THE REGION OF PEEL
CLASS ENVIRONMENTAL ASSESSMENT FOR ZONE 6 RESERVOIR & FEEDERMAIN

MEETING NOTES

CLASS EA FOR ZONE 6 RESERVOIR AND FEEDERMAIN
REGION OF PEEL

DATE: Tuesday, May 26, 2009

TIME: 10:00 a.m.

LOCATION: Town of Caledon, Planning Department

TROW PROJECT: BRIF00306669A

ATTENDEES:

NAME	ORG	CONTACT NO.	E-MAIL ADDRESS
Marsha Paley	Town of Caledon	905-	
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Alison Featherstone	LGL	905-333-1667	afeatherstone@lgl.com

Notes

Heather provided an overview of the project. The following additional information was provided:

- Clarification that this project will not supply water to Zone 7 but the facilities need to be located in Zone 7 in order to achieve the ability to gravity feed development in Zone 6 during emergencies. Six elevated tanks (same size as the Kennedy tank – 0.7 acres for each tank and 4 acres for each site; would be needed and one to two in ground or on ground reservoirs (roughly 15 acres for on/in ground reservoir site, if two sites the size would be 6.5 acres each)

The following is an overview of the information, advice and suggestions that arose from the discussions.

Official Plan and Agricultural Policies

The Town's Official Plan (OP) permits public utilities. However, all of the study area is prime agricultural land and the Town wants to protect as much of this land as possible. The OPA for agricultural policies was adopted in by Council in 2003 and there were several appellants. The issues were resolved in 2009 and are now included in the OP as OPA 179. A copy was provided to the team. These policies should be referred to in the Study. In particular, section 5.1.1.17 outlines the requirements for an Agricultural Impact Assessment. In addition, the town wishes to retain all woodlands (section 5.1.1.18.1)

Action: Trow to circulate OPA 179 to the Study Team including the Region and planning Alliance.

The Agricultural Impact Assessment (AIA) Guidelines are labeled as DRAFT but are being used for all development applications.

The AIA Guidelines are suggested to be applied to the site selection process once the type of storage facility is decided. In deciding on the type of storage facility, the types of agricultural indicators that may be helpful include the following:

- Soils – these can be easily mapped using Chapman and Putnam. This will help to determine if there is any difference in soil quality within the topographic bands
- Lot Fragmentation – this is related to the size of viable agricultural operations. The goal is to maintain the larger farms (100+ acres). The larger farms should be mapped so they can be avoided.
- Ownership – this relates to the property that is in ownership for development versus family owned farms that are intended to remain as viable farms. The Town wants to protect these farms from development. Mapping will show where the family owned farms are more likely to be located. While the information in the property data base may not conclusively show this, it can be inferred from some of the ownership if it is family owned (ownership mailing address same as property address). Numbered companies are usually developers. This can be refined further at the site selection stage.

Agricultural Impact Assessment

Both the Town and Region Planning suggests that the Project Team retain an agricultural consultant as soon as possible to be updated on the project and to meet with the key agricultural stakeholders to understand their issues and collect information. There are very few (5 or less) agricultural consultants in the province. While the Town does not recommend any consultants, Sean Colville has done work in the area for the Town and for the Alloa water reservoir project and therefore knows the area.

Action: Region to confirm when they will retain an agricultural consultant and direct Trow to bring them on board.

Environmental Mapping and Policies

Mark Head (Regional Planning) is working with Marsha to refine the watercourse mapping and information . There is detailed environmental information available for Mayfield West. Mark is looking at criteria and thresholds for the Redside Dace habitat. There may be another Redside Dace watercourse not indicated on the Project Team's map.

Action: LGL to contact Mark Head and ensure that all relevant material is reflected. Woodlots should also be mapped.

Clarification on provision of water to nearby communities:
This is anticipated to be a major issue for residents and farms in the study area. It will not be easily addressed unless the Region can show how this area will be provided with water. As an example, the regional pipe that feeds the waste management site at King Road is providing water to a major farm located on the east side of Dixie Road. The project must be able to address this issue. It will not be seen as a reasonable response by farmers in particular, to indicate that this water will not service the Study Area.

Communication and Consultation
Key Stakeholders
The Town recommends that the Region attend meetings of the three key agricultural stakeholder groups in the study area to explain the project and get their feedback directly:
Peel Federation of Agriculture (PFA) – they meet the first Wednesday of the month
Region of Peel Agricultural Working Group (PAWG) – contact David Wright at the Region of Peel Planning Department
Caledon Agricultural Advisory Committee – their next meeting is in September – keep them informed until then.
Action: Region to make decision about attending these meetings and provide direction to Project Team.
Marsha will send an email to Trish Eastman (PFA) to advise them of the Region's interest in meeting with them

The Town also recommends that the region issue a media release for the public consultation centres. Laura Johnson is the Town's Communication person and should be contacted.
Action: Region to consider preparing a media release and coordinating it with the Town.

Messages/Diagrams for Public Open House
Ensure that key messages are clear e.g. that the water is not being drawn from Caledon groundwater for the reservoir.
Show the water pressure zones on a map.
Have a clear and consistent message about the provision of water to those in the study area. Be aware that the property owners may not understand nor appreciate the inability to provide them with water.
Action: the Town is willing to review PIC materials/notices/reports in advance of public events

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MEETING NOTES
CLASS EA FOR ZONE 6 RESERVOIR AND FEEDERMAIN
REGION OF PEEL

Meeting with Town of Caledon

DATE: Friday, July 24, 2009

TIME: 10:30 a.m.

LOCATION: Region of Peel, 10 Peel Centre Drive, 4th Floor Boardroom, Brampton

TROW PROJECT: BRIF00306669A

ATTENDEES:

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Vincent Laplante	Associated Eng.	416-622-9502	laplantev@ae.ca

Meeting Purpose

The purpose of the meeting was to:

- Update the Town of Caledon on the Region's evaluation of reservoir storage types; and
- Review the Region's work to date on the mapping of constraints with respect to potential sites for the Zone 6 reservoir.

Update on Storage Type Evaluation

- Italia noted that the feedback received through the PIC and through discussions with councilors and the Mayor that the elevated tank option is less preferred.
- Italia reviewed the storage type evaluation sheet with Tim. Based on the evaluation sheet, the on-the-ground and the in-ground reservoirs are most preferred, the elevated tank option is less preferred, and the combination is least preferred.
- Tim reported that he distributed our materials to his colleagues, and he has received no feedback from them, from council, or from any residents.

