

3.0 Planning Framework

A full review of existing conditions was prepared as part of the Plan process and available under separate cover. The Final version of the Existing Conditions Report is dated January 18, 2006 and should be consulted for complete information. The following section provides a summary of the information contained in the Existing Conditions Report.

3.1 General Characteristics

The CDP area is part of the Orléans Expansion Area. The uses surrounding the CDP Area include residential and rural uses to the south, vacant lands to the west, developing employment and commercial lands north of the hydro corridor (a Hydro One easement for 115KV and 230 KV lines) and a mix of commercial development and vacant lands designated and being developed for residential development, on the east side of Tenth Line Road. A municipal snow disposal facility is planned west of the CDP Area along Mer Bleue Road, north of the hydro corridor. The CDP area has some structures, mainly farming related and a few homes, with much of the land being largely vacant and undeveloped.



Intersection of Mer Bleue Road and Renaud Raod



Mer Bleue Road looking north



The Hydro Corridor is the northern boundary of the CDP Study area



Intersection of Innes Road and Mer Bleue Road



Tenth Line Road looking south



Minto's Avalon Community, east side of Tenth Line Road



*McKinnon's Creek at
Mer Bleue Road*



New commercial development along Innes Road



Unoccupied dwelling along Tenth Line Road



CDP Study Area looking west from Tenth Line Road

3.2 Schools, Parks & Open Space

There is a total of 31 schools located within the influence of the CDP area, each belonging to one of the four following area boards: Ottawa-Carleton District School Board; Conseil des écoles publiques de l'Est de l'Ontario; Ottawa-Carleton Catholic School Board; and Conseil des écoles catholiques de langue française. Of the 31 schools, 6 are high schools and 25 are elementary schools.

Initial investigation with all four school boards has revealed the potential need for 2 new schools as part of the development of the Mer Bleue area. The Ottawa-Carleton Catholic School Board (OCCSB) has expressed the need for 8.1 ha site to accommodate a new intermediate/high school within the Study Area. The Ottawa-Carleton District School Board (OCDSB) has requested 2.8 ha for a future elementary school.

There are no city parks or recreation facilities within the CDP area, however there are some significant natural features (Mer Bleue Bog) and major recreation facilities within the influence of the CDP area as indicated in Figure 5. In addition, nearby existing residential communities have a number of neighbourhood, community and district parks generated through park dedications at the time of subdivision approval.

