

Report to/Rapport au :

Transportation Committee
Comité des transports

October 24, 2012
24 octobre 2012

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Barrhaven (3), Rideau-Goulbourn (21)

Ref N°: ACS2012-PAI-PGM-0254

**SUBJECT: REALIGNED GREENBANK ROAD AND SOUTHWEST TRANSITWAY
EXTENSION (SOUTH OF CAMBRIAN ROAD) ENVIRONMENTAL
ASSESSMENT STUDY - STATEMENT OF WORK**

**OBJET : ÉTUDE D'ÉVALUATION ENVIRONNEMENTALE SUR LE NOUVEAU
TRACÉ DU CHEMIN GREENBANK ET LE PROLONGEMENT DU
TRANSITWAY SUD-OUEST (AU SUD DU CHEMIN CAMBRIAN) –
ÉNONCÉ DE TRAVAIL**

REPORT RECOMMENDATION

That the Transportation Committee approve the Statement of Work for the proposed realigned Greenbank Road and Southwest Transitway Extension (South of Cambrian Road) Environmental Assessment Study, as detailed in Document 1.

RECOMMANDATION DU RAPPORT

Que le Comité des transports approuve l'énoncé de travail relatif à l'Étude d'évaluation environnementale sur le nouveau tracé du chemin Greenbank et le prolongement du Transitway Sud-Ouest (sud du chemin Cambrian), comme il est expliqué en détail dans le Document 1.

BACKGROUND

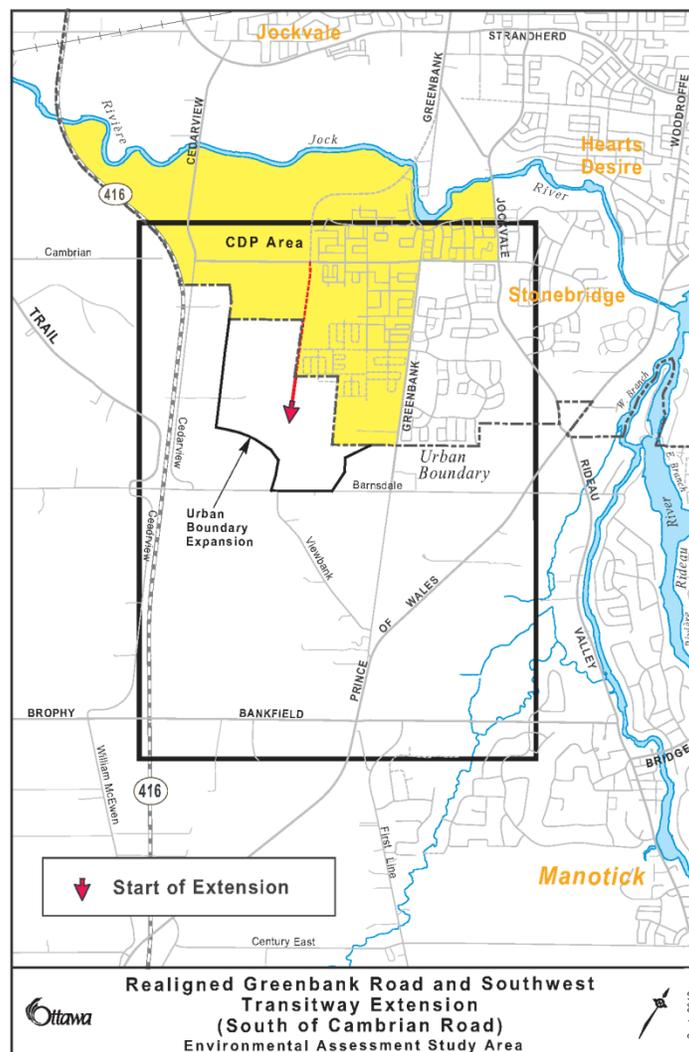
In 2006, Council approved the Barrhaven South Community Design Plan (CDP). The shaded area depicted in Figure 1 is the coverage of the CDP. A realigned Greenbank Road, with a transitway facility in the median (Southwest Transitway),

to Cambrian Road was defined through environmental assessments studies and the results were rolled into the CDP. South of Cambrian Road, the CDP only showed an approximate corridor for the extension of Greenbank Road to the urban boundary. The CDP effort did not include a functional design for this section of roadway, nor did it include an alignment for the Southwest Transitway extension south of Cambrian Road.

