Waste Management of Canada Corporation

Environmental Assessment for a New Landfill Footprint at the West Carleton Environmental Centre

SOCIO-ECONOMIC EXISTING CONDITIONS REPORT

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1. Introduction

This report provides an overview of the existing Socio-Economic conditions associated with the study area for the Environmental Assessment (EA) for the proposed new landfill footprint at the West Carleton Environmental Centre (WCEC) Environmental Assessment (EA). The Terms of Reference (ToR), approved by the Minister of the Environment, included a preliminary description of the existing environmental conditions on-site as well as within the site vicinity (see Section 7 of the approved ToR, August 2010). The ToR made a commitment that the description of the existing conditions would be expanded during the EA[1]. With this in mind, investigative studies of the following environmental components were carried out for the purposes of generating a more detailed description and understanding of the environment for use in the assessment and evaluation of alternative landfill footprint options during the EA:

- Atmospheric;
- Geology and Hydrogeology;
- Surface Water;
- Biology – Terrestrial and Aquatic;
- Cultural Heritage Resources;
- Transportation;
- Land Use;
- Agriculture; and,
- Socio-Economic.

The Socio-Economic work plan included in Appendix C of the approved ToR presents the scope of work required to complete the EA, including the scope of technical studies for each of the environmental components, including the existing conditions. The specific work plan tasks for completing the existing conditions for the Socio-Economic component are provided in Attachment 7 of Appendix C to the approved ToR and are provided here for reference:

> *The socio-economic environmental component has the sub-component of effects on the cost of services to customers, continued service to customers, economic effects on the local municipality, effects on recreational resources and visual impact. The following tasks will be undertaken to characterize existing environmental conditions:*
>
> ***Visual Assessment***
>
> - *Define the existing visual conditions of the site from off-site viewpoints, and document through written and photographic record;*

1. *During the EA, and following approval of work plans by the GRT, the project team will collect further information and conduct studies (desktop and field) to describe components and sub-components of the environment identified in the ToR that may be affected by the undertaking (Approved ToR, Section 7.4, p. 41)*

- *Determine the viewpoints (directions, distances) from which the proposed landfill expansion alternatives will be visible and take photographs from those viewpoints;*

Local Residents

- *Define the distance parameters and number of residents within the vicinity of the facility.*

Recreational Resources

- *Define existing recreational resources in the study areas, including parks, trails, playing fields and other facilities;*
- *Define opportunities to provide new recreational resources as part of the Project;*

The indicators from the approved ToR associated with the three sub-components for Economic (effects on the cost of services to customers, continued service to customers, economic effects on the local municipality) comes directly from or is calculated from the Conceptual Design Report. As such, there are no work plan tasks specific to these sub-components.

This report focuses on economic criteria, visual impacts, local residents and recreational resources in the study area for the Environmental Assessment (EA) for the proposed new landfill footprint at the West Carleton Environmental Centre (WCEC).

1.1 Documentation

The results of these individual studies will be documented in separate stand-alone technical memorandums during the EA. The final Existing Conditions will form a chapter of the EA Report with each of the stand-alone memorandums becoming supporting documents/appendices to the EA Report.

1.2 Socio-Economic Study Team

The study team for the existing Socio-Economic conditions component consisted of AECOM staff. The actual individuals and their specific roles are provided as follows:

- **Maryna Semenova** – managed the work program and was responsible for the work on existing conditions. Ms. Semenova ensured that the appropriate linkages were maintained with other study disciplines.
- **Jennifer Owen and Catherine Parker** – undertook the field work.

- **Tomasz Wlodarczyk** – provided a senior review and advice/guidance, quality assurance and input on technical issues and analysis.
- **John Holst** – carried out the existing visual assessment.

2. Landfill Footprint Study Areas

In accordance with the approved ToR, the generic On-Site and Site-Vicinity study areas for the proposed new landfill footprint at the WCEC are listed below:

On-Site ..... the lands owned or optioned by WM and required for the new landfill. The Site is bounded by Highway 417, Carp Road and Richardson Sideroad;

Site-Vicinity..... the lands in the vicinity of the site extending about 500 m in all directions; and,

Regional ..... the lands within approximately 3 to 5 kilometres (km) of the Site for those disciplines that require a larger analysis area (i.e., socio-economic, odour, etc).

The study areas identified above were presented in the approved ToR with the commitment that these generic study areas would be modified during the EA to suit the requirements of each environmental component. For the Socio-Economic (local residents and recreational resources) component, these generic study areas were modified as follows:

On-Site ..... the lands owned and/or optioned by WM for the proposed new landfill footprint. The subject site includes the current Ottawa landfill and the area for the alternative West Carleton Environmental Centre (WCEC) landfill footprints, which will be developed during the EA. The subject site is bounded by Highway 417, Richardson Sideroad and Carp Road as shown on **Figure 1;**

Site-Vicinity..... the lands and neighbourhoods within approximately 3 km of the perimeter of the subject site as described above. The 3 km area extends northwest to McGee Sideroad, southwest to Beavertail Road and southeast of Hazeldean Road into Stittsville. Northeast of the subject site, the study area has been extended into Kanata to Terry Fox Drive to include streets canvassed by WM during door-to-door campaigns in 2007 and 2010. The Site Vicinity study area is shown on **Figure 1**. The

3 km zone is considered to be a conservative estimate of the area that may be directly affected by nuisance effects potentially generated by the WCEC, such as noise, dust and odours. Further, the lands along the haul route within the Site Vicinity study area were considered as business/institutional and residential properties along both sides of Carp Road between Highway 417 and the existing entrance to the WM site (see **Figure 1**). This assumes that trucks will be entering and exiting through the existing entrance off Carp Road; and,

Regional ..... includes communities that surround the WM site, namely: Carp, Stittsville and Kanata. The Regional study area also encompasses the areas within the former townships of Huntley and Goulbourn where the communities of Carp and Stittsville are located (**Figure 2**).

For the Visual component, the study area was determined to be within 3 km of the existing site.

3. Methodology

Based on the work plans presented in Appendix C of the approved ToR, and re-stated in Section 1 of this document, the following sections outline the methodology for detailing the Socio-Economic existing conditions associated with local residents and recreational resources in the Site Vicinity study area and the visual assessment within 3 km of the existing site.

3.1 Local Residential and Recreational Resources

3.1.1 Available Secondary Source Information Collection and Review

Available secondary sources of information were collected and reviewed by the Socio-Economic Study Team to determine existing Socio-Economic conditions within the Site Vicinity study area. The following sources of secondary information were collected and reviewed:

- *Most recent aerial photos available for the study area*
- *Community profiles*
- *Community websites*
- *Ottawa Neighbourhood Study website (http://www.neighbourhoodstudy.ca/)*
- *Local directories, facility websites*

3.1.2 Process Undertaken

In establishing existing conditions associated with local residents and recreational resources in the study area, the approach taken was to use secondary data sources to the greatest extent, supplemented with and updated through a field visit.

