3.0 PROJECT APPROACH

3.1 Background

This chapter presents a discussion of the following:

- Project management and environmental assessment requirements;
- Study process and tasks involved in the completion of the project;
- The study organization including:
  - Involvement of internal organizations
  - Involvement of external agencies and interest groups
  - Public participation program

This report forms the basis for a Transportation Environmental Study Report for the twinning of Highway 17, from County Road 29 westerly to 3 km west of Bruce Street.

3.2 Environmental Assessment Requirements

This study was completed commensurate with the requirements for a Group 'B' project, under the Class Environmental Assessment for Provincial Transportation Facilities (2000).

The study was undertaken in a manner which addressed all necessary elements of the Environmental Assessment Act, including:

- Detailed inventories of natural and social environments;
- Consideration of all reasonable alternatives;
- Assessment of alternatives using a comprehensive methodology capable of assessing all net environmental effects;
- Thorough public consultation process;
- Identification of impacts and appropriate mitigation measures; and
- Clear and concise documentation.

These activities were aggregated into four basic stages, described in **Section 3.3**, which generally reflect the elements described above. However, the public participation activities were an integral part of the entire study process rather than a stage specific element.

Throughout the duration of the study, the general public, special interest groups and other agencies were actively solicited and encouraged to participate in all aspects of the study. This proactive, coordinated approach provided an opportunity for all interested parties to comment on both the process and findings of the study.

The management of this study and consultative process was undertaken by the Ministry of Transportation (MTO). All local municipal stakeholders were provided opportunities to participate in the decision-making process through the use of a Municipal Advisory Committee (MAC), which included input from the County of Renfrew, Town of Arnprior, Town of Renfrew and Townships of Horton and McNab-Braeside. The structure of the MAC is described in **Section 3.4.2**. All study recommendations were reviewed, evaluated, and endorsed by this committee. The study process therefore ensured that all recommendations were traceable and accountable to the local community, since municipal staff and elected officials participated in the decision-making process.

This study, and its documentation, has been completed so as to meet the requirements of the Canadian Environmental Assessment Act (CEAA). Federal agencies were contacted to assess impacts with respect to:

- Migratory birds;
- Endangered species;
- Canadian Fisheries Act;
- Navigable Waters Protection Act;
- Aviation requirements of NAV Canada / Transport Canada for the Arnprior airport;
- Native land claims of the Algonquin First Nation; and
- Federal property.

Based on a review of the expected cumulative environmental impacts and downstream effects, the Federal government is expected to provide a screening level approval under CEAA.

3.3 Study Process

The generic requirements of a Class Environmental Assessment, described above, were incorporated into the four basic stages of the study process. Within each stage a number of specific tasks or assignments were completed. A broad overview of each stage is provided below:

- **Stage 1** included the development of a Study Design, Environmental Plan and Consultation Plan outlining the manner in which the project would be completed. This was presented to the public at PIC No. 1. The Study Design is included in **Appendix A,** Environmental Plan in **Appendix C** and Consultation Plan in **Appendix B**.
- **Stage 2** of the project included information gathering and the generation of alternatives. This stage involved the collection of all relevant data, including background reports, mapping, traffic counts and property information within the study area. Supplementary field investigations and inventories of the natural and social environments were also undertaken. This information was presented at PIC No. 1.
- **Stage 3** entailed the analysis and evaluation of the alternatives. All reasonable options were considered including the "do nothing" alternative. A traceable and systematic evaluation process was employed and ensured that the study recommendations considered all environmental effects of the project. A "technically preferred alternative" was presented to the public at PIC No. 2 following the completion of this stage of the project.
- **Stage 4** included the selection of the Recommended Plan, which was presented to the public at PIC No. 3, and documentation. The results of the information gathering, analysis and evaluation of alternatives, and public involvement activities from the previous three stages were used in the selection and documentation of a recommended plan. This plan included refinements and mitigation measures to reduce or eliminate any detrimental residual effects of the project. The planning process culminated with the preparation of the Transportation Environmental Study Report (TESR), documenting all aspects of the study.