On 12 June 2012, as a result of an Ontario Municipal Board Partial Order, the City expanded the urban boundary further south to Barnsdale Road.

The purpose of this Environmental Assessment Study is to develop a functional design for the re-aligned Greenbank Road as well as for the rapid transit facility south of Cambrian Road to the new urban boundary (Barnsdale Road). However, due to growth from the Village of Manotick, it is only prudent for the City to also examine whether Greenbank Road needs to be extended further south to avoid piece-mealing of infrastructure planning. Hence, the study area was expanded to Bankfield Road (Figure 1).

Figure 1 - Study Area



DISCUSSION

The Statement of Work (SOW), or scope of this Environmental Assessment Study, is described in Document 1. It outlines the tasks to be undertaken to define the alignment and right-of-way requirements for Greenbank Road and the Southwest Transitway Extension, south of Cambrian Road. It includes consultation, and identifies the study deliverables. Upon approval from Transportation Committee, the SOW will form the basis for a call for proposals to the consulting industry.

This project will be carried out as a Schedule 'C' Class Environmental Assessment as set out in the Municipal Engineers Association: "Municipal Class Environmental Assessment" document. Some tasks will require examination of a broader area in order to address environmental impacts; operational issues; to co-ordinate with relevant on-going studies and projects (including the Amendment to the Barrhaven South Final Community Design Plan); and, to study and identify tie-ins to future network roadway and transit connections.

Key considerations for the Environmental Assessment Study include the following:

- Detailed evaluation of future transportation demand for the north-south direction of travel;
- Detailed evaluation of future transit demand for the north-south direction of travel;
- Identification of requirements and location for future park and ride lots, including the site shown in the TMP (at Cambrian Road);
- Cycling and pedestrian needs in the corridor;
- Analysis of all key intersections;
- Full evaluation of any potential impacts on wetlands and other natural environment areas;
- Preserving the rural character in the rural area;
- Stormwater management/hydrology;
- Effects on existing and future community; and
- Costs.

This Study is expected to be completed in 18 months with emphasis on identifying a preferred alignment north of Barnsdale Road within approximately 12 months.

While the alignment is focused on the segment north of Barnsdale Road due to development pressures, the study area includes the area south to Bankfield Road to ensure that future connections towards Manotick are fully addressed and any required right-of-way protected. Recent and planned growth in the Manotick area will also be taken into consideration. The study area may be adjusted as necessary in order to comprehensively identify the influences on, and the effects of the undertaking.

RURAL IMPLICATIONS

The study area lies within the City's urban and rural area and the potential impacts on the rural character, rural residents, and any active farming operations will be

considered. Travel demand originating from existing and future residents of the rural area will also be incorporated into the study process.

CONSULTATION

The consultation process will include meetings with key stakeholders through the Agency Consultation Group, Public Consultation Group, and Business Consultation Group. Consultation with the general public will occur principally through open houses and also through the project web page, e-mail, and additional meetings as required.

COMMENTS BY THE WARD COUNCILLORS

Councillors for Wards 3 and 21 support the Environmental Assessment Statement of Work.

LEGAL IMPLICATIONS

There are no legal impediments for implementing the recommendation in this report.

RISK MANAGEMENT IMPLICATIONS

There are no risk management implications associated with this report.

FINANCIAL IMPLICATIONS

Funding for this study is available under internal order 905396 – Environmental Assessment Studies Arterial Roads and 902973 – Smart Growth Transit Environmental Assessments.

ACCESSIBILITY IMPACTS

There are no accessibility impacts associated with this report.

ENVIRONMENTAL IMPLICATIONS

The study will evaluate the project's effects on social, cultural, physical, and natural environments within the study area. Appropriate mitigation measures will be developed and post mitigation environmental impacts will be determined.

TECHNOLOGY IMPLICATIONS

There are no technology implications associated with this report.