After secondary source information was collected and reviewed, a field reconnaissance visit was undertaken to the Site Vicinity study area on March 15 and 16, 2011 to collect information on the area character and location of recreational resources. Team members drove through the study area with relevant aerial photos and maps and made notes of the area character and identified all recreational resources in the Site Vicinity. The team also made notes of community facilities that may or may not be considered as "recreational" by some (e.g., churches, cemetery) and institutional facilities (e.g., schools, municipal facilities). Collected information on recreational, community and institutional facilities included facility names, addresses and notes on observed outdoor components (e.g., playgrounds, sports fields, picnic areas). Local directories or facility websites were used to collect descriptive information for the facilities nearest to the subject site.

Based on collected information and with the use of Geographic Information Systems (GIS) mapping, a location map of Site Vicinity study area recreational, community and institutional features was prepared (see **Figure 3**).

A desktop GIS mapping of residences was also undertaken by putting dots (to represent individual residences or houses) on the most recent available aerial photo of the study area, where structures that looked like houses were observed. Location of residences, identified in this fashion, was confirmed/updated within a 1 km radius of the site during a drive-through undertaken on June 22, 2011. Based on the desktop mapping of residences and verification in the field, a location map of residences in the Site Vicinity study area was prepared (see **Figure 4**).

This location map of residences was used to estimate the number of residents in the Site Vicinity study area. Since the most recent Statistics Canada Census data on population available during the report writing was from 2006 Census, the following approach was undertaken to estimate the current number of residents in the Site Vicinity study area:

- An estimate of the total number of residences, by the study area community (i.e., Carp, Stittsville, and Kanata), was derived from the GIS mapping of residences described above;

- The Ottawa Neighbourhood Study's neighbourhood map and profiles (University of Ottawa, 2011a) were reviewed to identify neighbourhoods that most closely correspond to the study area communities;
- For each of the identified neighbourhoods, the average number of persons per household (PPH) was calculated using 2006 Census data on the number of residents and dwellings provided in the neighbourhood profiles; and finally
- Assuming the same PPH as in 2006, the current number of residents in the Site Vicinity study area was estimated by multiplying the estimated current number of residences in each study area community by the PPH for a respective neighbourhood.

3.2 Visual

3.2.1 Approach

The visual assessment considered the existing setting of the project and surrounding area, the existing visual character of the project site and the nature and makeup of present views toward the site from within a 3 km surrounding area.

3.2.2 Field Studies

The study began with field visits to the project site and surrounding area. An inventory of existing landscape components, viewing opportunities, landscape character, and scenic quality was developed. Particular attention was paid to the proposed project site itself. Observations were recorded with written field notes and documented with photographs. Surrounding locations from which the project site can be seen were identified. These locations were marked on a base map and direct observations from each viewpoint were recorded. Photographs from each location were taken for later reference and were held as baseline images for potential use in preparing photo simulations of the proposed project. Publicly accessible areas that provide views of the site include local streets, surrounding neighbourhoods and open space. A total of fourteen different public access viewpoints were visited and photographed. All were considered as candidates for preparing visual simulations.

4. Existing Socio-Economic Conditions

4.1 Local Residents

The subject site is located at the intersection of Highway 417 and Carp Road, along the industrialized section of the Carp Road Corridor. This location is within a transitional rural/industrial part of the City of Ottawa's west end within the community of Carp. The Carp Road Corridor is an area defined in the City of Ottawa's Carp Road Corridor Community Design Plan (City of Ottawa, 2004) as a significant rural employment area. It has a concentration of light and heavy industrial and commercial uses and extends for 9 km along Carp Road from Rothburne Road in the south to March Road in the north.

The village of Carp is 9 km to the northwest of the subject site along the Carp Road corridor. The community of Stittsville in the former Goulbourn Township is located approximately 1.5 km south of the subject site, across the Highway 417 corridor. The periphery of the Site Vicinity study area also covers the western portion of the community of Kanata, including a small area of the Kanata Lakes subdivision and the future residential development of Kanata West, north of Highway 417 and east of Huntmar Drive.

The following subsections provide a brief overview of these three communities.

4.1.1 Carp Portion of the Study Area

The community of Carp centres on the village of Carp just north of the intersection of Carp and March Roads, 9 km northwest of the subject site along Carp Road. The community of Carp extends north to approximately Thomas Dolan Parkway and the border of the rural community of Kinburn, also in the City of Ottawa. The southern edge of the community of Carp is at Rothbourne Road, south of the Highway 417 corridor, at the border of the community of Stittsville, while the eastern edge of Carp borders the community of Kanata at Huntmar Drive.

Within the Site Vicinity study area, the community of Carp retains a rural character with working farms and estate lots set amidst forests, woodlots, wetlands, and shrublands. Along Carp Road there is also a concentration of light and heavy industrial and commercial uses. Single rural residences are scattered along all main roads, with estate lot clusters located north and west of the site and a small subdivision along Lloydalex Crescent south of the site.

The closest residences to the subject site are listed in **Table 1**. Distances are measured to the nearest subject site boundary. **Table 1** includes residences located outside of the subject site

only. There are also five houses located within the subject site boundary; however they have been optioned or are currently owned by WM and therefore are not included in **Table 1**.

Table 1. Closest Residences to Subject Site

Direction to Subject Site	Property Address	Distance to the Subject Site
From North	Richardson Sideroad	30 m
From West	590 David Manchester Road	220 m
From East	2016 Richardson Sideroad	725 m
From South	Address not available	300 m

An estimated total of 691 residences were identified in the Carp portion of the Site Vicinity study area. Using the most recent Statistics Canada Census data on the average number of persons per household for this area (PPH=3.17)[2], the total number of residents in the Carp portion of the Site Vicinity study area is estimated at 2,190 persons.

4.1.2 Stittsville Portion of the Study Area

Although the subject site is, in name, associated with the community of Carp, the community of Stittsville has a concentration of residential development approximately 1.5 km southeast of the subject site across the Highway 417 corridor, within the former Goulbourn Township. Within the study area, Stittsville is bounded by:

- Huntmar Road and Maple Grove Road on the north;
- Hartsmere Drive on the south;
- Hazeldean Road , Sweetham Drive, the creek, and Abbot Street East to the east; and,
- Sirocco Crescent, Smoketree Crescent, Whalings Circle, and West Ridge Drive to the west.

The community of Stittsville is a former rural village, now within the City of Ottawa's urban boundary and a fast-growing suburban community of over 15,000 residents. It is home to suburban style subdivisions and a broad range of commercial developments, small residential parks, walking trails and schools.

2. *Based on the Ottawa Neighbourhood Study map provided on the Ottawa Neighbourhood Study website, this area falls into the Ottawa's Stittsville-Basswood neighbourhood (University of Ottawa, 2011d). In 2006 (the year for which the most current Census statistics was available during this report writing), this neighbourhood had a Census population of 7,890 people and a total of 2,490 dwellings, or approximately 3.17 persons per household.*

The predominant gateway access to the community of Stittsville is from the Carp Road exit off Highway 417. This stretch of Carp Road connects rural Carp to suburban Stittsville. The transitional nature of this former rural area and village is most evident where the subdivision of Timbermere begins. At the southeastern edge of this community, at the intersection of Hazeldean and Carp roads, the village feel of Stittsville becomes evident as Carp Road ends at Stittsville's Main Street.

