

# 407 EAST *Environmental Assessment*

CAG Meeting #13

Wednesday February 20, 2008

## 407 East Environmental Assessment (EA)



# Project Contacts

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# Agenda

- Status Update
- Comments Received
  - Public
  - Agency
  - Municipal
- Preliminary Design
- EA Study Schedule
- Next Steps
- Questions/Comments

# Status Update

## June/July 2007 – PIC#3

- Presentation of route alternative assessment and evaluation results
- Presentation of *Technically Recommended Route*

## October 2007

- Met with Advisory Groups (MTAG, RAG and CAG)

## November 2007

- Contacted all directly impacted property owners
- Initiated Preliminary Design

## December 2007 / January 2008

- Review and preparation of responses to all PIC#3 comments
- Initiated field work to support preliminary design

# Public Comments

## Will this route change?

- TRR will not vary substantially based on comments received and preliminary design work undertaken to-date
- Preliminary Design may result in some refinements to TRR to further avoid and/or mitigate identified impacts

## What governed this choice?

## Why was another route not chosen?

## Why has the route changed?

- TRR was determined on basis of net effects analysis and comparative evaluation results:
  - Evaluation criteria, indicators, and measures applied to each route
  - Net positive and negative environmental effects determined
  - Comparative evaluation undertaken; key trade offs of each route identified
  - Ranking of most preferred and least preferred routes assigned

## Why was Lake Ridge Road not chosen as the TRR for the West Durham Link?

- Would have required Lake Ridge Road to be replaced elsewhere, resulting in additional footprint impacts.
- Two Lake Ridge Road alternatives evaluated and deemed less favorable due to significant impacts on:
  - natural environment
  - social environment, including residential properties

# Public Comments

## My property is directly impacted.

### What is the Advanced Purchase process?

#### How is value determined?

- Advance Property Purchases are being considered:
  - On a case-by-case basis
  - Where the property is substantially impacted by the TRR
  - Only on a willing seller / willing buyer basis
- Property is appraised by independent appraiser hired by MTO
- Purchases carried out on basis of appraised fair market value

## What are the effects on my property and area which are not directly impacted? (noise, air, views, etc)

- During Preliminary Design, Project Team will:
  - Undertake detailed evaluation and assessment of these impacts
  - Develop mitigation measures where appropriate

## What lighting will be used and where?

- Lighting anticipated at interchange locations and potentially for select mainline sections
- Similar to Highway 407 between Markham Road and Brock Road

# Agency Comments

## Number of sensitive natural features where additional evaluation and consideration warranted.

- Field Investigations Report documents complete description of natural features and functions throughout Study Area (to be released to agencies in February)
- Innovative approaches for construction and operation of 407 in these areas, along with conceptual mitigation strategies, will be identified during preliminary design and impact assessment phase

## Recommended Mainline Route be refined to north to minimize impacts on Solina Bog feature.

- Potential to shift mainline to the north to increase separation to Solina Bog
- Impact assessment phase will identify mitigation measures to deal with issues noted (e.g. flash flooding, water quality, vegetation buffers and wildlife)

## Technically Recommended Route for Central Mainline (northern route) results in greater natural environment impacts than other routes in this area.

- Agreed. However, northern route preferred when all factor areas (social, economic, cultural, technical) considered.

# Agency Comments

## **Greater evaluation information needed.**

- Field Investigations Report has been drafted and will be distributed to agencies shortly
  - documents secondary source material and primary methods used by ecological, archaeological and heritage specialists to undertake their evaluation
- Future evaluation of TRR impacts will be documented in a detailed Impact Assessment Report which will include:
  - description of potential effects
  - mitigation strategies

## **More detail needed regarding groundwater impacts, drainage impacts, surface water quantity and quality, storm water management, mitigation/compensation.**

- During Alternative Methods phase, potential effects were evaluated based on sensitivities and/or significance of features (within or adjacent to each route)
- During Preliminary Design, a detailed description of potential effects and mitigation strategies will be provided for the TRR through an Impact Assessment Report

## **Butternut listed as "endangered". Number of them have been identified but it is unclear about distribution, size and health of these according to standard methodology.**

- No standard methodology exists to our knowledge
- When original field investigations undertaken (2003), Butternut not listed as endangered
- Future field investigations (2008) will document this information; will be included in detailed impact assessment