Update on Constraint Mapping

- Italia shared the Region's Official Plan Amendment 24 Schedule D-Regional Structure (July 2009) map with Tim, which shows the area of consideration for the proposed GTA-West transportation corridor through Caledon. Italia noted that the amendment went to Council on June 23, 2009 and a public meeting is scheduled for the amendment on October 8.
- Tim noted that the Town plans to expand the Tollemore settlement study area.
- Italia noted that she had been in touch with the Ministry of Natural Resources, and that Mark Heaton had suggested she e-mail him if the Region had any questions regarding species at risk/endangered species. Italia will contact him after Trow confirms what information LGL has received from Ministry of Natural Resources (MNR).
- Tim asked if the land above an in-ground reservoir could be used for pasture, and Italia explained that it could not due to water quality issues.

Actions	
1. Trow to add proposed Strategic Infrastructure Study Area top constraint maps.	Trow
2. JL to contact Allison to see if she was able to get the information she needed from MNR.	Trow
3. Italia to follow-up with Mark Heaton to obtain updated species at risk information from MNR.	Region

Discussion on Potential Sites

- Tim was provided with a constraints map showing possible sites, based on the latest constraints mapping.
- It was noted that the project team will develop criteria prior to preparing a shortlist of sites. Tim suggested that the project team prepare the list of criteria and provide it to the Town for feedback.

Actions	
4. Project team to prepare draft list of criteria and send to Tim for review by the Trow Team	Trow

Discussion on the Next PlC

- Italia noted that PlC #2 will show the alternative sites selected and their ranking based on the criteria. The preferred property would be identified at PlC #3.
- Italia clarified that the Region's policy is that it cannot purchase more land that it requires for the project at hand.
- Tim noted that, if an on-the-ground reservoir is chosen, then it should be designed to fit into the local community. Town Council is visual they would like to see examples of what the project may look like and how it world incorporate the character of the area. For example, the West Brampton Reservoir is designed to look like a barn. He suggested that the Region show examples of types of reservoirs. Pam suggested that the Region could show what an above-ground reservoir might look like from different perspectives.
- Agreed that the PlC should include illustrations or renderings of what the reservoir could look like.
- Anticipated timing of the PICs include October for PlC #2 and after the New Year for PlC #3. The ESR would be filed in early spring.

Other Issues

- Tim asked if the Region has a land severance policy, as the Town of Caledon has strict rural/agricultural severance policies. Italia is to confirm.
- Discussion around the construction of the feedermain around Heart Lake Road and Highway 410. Italia noted that because they will need to cross Highway 410, they are looking to put a steel casing underneath where Heart Lake Road crosses the 410. Tim noted that Giffels did the design of the bridge through Ministry of Transportation (MTO).
- Noted that the Project Team would be contacting the Peel Federation of Agriculture, the Peel Agricultural Working Group and the Town of Caledon Agricultural Advisory Committee to see if they would like the project team to provide a presentation to them about the project at one of their meetings. Tim will provide contacts for Peel Federation of Agriculture and Caledon Agricultural Advisory Committee.
- Italia noted that the project team plans on having future meetings with the Mayor of Caledon and with the councilors.

Actions	
5. Italia to confirm if the Region has a severance policy.	Region
6. Tim to provide contacts for Peel Federation of Agriculture and Caledon Agricultural Advisory Committee	Town of Caledon

Should there be any errors or omissions to these minutes, please contact the undersigned.

Yours truly,

Trow Associates Inc.

Jean-Louis Gaudet
Project Coordinator, Infrastructure Division

WHY A NEW RESERVOIR?

The Zone 6 Water Distribution system needs to supply water in all circumstances. During power outages, an exclusively "pumped" water system is not effective or efficient.

A new reservoir is needed to provide water by gravity to Zone 6.