Stittsville's small village character derives from the presence of Main Street that remains a commercial and social hub for residents. Despite the recent growth and transformation of its rural fabric, Stittsville residents continue to place value on the community's quality of life and village-type character, all within close proximity to urban job areas and amenities. The Stittsville Village Association website (Stittsville Village Association, 2011) notes in its 'Community Values' section that:

> *"Stittsville has been growing with the times, and although the population and supporting services have increased enormously in recent years, it remains a village in spirit and a community of caring people."*

Notably, a major subdivision and retail development completed in 2009 is the 300-unit mixed use 'Jackson Trails' community on the north side of Hazeldean Road, at the intersection of Stittsville Main Street. This development is within 3 km of the subject site. A second major community called 'Fairwinds' is currently approaching completion at the intersection of Maple Grove Road and Huntmar Drive. The community includes several small parks, a walking trail surrounding a stormwater pond, and roughly 650 mixed-use units.

The new Jackson Trails and Fairwinds communities, along with new anchor big box retail developments along the Hazeldean corridor east of Huntmar Drive and Iber Road, will eventually connect the developed part of Stittsville to the emerging Kanata West Development area.

An estimated total of 3,920 residences are found in the Stittsville portion of the Site Vicinity study area. Using the most recent Statistics Canada Census data on the average number of persons per household for this area (PPH=3.0)[3], the total number of residents in the Stittsville portion of the Site Vicinity study area is estimated at 11,760 persons.

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3. *Based on the Ottawa Neighbourhood Study map provided on the Ottawa Neighbourhood Study website, this area falls into the Ottawa's Stittsville neighbourhood (University of Ottawa, 2011c). In 2006 (the year for which the most current Census statistics was available during this report writing), this neighbourhood had a Census population of 15,470 people and a total of 5,159 dwellings, or approximately 3.0 persons per household.*

4.1.3 Kanata Portion of the Study Area

Before it was amalgamated into Ottawa in 2001, Kanata was one of the fastest growing cities in Canada and the fastest growing community in Eastern Ontario. The portion of Kanata within the Site Vicinity study area includes the suburban area along Kanata Avenue, which is a very recently developed area of the neighbourhood of Kanata Lakes, and the emerging Kanata West Development area. The portion of Kanata Lakes within the study area consists primarily of estate homes on medium-sized lots.

Approved as the Kanata West Concept Plan by Ottawa City Council in 2003, over the next ten to twenty years, the 1,700 acres around Scotiabank Place on Kanata's western edge and Stittsville's eastern edge will see mixed use residential and commercial development, along with a high-profile entertainment, employment and leisure hub slated to bring 5,000 new homes and 25,000 jobs, with supporting retail and green corridors and waterways to the area.

Additionally, Minto Developments is in the planning stages for its 'Arcadia' community on the north side of Highway 417, west of the Carp River and east of Huntmar Road, which is on the edge of the 3 km radius of the subject site. The new subdivision will ultimately contain 1,800 new homes on a 200 acre property.

An estimated total of 1,448 residences are found in the Kanata portion of the Site Vicinity study area. Using the most recent Statistics Canada Census data on the average number of persons per household for this area (PPH=3.15)[4], the total number of residents in the Kanata portion of the Site Vicinity study area is estimated at 4,560 persons.

4.1.4 Summary

An estimated total of 6,059 residences are found within the Site Vicinity of the subject site. The total number of residents within the Site Vicinity is estimated at 18,510. **Table 2** provides a breakdown of residence and resident counts by the study area community.

Table 2. Counts of Residences and Residents in the Site Vicinity

Site Vicinity Study Area	Number of Residences	Number of Residents
Carp Portion	691	2,190
Stittsville Portion	3,920	11,760
Kanata Portion	1,448	4,560
Total	**6,059**	**18,510**

4. *Based on the Ottawa Neighbourhood Study map provided on the Ottawa Neighbourhood Study website, this area falls into the Ottawa's Kanata Lakes neighbourhood (University of Ottawa, 2011b). In 2006 (the year for which the most current Census statistics was available during this report writing), this neighbourhood had a Census population of 18,214 people and a total of 5,781 dwellings, or approximately 3.15 persons per household.*

4.2 Recreational Resources

Recreational resources in the Site Vicinity study area include neighbourhood parks, walking trails and recreational facilities. Recreational features identified within the Site Vicinity study area during the field visit are listed in **Table 3.** The features closest to the subject site are highlighted in grey colour. Distances are measured to the nearest subject site boundary. Notes on observed outdoor components that make a facility potentially sensitive to noise, odour, dust impacts are included with the facility descriptions. The location of features is shown on **Figure 3.**

Table 3. Recreational Features in the Site Vicinity

Map ID #	Feature Name	Location	Description
Parks and Walking Trails			
3	Feed Mill Pond Park	Stittsville	• Neighbourhood park with outdoor walking trails and tobogganing hills during winter months
7	Banyon Park	Stittsville	• Neighbourhood park
9	Kittiwake Park	Stittsville	• Neighbourhood park with outdoor sports field • Walking trails along a Hydro right of way corridor that traverses the community
10	Ladybird's Park	Stittsville	• Neighbourhood park with walking trail and kids playground
11	Lloydalex Park	Stittsville	• Neighbourhood park • Nearest park to the site (1,600 m)
12	Westridge Park "A"	Stittsville	• Neighbourhood park with outdoor soccer field
13	Crantham Park	Stittsville	• Neighbourhood park
14	Crossing Bridge Park	Stittsville	• Neighbourhood park with outdoor soccer field and outdoor ice rink
15	Laumann Park	Stittsville	• Neighbourhood park
16	Sugar Creek Park	Stittsville	• Neighbourhood park
17	Bryanston Gate Park	Stittsville	• Neighbourhood park
18	Amberway Park	Stittsville	• Neighbourhood park
20	Westridge Park "B"	Stittsville	• Neighbourhood park
21	Pioneer Plains Park	Stittsville	• Neighbourhood park
23	Poole Creek Pathway Park	Stittsville	• Neighbourhood park
24	Bandmaster Park	Stittsville	• Neighbourhood park
25	Tempest Park	Stittsville	• Neighbourhood park
26	Par-La-Ville Park	Stittsville	• Neighbourhood park
27	Unnamed Park	Stittsville	• Neighbourhood park
30	Insmill Park	Kanata Lakes	• Neighbourhood park
31	John Gooch Park	Kanata Lakes	• Neighbourhood park
32	Judy Laughton Park	Kanata Lakes	• Neighbourhood park
33	Fentiman Park	Kanata Lakes	• Neighbourhood park
34	Whalen Park	Kanata Lakes	• Neighbourhood park
35	Goldridge Park	Kanata Lakes	• Neighbourhood park
36	Star Park	Kanata Lakes	• Neighbourhood park
37	Tanmount Park	Kanata Lakes	• Neighbourhood park
n/a	Jim's Bridge Trail	Carp (at Sentinel Way)	• Walking trail that includes a covered bridge across the meandering Carp River, connecting two estate lot developments on either side of the creek bed
n/a	Trails in Jackson Trails community	Stittsville	• Include a nature trail and a multi-use recreational pathway network