# Agency Comments

## **Significant concerns with East Durham Link and potential environmental impacts of link during both construction and operation.**

- Crossing of Wetlands is one of the greatest challenges in the Study Area
- In recognition of the importance of this feature and associated functions, we will be convening a workshop of experts to identify innovative approaches to the construction and operation of 407
- MNR staff have been invited to this workshop

## **Alternatives to East Durham Link, such as upgrading existing roads and highways, should be explored fully.**

- Alternative solutions were explored during the 'Alternatives To' phase
- Optimal network configuration for the TRR includes the East Durham Link
- Removing the East Durham Link results in considerable impacts including:
  - Need for upgrades to Highway 35/115, resulting in significant footprint impacts
  - Increased traffic on local roads, resulting in need for significant upgrades
  - Increased traffic on the West Durham Link, potentially resulting in need for additional lanes
  - Continued and increased congestion on Highway 401 through Oshawa / Clarington

# Municipal Comments

## **Additional interchange locations should be considered.**

- Interchange locations sited taking into consideration geometric, spacing, operational and safety requirements
- Additional traffic analysis will be undertaken during Preliminary Design to examine need for additional interchanges

## **Local road crossings should take into consideration desires of municipal and regional stakeholders as expressed in their Official Plans.**

- Agreed – Preliminary Design will not preclude the extension of local roads which are currently slated to cross the 407 corridor as identified in local and regional Official Plans

## **Alternative local road realignment and widening preferred.**

- Project Team will evaluate alternative methods of providing capacity associated with realignments elsewhere within local road network (in consultation with regional/municipal staff)

# Municipal Comments

## **Are the Lake Ridge Road interchange and the Highway 401 widening included in this EA and the future design and construction of 407?**

- Design and evaluation work to date has:
  - included Lake Ridge Road interchange
  - protected for future widening of Highway 401 which will be addressed through a separate EA
- Preliminary Design will ensure operational compatibility with these improvements

## **Consider farming operations and access routes when determining which roads will be truncated by 407.**

- Agreed - various agricultural groups/stakeholders will be further consulted throughout Preliminary Design
- Alternative crossing road treatments will be developed (to accommodate equipment) where appropriate and feasible

# Municipal Comments

## Transit connections should be reviewed with regional and municipal staff. Opportunities for a GO station at Lake Ridge Road should be explored.

- Local authorities were consulted during Alternative Methods phase to discuss:
  - transit station locations
  - future transit objectives
- Ongoing consultation throughout EA
- Provision of future GO service (associated stations and parking) to be addressed by GO Transit
- GO Transit is a participant in this EA through the Regulatory Agency Group (RAG)

## How will surplus lands and 'remnant' parcels be viewed – will they be eligible to obtain a building permit?

- Provincial, regional and municipal policies are in place to limit the issuance of building permits
- Creation of surplus and remnant parcels by 407 corridor requires further discussion