From the Notice of Commencement

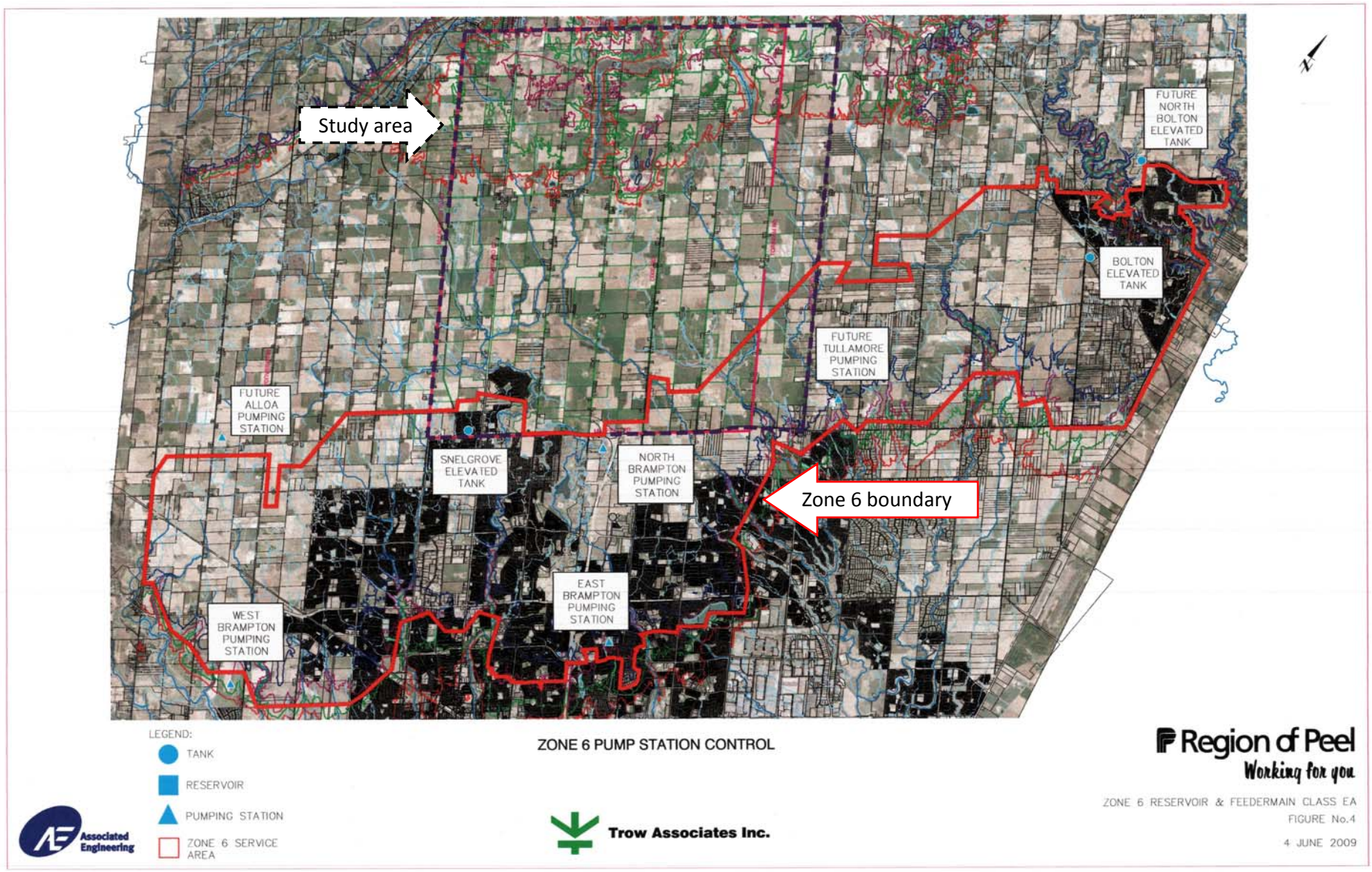
The Study

The Region of Peel has initiated a Class Environmental Assessment (Class EA) for the proposed construction of the Zone 6 Reservoir and Feedermain. The June 2007 Region of Peel Water and Wastewater Master Plan Update identified the need for fire and emergency water storage, using facilities not dependent on a pumped water supply, to service the areas of North Brampton and Mayfield West (known as the Zone 6 Water Distribution Area). This would require the use of elevated tanks or in-ground reservoirs. The proposed water reservoir and feedermain located in the study area will provide a viable solution that meets this objective.

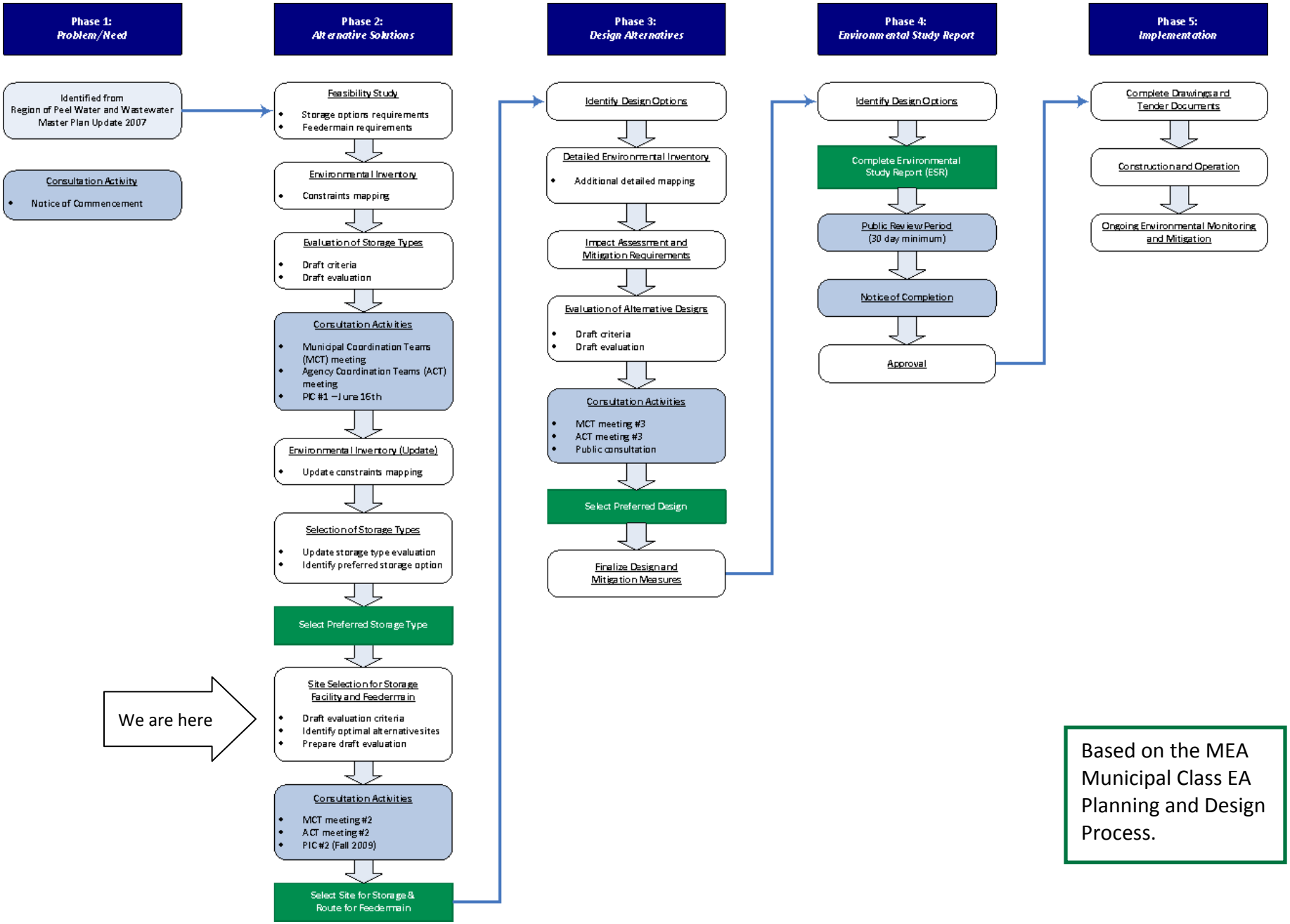
The Process

The study is being conducted according to the requirements outlined under the Municipal Engineer's Association Municipal Class Environmental Assessment (EA) (October 2000, and as amended in 2007), which is a planning process approved under the Ontario *Environmental Assessment Act*. This project has been classified as a Schedule C project and will include public and review agency consultation, evaluation of alternative solutions, possible locations for the storage facility and the associated pipes, an assessment of the potential environmental effects of the proposed project and alternatives, and identification of reasonable measures to mitigate any adverse impacts that may result from the proposed project.

Zone 6 and the Study Area



Steps in the Process



Based on the MEA Municipal Class EA Planning and Design Process.

Methodology for Storage Type and Site Selection

Storage Facility Type:

1. identify storage types that will met the required volume.
2. identify the topographic band that is suitable for each reservoir type.
3. identify the key criteria to be considered in selecting a storage type. The criteria and associated indicators are grouped into the following categories: technical, economic, environmental, and socio/cultural.
4. Show the differences between storage types for each criteria and indicator.
5. Identify the main factors that influence the selection of a preferred option.
6. Select a preferred storage type.