Table 3. Recreational Features in the Site Vicinity

Map ID #	Feature Name	Location	Description
Recreational Facilities			
1	Sunset Farms	6559 Hazeldean Rd., Stittsville	• Outdoor component - Horses outside paddock
2	Sunny Tang Kung Fu	2591 Carp Rd., Carp	• Kung Fu club
4	Stan's Putt Putt Land	1905 Richardson Side Road, Carp	• Outdoor driving range and mini-golf facility
5	Thunderbird Golf and Country Club and Kanata Soccer Dome	1927 Richardson Side Road, Carp	• Year-round facility with 9-hole golf course, indoor tennis and squash, and a restaurant • Kanata Soccer Dome hosts Kanata Soccer Club during winter months • Nearest golf club to the site (1,750 m)
6	Scotiabank Place	1000 Palladium Dr., Kanata	• Major sports and entertainment facility • home of the Senators NHL hockey club
8	OZ Dome	221 Westbrook Rd, Carp	• Soccer dome with 2 outdoor sport pitches • Nearest recreational facility with outdoor sport fields (600 m)
19	Amberwood Golf and Country Club	54 Springbrook Drive, Stittsville	• Semi-private 9-hole course with tennis courts, outdoor pool, and a dining room
22	OZ Optics Stadium and Training Centre	146 Walgreen Rd, Carp	• Soccer fields, stadium and training centre
29	Bell Sensplex	1565 Maple Grove Road, Kanata	• Indoor soccer rinks

During the March 2011 field trip to the study area, the team also made notes of community facilities that may or may not be considered as "recreational" by some (e.g., churches, cemetery) and institutional facilities (e.g., schools, municipal facilities). Information on the community and institutional facilities identified in the Site Vicinity is presented in **Table 4.** The location of features is shown on Figure 3.

Table 4. Community and Institutional Features in the Site Vicinity

Map ID #	Facility Name	Location	Description
Community Facilities			
5	Huntley United Cemetery	2605 Carp Road, Carp	• Historical cemetery • Funerals outdoors • Nearest cemetery to the site (1,000 m)
8	Stittsville Lions Club	4-1339 Main Street, Stittsville	• Community club
11	Kingdom Hall of Jehovah's Witnesses	300 Maple Grove Rd, Kanata	• Church
15	The Bridge Church	285 Didsbury Road, Kanata Lakes	• Nearest church to the site (3,870 m)
Institutional Facilities			
1	Terrace Youth Residential Services	112 Willowlea Road, Carp	• Foster Care services for youth
2	City of Ottawa Forestry Services	125 Walgreen Road, Carp	• Storage of vehicles for Ottawa Forestry Services
3	A. Lorne Cassidy Elementary School	27 Hobin Street, Stittsville	• Outdoor component - school soccer field, connected to the Crossing Bridge community park
4	St. Stephen Catholic Elementary School	1145 Stittsville Main Street, Stittsville	• Elementary school • Outdoor component - school play ground • Nearest school to the site (2,230 m)

Table 4. Community and Institutional Features in the Site Vicinity

Map ID #	Facility Name	Location	Description
6	Stittsville Community by Revera	1340 - 1354 Stittsville Main Street	• Retirement centre • Outdoor component - Patios
7	Holy Spirit Catholic School	1383 Stittsville Main Street, Stittsville	• Outdoor component - school yard
9	Ottawa Police	211 Huntmar Drive, Kanata	• Police station
10	Government Service Centre	580 Terry Fox Drive, Kanata	• Services from the government of Canada, the government of Ontario and the City of Ottawa
12	City of Ottawa Maple Grove Depot	1655 Maple Grove Road, Kanata	• Ottawa Maintenance Depot
13	Ontario Ministry of Transportation Patrol Yard 78	214 Didsbury Road, Kanata	• MTO patrol yard
14	All Saints Catholic High School	5115 Kanata Ave, Kanata	• Secondary school • Outdoor component - school yard and fields
16	CBC (Radio- Canada Transmission, National Alarm Centre, Ottawa Maintenance Base)	2415 Richardson Side Road, Carp	• Nearest institutional facility to the site (135 m)

4.3 Visual Assessment

The proposed WCEC on-site study area or project site occupies land that is relatively flat and at a low elevation to the surrounding area. The site lies between Richardson Side Road, Carp Road and the Trans-Canada Highway (Highway 417). Surrounding the project site, the land slopes slightly upward in all directions.

Land use surrounding the site consists of residential development to the northwest and southeast, commercial and industrial development to the northeast, and various agricultural and woodlot cover throughout. The existing landfill site has minimal vegetative cover and a landscape generally open. The project site is immediately surrounded by various densities of vegetative cover which permits no more than partial and filtered views to the site from most distant areas.

Vegetation on the site generally consists of hedgerows and small woodlots as well as berms planted for screening. Rural agricultural land is bordered by established hedgerows and woodlot remnants beyond the site limits. Vegetation density and cover varies considerably across the surrounding landscape from new plantings to established woodlots, hedgerows and field brush.

Figure 5 provides a summary of the viewshed of the existing landfill within 3 km of the site. Further detail on each viewpoint is provided in **Appendix A**.

4.4 Economic Environment

Existing conditions considered in determining the economic environment were, economic and land development growth, municipal finance and commercial activity of Waste Management.

4.4.1 Development Growth

The City has experienced significant economic and land development growth in recent years mainly due to growth in the technology industry and in the public sector. Housing starts have been highest in the last five years in the west suburban area of the City, which includes the former municipalities of Goulbourn, Stittsville, Kanata and Nepean. This development pressure has moved southwest, along the Highway 417 corridor, through Kanata towards West Carleton and the existing WM Ottawa landfill. Although development pressures do not appear to be imminent in the site area during the short term, this landscape could undergo changes over the future operating life of the project. Additional information regarding development growth is presented in the Land Use Existing Conditions report.

4.4.2 Municipal Finance

Municipal finance records for the City of Ottawa were examined through the Financial Information Returns 2010 database. Tables 5 and 6 provide a summary account of revenue and expenditure for the municipality.

Table 5. City of Ottawa Sources of Municipal Revenues ($), 2010

	Amount ($)	% of Total
Taxation – Own Purposes / Payments-in-Lieu of Taxation	1,378,199,115	40%
Ontario and Federal Grants	859,359,148	25%
User fees and service charges	653,889,237	20%
Other	519,830,398	15%
Total	**$3,411,277,898**	**100%**

Source: MMAH, 2010 - Schedule 10

Table 6. City of Ottawa Revenue Fund Expenditures ($), 2010

	Amount ($)	% of Total
General Government	104,304,371	3.79%
Protection Services	451,912,837	16.44%
Transportation Services	781,614,260	28.43%
Environmental Services	275,831,885	10.04%
Solid Waste Collection	15,519,897	0.56%
Solid Waste Disposal	20,051,365	0.72%
Waste Diversion	37,053,246	1.34%
Health Services	132,806,341	4.82%
Social and Family Services	413,746,064	15.04%
Social Housing	262,608,799	9.54%
Recreation and Cultural Services	274,290,045	9.97%
Planning and Development	52,765,618	1.92%
Total	**$2,749,880,220**	**100%**

Source: MMAH, 2010 - Schedule 40

In 2010, the City of Ottawa received a total of over $3,411 Million in revenues. Approximately 40% of the total came from municipal taxation. An additional 20% was collected through user fees and service charges. Ontario/Federal Grants supplied 25%, and the balance of 15% came from other sources.