The study planning process is shown on **Figure 3-1**. The generalized flow chart provides a detailed indication of the various tasks included in the four primary stages of the project. Although a logical and sequential process is illustrated, the actual execution of the project involved iterative steps at various stages of the study. This entailed the re-examination of a number of potential design alternatives or design refinements, which were suggested during the course of the public involvement activities. A number of these design refinements have been incorporated into the Recommended Plan.

3.4 Study Organization

3.4.1 Project Team

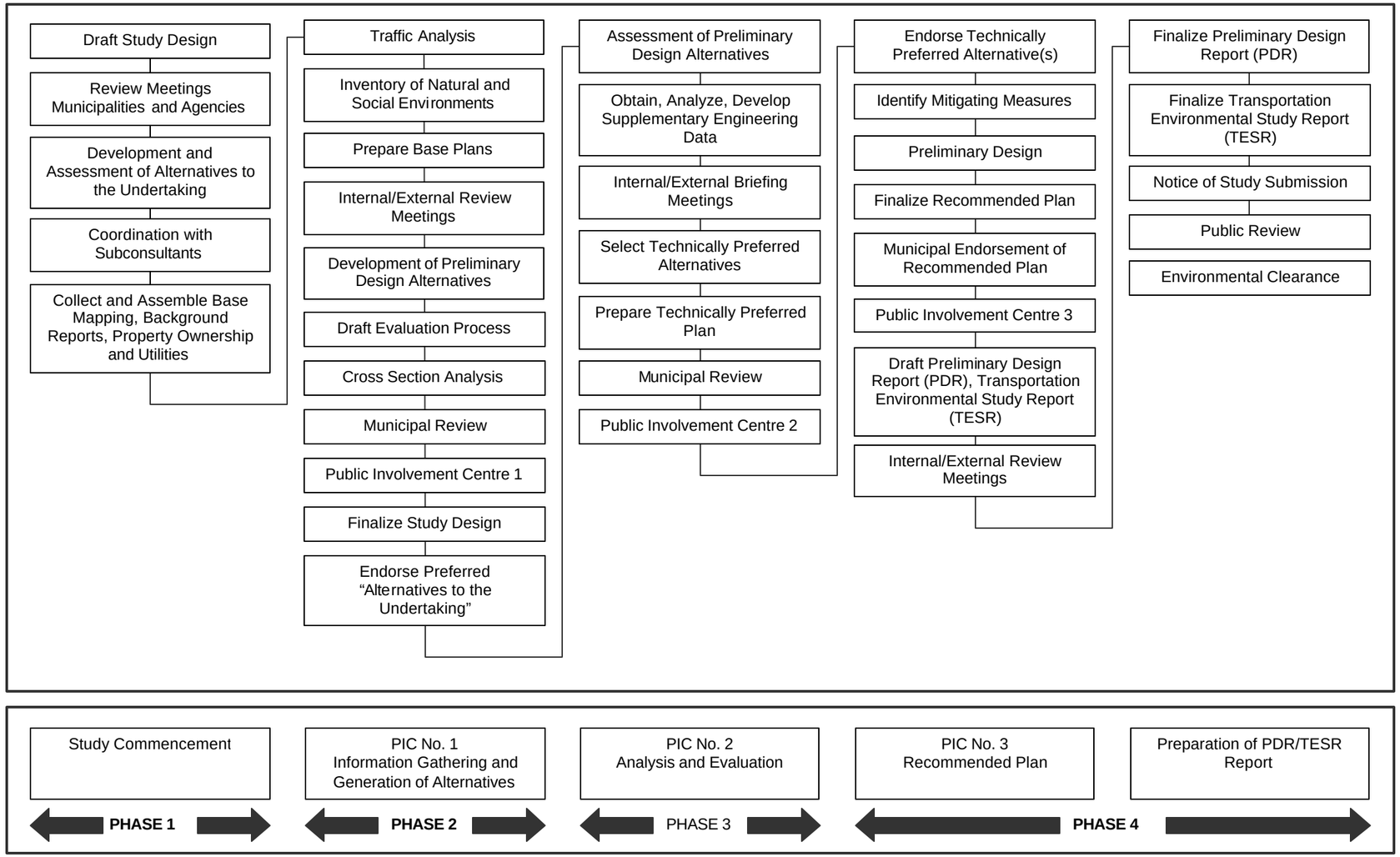
The Ministry of Transportation (MTO) was responsible for the initiation and management of this study and direction of all aspects of the work program. MTO provided overall direction for the study including technical advice and assistance relating to roads, structures and other infrastructure elements. They ensured coordination and liaison with external agencies, elected representatives, interest groups and the public. Persons involved in the study's organization are provided below:

The Technical Advisory Committee (TAC), was employed to address the day to day activities associated with the study. The TAC was comprised of representatives from a selected number of Ministry specialist offices together with the assistance of representatives from NCE and their specialist sub-consultants. Through meetings of this committee technical participation was coordinated through the MTO project manager and consultant project manager.

The TAC members consisted of representatives from:

- MTO
  - Head of Planning and Design
  - Area Engineer
  - Project Manager
  - Regional Environmental Unit
  - Property Section
  - Traffic Section
  - Structural Section
  - Ottawa Office
- Ministry of Natural Resources (MNR)
- NCE

Figure 3-1 Study Planning Process



The project organization is shown on **Figure 3-2**. The specific activities of each element of the study are described in the following sections.

3.4.2 Consultant Team

National Capital Engineering (NCE) was retained to provide transportation engineering and project management services. NCE also provided specialist services in:

- Traffic
- Noise
- Land Use Planning
- Environmental Contamination
- Analysis and Evaluation
- Water Resources

The services of several sub-consultants were also retained to provide expert advice in required areas, as follow:

- **TSH** - Environmental / Structures
- **Daniel Brunton** - Wildlife / Botany
- **Rudi Warme** - Fisheries
- **Archaeological Services** - - Heritage / Archaeological Resources
- **Golder** - Geotechnical
- **Thurber** - Foundations
- **J. D. Barnes** - Surveys
- **Heartland Environmental** -Landscape Architecture

3.4.3 Municipal Advisory Committee

A Municipal Advisory Committee (MAC), comprised of staff and elected officials, was organized to direct all technical aspects of the study and to maintain a dialogue with the affected municipalities and local concerns. The Highway 17 MAC consisted of the MTO and NCE project team and representatives from:

- County of Renfrew
- Town of Renfrew
- Town of Arnprior
- Township of Horton
- Township of McNab-Braeside
- Ministry of Transportation
- National Capital Engineering

Municipal Advisory Committee meetings were held at key study milestones during the course of the study. Committee members participated in making decisions and recommendations prior to discussions with the general public. This permits members the opportunity to give perspectives of their respective organizations. Committee members also participated in the generation, analysis and evaluation of alternatives. This process ensured that MAC members actively participated in the decision-making process and the formulation of study recommendations.

3.4.4 Public Advisory Committee

A Public Advisory Committee (PAC) was organized to solicit input, provide direction, participate in the evaluation of alternatives and review the progress of the study with members of the public, property owners, stakeholders and interest groups. Meetings of the PAC were held at key milestones, such as following public involvement centres, and included representatives from the MTO and NCE, along with their specialist sub-consultants.

3.4.5 Municipal Councils

The local municipal organizations (County of Renfrew, Towns of Renfrew and Arnprior, and Townships of Horton and McNab-Braeside) were informed of the study through their respective Municipal Advisory Committee representatives and / or through a series of council presentations as presented in **Table 3-1**. These presentations were held at each of the Public Involvement Centres and at the completion of the study to receive endorsement of the Recommended Plan.