Site Selection:

1. Develop a constraints map based on municipal policies and objectives and legislative requirements:
    a. Major constraints are areas to avoid. These include:
        i. Floodplains and steep slopes regulated by TRCA
        ii. Habitat for Species at Risk
        iii. Properties designated under the Ontario Heritage Act and private/public cemeteries
        iv. Settlement areas (existing, approved and study areas)
        v. Residential, industrial and commercial zoned properties that are in use
        vi. Provincial policy areas such as MNR evaluated wetlands, ANSIs
        vii. Municipal Environmental policy areas such as ESAs, major future transportation corridors
        viii. Contaminated sites and old landfill sites

    b. Flexible constraints are areas to avoid if possible. If it's necessary to use all or part of these areas, mitigation must be developed.
        i. Provincial policy areas such as the Green Belt (have to show that no other areas outside the Green Belt are possible), Oak Ridges Moraine, Niagara Escarpment.
        ii. Lands owned by TRCA
        iii. Heritage areas that are listed on the Town of Caledon heritage inventory
        iv. Residential, industrial and commercial zoned properties that have a willing seller (may be in use, but preferred not)
        v. Agricultural properties that have a CLI capability rating of 1-3 soils. (Class 1 being the most productive)

2. Identify properties that are possible sites based on the constraints map.
3. Examine properties in more detail to confirm that there are no major constraints associated with the property.
4. Identify the possible impacts of a storage facility, considering all life-cycle phases of the facility (during construction, post construction, operation and maintenance). The criteria fall into the following groups (each with their own indicators):
    a. Natural environment
    b. Agriculture
    c. Technical merit
    d. Socio-cultural
    e. Economic
5. Show the differences between the reservoir sites for each criteria and indicator.
6. Select the property with the least potential for impacts

Feedback from the PAAWG

- What should the Region consider in moving forward (for site selection, for construction, etc)
- Feedback on draft site selection criteria and indicators (once drafted)
- Input on the key features maps - have we caught the key features?
- How does PAAWG want to continue to be involved, and what does PAAWG need to do so? (e.g., timing of meetings/sessions, lead time, information, etc.)
- What does the project team need to know about PAAWG's community in continuing to plan this project?

Next Steps

August – September 2009	• Identify optional sites for the storage reservoir and optional routes for the feedermains • Draft an evaluation of the optional sites
September – November 2009	• Consult with the public, property owners, government agencies on the optional sites • Public Open House #2
Winter 2009/2010	• Select a site for the storage facility and a route for the feedermains • Confirm preferred route. • Carry out more detailed environmental inventory for the selected site and route • Identify preliminary design options for the site and route • Identify mitigation to reduce impacts • Consult with the public, property owners and government agencies on the preliminary design options and mitigation (type of public forum to be determined based on interest) • Confirm the preliminary design for the site
February/March 2010	• Public Open House #2
Spring 2010	• Prepare and post the Environmental Study Report for public review (minimum 30 day review)

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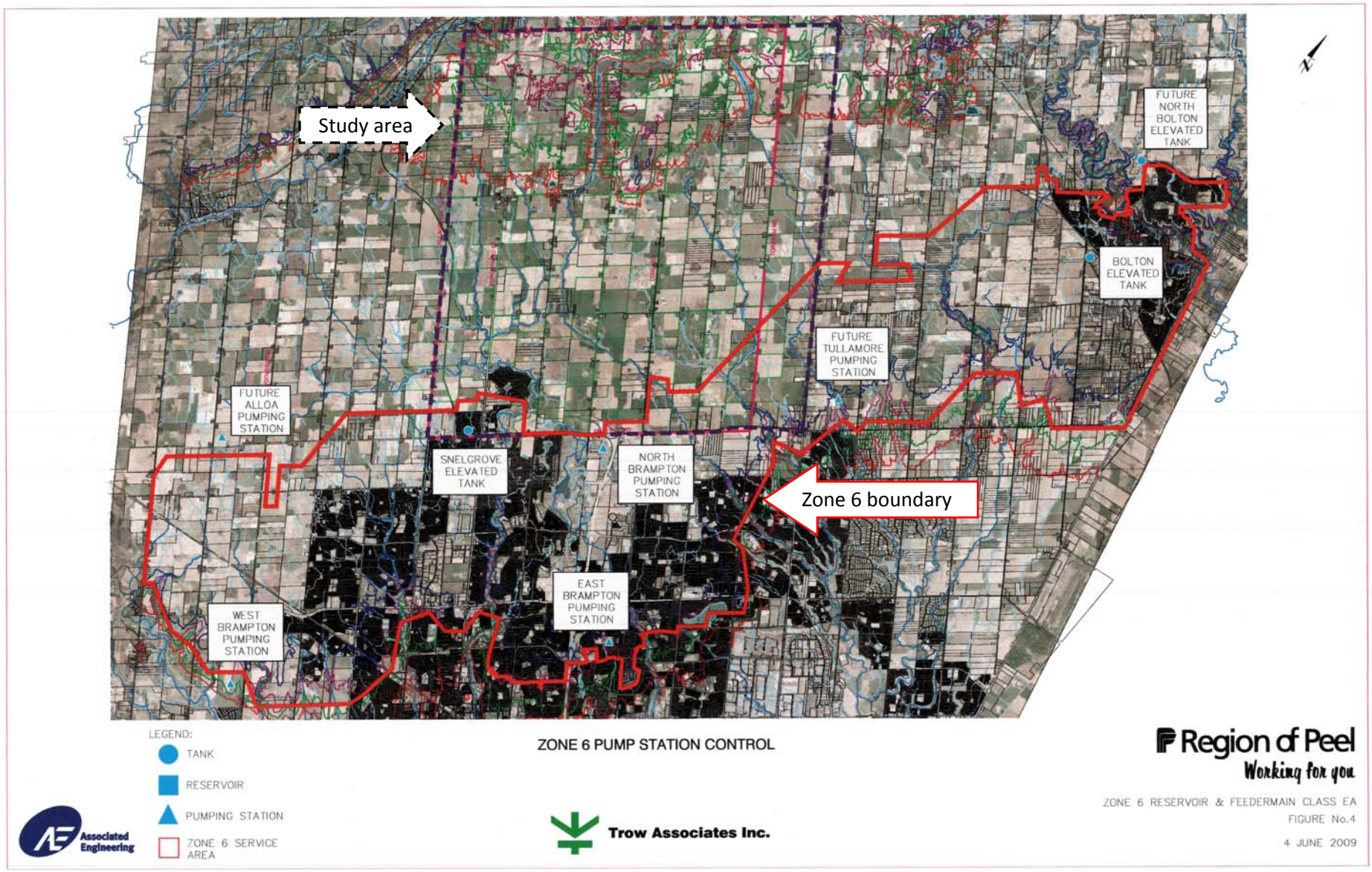
http://www.peelregion.ca/pw/water/environ-assess/zone6-reservoir.htm