The City's revenue fund expenditures for the same year totalled over $2,749 Million. Almost 50% of the total was spent on provision of transportation, health and protection services (28.43%, 4.82% and 16.44% respectively), while an additional 34.62% provided for social and family, environmental and social housing services (15.04%, 10.04% and 9.54% respectively). Waste collection and waste disposal accounted for less than 1% each, and waste diversion at 1.34% – for 2.62% of the total.

4.4.3 Commercial Activity of Waste Management

WM is a provider of comprehensive waste management services, including advanced residential, commercial and industrial collection, recycling and disposal services throughout Canada. WM employs about 3,400 people at 116 operating locations in 9 provinces in Canada, servicing over 4.5 million residential customers and 170,000 industrial and commercial customers. WM owns and/or operates 20 recycling recovery facilities and 18 landfills across Canada.

WM is a contract service provider for the collection, processing and marketing of recyclable materials plus the disposal of any residual wastes not recycled. These services are provided under contract to both the public and private sectors within the City of Ottawa and neighbouring communities. WM historically reserves between 75-90% of the site capacity for waste

generated within the City of Ottawa, including residential wastes and wastes from about 7,500 industrial, commercial and institutional (IC&I) customers.

WM is the City's largest waste management service provider, employing nearly 250 people in 6 locations in the City of Ottawa and Eastern Ontario. Within this area, WM is positioned as a contract service provider for the collection, processing and marketing of recyclable materials. In addition, the company meets over 50% of the annual waste disposal requirement for the City, including residential wastes (historically) and wastes from about 7,500 industrial, commercial and institutional customers.

The WCEC will create up to 75 new green jobs in waste diversion, disposal and green energy facilities. Economic benefits will also extend to the larger community through community host agreements, as well as a Community Trust Fund to support local projects. In addition, revenue opportunities will be created from waste diversion activities for local processors and downstream activities related to recycling and re-use.

5. Conclusions

5.1 Residents

The subject site is situated in an area that is predominantly rural and industrial, with several pockets of residential homes. To the north of the site is rural residential, with large estate lots located between agricultural areas and industrial facilities. Immediately south of the site is an industrial park, followed by a commercial area, and then residential homes in residential communities ranging from a well established neighbourhood with a main street and a newly developed neighbourhood. Immediately east of the site is an industrial area, and beyond that, rural homes dot the landscape for several kilometres before culminating in the developed residential neighbourhood of Kanata Lakes, and its associated commercial areas. West of the site is rural residential, with only a few homes located in close proximity to the landfill, and small estate subdivisions in a rural context as you move farther away. Overall, it is estimated that approximately 18,500 persons reside in the Site Vicinity study area, with the majority of these in the Stittsville portion of the study area. The nearest residence is located on Richardson Sideroad, approximately 30 m to the north of the subject site.

5.2 Recreational Uses

The majority of recreational resources in the area are in the form of small neighbourhood parks and parkettes. There are a few golf courses in the rural part of the study area, as well as an

indoor soccer dome and an indoor golf facility. One recreational facility, with ball diamonds and soccer fields, exists in an industrial park to the south of the current landfill. A major sports facility, Scotiabank Place, as well as an indoor hockey arena, the Bell Sensplex, are both located east of the landfill, between Stittville and Kanata. The nearest recreational features to the subject site are:

- Lloydalex Park, located in Stittsville, approximately 1.6 km to the southeast of the subject site;
- OZ Dome, located in Carp, approximately 600 m to the south of the subject site;

Thunderbird Golf and Country Club and Kanata Soccer Dome, located in Carp, approximately 1.8 km to the north of the subject site. The nearest community and institutional features to the subject sites are:

- CBC (Radio – Canada Transmission, National Alarm Centre, Ottawa Maintenance Base), located 135 m to the northwest of the subject site;
- Huntley United Cemetery, located 1 km to the north of the subject site;
- St. Stephen Catholic Elementary School, located approximately 2.2 km to the east of the subject site; and
- Kingdom Hall of Jehovah's Witnesses, located over 3.8 km to the northeast of the subject site.

5.3 Visual

An inventory of existing landscape components, viewing opportunities, landscape character, and scenic quality was developed. The existing landfill site has minimal vegetative cover and a landscape generally open. Various densities of vegetative cover immediately surrounding the project site filter or partially obstruct views of the site from most points within the study area. Vegetation density and cover varies considerably across the surrounding landscape from new plantings to established woodlots, hedgerows and field brush. A total of fourteen different public access viewpoints were visited and photographed. All were considered as candidates for preparing visual simulations.

5.4 Economic

The City has experienced significant economic and land development growth in recent years mainly due to growth in the technology industry and in the public sector. This development pressure has moved southwest, along the Highway 417 corridor, through Kanata towards West

Carleton and the existing WM Ottawa landfill. Although development pressures do not appear to be imminent in the site area during the short term, this landscape could undergo changes over the future operating life of the project. In 2010, the City of Ottawa received a total of over $3,411 Million in revenues, with revenue fund expenditures for the same year totalled over $2,749 Million. WM is the City's largest waste management service provider, employing nearly 250 people in 6 locations in the City of Ottawa and Eastern Ontario. Within this area, WM is positioned as a contract service provider for the collection, processing and marketing of recyclable materials. In addition, the company meets over 50% of the annual waste disposal requirement for the City, including residential wastes (historically) and wastes from about 7,500 industrial, commercial and institutional customers. Economic benefits will also extend to the larger community through community host agreements, as well as a Community Trust Fund to support local projects. In addition, revenue opportunities will be created from waste diversion activities for local processors and downstream activities related to recycling and re-use.

