.

Market Research Corporation also provided advice regarding the distribution of retail/commercial floor space within the Community. This recommended distribution is reflected in the description of Commercial Sites in Section 2.3.3 of this Plan.

8.0 Implementation

8.1 Phasing of Development

The City of Ottawa Official Plan requires that community design plans include a plan for phasing of development and show how the plan will be implemented through a variety of different measures.

In the case of Riverside South, major sanitary sewer services have been provided to the Community from the West Rideau Collector crossing the Rideau River near the northwest corner of the community. As a result, development has to date proceeded easterly and southerly in an incremental manner as sanitary sewers have been extended. Future development within the Community Design Plan area will continue to proceed in an incremental manner both easterly, crossing Limebank Road, and southerly, crossing Earl Armstrong Road.

Updates to the servicing and drainage plans and a new Area Parks Plan have been prepared concurrently with this CDP. The Land Use Plan contains all the necessary and expected elements relating to these updates however, all of these must be approved by the City before any new subdivisions will be considered for draft approval.

It is the responsibility of landowners in the Planning Area to collaborate and agree on how roads, over-sized infrastructure, local parks, stormwater ponds and any other facilities that benefit multiple owners will be cost-shared. A landowner's cost sharing agreement for the Planning Area shall be established as well as any other required or corresponding development agreements for services that benefit multiple owners in the Planning Area. The City will require a landowners' agreement, or agreements, that will address, but is not limited to:

- The on-site and off-site servicing systems that benefit more than one owner, whether dealt through development charges or at the expense of a proponent. This may include, but is not limited to, sanitary or storm water infrastructure, roads and intersections;
- Compensation for the valley lands and other lands as shown on the Land Use Plan that make up the natural heritage system as non-developable lands to be transferred to the City for $1;
- Compensation for the Multi-Use Pathways (including footbridges and road crossings) as identified in the CDP, as compensable through development charges or at the expense of the proponent(s);
- The land dedication and construction of local City parks including parkettes, neighbourhood parks and community parks in accordance with the Community Design Plan and the Area Parks Plan; and
- Cost sharing for information signage, trail development and community amenities in the natural areas or woodlots, as determined by Natural Systems and Park Planners, within Riverside South.

A landowner must have executed any relevant agreements and be in good standing according to the agreements prior to the submission of a development application by that landowner. For proponents of development that are not yet party to the agreement(s), the City shall include a condition of draft approval for all plans of subdivision, plans of condominium and severance applications, and as a condition of approval for site plans in the Planning Area requiring notification from the administrator for the Planning Area that the proponent is party to the agreements and has paid its share of any costs pursuant to the agreements.

8.2 Affordable Housing

Affordable housing will be required in accordance with applicable City policy in all new residential development and redevelopment in Riverside South. Section 2.5.2 of the Official Plan defines affordable housing as rental or ownership housing, for which a low or moderate income household pays no more than 30% of its gross annual income. The Official Plan directs that 25% of all new housing development and redevelopment is to be affordable to households at the 30th income percentile for rental and at the 40th income percentile for ownership.

The provision of "social housing" by social housing providers, with or without City funding or incentives, will be included within the total 25% of affordable housing in the community. For a suburban context such as Riverside South, a target of approximately 7% of all homes (about 1,085 homes total in the community) should be provided for social housing subject to federal/provincial funding. The preferred locations for social housing will have convenient access to public transit, shopping and community services.

8.3 Core Area Urban Design Guidelines

In support of this Community Design Plan, urban design guidelines were prepared for the Core Area of Riverside South. These guidelines provide direction with respect to:

- Specific types of trees and shrubs and planting locations.
- Materials to be used for sidewalks, walkways, street crossings, parking lay-by areas, walkways
- Types of lighting poles and fixtures.
- Provision for banners, hanging baskets.
- Type of street furniture (benches, waste receptacles, transit shelters).
- Locations and design of utility boxes
- Traffic circle design and landscape treatment
- Locations for public art
- Design of wayfinding signage
- Location, height, size, materials for fascia signage and pylon signs
- Design and materials to be used for fencing (e.g. adjacent to parking areas, outdoor patios, play structures)
- Conceptual design for the public squares and sub-neighbourhood parks.

The intention is that all of the foregoing elements will be organized with a common design theme (e.g. heritage vs. modern), allowing for appropriate variations across different parts of the Community Core area (e.g. Main Street, Transit Street, large format retail, residential precincts) in order to achieve the design objectives outlined in Section 5.0.