Zone 6 and the Study Area



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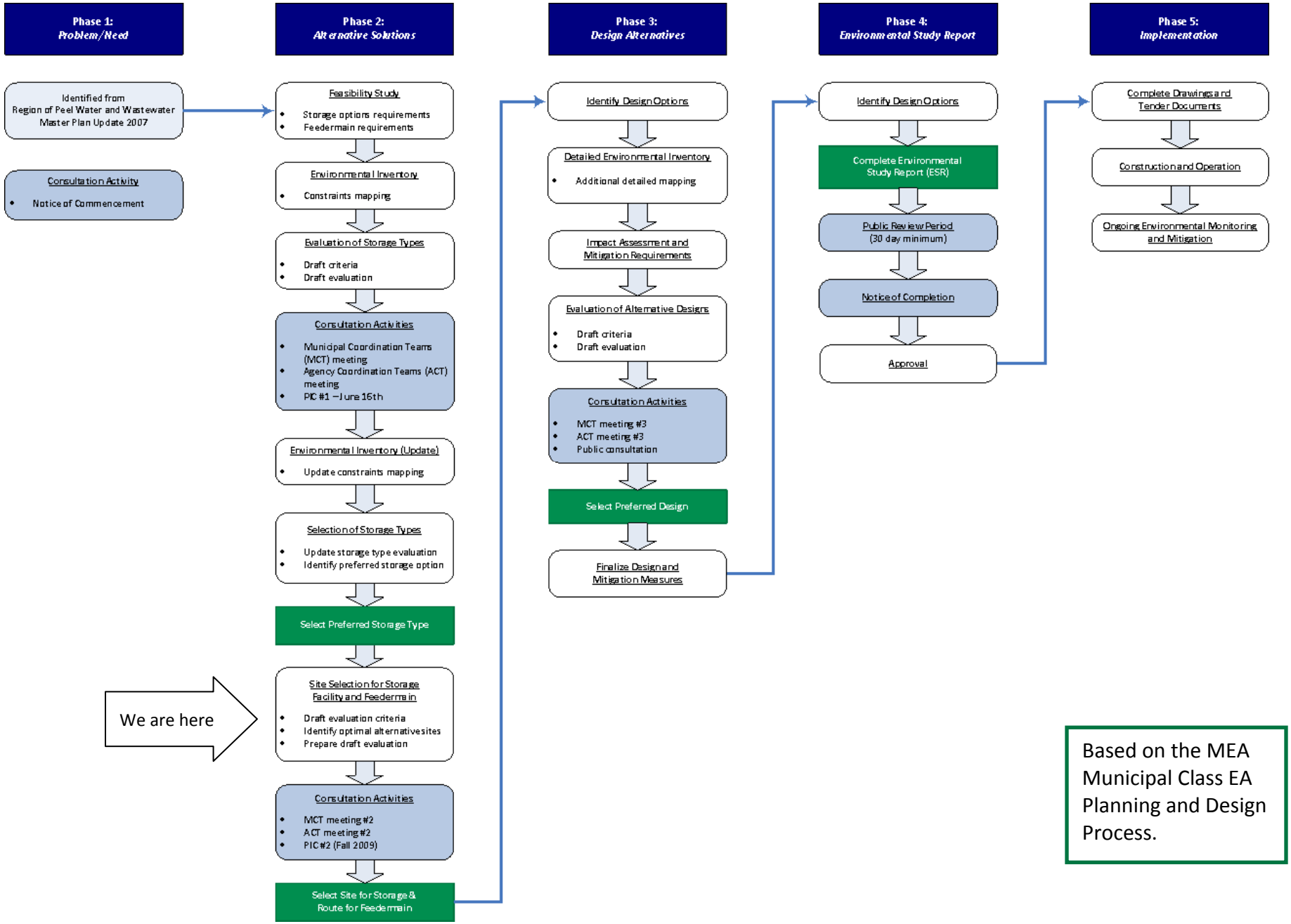

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    b. Flexible constraints are areas to avoid if possible. If it's necessary to use all or part of these areas, mitigation must be developed. Flexible constraints include:
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        ii. Lands owned by TRCA
        iii. Heritage areas that are listed on the Town of Caledon heritage inventory
        iv. Residential, industrial and commercial zoned properties that have a willing seller (may be in use, but preferred not)
        v. Prime Agricultural Areas

2. Identify properties that are possible sites based on the constraints map.
3. Examine properties in more detail to confirm that there are no major constraints associated with the property.
4. Identify the possible impacts of a storage facility, considering all life-cycle phases of the facility (during construction, post construction, operation and maintenance). The criteria fall into the following groups (each with their own indicators):
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6. Select the property with the least potential for impacts

Feedback from the PFA

- What should the Region consider in moving forward (for site selection, for construction, etc)
- Feedback on draft site selection criteria and indicators (once drafted)
- Input on the key features maps - have we caught the key features?
- How does PFA want to continue to be involved, and what does PFA need to do so? (e.g., timing of meetings/sessions, lead time, information & materials, etc.)
- What does the project team need to know about PFA's community in continuing to plan this project?

Next Steps

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MINUTES OF MEETING – Revision 1

WITH MINISTRY OF TRANSPORTATION

REGION OF PEEL ZONE 6 RESERVOIR AND FEEDERMAIN CLASS EA
REGION OF PEEL
BRAMPTON, ONTARIO

DATE: Friday, February 26, 2010

TIME: 10:00 a.m.

LOCATION: Ontario Ministry of Transportation Office, 1201 Wilson Avenue, Building D, Downsview, ON

TROW PROJECT: BRIF00306669A

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The purpose of the meeting was to review the proposed feedermain routes with MTO and obtain their feedback.

1- Project Update

- Trow provided an overview of the process: The scope of the project includes preparing a Class Environmental Assessment and preliminary design for a reservoir and two twin Feedermains (1200 and 900mm) to serve Peel Zone 6. The project is currently in phase 2 of the EA process.
- Trow along with its sub-consultants has prepared background reports, including traffic, archaeological, natural environment and hydrogeological.
- Trow has prepared evaluation tables for three alternative reservoirs and three alternative feedermain routes.
- The background reports and draft evaluation tables are being circulated to the agencies for feedback.

2- Overview of Sort-listed Reservoir Sites and Feedermain Routes

- Three feedermain alternative routes (F1, F2 and F3) have been identified between the North Brampton Pumping Station to the potential reservoir site in the vicinity of King Street and Hurontario Street.
- Three potential reservoir sites have been identified. All three sites are located south of King Street, between Hurontario Street and Kennedy Road.
- The three feedermain routes have a common section from North Brampton Pumping Station on Mayfield Road, along Heart Lake Road to the intersection of Heart Lake Road and Old School Road. Part of Route F1 is located on Hurontario Street from Old School Road to about 500m south of King Street.