Figure 3-2 Project Organization

PUBLIC ADVISORY COMMITTEE (PAC)
Community Associations
Interest Groups
Individuals

EXTERNAL AGENCIES AND INTEREST GROUPS
Federal Departments
Provincial Ministries
Municipal Emergency Services
Interest Groups

MUNICIPAL ADVISORY COMMITTEE (MAC)
Ministry of Transportation
County of Renfrew
Town of Arnprior
Town of Renfrew
Township of McNab-Braeside
Township of Horton
National Capital Engineering

TECHNICAL ADVISORY COMMITTEE (TAC)
Consultant Team
MTO Sections:
- Planning and Design
- Structures
- Property
- Traffic
- Ottawa Office
- Surveys
- Geotechnical
- Foundations
- Electrical
- Ministry of Natural Resources

INVENTORY SPECIALISTS
Natural Environment – D. Brunton
Pavement – T. Nicholas
Archaeological Resources – R. MacDonald
Heritage Resources – M. MacDonald
Fisheries and Aquatic – R. Warme
Structures – M. Delph
Noise – S. Taylor
Social Environment – K. Dimoff
Foundations – P. K. Chatterji
Landscape Architecture – K. Tribble
Driver Behaviour – G. Wilde
Safety – D. Wilson

Table 3-1
Committee and Council Presentations

Date		Location	Description of Presentation	Council Endorsement*
June 9, 2003	County Roads Committee	Renfrew County, Pembroke	Recommended Plan	Committee passed a motion supporting the Recommended Plan.
July 28, 2003	Town of Renfrew Council	Renfrew Municipal Council Chambers, Town of Renfrew	Recommended Plan	Council passed a motion supporting the Recommended Plan.
July 29, 2003	Horton Township Council	Horton Township Municipal Office, Horton Township	Recommended Plan	Council passed a motion supporting the Recommended Plan.
August 5, 2003	Township of McNab/Braeside	McNab-Braeside Township Municipal Offices McNab-Braeside Township	Recommended Plan	Council passed a motion supporting the Recommended Plan.
September 8, 2003	Town of Arnprior Council	Town of Arnprior Municipal Offices, Town of Arnprior	Recommended Plan	Council passed a motion supporting the Recommended Plan.

* Refer to **Appendix DD** Council Resolutions.

3.4.6 External Agencies and Special Interest Groups

Throughout the project a consultative approach was used with external agencies and interest groups. The following government agencies and special interest groups were contacted during the study:

Provincial Ministries

- Ministry of the Environment
- Ministry of Natural Resources
- Ministry of Agriculture, Food and Rural Affairs
- Ministry of Culture
- Ministry of Community and Social Services
- Ministry of Health
- Ministry of Municipal Affairs and Housing
- Ministry of Economic Development, Trade and Tourism
- Ministry of Labour

Federal Ministries

- Environment Canada
- Transport Canada
- Indian and Northern Affairs Canada
- Department of Fisheries and Oceans
- Canada Post Corporation

Utilities

- Bell Canada
- Hydro One
- Ontario Power Generation
- Enbridge / Consumers Gas
- AT&T Canada
- Interprovincial Pipelines
- Trans-Canada Pipelines
- Ottawa Valley Railway
- CP Rail
- Renfrew Power Generation
- Renfrew Hydro

Agencies and Interest Groups

- Federation of Agriculture
- Safe on Seventeen
- Canadian Environmental Network
- Canadian Institute of Forestry
- Ducks Unlimited
- Ontario Provincial Police (OPP)
- Ottawa Field Naturalist Club
- Ontario Federation of Anglers and Hunters
- Ontario Federation of Snowmobile Clubs
- White Waters Snogoers
- Canadian Automobile Association
- Burnstown Bicyclists Association
- Renfrew Fish and Game Club
- Federation of Ontario Naturalists
- Macnamara Field Naturalists
- Bonnechere River Watershed Committee
- Renfrew Board of Education
- Upper Canada District School Board
- Catholic District School Board of Eastern Ontario
- Horton Public School
- McNab Public School
- A.J. Charbonneau School
- Town of Arnprior Fire Department
- Town of Renfrew Fire Department
- McNab-Braeside Fire Department
- Horton Fire Department
- Renfrew County Emergency Medical Services
- South Renfrew Municipal Airport

Each agency or group, which either had information to contribute or could be affected by study proposals, was contacted. In addition, special meetings were held with affected organizations throughout the study, including:

- Boeing
- CP Rail
- Emergency Services (Police, Fire and Emergency Medical Services)
- Ottawa Valley Railway
- Utility Companies

External agencies and special interest groups were consulted during numerous stages of the study including: Data collection, development of alternatives, preparation and screening of evaluation criteria, review of the assessment of alternatives, and the development of appropriate mitigation plans. **Table 3-2** provides a summary of comments received from municipal and agency consultation.