For building design, the Urban Design Guidelines also include an "image bank" which shows the intended range of architectural massing, materials, building entries, glazing, rooflines and other features in order to achieve the principles set out in Section 5.0 of these Implementation Guidelines.

The intent is that the guidelines will provide for appropriate variations across different parts of the Community Core area. Even within individual precincts (e.g. along Main Street), the guidelines should allow for variation between buildings and room for architectural expression, so that the development does not look or feel like a single "project". At the same time, careful attention to materials and design will seek to ensure that the individual precincts and the Community Core as a whole has a cohesive character so that the whole is more than simply the sum of its parts.

8.4 Process to Amend the Community Design Plan

The process to amend the Community Design Plan depends on whether the proposed changes are minor or major in nature. Minor changes may be made at the discretion of the General Manager, Planning and Growth Management at the time of a planning application without an amendment to this Community Design Plan provided that the overall balance of dwellings, population and jobs are generally maintained. Minor changes will be incorporated into the plan at the time of the review of the plan. Examples of minor changes include: the reconfiguration of local streets, the adjustment to the location of low to medium density residential, minor changes to the shape or size of a development block, minor changes to the location or massing of commercial, parks, open space, high density residential or office buildings and changes that incorporate directions for suburban development being determined through the BBSS/ISR project. Modifications to incorporate directions for infrastructure being determined through the ISR will be reflected in the master plans that have been developed in support of the CDP to ensure that subsequent plans such as master servicing for specific plans of subdivision will align with the modified standards/directions flowing from the ISR project.

Major changes that are proposed in a development application will require City Council approval to amend the Community Design Plan concurrently with consideration of a planning application. These changes to the community design plan will be advertised at the time of application circulation. Examples of major changes include: the number and location of larger high density residential, commercial/mixed use and employment blocks, the location of major roads, and the relocation of school and large park blocks.

Notwithstanding the above, in accordance with the Building Better and Smarter Suburbs initiative, adjustments and shifts in the shape and co-location of schools, parks and stormwater areas, that achieve land efficiencies, may be done without amending this Plan as long as they are re-located within the same general area.

To initiate the review and approval of proposed changes, the proponent shall produce and submit to the City a composite plan comprised of the proposed change(s) and including subdivision and site plan(s) within the neighbourhood (or the broader community if affected) that are approved or about to be approved. Where the proposed change affects land not subject to an approved or about to be approved plan, the composite plan shall also include the design as shown on the Land Use Plan of the surrounding neighbourhood, or broader community as may be required.

The City will circulate copies of the composite plan as may be required to owners of development and redevelopment land directly affected by the proposed change(s) for comment. Disagreements will result in referral of the subdivision and/or site plan(s) to Planning Committee for approval.

Where a proposed change affects the broader community, a public open house to present the proposed changes to the CDP and to receive input may also be required. Each successive change to the Land Use Plan must reflect prior revisions as approved through the composite plan/subdivision approval process. The City will keep all approved changes on file.

Staff-initiated changes to the Land Use Plan and to the text of the CDP may be made at the discretion and approval of the General Manager, Planning and Growth Management and shall involve notice to owners of affected development and redevelopment parcels as may be required. Where changes are substantive or there is disagreement between staff and the landowners affected by such proposed changes, approval by Planning Committee may be sought.

The principles and objectives of the Official Plan and of the CDP must be reflected in any proposed change to the Land Use Plan and to the text of the CDP. To ensure that the objectives of the

Official Plan regarding housing mix and minimum net density for ground-oriented units are met and that the distribution of housing within the community achieves the intent of the CDP, changes to the location and/ or number of these units should be made within the neighbourhood in which they were located originally on the Land Use Plan. Updates to the studies supporting the CDP, such as engineering and transportation, may also be required in support of the proposed change. As well, variations which require an amendment to the City of Ottawa Official Plan will also require a corresponding formal amendment to the Community Design Plan.

The Land Use Plan sets out the location and extent of various forms of housing in the community. The densities set out in Table 4 illustrate the expected average density for each housing form, in order to achieve Official Plan targets. The total number and mix of residential units will be tracked on a neighbourhood and community-wide level at the time of development approval. Minor variations in the expected average density for each housing form are permitted, provided it can be demonstrated that both the total number of residential units and the mix of residential unit types can be reasonably achieved by adjusting density and/or mix on remaining vacant lands.