TERM OF COUNCIL PRIORITIES

The recommendation contained herein aims to support the following Term of Council Priorities approved by Council in July 2011:

- TM1 Ensure sustainable transit services
- TM3 Provide infrastructure to support mobility choices
- TM4 Promote alternative mobility choices

SUPPORTING DOCUMENTATION

Document 1 Realigned Greenbank Road and Southwest Transitway Extension (South of Cambrian Road) Environmental Assessment Study – Statement of Work (Immediately follows the report)

DISPOSITION

Following Transportation Committee approval of the Statement of Work, the process to retain a consulting firm to assist with the Environmental Assessment Study will be initiated. A call for proposals will be undertaken under the direction of Supply Management.

**REALIGNED GREENBANK ROAD
AND SOUTHWEST TRANSITWAY EXTENSION
(SOUTH OF CAMBRIAN ROAD) EA STUDY-
STATEMENT OF WORK**

DOCUMENT 1

INTRODUCTION

The City of Ottawa is the proponent of a Class Environmental Assessment (EA) Schedule "C" to study the proposed extension of the realigned Greenbank Road and Southwest Transitway Extension south of Cambrian Road. This Statement of Work describes the City's intentions with respect to the methodology, public consultation and deliverables for this study.

PLANNING CONTEXT

In 2006, Council approved the Barrhaven South Community Design Plan (CDP). The shaded area depicted in Figure 1 is the coverage of the CDP. A re-aligned Greenbank Road, with a transitway facility in the median (Southwest Transitway), to Cambrian Road was defined through environmental assessments studies and the results were rolled into the CDP. South of Cambrian Road, the CDP only showed an approximate corridor for the extension of Greenbank Road to the urban boundary. The CDP effort did not include a functional design for this section of roadway, nor did it include an alignment for the Southwest Transitway extension south of Cambrian Road.

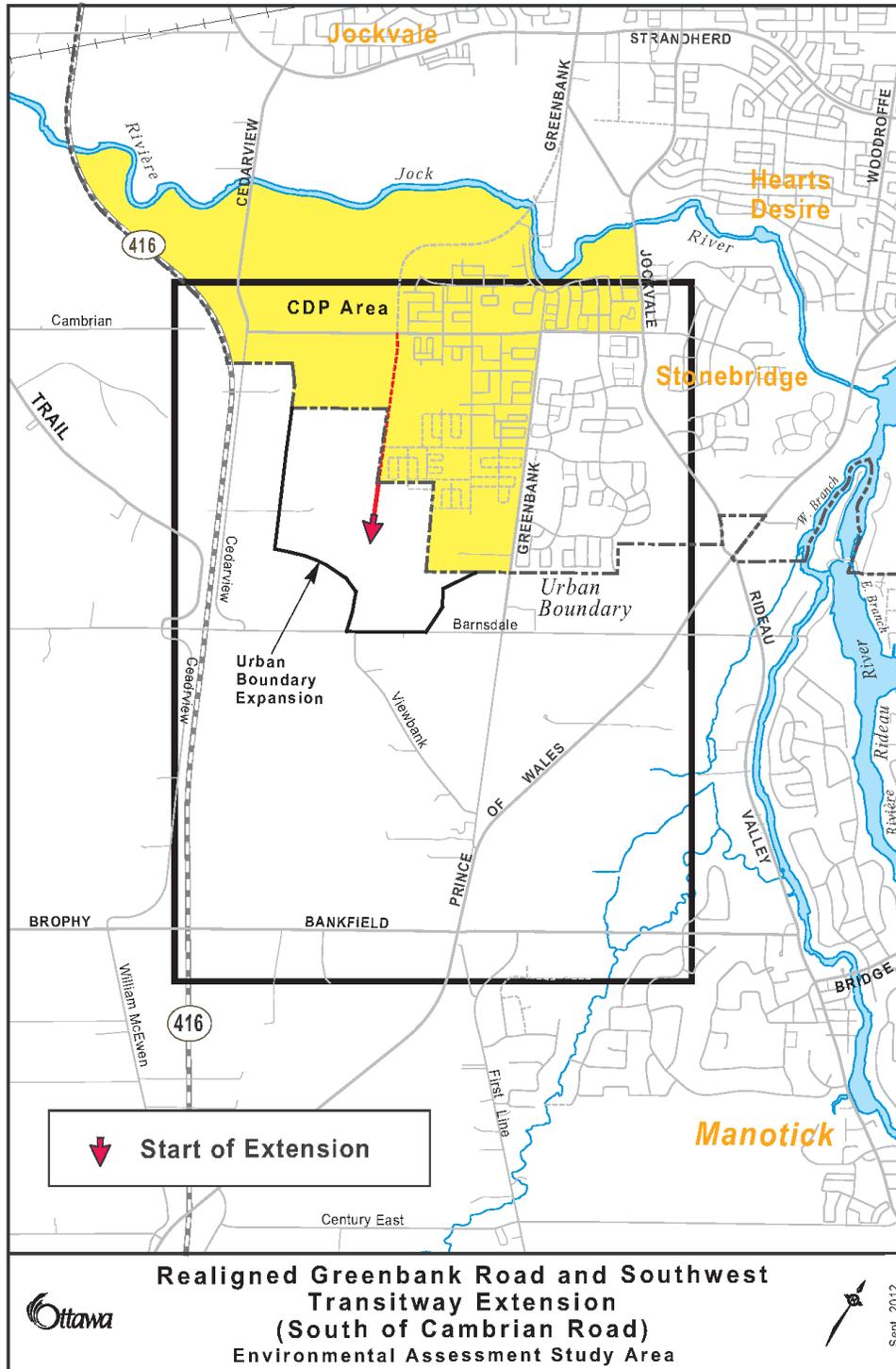
On 12 June 2012, as a result of an Ontario Municipal Board Partial Order, the City expanded the urban boundary further south to Barnsdale Road.