3.4.7 Emergency Services

The following section provides a brief description of the emergency services and their role in providing fire, police and ambulance service to the communities adjacent to the Highway 17 corridor. A detailed description of the service providers, locations and areas covered can be found in **Section 4.2.3.**

Table 3-2
Summary of Municipal and Agency Correspondence

Title/Agency	Comments/Concerns
Great Lakes and Corporate Affairs Office Environmental Policy and Assessment Division Environment Canada, (DOE) Ontario Region	• DOE does not expect to exercise any power, duty or function pursuant to Sec. 5 of the Canadian Environmental Assessment Act (CEAA) and will not be triggering a federal EA under CEAA. • If a federal EA under CEAA is triggered, DOE may request specialist information and knowledge to assist with the Federal EA. Expect to provide comments on the following legislation and policies within the DOE mandate: • Section 36 (3) of the Fisheries Act, prohibits the deposit of potentially deleterious substances into Canadian Fisheries waters; • Canadian Environmental Protection Act (Parts 3/4/5); • Strategy for Action on Pollution Prevention; • Migratory Birds Convention Act; • National Accord for the Protection of Species at Risk; • Federal Policy on Wetland Conservation; • Canadian Biodiversity Strategy; • A Wildlife Policy for Canada; • Federal Water Policy; and • Department of Environment Act.
Department of Fisheries and Oceans (DFO)	• MNR will review and notify DFO of the project. No comment at this time. • DFO review of Fisheries Report.
Environment Canada, Ontario Region Great Lakes and Corporate Affairs Branch Environmental Policy and Assessment Division	• Responsible for coordinating EA reviews of Ontario based projects on behalf of Environment Canada.
County of Renfrew	• Participated on MAC. • Provided County of Renfrew Traffic count Data and Road Maps and Official Plan. • Resolution supporting County Road 6 interchange. • Resolution supporting recommended plan.
Town of Renfrew	• Participated on MAC. • Concern regarding the proposed interchange at County Road 6 (Gillan/Lochwinnoch Road) will delay the entire project due to the cost and the property purchases. • Official Plan and Zoning By-law • Resolution supporting recommended plan.
Township of Horton	• Participated on MAC. • Concern regarding the left turn for traffic from Renfrew to go east on Highway 17, this would be difficult especially for trucks. Add a new on-ramp to access Highway 17 east in a Parclo and Diamond interchange configuration. • Resolution supporting interchange at County Road 6 • Resolution supporting recommended plan.
Town of Arnprior	• Participated on MAC. • Provided Agency and Public Contact Lists. • Mapping and utility information. • Official Plan and Zoning By-law. • Resolution supporting Baskin Drive – White Lake service road. • Resolution requesting consideration of an interchange at Campbell Drive and Baskin Drive.