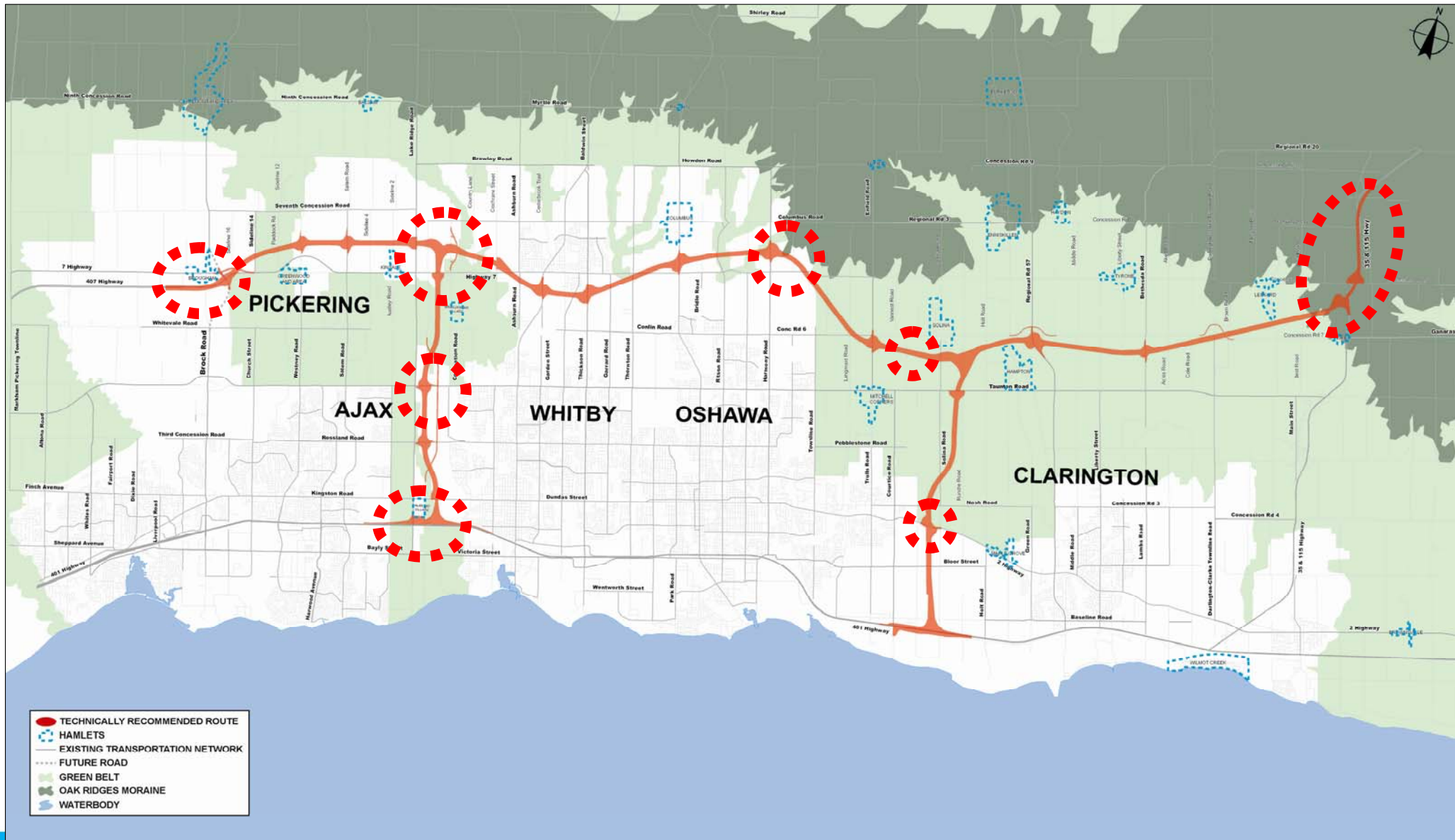
# Preliminary Design

## **During preliminary design phase, Project Team will review:**

- Horizontal and vertical alignment of the highway and crossing roads
- Right-of-Way (ROW) width and cross section
- Interchange locations and configurations
- Local road realignments associated with the 407 Highway (working with Regional & Municipal Staff)
- Mitigation measures (e.g. landscaping, noise attenuation, etc).

# Route Refinements

- At select locations to further avoid and/or mitigate identified impacts



# Preliminary Design Alternatives

## **Preliminary Design Alternatives will be generated, assessed and evaluated for:**

- Vertical alignment of highway and crossing roads
- Interchange locations and configurations
- Crossing road treatments (over, under, close)
- Local road realignments