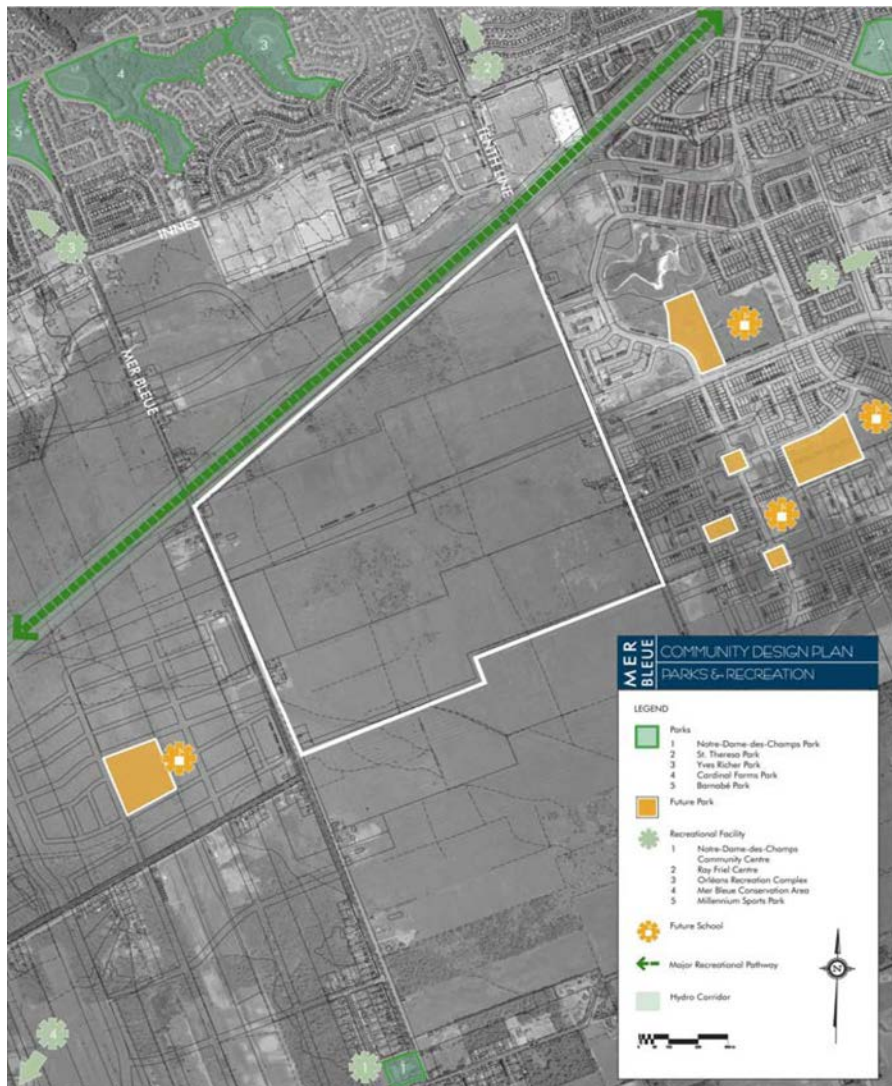


Figure 5- Parks and Open Space

3.3 Transportation

Road Network

Mer Bleue Road is a two-lane urban arterial with rural cross-section and a posted speed limit adjacent to the site of 60 km/h. The road is under the jurisdiction of the City of Ottawa. Tenth Line Road is a two-lane arterial road with a rural cross-section and a posted speed limit of 80 km/h adjacent to the CDP Area.

Innes Road is an arterial road located to the north of the CDP Area. The recently widened four-lane arterial provides an east-west connection between Mer Bleue Road and Tenth Line Road. Although Innes Road currently has a posted speed limit of 80 km/h at this location, it is expected that the limit will be lowered once the road widening is completed. The road is under the jurisdiction of the City of Ottawa.

Transit Network

There are no bus routes currently operating on Mer Bleue Road south of Innes Road. Express route 32 operates on Tenth Line Road, south of Innes Road to service the Avalon community. Transit service is provided on Innes Road north of the site by regular bus routes 131 and 137. As well, express routes 33 and 21 provide peak hour service on Innes Road east and west of Mer Bleue Road and onto Jeanne D'Arc Boulevard. However, starting September 2006, a new Route 94 will be implemented, which will provide direct-to-downtown service along Innes Road. Service will no longer be provided on Innes Road on Routes 21 and 33.

Route 94 will be a prelude to service, which will operate in the future Rapid Transit corridor. Early morning service route 835 is provided on Innes Road between Prestwick Drive and Tenth Line Road.



Figure 6 – Transportation Network

Screenline Volumes

The City of Ottawa has identified major transportation screenlines for the purpose of monitoring and determining future transportation needs. Of relevance to the proposed development, the Bilberry Creek Screenline is located on a north-south axis within the proposed development and east of Mer Bleue Road.

Based on the information in the CCL Transportation Overview (2004) and the Delcan report for Eden Park (2003), the modal split to transit at the Bilberry Creek Screenline is 27% in the morning peak hour and 22% in the afternoon peak hour. This compares favourably to the City-wide average of 17% in the afternoon peak hour.