3- Mayfield Road from Brampton Pumping Station to Heart Lake Road

- Trow is examining locating the two Feedermains on the north side of Mayfield Road, partially within an easement. The lands belong to MTO and a private owner. MTO noted that ownership of the property around the highway access ramps have reverted back to the original owner. (MTO advised Trow to obtain the property plans from the registry office).
- Some utilities in this area have been recently relocated, including a gas main and a Bell line on the north side of Mayfield Road.
- Trow is advised to obtain the recent utility plan from Jimmy Chong of the Region of Peel.
- Bernie advised that an encroachment permit during the design stage would be needed for the portion of the Feedermain within the MTO property.

Actions	
1. Trow to obtain property plans of the north side of Mayfield	Trow
2. Trow to obtain the recent utility plan from Jimmy Chong of the Region of Peel	Trow

4- Highway 410 Crossing on Heart Lake Road

- Eugene advised of the following utilities: Bell and Hydro on the west side, new watermain on the east side and storm sewers and high mast lighting on the highway.
- The intent is to construct the feedermains using trenchless construction methods. MTO brought up the following issues:
    - Provide casing with strength equal to or greater than the “bursting” strength of the pipes.
    - Grout all tunnel voids. Alternatively, use bentonite.
    - The casing shall extend from one side of the ROW to the other side. Trow noted that the tunnel shafts would require easements from private owners.
    - **MTO advised that there is a gas main running on the east side of the bridge.**
    - MTO prefers to locate the feedermains on the west side of Heart Lake Road.
    - MTO advised that the Town of Caledon intends to widen the bridge, possibly to the east side. Trow to check the future bridge widening location and footings.
    - MTO need to review the tunnel design at the design stage, before an application for permit is made. Tunnel design to include the necessary geotechnical information and dewatering recommendations.
    - The two feedermains could be installed in one large tunnel or two smaller tunnels. The two tunnels should have sufficient separation (in the range of 3m or so) to avoid the impact of one tunnel on the other tunnel.

- Due to potential flooding, MTO will not allow discharges from the dewatering operations into the highway sewer system without a permit.
- The top of the watermain casing shall be at least 5m below the top asphalt level.
- MTO noted that Trow's drawing is showing the temporary working easements on the east side of Heart Lake Road rather than the permanent property lines, (the temporary working easement was obtained for detouring Heart Lake road during the bridge construction only).

- Trow has the following concerns.
  - Easements for shaft would be required on private properties.
  - Shafts shall be located away from the embankments.

Actions	
3. Trow to obtain all utility information from the various companies/agencies	Trow
4. Trow to coordinate (or meet) with the Town of Caledon	Trow
5. Trow to identify property requirements.	Trow
6. Trow to revise the preliminary plan and profile to reflect MTO criteria	Trow
7. Trow to review MTO's geotechnical and piping separation requirements.	Trow

5- Hurontario Street (Highway 10), Portion of F1 Route

- MTO would allow watermain installations only between the ditch centerline and the property line, as close as possible to the property line. MTO also noted that there is no free space available for the installation of the feedermains in this strip as it is occupied with other utilities including Hydro (on both sides).
- Trow to obtain recent Hydro and Bell information on the area.
- Trow to circulate the preliminary drawings to MTO for comments including considerations to future widening plans.
- MTO requires that traffic issues be considered at the detailed design stage.
- MTO requires hiring a RAQS approved contractor.
- MTO requires that all road crossings to be at right angles.
- MTO attempts to avoid future utility relocations in case the road is to be widened. MTO may request to deepen the feedermains.
- **MTO is planning intersection improvement project at Highway 10/Old School Road. The project has been awarded to a contractor and it should be constructed by late summer 2010.**
- **There are also ongoing sign enhancement works in the vicinity of the Highway 410/ Highway 10/Valleywood interchange**.
- There is a good chance that Hurontario Street will be widened in the future due to the increased traffic from Hwy 410. MTO has not initiated any studies yet.
- The Region intends to install a 300mm service watermain on Hurontario Street from King Street to the gas station (located about 600m to the south of King St.). MTO advised that the there is a good chance that the Region may extend this service watermain in the future to Old School Road. The Region may need to consider at this stage the alignment of the future service watermain.
- MTO advised that Hurontario Street is a Class 3 special control access highway. There is an Order in Council that no new access points to the highway be allowed. MTO reviews all development proposals within 45m of the highway and within 180m from intersections.
- The access to the potential reservoir site R12 is subject to MTO approval, but it is not expected to be an issue, if the existing residential access point is used (e.g., the driveway on R12).
- Construction (temporary) access to site R12 should not be a major issue.

Actions	
8. Trow to obtain all utility information from **Enbridge,** hydro and Bell	Trow
9. Trow to revise the plan and identify required easements.	Trow
10. Trow to provide MTO with a copy of the preliminary design drawings for comments.	Trow
11. Region to confirm whether the 300mm service watermain on Hurontario Street is to be extended to Old School Road.	Region

6- GTA West Corridor

- MTO representatives were not able to provide comment on the GTA West corridor. That is being dealt with out of the St. Catherine's office
- Trow would need to contact Jin Wang of MTO.
-

Actions	
12. Trow to contact Jin Wang of MTO regarding GTA West Corridor.	Trow

7- Easements

- MTO does not enter into easements agreements. MTO requires an encroachment permit.
- Trow to identify all area requirements and consult with Bernie.
- An encroachment permit is required at the detailed design stage. However, a written approval can be obtained during the Class EA, which will help facilitate the encroachment permit application process.
- MTO advised Trow to review its corridor control policies, which are available on the MTO's corridor control website (MTO homepage/highway engineering/corridor control).

8- Future Steps

Actions	
13. Trow to update the preliminary design to address MTO criteria.	Trow
14. Trow to update the evaluation sheets based on feedback from MTO.	Trow

Should there be any errors or omissions to these minutes, please contact the undersigned.

Yours truly,

Trow Associates Inc.

Maurice Batchoun, P. Eng.
Infrastructure Division

Zone 6 Reservoir and Feedermain Class EA

Region of Peel
Italia Ponce, Project Manager
March 3rd, 2010

- Why do we need this project
- Study area vs. Service area
- Process followed
- Preliminary Sites
- Preliminary Routes
- Detailed Investigations
- Next steps
- Feedback

Why do we need this project?