Rapid growth in the Barrhaven South Community has resulted in advanced development plans for the vacant lands south of Cambrian Road. Developers have submitted proposals to the City for the second phase of the community, otherwise known as Half Moon Bay South. The community totals approximately 5500 new residential units. In the next 10 years, development is anticipated to total approximately 8300 dwelling units.

The CDP has been used to guide development activities in this rapidly growing community. The supporting document to the CDP, the Barrhaven South Transportation Master Plan, identifies the transportation network and includes the realigned Greenbank Road corridor which is a key consideration in the development of the community.

Additionally, Minto Developments is now planning to develop the area of the urban boundary expansion north of Barnsdale Road.

Figure 1 - Study Area



The purpose of this environmental assessment study is to develop a functional design for the re-aligned Greenbank Road as well as for the rapid transit facility south of Cambrian Road to the new urban boundary (Barnsdale Road). However,

due to growth from the Village of Manotick, it is only prudent for the City to also examine whether Greenbank Road needs to be extended further south to avoid piece-mealing of infrastructure planning. Hence, the study area was expanded to Bankfield Road.

This project will be carried out as a Schedule 'C' Class EA as set out in the Municipal Engineers Association: "Municipal Class Environmental Assessment" document. Some tasks will require examination of a broader area in order to address environmental impacts; operational issues; to co-ordinate with relevant on-going studies and projects (including the Amendment to the Barrhaven South Final Community Design Plan); and, to study and identify tie-ins to future network connections for all travel modes.

Key considerations for the EA study include the following:

- Detailed evaluation of future transportation demand for the north-south direction of travel;
- Detailed evaluation of future transit demand for the north-south direction of travel;
- Identification of requirements and location for future park and ride lots, including the site shown in the TMP (at Cambrian Road);
- Cycling and pedestrian needs in the corridor;
- Analysis of all key intersections;
- Full evaluation of any potential impacts on wetlands and other natural environment areas;
- Preserving the rural character in the rural area;
- Stormwater management/hydrology;
- Effects on existing and future community; and
- Costs.