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Socio-Economist

Report Reviewed By:

Tomasz Wlodarczyk
Senior Consultant

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Figures

Legend

- Existing WM Operations
- Subject Site: On-site Study Area
- 500m of Subject Site
- 3km of Subject Site
- Site Vicinity Study Area (Approx. 3km of Subject Site)
- Landfill Envelope 1
- Landfill Envelope 2
- Streets Canvassed during WM Door-to-door 2007 and 2010 Campaigns
- Haul Routes

Basemapping from Ontario Ministry of Natural Resources
Orthophotography: 2002, 2010

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Waste Management of Canada

Environmental Assessment of a New Landfill Footprint at the West Carleton Environmental Centre

Socio-Economic Study Areas: On-site and Site Vicinity

June 2011
Project 60191228

AECOM

Figure 1

Map Document: (P:\60191228\000-CADD\050 GIS WIP\MXDs\SocialEconomicMXDs\60191228StudyArea.mxd)
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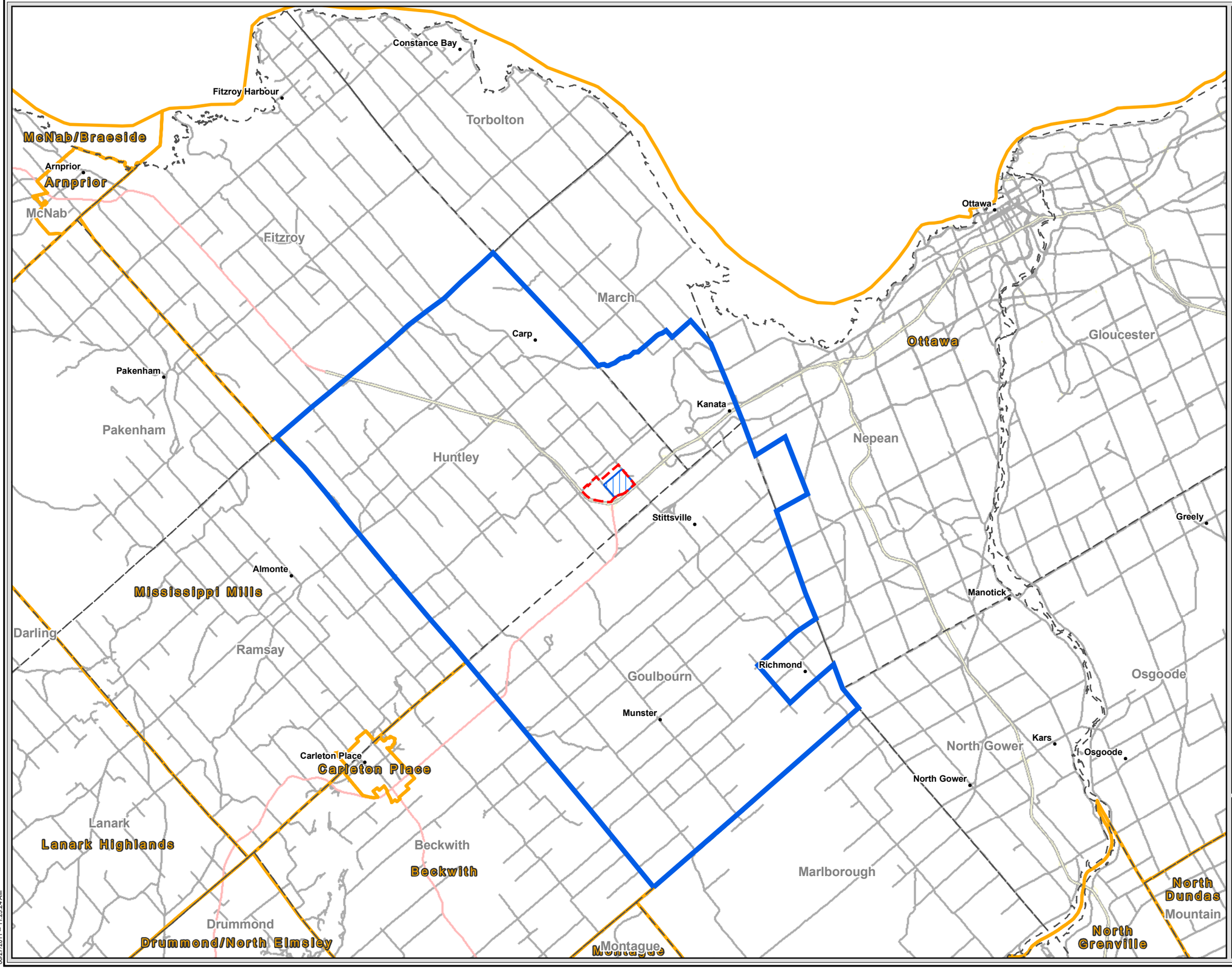

Legend

- Existing WM Operations
- Subject Site: On-site Study Area
- Regional Study Area
- Ontario Municipalities
- Township Boundary
- Named Places

Basemapping from Ontario Ministry of Natural Resources

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Waste Management of Canada

Environmental Assessment of a New Landfill
Footprint at the West Carleton Environmental Centre

Socio-Economic Study Areas: Regional

June 2011
Project 60191228

AECOM

Figure 2

Map Document: (P:\60191228\000-CADD\050 GIS WIP\MXDs\SocialEconomicMXDs\60191228RegionalContext.mxd)
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Recreational

1 Sunset Farms
2 Sunny Tang Kung Fu
3 Feed Mill Pond Park
4 Stan's Putt Putt Land
5 Thunderbird Golf and Country Club and Kanata Soccer Dome
6 Scotiabank Place
7 Banyon Park
8 OZ Dome
9 Kittiwake Park
10 Ladybird's Park
11 Lloydalex Park
12 Westridge Park "A"
13 Crantham Park
14 Crossing Bridge Park
15 Laumann Park
16 Sugar Creek Park
17 Bryanston Gate Park
18 Amberway Park
19 Amberwood Golf and Country Club
20 Westridge Park "B"
21 Pioneer Plains Park
22 OZ Optics Stadium and Training Centre
23 Poole Creek Pathway Park
24 Bandmaster Park
25 Tempest Park
26 Par-La-Ville Park
27 Unnamed Park
28 Walking Trail and Stormwater Pond
29 Bell Sensplex
30 Insmill Park
31 John Gooch Park
32 Judy Laughton Park
33 Fentiman Park
34 Whalen Park
35 Goldridge Park
36 Star Park
37 Tanmount Park

Community and Institutional

1 Terrace Youth Residential Services
2 City of Ottawa Forestry Services
3 A. Lorne Cassidy Elementary School
4 St. Stephen Catholic Elementary School
5 Huntleigh United Cemetery
6 Stittsville Community by Revera
7 Holy Spirit Catholic school
8 Stittsville Lions Club
9 Ottawa Police
10 Government Service Centre
11 Kingdom Hall of Jehovah's Witnesses
12 City of Ottawa Maple Grove Depot
13 Ontario Ministry of Transportation Patrol Yard 78
14 All Saints Catholic High School
15 The Bridge Church
16 CBC (Radio- Canada Transmission, National Alarm Centre, Ottawa Maintenance Base)

Huntmar Drive
Goulbourn Forced Road
March Road
Kanata Avenue
Campeau Drive
Oak Creek Road
Carp Road
Bradley Sideroad
Richardson Sideroad
Didsbury Road
Katimavik Road
Castlefrank Road
Terry Fox Drive
Palladium Drive
Mcgee Sideroad
William Mooney Road
Cavanmore Road
417
David Manchester Road
Old Almonte Road
Howie Road
Beavertail Road
Spruce Ridge Road
Whitetail Drive
Rothbourne Road
Hazeldean Road
Neil Avenue
Stittsville Main Street
Shea Road
Fernbank Road
Flewellyn Road
7

Legend

Community Features
- Recreational
- Community and Institutional
- Trails
- Transmission Line