- Identified in the Region of Peel Water and Wasterwater Master Plan
- Need for additional fire and emergency storage using facilities not dependent on a pumped water supply to service areas of North Brampton and South Caledon
- Need 60ML storage

Study Area vs. Service Area

- Study area – Pressure zone 7
- Service area - Pressure zone 6
- To provide water through gravity, we need to place the reservoir at a higher elevation

Process Followed

- Environmental Assessment Process

- Review the entire study area and divided based on elevation (blue, orange and red) for type of storage. We need elevation between 260m-299m
- At 1st PIC we presented these options and based on feedback received, the areas in orange and red were selected to move forward (above ground reservoir and buried reservoir)

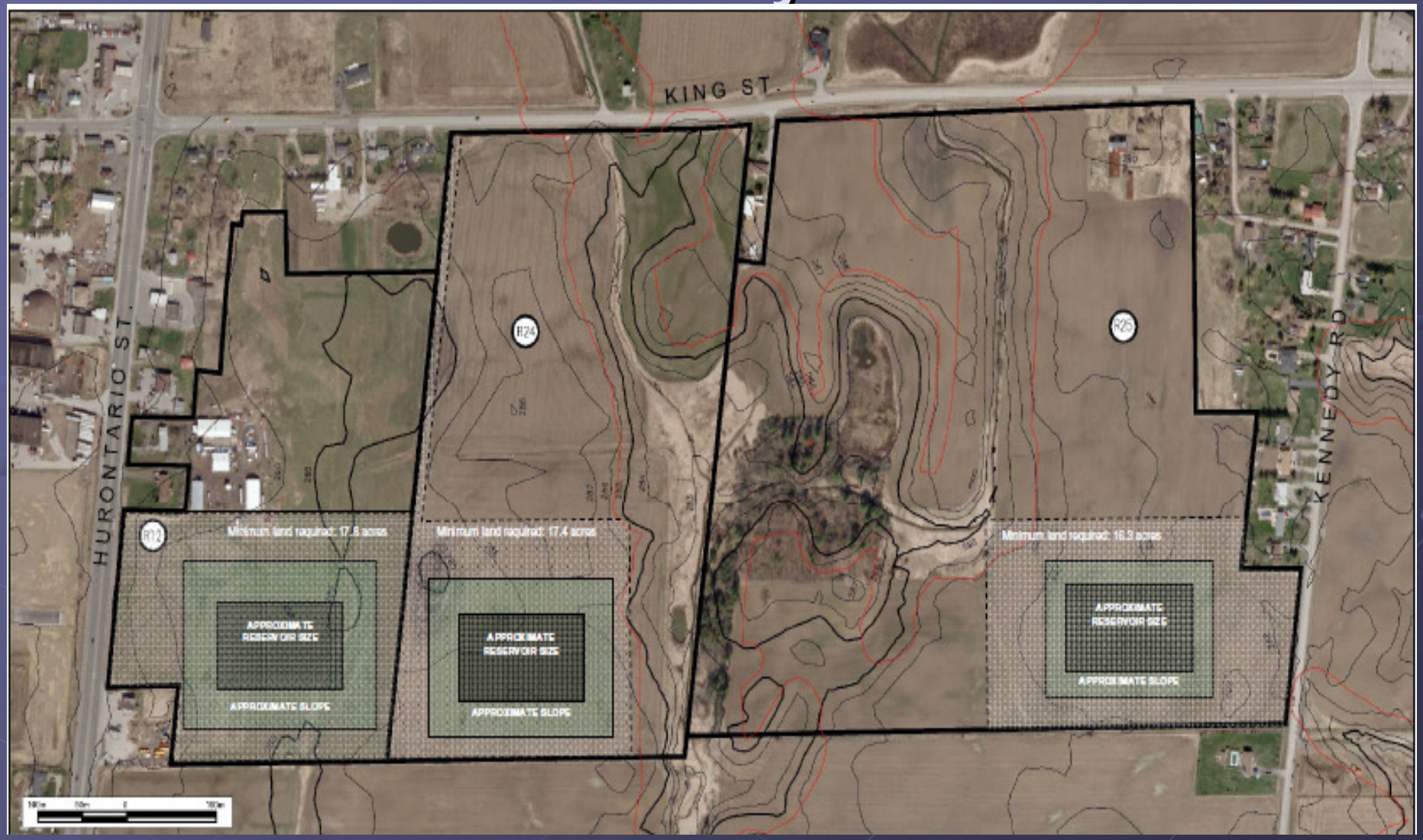
Process Followed (cont.)

- Constraints mapping prepared, identifying areas of major and flexible constraint
- Based on constraints, several areas were identified for further review and discussion
- Within those areas nine properties selected for further investigation.

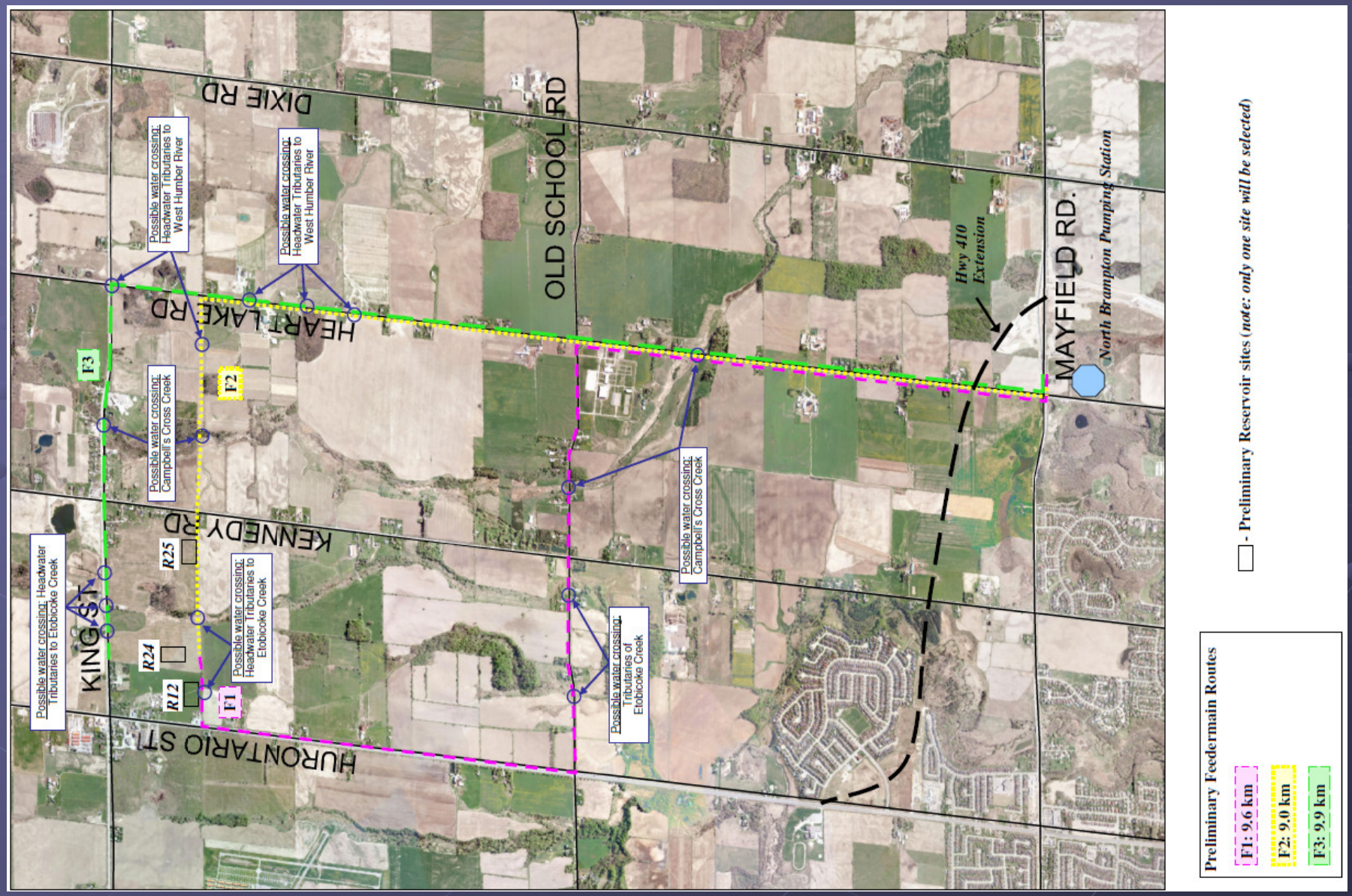
Process Followed (cont.)