PROJECT SCOPE, TASKS, AND DELIVERABLES

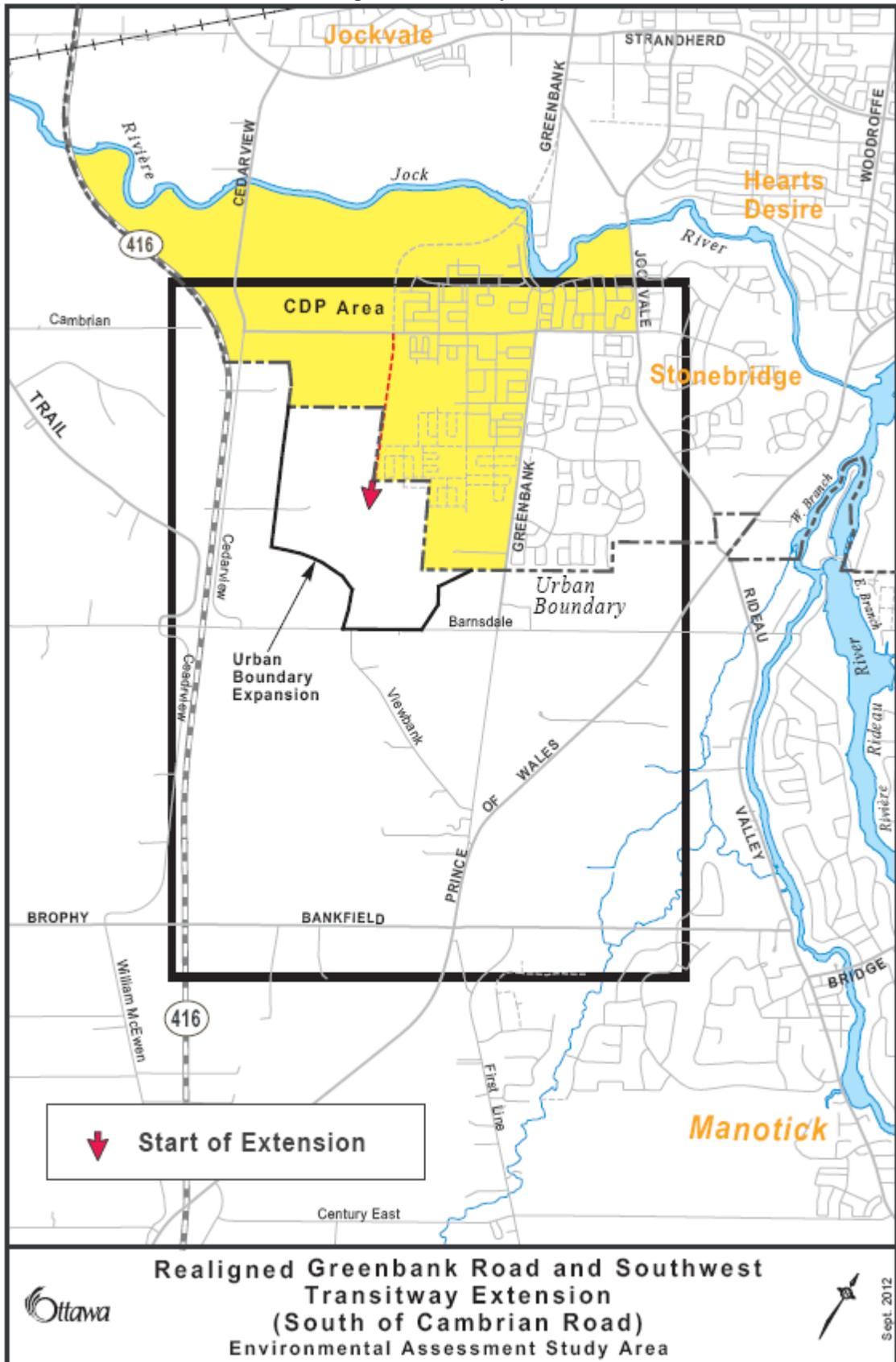
1. General

The study will be consistent with the approach and requirements set out in the Provincial *Environmental Assessment Act*. All relevant environmental inventories and analysis undertaken for this assignment will be of sufficient scope to satisfy the Provincial EA requirements.

1.1 Study Area

The primary study area, shown in Figure 1, generally includes the surrounding area south of Cambrian Road extending from the limits of realigned Greenbank Road (as per the CDP) towards Bankfield Road to the south. The study area may be adjusted as necessary in order to comprehensively identify the influences on, and the effects of the undertaking.

Figure 1 - Study Area



1.2 Timing

The study will be completed within approximately 18 months with emphasis on establishing a preferred alignment north of Barnsdale Road within approximately 12 months.