Further west, the Green's Creek Screenline located west of Blackburn Hamlet, captures travel in the east-west corridor between the Orleans Community and the rest of the City of Ottawa. The dominant influence on traffic volumes crossing the Green's Creek Screenline is the scale of development in both Blackburn Hamlet and Orleans. Based on information provided in the 2003 Delcan CDP, the transit modal split at the Green's Creek Screenline during the morning peak hour is 31.6% and during the afternoon peak hour 30.6% based on 2002 data.

It has been concluded that the Bilberry Creek and Green's Creek Screenlines are operating currently at overall acceptable levels of service in both the morning and afternoon peak hours.

As well, the higher than average modal splits at each screenline indicate the high level of transit use in the Orleans Community, which currently exists.

Pedestrian and bicycle modal splits at each screenline are very low. In the case of Green's Creek Screenline, the bicycle and pedestrian modal splits are 1% with 0% in the morning and afternoon peak hours respectively. At the Bilberry Creek Screenline, the bicycle percentage is approximately 1% and the pedestrian percentage is approximately 1% in the morning and afternoon peak hours respectively.

Intersection Capacities

The key intersections adjacent to the CDP Area are Innes Road/Mer Bleue Road and Innes Road/Tenth Line Road. It is evident that the key intersections on Innes Road adjacent to the proposed development site were close to capacity for critical movements under pre-widening conditions. In the case of Innes Road/Mer Bleue Road, under pre-widening conditions the intersection operated at Level of Service D and E, respectively (2003 volumes). Similarly, Innes Road/ Tenth Line Road operated at Level of Service B and D, respectively. The City of Ottawa is finalizing construction of a four-lane Innes Road between Orleans Boulevard and Tenth Line Road. This will provide increased capacity at the key intersections identified above, and improvements in the Levels of Service for the critical movements indicated.

Cycling & Pedestrian Network

The City of Ottawa Cycling Plan identifies Mer Bleue, Tenth Line, Blackburn Hamlet Bypass Extension and Innes Road as on-road cycling routes. In addition, the Plan identifies a future off-road cycling route within the Hydro Corridor.

3.4 Municipal Servicing

Water Infrastructure

The CDP Area is identified as 'Neighbourhood 5' (N5) in previous servicing studies. Water service to the N5 lands is provided by an existing 406 and 152 mm watermains along Tenth Line Road on the east side. The water distribution system is capable of providing large fire flows and maintaining water pressure to the CDP Area due to the proximity of the Innes Road Water Storage Tank.

The area in the vicinity of N5 is currently serviced with water from a 600mm diameter watermain in Innes Road, which extends from Belcourt Boulevard to Trim Road. This main feedermain supplies several smaller 406mm diameter feeder mains, which extend southerly from Innes Road in Tenth Line Road, Esprit Drive and Portabello Drive. As development advances, an additional 406mm diameter feedermain will be added in Mer Bleue Road and another 610mm diameter feedermain will be installed along the hydro corridor from Pagé Road to Mer Bleue Road to complete the main water supply for this portion of the EUC in the vicinity of NH5.

Wastewater Infrastructure

The wastewater outlet for this development is the future Tenth Line Road Pump Station located in the southeast corner of the CDP area and the proposed gravity sewer, which will be installed in Tenth Line Road from the Billberry Creek Industrial Park to the proposed pumping station. The pump station will also service the adjacent Avalon South lands situated east of Tenth Line Road. The construction contract for the Station is nearing completion and expected to be commissioned by summer 2006. Flow from the pump station is discharged into trunk sewers in Neighbourhood 4 which outlet to the existing 900 mm sanitary sewer on Esprit Drive. A trunk sanitary sewer flowing south on Tenth Line Road and outletting into the pump station is presently being designed. Construction is planned for 2006.