Table 3-2
Summary of Municipal and Agency Correspondence

Title/Agency	Comments/Concerns
	• Resolution supporting recommended plan.
Township of McNab/Braeside	• Participated on MAC. • Official Plan and Zoning By-law. • Resolution requesting consideration of an interchange at Campbell Drive. • Resolution supporting recommended plan.
Emergency Services *Meeting*: Renfrew Fire Department Renfrew County EMS Horton Township Fire Department Arnprior Fire Department Arnprior OPP *September 05/02*	• McNab-Braeside Fire Station at Highway 17 and County Road 508. Heavy traffic on Highway 17 presents difficulty crossing the highway. • Horton Fire Department concerns regarding the removal of access from Highway 17 to County Road 6 and the alternative access being O'Brien Road and Whitton Road. Whitton Road is considered in very poor condition, especially in the winter. • Mutual Aid System involves the use of manpower and tankers of Renfrew, Arnprior and Horton. The County Rescue System includes heavy hydraulics, Zone 1 covers Renfrew and Horton and Zone 2 covers Arnprior. • Emergency median cross overs at all flyovers and a 5 km separation of median cross overs. • Emergency median crossover at the Renfrew/Horton boundary. • Ambulance is located out of the Arnprior Hospital and the standby area is at County Road 508. • Ambulance service operates out of the Town of Renfrew as well. • Arnprior OPP coverage only includes the municipality of Arnprior. • The use of Whitton Road for emergency access is considered the most critical issue due to the CPR crossing which is sometimes blocked by rail "shunting" and the condition of the roadway.
Emergency Services *Meeting*: Renfrew Fire OPP Horton Fire Department *November 13/02*	• Asked for consideration of an interchange at Scheel Drive instead of Campbell Drive. • McNab/Braeside is considered the busiest part of OPP service area and a median break at Baskin Drive would be a priority. Plans for turn-a-rounds at County Road 508 and White Lake Road along with median turnarounds were considered within acceptable limits. • Identified the CPR line crossing at Whitton Road a concern for response time.
Stormont, Dundas & Glengarry OPP	• Proposed MTO consider Wild Animal Highway Warning Reflector System to deter deer and other wildlife from crossing onto a road into oncoming traffic at night.
Canadian Pacific Railway Engineering Services	• CPR has no plans for development in the vicinity of the Highway 17 corridor. CPR structural data available from Manager Structures, Toronto
Canadian Pacific Railway *Meeting* Manager of Engineering Maintenance Manager of Public Works *November 04/02*	• Provided the required dimensions for Railway Bridges, Snowsheds and Overhead Timber Bridges. This line is currently leased to Ottawa Valley Railway (OVR), Northbay, which has the authority to act as the owner. • OVR is responsible for maintenance of the line and bridges and establishing operating speeds. The line is part of the Chalk River subdivision and it is unlikely to be abandoned within the 20 year planning horizon. • CP Rail operates a Safe Passage Program whereby a 1-800 number links a dispatch centre directly to the driver of the train in case of an emergency.
Ottawa Valley Railway *Meeting*: *December 16/02*	• Identified trains may reach 8000 ft lengths • Railway cannot guarantee Whitton Road will not be closed • Project will not effect railway operations • Provided railway clearance requirements

Table 3-2
Summary of Municipal and Agency Correspondence

Title/Agency	Comments/Concerns
Ontario Power Generation - Madawaska Generating Station *Meeting* February 15, 2002	• Need to predict potential 'black ice' conditions on the Madawaska Bridge. Permit spraying the bridge with anti-icing material. MTO will be installing an ARWIS Station (Advanced Roadway Information System) and FAST (automated chemical deicing system) • Madawaska River Dam has a series of alternatives to allow the water through in an emergency if the turbines fail. Including a concrete dam that has pre-set holes for dynamite and a 'breakpoint' in the man-made rock wall to the west of the dam.(Highway 17 is between the 'breakpoint' and the river. • East rock fill approach to the existing structure crushed the Ontario Power Generation's power cable conduits underneath the fill. The conduit was re-routed to west of the fill approach and if a twin structure and approach fill is constructed the conduit will have to be re-routed.

3.5 Public Consultation

Information on the study was distributed to the general public through a variety of community involvement tools, including:

- Public Involvement Centres;
- Letters and flyers;
- Newspaper notices;
- Supplementary meetings with local residents, interest groups and external agencies.

Public notices and Public Involvement Centres were held at milestone dates during the course of the study, including:

Study Commencement Notices were placed in the following papers:

- Ottawa Citizen – August 2, 2002
- Ottawa Ledroit – August 2, 2002
- Arnprior Chronicle – August 7, 2002
- Renfrew Mercury – August 6, 2002

PIC No. 1 notices were placed in the following papers:

- Ottawa Citizen – September 30, 2002
- Ottawa Sun – September 30, 2002
- Le Droit – September 30, 2002
- Renfrew Mercury – October 1, 2002
- Arnprior Chronicle-Guide – October 2, 2002

PIC No. 1 was held on **October 2, 2002** and **October 3, 2002:** Presented an Introduction to the study, study approach and Alternative Planning Solutions at the Nick Smith Centre in Arnprior and the Renfrew Inn in Renfrew.