1.3 Co-ordination with Concurrent Studies

The EA Study process will take into consideration any information including analysis and preliminary findings of concurrent on-going transportation, development and infrastructure projects that could influence the direction and/or conclusions of the Study.

These projects include:

- City of Ottawa Transportation Master Plan Update;
- Manotick Secondary Plan Review (2013);
- Cambrian Road Widening (realigned Greenbank Road to Jockvale Road) Environmental Assessment Study;
- Amendment to the Barrhaven South Final Community Design Plan
- Barrhaven South Final Community Design Plan (2006);
- Barrhaven South Community Transportation Study;
- Prince of Wales Drive Widening (Fisher to Woodroffe) Environmental Assessment Study;
- Volume 2A Jockvale Golf Community Secondary Plan (2003);
- South Nepean Urban Area Secondary Plan (June 1997);
- South Nepean Town Center CDP (2006);
- Southwest Transitway Extension (Strandherd Drive to Cambrian Road) EA Study (2006);
- Greenbank Road Widening (Malvern Drive to Cambrian Road) EA (2006);
- Current development applications and associated studies (i.e. transportation impact studies);
- City policies/guidelines/practices;
- Travel surveys and traffic counts including travel demand forecasts and origin/destination data;
- Population, employment and development projections;
- Current and past development applications and associated studies (e.g. traffic and noise);
- Property ownership (and tenants), easements and rights-of-way information;
- Natural environment studies, such as the Urban Natural Areas Environmental Evaluation Study (2005);
- Relevant economic development studies;
- Relevant water, wastewater and storm water management studies;
- Relevant stream crossing information (fisheries, water quality, etc.);
- Regional Road Corridor Design Guidelines;
- City Pedestrian and Cycling plans; and
- Current and planned transit priority opportunities. South Nepean Urban Area Secondary Plan (June 1997);
- South Nepean Town Center CDP (2006);

- Southwest Transitway Extension (Strandherd Drive to Cambrian Road) EA Study (2006);

1.4 Summary of Deliverables

The deliverables for the study include:

- Presentation Materials for Consultation Group meetings and Public Open Houses;
- Public Open House Summary Report – one for each of three Public Open Houses;
- Project Update Newsletter – minimum of three;
- Geotechnical Report;
- Noise and Vibration Report;
- Information (text and graphics) for Study Web Page;
- Draft and final Environmental Study Report (ESR);
- Project Recommended Plan incorporating functional design drawings of the preferred design, and other information as detailed elsewhere in this document;
- Approvals in principle for storm water management facilities, grade separations, etc; and
- Project Cost Estimate Report identifying the project baseline budget in Work Breakdown Structure (WBS) format.

2. Environmental Assessment

The undertaking of the Environmental Assessment comprises the following tasks outlined below.

2.1 Project Need

The Class EA work begins with the review of the need and justification for the realigned Greenbank Road and Southwest Transitway Extension south of the limits identified in the CDP. Although the TMP indicates a conceptual extension south of Cambrian Road, the need for additional arterial capacity, the requirement for transit expansion and an examination of need and assumptions is required under the *Provincial Environmental Act*. This exercise will be carried out by forecasting travel demand for the south end of the city and determining both existing and future needs for a facility with respect to the impact on north-south travel demand/distribution, economic benefits and links to major employment destinations.

2.2 Existing Conditions

An inventory of the social, economic (agricultural, employment, retail etc.), physical and natural environments within the study area will be compiled. The inventory will consider all available background material and where necessary, supplement this information through on-site surveys and/or detailed studies. The inventory must be of sufficient

detail to enable the analysis and evaluation of alternative transportation solutions, designs and mitigating measures.

In general, the inventory will identify and describe those aspects of the environment that could potentially affect, or be affected by the undertaking. Some of the specific aspects of the environment associated with this project include:

- Transportation and infrastructure facilities (existing and planned), including cycling and recreational pathway corridors/routes;
- Potential influence of the project from/on development patterns in the southern suburban and rural areas and villages;
- Utilities including water, sanitary, hydro, gas, cable, phone, fibre optic, etc. ;
- Green spaces and natural areas;
- Water courses;
- Current storm water drainage patterns;
- Geotechnical;
- Landscape Architecture;
- Heritage and archaeological conditions;
- Air quality;
- Noise and vibration.