Stormwater Management

Stormwater runoff from the CDP area flows south through agricultural drains into McKinnons Creek, which diagonally flows along the southwest corner of the site and crosses Tenth Line Road at Wall Road

to the south. A revised Master Drainage Plan (MDP), which followed the Environmental Assessment (EA) process, was completed in 2000. The MDP calls for a storm water management pond to treat post development runoff from the CDP Area (Neighbourhood 5), which will outlet to McKinnons Creek. It also proposes a separate storm water pond to treat post development flows from Neighbourhood 4 (to the east), which will also outlet to McKinnons Creek just south of Wall Road via a storm sewer along the Tenth Line Road right-of-way.

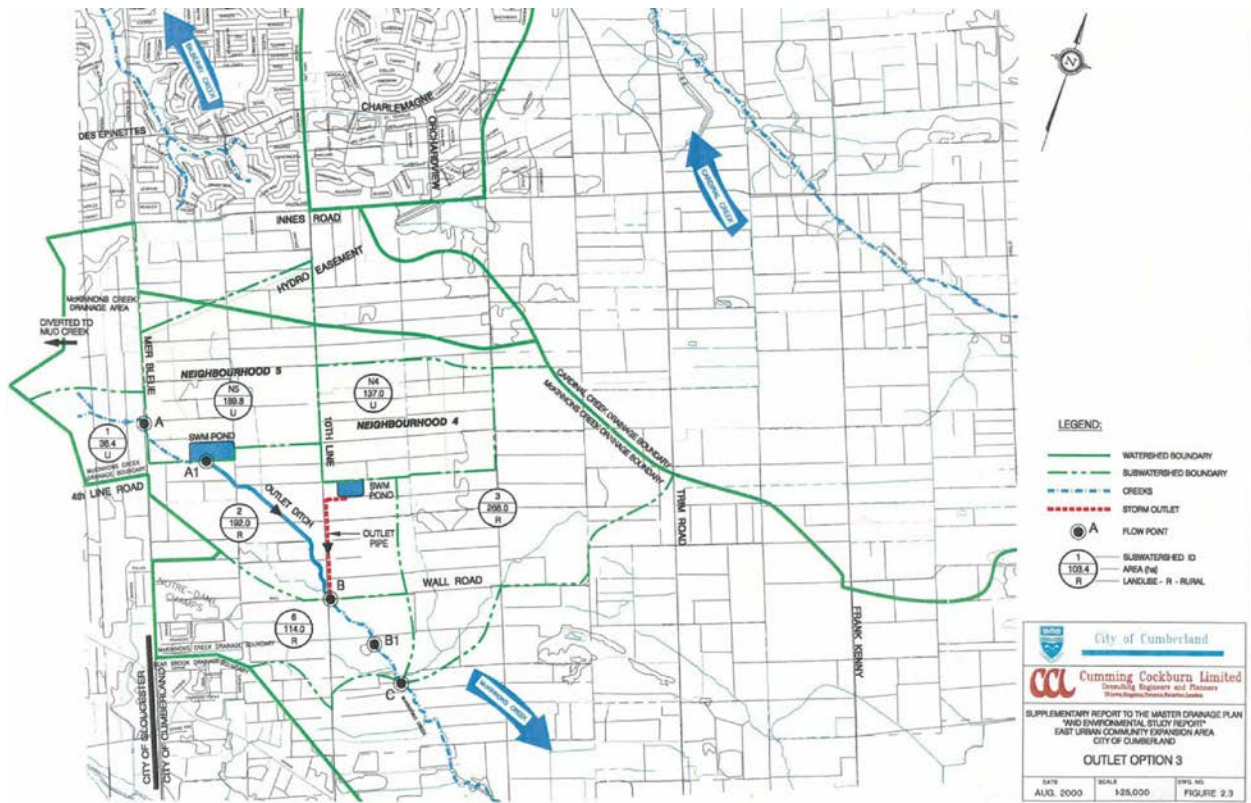


Figure 7 – Stormwater Management

3.5 Soil Conditions

A Phase 1 Environmental Site Assessment was prepared by Paterson Group in November 2005 in order to research the past use of the site and identify actual or potential contamination. The assessment concluded that the historical data researched for this site did not indicate any areas of concern regarding the past uses of the site and adjacent properties.