Boundaries
- Existing WM Operations
- Subject Site: On-site Study Area
- 500m of Subject Site
- Site Vicinity Study Area (Approx. 3km of Subject Site)

Basemapping from Ontario Ministry of Natural Resources
Orthophotography: 2005, 2008, 2010

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Waste Management of Canada

Environmental Assessment of a New Landfill Footprint at the West Carleton Environmental Centre

Recreational, Community and Institutional Features in Site Vicinity

June 2011
Project 60191228

AECOM

Figure 3

Map Document: (P:\60191228\000-CADD\050 GIS WIP\MXDs\SocialEconomic\MXDs\Fig4_Recreational_Institutional_3km.mxd)
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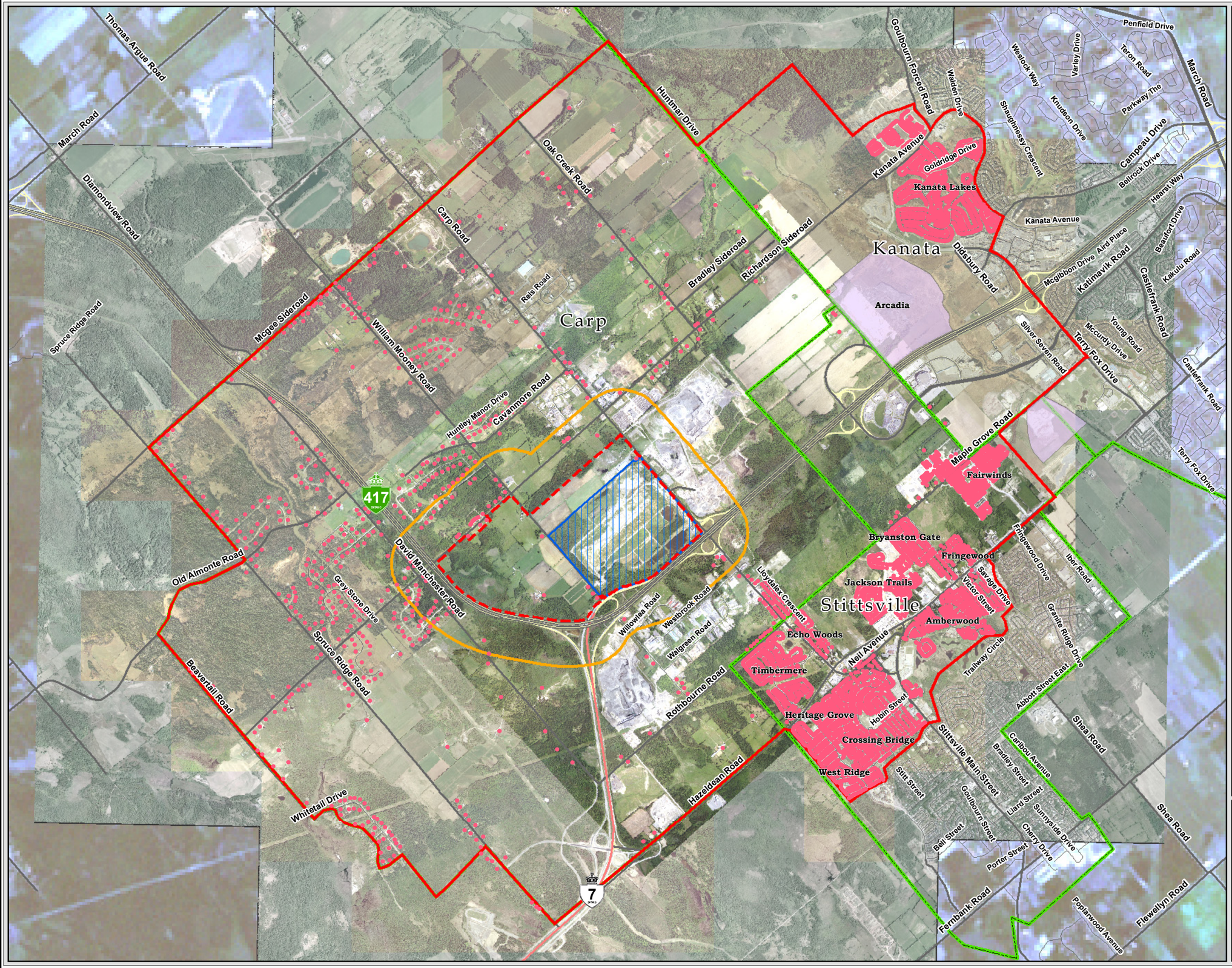

Legend

- Residences
- Under Development

Boundaries

- Existing WM Operations
- Subject Site: On-site Study Area
- 500m of Subject Site
- Site Vicinity Study Area (Approx. 3km of Subject Site)
- Community Bondaries

Basemapping from Ontario Ministry of Natural Resources
Orthophotography: 2005, 2008, 2010

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Waste Management of Canada

Environmental Assessment of a New Landfill Footprint at the West Carleton Environmental Centre

Residences in Site Vicinity

June 2011
Project 60191228

AECOM

Figure 4

Map Document: (P:\60191228\000-CADD\050 GIS WIP\MXDs\SocialEconomic\MXDs\Fig3_Residential_3km_w_developments.mxd)
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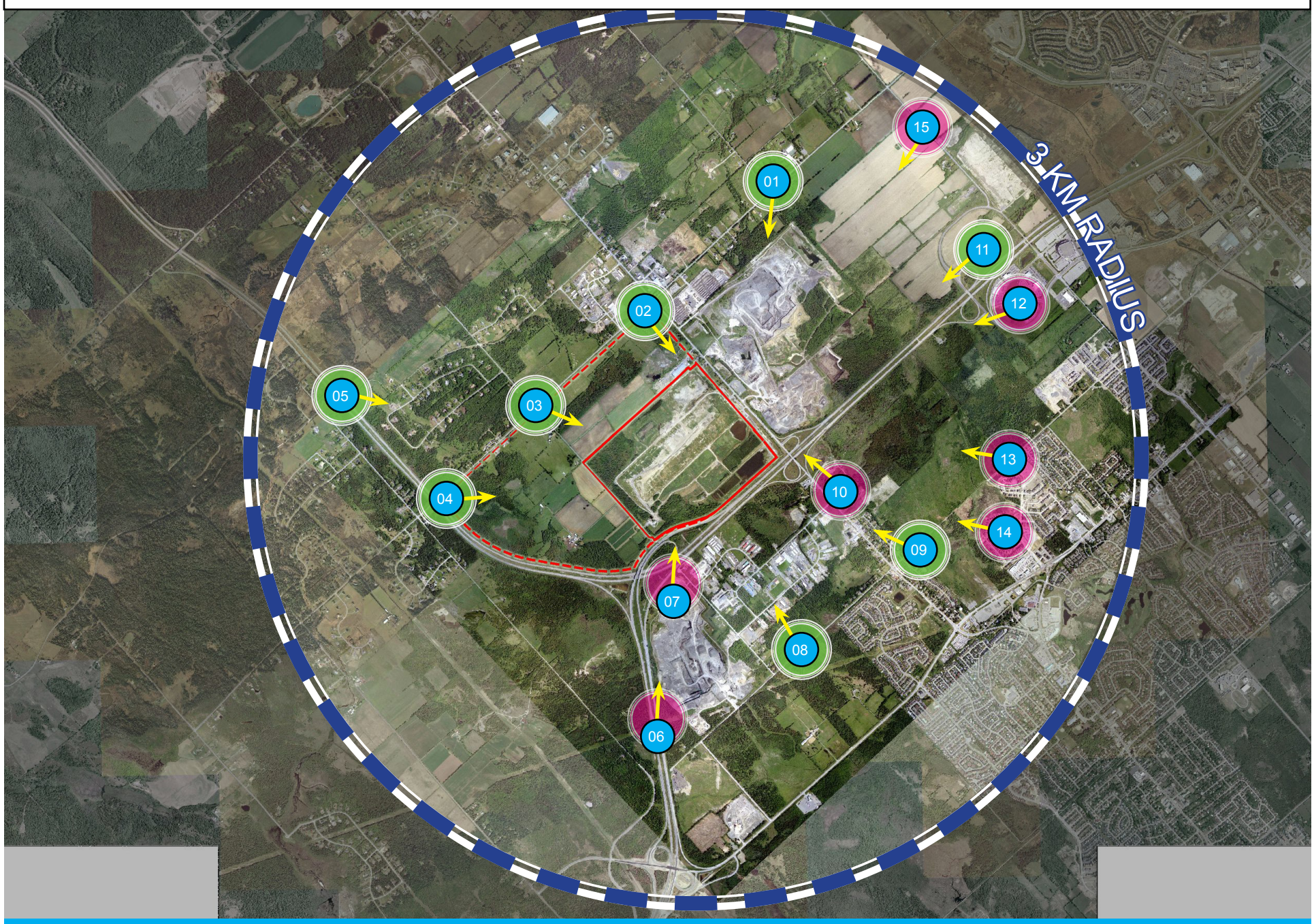
WEST CARLETON ENVIRONMENTAL CENTRE
EXISTING LANDFILL VISIBILITY