For the purpose of achieving the Official Plan target of 29 units per net hectare, ground-oriented units including detached, semi-detached, townhouse and ground-oriented stacked townhouse dwellings will be counted. On a community-wide basis, single detached and semi-detached units must not exceed 60% of the total number of residential units, townhouse and ground-oriented stacked townhouse units must comprise a minimum of 30% of the total number of residential units, and apartments including non-ground oriented stacked townhouse units must comprise a minimum of 10% of the total number of residential units.

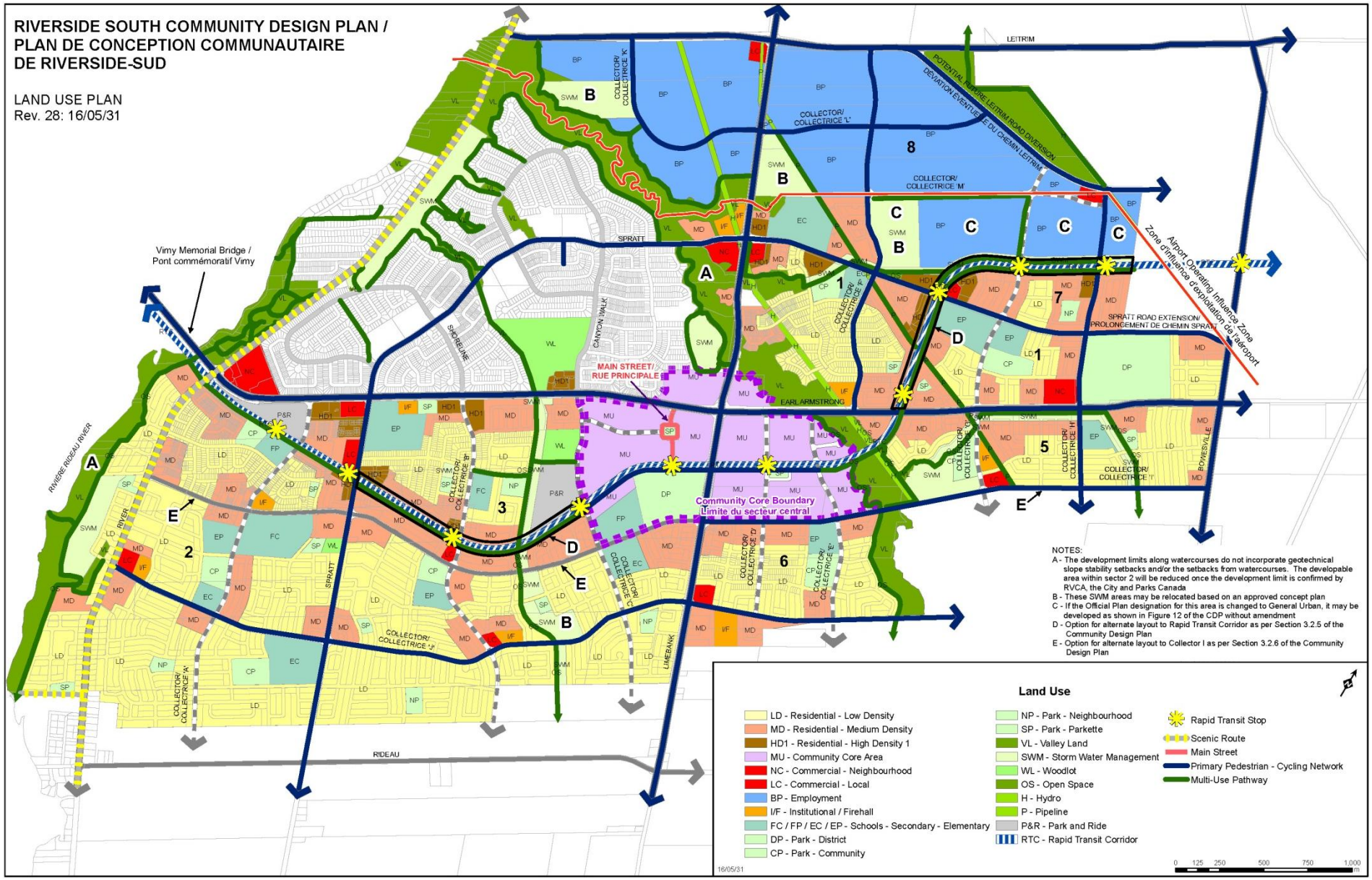

Figure 45: Land Use Plan