PIC No. 2 notices were placed in the following papers:

- Ottawa Citizen – March 14, 2003
- Le Droit – March 14, 2003
- Renfrew Mercury – March 11, 2003
- Arnprior Chronicle-Guide – March 11, 2003

PIC No. 3 notices were placed in the following papers:

- Ottawa Citizen – June 20, 2003
- Le Droit – June 20, 2003
- Renfrew Mercury – June 24, 2003
- Arnprior Chronicle-Guide – June 24, 2003

The **Notice of Submission** (30 day review period) was placed in the following papers:

- Ottawa Citizen – December 15 – December 19, 2003
- Ottawa Sun - December 15 – December 19, 2003
- Le Droit - December 15 – December 19, 2003
- Renfrew Mercury - December 15 – December 19, 2003
- Arnprior Chronicle-Guide - December 15 – December 19, 2003

All property owners adjacent to the freeway right-of-way[1] and persons who requested to be on the mailing list were notified and invited to attend the PIC's through a mailing of over 250 letters and flyers. This format assured that all adjacent property owners and residents were informed of each PIC. A brief summary of the PIC's is described in the following sections.

Throughout the study meetings were held with property owners, local businesses, external agencies and interest groups (either individually or with the Public Advisory Committee). The purpose of these meetings was to allow all affected parties the opportunity to participate in the project, and to comment on the study process, alternatives and recommendations that directly affect their property or operation. Every property owner that requested a meeting to discuss specific concerns or property impacts was given the opportunity to meet with MTO and Consultant representatives.

[1] From a Last Registered Owner search in 2001

3.5.1 Public Involvement Centre No. 1

Public Involvement Centre 1 was held at the Nick Smith Centre in Arnprior on October 2, 2002 and at the Renfrew Inn in Renfrew on October 3, 2002. On both days, Municipal councillors and staff had the opportunity to view the presentation material from 2:00 p.m. to 3:00 p.m. and external agencies were invited to view between 3:00 p.m. and 4:00 p.m., prior to the arrival of the public between 4:00 p.m. and 8:00 p.m.

The purpose of the initial PIC was to present background information, the study approach, and a preliminary series of alternatives for the twinning of the highway. More specifically, the information presented at the PIC included:

- Introduction of the project and the project team members;
- Presentation of the proposed study process;
- Identification of the study area;
- Presentation of preliminary inventories of the natural and social environments;
- Presentation and assessment of alternatives to the undertaking; and
- Presentation of preliminary alternatives for the twinning of Highway 17

At the Arnprior PIC, a total of 112 people signed the registration sheet and 40 comment sheets / letters / e-mails were received during the PIC and subsequent two week return period. The most significant issues raised by the public at this PIC included:

- Grade Separation options at Scheel Drive;
- Interchange options at Campbell Drive;
- Property concerns and issues; and
- Noise issues.

At the Renfrew PIC, a total of 85 people signed the registration sheet and 33 comments / letters / e-mails were received. The most significant issues raised by the public were:

- Interchange and grade separation options at County Road 6;
- Property concerns and issues;
- Issues and concerns at Bruce Street; and
- Drainage issues.

A complete description of PIC No. 1 is provided in **Appendix E**.

3.5.2 Public Involvement Centre No. 2

Public Involvement Centre No 2 was held at the Nick Smith Centre in Arnprior on March 19, 2003 and the Renfrew Inn in Renfrew on March 20, 2003. Municipal councillors and staff were invited to view the presentation material from 2:00 p.m. to 3:00 p.m. External agencies were invited to view the exhibits between 3:00 p.m. and 4:00 p.m. The general public viewed the exhibits between 4:00 p.m. and 8:00 p.m.