(ALL SITE IMAGES: 2011 AECOM PHOTOGRAPHY)



LEGEND

- Viewpoints / Points of influence
- Property Line
- 3 Kilometre Radius
- Visible
- Obstructed View

MAY 2011

Appendix A

Existing Visual Assessment

Photo #1: Facing south along Richardson Side Road as it intersects with Old Creek Road, this photo was taken approximately 1.9 km from the existing landfill. This immediate area is rural residential and contains properties on the outskirts of an industrial complex to the immediate south. In this view, the existing landfill is invisible. It is screened not only by distance, but also a myriad of young-to-mature woodlots and forests along its 1.9 km southern stretch. Subtle changes in topography facilitate further screening opportunities by varying the elevation of the dense vegetation. In the immediate foreground, the view is obstructed by coniferous and deciduous field edge plantings.

Photo #2: Facing southeast just outside of the immediate property line of the project site, this image highlights the intersection at Carp Road and Richardson Side Road. This area (Huntley) is made up of commercial and industrial space as well as dispersed residential properties. The photo was taken approximately 944 m from the existing landfill and shows that the project site is completely obstructed. In the immediate foreground, views are partially obstructed by utility poles and traffic lights. Medium-to-mature-aged mixed forest cover has developed a dense and continuous blockade that has enveloped the property line from this vantage point.

Photo #3: Facing southeast along of the immediate property line of the project site, this image highlights the intersection at William Mooney Road and Richardson Side Road. The photo was taken approximately 986 m from the northernmost edge of the existing landfill and shows that the project site is completely obstructed. Medium-to-mature-aged mixed forest cover has developed a dense and continuous blockade that has enveloped the property line from this vantage point.

Photo #4: Facing east, adjacent to the immediate property line of the project site, the existing landfill is completely obstructed. It is densely screened by a young-to-medium-aged coniferous woodlot. Coniferous vegetation provides year-round screening. This photo was taken approximately 1.6 km from the northwestern-most edge of the existing landfill.

Photo #5: Facing southeast, the existing landfill is completely obstructed. It is densely screened by a young-to-medium-aged coniferous woodlot with understorey vegetation. Coniferous vegetation provides year-round screening. This photo was taken approximately 2.6 km from the northernmost edge of the existing landfill.

Photo #6: Facing north along the Trans-Canada Highway (approximately 2.4 km from the project site), the existing landfill is partially visible. It is densely screened by landforms in the distance, mature vegetation and highway signage. Coniferous vegetation provides year-round screening.

Photo #7: Facing north, adjacent to the immediate property line of the project site, the existing landfill is almost completely obstructed. It is densely screened by a young-to-medium-aged woodlot with understorey vegetation. This visual screening is further enhanced by a woodlot immediately adjacent to the project site property line. This photo was taken approximately 1.1 km from the project site.

Photo #8: Facing northwest along Rothbourne Road, this image was taken approximately 1.8 km from the existing landfill. The project site is completely screened by a young woodlot with thick brush and understorey vegetation.

Photo #9: From the southeast corner of the property line along the Carp Road interchange the existing landfill is obstructed behind a constructed berm in the foreground that has been planted with coniferous and deciduous trees and shrubs.

These plantings have not yet reached full maturity and will provide further visual screening in the future. This photo was taken approximately 650 m from the existing landfill.

Photo #10: From the southeast approximately 0.82 km from the project site, along Carp Road, the existing landfill can clearly be seen with virtually no obstruction across the Queensway.

Photo #11: From the northeast, approximately 2.6 km from the project site along the Queensway, the existing landfill can be seen partially screened by distant landforms and dispersed forested areas beyond the agricultural fields.

Photo #12: Facing southwest on the east side of the Queensway (approximately 2.4 km from the project site), the existing landfill is partially visible. Its base is densely screened by landforms in the distance and by disbursed forested areas. Coniferous vegetation provides year-round screening.

Photo #13: Facing west along Maple Grove Road, this photo highlights the residential property development taking place just west of Old Stittsville. In this view, the existing landfill is visible, partially screened not only by distance, but also by a myriad of forested areas along its 2.5 km stretch. Subtle changes in topography facilitate further screening opportunities by varying the elevation of the dense vegetation. In the immediate foreground, the view is obstructed by coniferous and deciduous field edge plantings. These plantings have not yet reached full maturity and will provide further visual screening in the future. This photo was taken approximately 2.5 km from the existing landfill.

Photo #14: Facing west along Kimpton Drive, this photo was taken within the neighbouring subdivision just west of Old Stittsville. In this view, the existing landfill is visible, only partially screened by large stature vegetation in forested areas along its 2.8 km stretch. Subtle changes in topography facilitate further screening opportunities by varying the elevation of the dense vegetation. Coniferous and deciduous field edge plantings further obstruct the view from this vantage point. This photo was taken approximately 2.8 km from the existing landfill.

Photo #15: Facing southwest, approximately 2.8 km from the project site along the Huntmar Drive, the existing landfill can be seen partially screened by distant landforms and dispersed forested areas beyond the agricultural fields.