The existing conditions must be completed for the entire study area so that as alternative solutions and designs are developed and analyzed, the cumulative effects can be examined.

2.3 Alternative Solutions

The Study will identify and examine all reasonable alternatives to the realigned roadway and rapid transit facility.

The key components of this stage include:

- Identify alternative solutions to address transportation problems including:
 - Do nothing;
 - Expand and enhance public transit service;
 - Implement transportation demand management (TDM) measures to reduce travel demand; and
 - Expand other arterial roadways in the north-south direction;
- Develop evaluation criteria and indicators to assess the impacts (with consideration to possible mitigation measures) on the environment by the various solutions; and
- Analyze and evaluate the alternative solutions and select the preferred solution(s).

The travel-forecasting component included in this stage of the EA must:

- Identify the needs for all modes of transportation including walking, cycling, transit, auto and truck;

- Incorporate the principles (e.g. mode share targets etc.) of the current Official Plan and Transportation Master Plan in balancing demand to capacity while promoting the desire to increase transit use;
- Provide supporting analysis and recommendations for the alternative or supporting infrastructure.

2.4 Alternatives Corridors

From the preferred solution, a range of alternative corridors will be identified and evaluated based on a comprehensive examination of various factors in a conjunction with the surrounding environment.

A comprehensive list of evaluation criteria and methodology will be developed to evaluate the various alternative corridors will be developed. The inventory of existing conditions will define the scope of impacts on the environment that will need to be examined to determine the technically preferred corridor(s).

Factors that are consistent with the goals and objectives of this study will be identified to conduct the evaluation of alternatives. The criteria will include but are not limited to:

- Transportation service and infrastructure;
- Natural environment;
- Social/cultural environment;
- Economic/Financial environment;
- Physical environment; and
- Implementation.

2.5 Design Alternatives

The study will identify and evaluate various design alternatives for the selected corridor. Alignment and cross-section design alternatives will be developed based on consideration of constraints within the study area, input from the public and approval agencies, landowners, as well as City guidelines/standards/practices. All proposed designs will include any required modifications on connecting roadways (public or private).

A comprehensive list of evaluation criteria and methodology will be developed to assess the various alternative designs. These include, but are not limited to:

- Road alignment;
- Geotechnical considerations;
- Grade separations and structural arrangements;
- Utility location and relocations;
- Stormwater management;
- Landscaping and urban design features;
- Access points;
- Operational considerations; and
- Costs.

2.6 Station Integration

Assessment and evaluation of station locations will include, but not limited to, the following:

- Integration with and access to adjacent communities, businesses and employment areas;
- Impact on adjacent communities;
- Integration with the existing pedestrian environment, including safety and access considerations;
- Effect on designated cycling and multi-use pathway routes;
- Air quality, noise and vibration;
- Aesthetic, urban design, views and vistas;
- Impact on vehicular traffic along the corridor and intersecting roadways;
- Impact on overhead and underground utilities and services; and
- Construction, phasing and operational issues.

2.7 Impact Assessment and Mitigation Measures

The effects of each alternative design on the environment will be thoroughly evaluated. Mitigation measures and associated implications (e.g. cost of mitigation etc.) are to be identified and considered in the evaluation process. The study must clearly identify the initial impacts of each alternative as well as the net post-mitigation effect using quantifiable indicators and measures wherever possible.

Effects on traffic and transit operations will be evaluated in accordance with current City guidelines and practices. To ensure that all impacts are appropriately evaluated, detailed studies will be required for specific issues such as:

- Archaeology and heritage;
- Impact on private property and accesses;
- Roadway drainage and storm water management;
- Subsurface conditions, geotechnical and utilities;
- Vegetation/terrestrial habitat and aquatic habitat;
- Air quality; and
- Noise/Vibration.

2.8 Costing

Developing an accurate project baseline budget is an essential component of this study and the resulting project cost will contribute to the City's short and long range capital budget forecasting, priority setting, and development charges strategy. The project budget will also form the basis for funding discussions with senior levels of government, where appropriate. The baseline budget will be developed using a Work Breakdown Structure (WBS) format in current dollars, and include contingency allowances.