The purpose of the second Public Involvement Centres was to present the following:

- Recommended Planning Solutions;
- Interchange Needs Analysis;
- Analysis and Evaluation of Preliminary Interchange Design Alternatives;
- Technically Preferred Alternatives (TPA);
- Technically Preferred Plan
- “Refinement” Alternatives to the TPA; and
- Obtain public comments.

One hundred and fifteen (115) people registered at the Arnprior Public Involvement Centre while 77 people registered at the Renfrew PIC. A total of sixty-seven (67) comment sheets / letters / e-mails received, (38 from the Arnprior PIC and 29 from the Renfrew PIC) were returned during the PIC and the subsequent 2-week response period.

The most significant issues raised by the public at the Arnprior Public Involvement Centre included:

- Support for the overall Highway 17 Twinning;
- Support for Campbell Drive Interchange;
- Concerns over increased traffic, speed and heavy vehicle levels on Campbell Drive; and
- Support of service road option from Baskin Drive to White Lake Road;

The most significant issues raised by the public at the Renfrew Public Involvement Centre included:

- Support for the County Road 6 Interchange;
- Property concerns along Gillan Road and Lochwinnoch Road (County Road 6); and
- Overall support for the Highway 17 Twinning study.

A complete description of PIC No. 2 is provided in **Appendix E**.

3.5.3 Public Involvement Centre No. 3

Public Involvement Centre No 3 was held at the Nick Smith Centre in Arnprior on June 24, 2003 and the Renfrew Inn in Renfrew on June 25, 2003. Municipal councillors and staff were invited to view the presentation material from 2:00 p.m. to 3:00 p.m. External agencies were invited to view the exhibits between 3:00 p.m. and 4:00 p.m. The general public viewed the exhibits between 4:00 p.m. and 8:00 p.m. The purpose of the third and final PIC was to:

- Present "Refinement" Alternatives to the Technically Preferred Plan;
- Illustrate the Recommended Plan; and
- Present Mitigation Measures.

Fifty-three (53) people registered and fourteen (14) comments sheets were returned during the Arnprior PIC and thirty-six (36) people registered and fifteen (15) comments sheets were received at the Renfrew Public Involvement Centre, and the subsequent 2-week response period.

Overall the Twinning of Highway 17 and the Recommended Plan was supported by members of the public at both the Renfrew and Arnprior Public Involvement Centres. Property impacts, landscaping concerns and property access were the most significant issues raised by the public.

A complete description of PIC No. 3 is provided in **Appendix E**.

3.6 Evaluation Process

The analysis and evaluation process is an integral exercise with the public consultation program. The process includes meaningful dialogue with the public and allows for a two-way exchange of technical information and public comment.

The methodology utilized for the study used two techniques to evaluate alternatives.

In areas where there were few alternatives and a limited number of evaluation criteria, a qualitative evaluation process was utilized. This approach was used to evaluate the Alternatives to the Undertaking, Median/Cross Section alternatives, Cross Road horizontal alignments and Cross Road vertical alignment alternatives.

In areas where there were a large number of alternatives and competing criteria, a detailed quantitative approach was utilized to compare and evaluate alternatives. This approach is based on the "weighted additive method", which uses an analytic approach that measures scores based on a mathematical relationship, and minimizes the degree of subjectivity by the study team. It provides a traceable decision-making process that allows for sensitivity testing and the ability to answer "what if" questions. This method was used to evaluate the design alternatives for twinning Highway 17, including interchanges, grade separations and service roads. The detailed evaluation process is described in **Section 5.4.3**.

The evaluation process, as shown on **Figure 3-3**, included the following steps:

- Generation of Alternatives (Alternatives to the Undertaking, median cross section, highway twinning alternatives for interchanges, grade separations, and service roads);
- Public review;
- Coarse screening (eliminating any alternative with significant environmental effects or unacceptable technical elements);
- Selection of evaluation approach (qualitative or quantitative evaluation technique);
- Technical analysis and evaluation;
- MAC endorsement of technically preferred alternatives (TPA's);
- Public review;
- Refinements to the TPA;
- Public review of Recommended Plan;
- Refinements to the Recommended Plan; and
- Council endorsements of Recommended Plan.

Figure 3-3 General Evaluation Process