# Community Value Plan

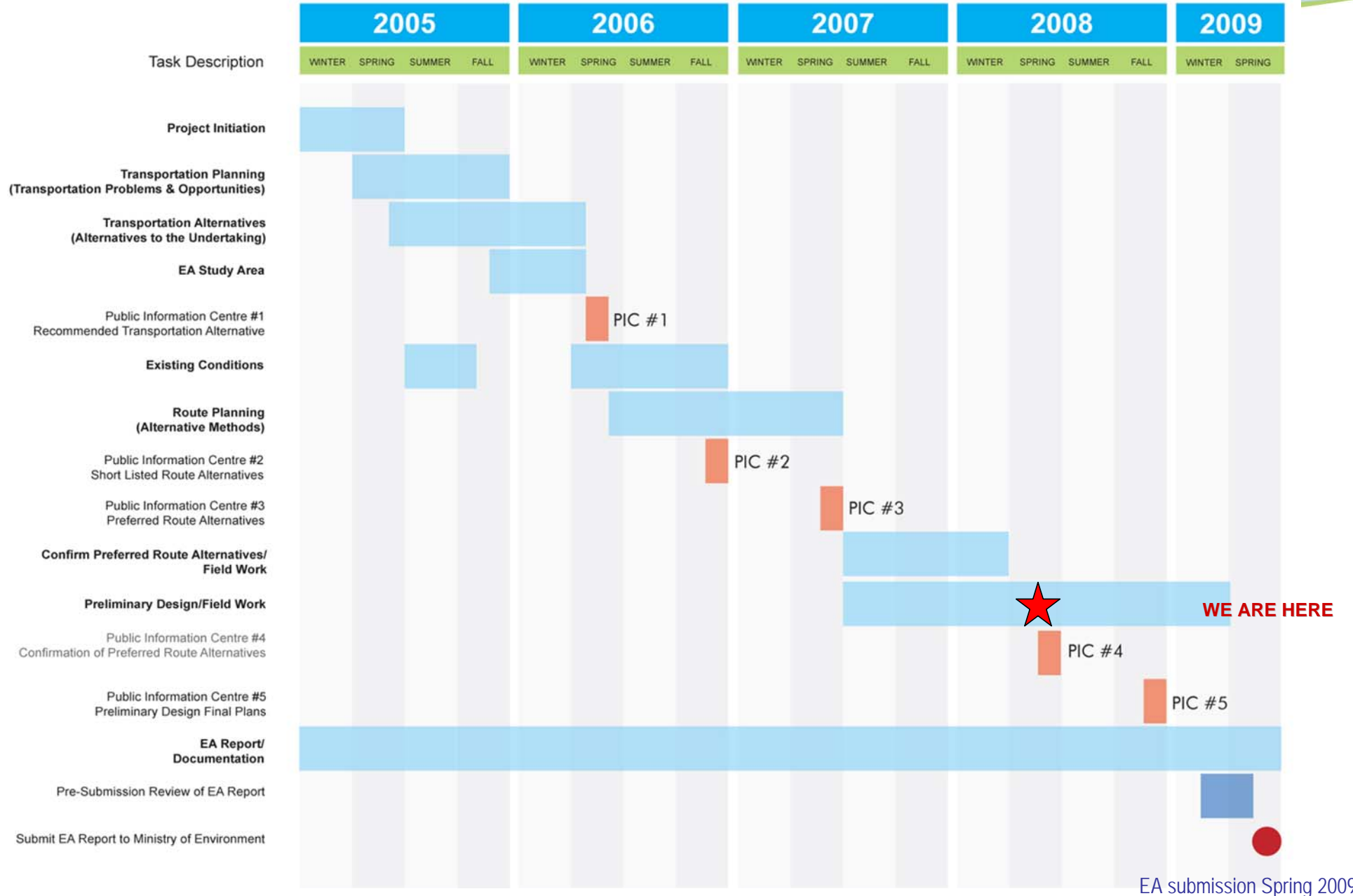
## Objective

- To enhance the success of the project in protecting community/neighborhood characteristics
- To retain and/or enhance the character, history and culture of communities/neighborhoods
  - By drawing out cultural, social, historical and environmental concerns from residents of communities surrounding the TRR

## Logistics

- Series of Workshops, first one to be held in early Spring
- Workshops will likely be held on the weekend
- Participation will be requested through
  - 407 EA website
  - Newsletter Issue 5
  - Municipal office posters

# EA Study Schedule



EA submission Spring 2009

# Next Steps

2005/2006

Project  
Initiation

Transportation  
Problems &  
Opportunities

Transportation  
Alternatives  
(Alternatives to  
the Undertaking)

2006/2007

Route Alternatives  
(Alternative Methods)

Long List  
Screening

Short List  
Assessment and  
Evaluation

2008/2009

Preliminary  
Design

Spring 2009

EA Report

- Issue response letters to PIC #3 Comments
- Distribute Newsletter #5
- Review and Refine TRR to further reduce identified impacts
- Prepare for PIC #4 (Late Spring 2008):
  - Generation of Preliminary Design Alternatives
  - Comparative assessment & evaluation of Preliminary Design Alternatives
  - Continue with field investigations and data collection
  - Development and implementation of Community Value Plan
  - Confirm the Technically Recommended Route

# Questions Comments...