Project costing is a fundamental criterion in the evaluation of alternatives and will be a key consideration for establishing implementation strategies.

2.9 Recommended Plan

Following the evaluation of alternatives and determining all necessary mitigation measures to minimize any adverse impacts of the project, a recommended plan will be developed. This will include:

- A detailed written description of the undertaking including the design parameters;
- Functional design drawings (1:500 scale, plan and profile) for the preferred alignment with a geo-referenced horizontal alignment, vertical profile, grading, drainage and property envelope;
- Roadway cross-section drawings for typical sections as well as at critical areas;
- Mitigation measures to reduce the environmental impacts of the project;
- Landscape design plan;
- Property requirements plan;
- Storm water management and roadway drainage requirements, as well as other infrastructure requirements;
- Infrastructure implementation/staging plan (e.g. water mains, sewers etc.);
- Implementation (phasing); and
- Cost.

The Recommended Plan will clearly identify and set out the requirements and timing for all subsequent approvals required to proceed with the construction phase of the project. The Recommended Plan will be presented to Transportation Committee and Council for approval.

2.10 Environmental Study Report

An Environmental Study Report (ESR) will be prepared to document the entire study process including the approved design, mitigation measures, rapid transit, and consultation efforts. The ESR will be placed on public record for a minimum 30-day review period as per the *Environmental Assessment Act*.

3. Consultation

The consultation process will include meetings with key stakeholders through an Agency Consultation Group (ACG), a Public Consultation Group (PCG), a Business Consultation Group (BCG), and the general public through Public Open Houses. A minimum of three meetings with each Consultation Group will be held during the course of the study. Representation on the ACG, PCG, and BCG, will be confirmed during the development of the Study Design and in consultation with Ward Councillors.

3.1 Agency Consultation Group

An Agency Consultation Group (ACG) will be formed to provide input on planning, engineering and environmental issues and will provide general guidance to the Study

Team. ACG members will include experts in their related fields from government agencies and approval bodies including, but not limited to:

- Ministry of Transportation of Ontario;
- Rideau Valley Conservation Authority;
- Ministry of Natural Resources;
- Transport Action Canada ; and
- Various City of Ottawa departments.

3.2 Public Consultation Group

A Public Consultation Group (PCG) will be formed to enable private groups to provide direct input to the study, advising and commenting on local issues and concerns. PCG members may include representatives from local community groups, special interest groups, and adjacent property owners. Membership of this group will be determined in consultation with affected Ward Councillors.

3.3 Business Consultation Group

A Business Consultation Group (BCG) will be formed to enable business representatives to provide direct input to the study, advising and commenting on local issues and concerns.

3.4 Notifications

The public will be notified at appropriate stages in the Study pursuant to the *Environmental Assessment Act*. Each announcement will take the following forms:

- Advertisements in daily newspapers (The Ottawa Sun, Le Droit);
- Advertisements in community papers where appropriate; and
- The project web site on the City's web portal.

3.5 Public Open Houses

The Public Open Houses (POHs) will be held to present and obtain feedback on existing conditions, alternative design concepts, and the recommended plan. There will be a minimum of three POH meetings, each including a formal presentation and question and answer period. The POHs will be advertised in daily and local newspapers and notification will be e-mailed to persons on the Project's Master Mailing List.

Background and presentation material will include a Project Update Newsletter which will summarize the information presented at the POH and will be available for general distribution. All material presented at the POH meetings as well as the Project Update Newsletter will be bilingual. Bilingual staff will be present during all Public Open House meetings. A summary report will be produced to document each POH including all comments received.

3.6 Project Master Mailing List

A Master Mailing List will be prepared and updated via Public Open Houses, general enquiries, e-mails and other forms of consultation.

3.7 Project Web Page

A Project Information Web Page for the Study will be established on the City's external web site to inform the public of the progress of the study and upcoming meetings or activities, post the bilingual materials presented at each Open House, and provide a point of contact for e-mail correspondence.

3.8 Frequently Asked Questions

To assist in providing information to the public, a Frequently Asked Questions (FAQ) will be prepared to provide answers to common questions raised during the study. The FAQ document will be established early in the study process and will be updated regularly. It will also be posted on the web site.