Paterson Group also prepared a Preliminary Geotechnical Investigation (January 18, 2006) for the CDP Area. The geotechnical investigation revealed that the soil profile in the area consists of a layer of topsoil overlying a layer of silty clay varying in thickness from 20 to 26m at the east end of the CDP Area and from 9 to 19m at the west end. Topsoil was encountered at ground surface at all test hole locations. Below the silty clay is the limestone and shale bedrock. Key findings contained in the report are as follows:

Geotechnical Assessment

For the most part, the subsoil conditions at this site consist of a deep firm to stiff silty clay deposit. From a geotechnical perspective, the subject land will be subjected to grade raise restrictions if routine shallow footing foundations are used.

If higher-grade raises are required, pile foundations, preloading with or without a surcharge, light weight fill and/or other measures should be investigated to reduce the risks of unacceptable long-term post construction total and differential settlements.

3.6 Natural Heritage

The following section is a summary of the findings and conclusions of fieldwork and research conducted by Niblett Environmental Associates in the fall of 2005. Detailed findings and observations are contained in the Mer Bleue Community Design Plan, Existing Conditions Report, dated January 18, 2006.

3.6.1 Features and Functions

No significant natural heritage designations are present in the CDP Area. This includes provincially significant wetlands, Areas of Natural and Scientific Interest and significant wildlife habitat. The recent Urban Natural Areas study conducted by the City of Ottawa (2005) did not identify any woodlands or other features on or adjacent to the CDP Area.

3.6.2 Significant Species and Habitats

Fisheries

A young of the year muskellunge was sampled at Station 4 and young of the year northern pike have been sampled at station 9 in the past. An additional 4 species were sampled at Station 4 with young of the year present for all the species. This site is providing nursery habitat and likely nearby spawning habitat. The presence of young of the year muskellunge and white sucker indicate that there are likely no migratory barriers between the site and larger habitat downstream required by the adults.

It is important to maintain this connectivity to continue to provide fish with access to habitats required to fulfill various lifestages. This area is however downstream of the CDP Area. Therefore, work within the CDP area needs to maintain water quality and quantity objectives so as not to harmfully alter fish habitat downstream. Fish were also sampled within the CDP area and therefore Authorization would be required for any work that would result in the harmful alteration, disruption or destruction of fish habitat.

The fisheries sampling results show some general seasonal trends. Spring sampling resulted in generally lower catch-per-unit-effort (CPUE) and numbers of species.

Fish likely are moving upstream at this time and their patchy distributions result in lower numbers of species.

The progeny from the year's spawning are in abundance in summer, resulting in higher CPUE and numbers of species. In fall, all fishes are likely seeking deeper downstream refugia habitat for over-wintering. This results in lower CPUE and numbers of species versus more upstream areas. Very high numbers of fish were captured in fall at Site 6 indicating the presence of possible over-wintering habitat.

Given these findings and the anticipated development for the area, Harmful Alteration, Disruption, or Destruction (HADD) of fish habitat is likely to result. Therefore, appropriate mitigation and compensation measures will have to be negotiated and approved by the South Nation Conservation Authority SNCA and the Department of Fisheries and Oceans (DFO).



Figure 8 – Fisheries Sampling Locations

Vegetation

A review of the plant list for the CDP Area found that none of the species are considered nationally or provincially rare. No significant vegetation communities (Bakowsky, 1997) are present in the CDP area.

A review of the Natural Heritage Information Centre (NHIC) list of rare species showed record of several rare species in the vicinity of the CDP Area, though none were recorded on it. Rare plants listed within 5 km of the Mer Bleue property included; hidden-fruited bladderwort (*Utricularia geminiscapa*), branching burreed (*Sparganium androcladum*), giant pinedrops (*Pterospora andromedea*), long-stemmed waterwort (*Elatine triandra*), cloud sedge (*Carex haydenii*), long sedge (*Carex folliculata*),

New England sedge (*Carex novae-angliae*) and cattail sedge (*Carex typhina*). Of these species, only the records for cloud sedge, hidden-fruited bladderwort, long sedge and New England sedge were within 120 m of the site.

Hidden-fruited bladderwort and long-stemmed water-wort are floating aquatic species. With no open water on the site they would not find suitable habitat on this property.

Branching burreed, while not strictly aquatic, does require true wetland habitat and would not survive the drier periods that regularly occur on this site. Giant pinedrops are saprophytic (living on) pines and thus grow only where pines grow, precluding them from inhabiting this site.

Cloud sedge, long sedge, New England sedge and cattail sedge are found in moist to wet forest and bottomland forest. There is no suitable habitat for these species on the property.



Figure 9 – Vegetation Communities

Birds

A review of the list of bird species recorded for the CDP area (see Appendix) found that none are considered nationally, provincially and regionally rare.

The CDP area includes one Ontario Breeding Bird atlas square (18VR63) (Bird Studies Canada, 2005). The database for that square includes results from the 1st atlas (1981-1985) and the current or second atlas (2001-2005). A list of significant species was generated for this square.

Species included ruddy duck (*Erismatura jamaicensis rubida*), red-shouldered hawk (*Buteo lineatus*), black tern (*Chlidonias nigra*), short-eared owl (*Asio flammeus*) and loggerhead shrike (*Lanius ludovicianus*). All of these species are considered Special Concern under COSSARO for Ontario except the loggerhead shrike, which is listed as endangered on a national and provincial level, and the ruddy duck, which is listed on the Ontario Birds at Risk database only (2005).

The black tern prefers wetlands with cattails and large open water areas associated with lakes or rivers and nesting sites that include stumps, muskrat pushups and muddy banks. No suitable habitat is present on or adjacent to the property.

Ruddy duck is found in small lakes and sewage lagoons. There is no suitable habitat for this species in the CDP area.

Red-shouldered hawk prefers large contiguous woodlands of 100 ha or greater with mature deciduous or mixed forest or swamp. This species would not find suitable habitat on or near the subject property.

The short-eared owl prefers open grasslands, marshes and bogs. The species is found in the Ottawa area where extensive grassland and abandoned fields are present.

This species has experienced declines in population throughout its range and has also declined in the Ottawa area in recent years. Short-eared owls have large territories (>100 ha) and are considered an area sensitive species. This species may find suitable habitat in the abandoned fields on the southern portion of the CDP area.

The loggerhead shrike is found in open hawthorn and red cedar pastures, neither of which habitat is present on the subject property. It is endangered in Canada and Ontario and has a very restricted range that currently does not include this area. Since the first atlas its population has declined to where it is no longer found in Eastern Ontario or the Ottawa area.

A review of the NHIC database found no recent records of nationally or provincially significant bird species.

Mammals

A review of the list of mammals observed and reported for the CDP area found that none are considered significant on a national, provincial or regional level. Both coyote and white-tailed deer are typical for rural areas in the Ottawa area.

Natural Heritage Information Centre (NHIC)

The NHIC lists numerous records for “sensitive species” within 5 km and several within 120 m of the subject property, although none are found on the property. Sensitive species are not identified in the database and as such cannot be commented upon. All of the records are from the 1940-1994 period.

3.7 Key Influences

Based on the review of existing conditions affecting the future development of the Mer Bleue area, a few key considerations are of note. They are as follows and further details in Section 4.2 (Concept Plan Assumptions).

- Soil Conditions
- McKinnon's Creek
- Community Integration and Linkages
- Employment
- Snow Disposal Facility
- Servicing
- Rapid Transit Corridor
- Blackburn Hamlet Bypass Extension



Figure 10 – Key Influences