- A set of criteria was used to prioritize these 9 properties into 3:
  - Outside of Greenbelt
  - As close to North Brampton Pumping Station but with the adequate elevation to place the reservoir
  - Avoid prime agricultural areas but if not possible to choose a property on lower priority agricultural land
  - Vacant/available lands
  - Locate feedermain within the Road Right of Way

Preliminary Sites



Preliminary Routes



Detailed Investigations

- Environmental Site Assessment (Phase 1)
- Archeological (Stage 1)
- Cultural Heritage
- Agricultural Impact Assessment
- Natural Environment
- Traffic study
- Hydrogeological

Next steps

- Review draft evaluation Matrix for Sites and routes (to be forwarded electronically)
- Obtain feedback from all agencies and stakeholders on criteria used
- Incorporate feedback into evaluation matrix
- Public Information Centre #2 (April/May)
- Present preferred technical site and route
- Preliminary design
- File Environmental Study Report (Summer 2010)
- 30-day review period

Feedback from PFA

- Feedback on draft criteria used to evaluate feedermain routes and sites (to be forwarded)
- What does the project team need to know about the PFA's community
- Agricultural disruption
- Site visit – sites and routes
- Other
- Questions?

Contact

Italia Ponce, P.Eng.
Project Manager
Water Division, Public Works
Region of Peel
Italia.ponce@peelregion.ca
(905)791-7800 ext. 4583

Region of Peel Zone 6 Reservoir and Feedermain
Meeting with Town of Caledon
March 23, 2010

Meeting Summary

Attendance:

David Hurst, Town of Caledon (DH)
Tim Manley, Town of Caledon (TM)
Italia Ponce, Region of Peel (IP)
Ismail Issa, Trow Associates (II)
Jean-Louis Gaudet, Trow Associates (JL)

Meeting Summary

Project Status Briefing

- JL provided an update on the status of the project. IP provided an update on her meeting with the agricultural stakeholders.
- A map of the three preferred reservoir sites was reviewed.
- TM asked if the reservoir has the ability to expand. II confirmed 60 ML as the ultimate storage.

Review of Evaluations

- DH confirmed access from Kennedy Street for R25 would not be a problem, although a permit may be required.
- IP asked if there is minimum access from road.
  DH said yes, but it is not a huge amount. It refers to amount of turning movement required. TM said R25 is not constrained by the amount of frontage
- DH noted there would be some concern from residents about R25.
- TM noted R25 is prime agriculture, so it would fall under the Town's prime agriculture policies. They need to look at if the remaining piece is viable.
- TM said they are not seeing anything as a red flag, but wants to become more familiar with the Agricultural Impact assessment report.
- DH asked if access from R24 would be from King Street.
  II confirmed that it would.
- TM confirmed there are no planning applications on the properties.

Review of Feedermain Evaluation

- DH asked if Heart Lake would be reduced to 1 lane. II said yes.
- II noted the trench on Heart Lake would be about 4.5 m wide, using straight sides.
- IP asked about the Town's plans for the Heart Lake section in the EA and if there any plans for north of the limit to King Street. DH said Heart Lake will be biggest

through the EA section. 1700 m north of Mayfield would be widened, with a 35 m ROW.

- TM said the Town is considering expanding the employment boundary to south of Campbell's Creek, which might mean road being widened to southern limit of Campbell's Creek. DH said they would need another EA to widen the road, to a 35 m ROW. The road then narrows down to 26 m width. That is what Town will require, but DH is not sure if it is there now. It may be 20 m on Heart Lake now.
- DH asked when the feedermain would be in place? IP said it would be in place and operation by 2014, and possibly building by next year.
- DH asked about the section of 410. II confirmed they would be tunneling, and going outside of the ROW.
- DH asked if the creek crossings are open cut or tunneling? II replied both, depending on the crossing. II reviewed which crossings were being considered for tunneling or open cut.
- TM asked of the F2 crossing is a new approach, or does the Region do that as needed? IP relplied they have done it on occasion, and such a crossing has been done for one of the Brampton reservoirs.

Review of Draft Feedermain Plan and Profile

- II presented the draft Plan and Profiles for the feedermain routes under consideration.

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MINUTES OF MEETING
CLASS EA FOR ZONE 6 RESERVOIR AND FEEDERMAIN
REGION OF PEEL
BRAMPTON, ONTARIO
MEETING WITH THE TOWN OF CALEDON

DATE: Thursday, July 8, 2010

TIME: 11:00 a.m.

LOCATION: Town of Caledon, 6311 Old baseline Road, Caledon, Ontario

TROW PROJECT: BRIF00306669A

ATTENDEES:

NAME	ORG	CONTACT NO.	E-MAIL ADDRESS
David Atkins	Town of Caledon	905-584-2272@4128	david.atkins@caledon.ca
David Hurst	Town of Caledon	905-584-2272@4187	david.hurst@caledon.ca
Italia Ponce	Region of Peel	905-791-7800 @ 4583	italia.ponce@peelregion.ca
Ismail Issa	Trow	905-793-9800@2329	ismail.issa@trow.com
Maurice Batchoun	Trow	905-793-9800@2442	maurice.batchoun@trow.com

CIRCULATION TO:

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Lori-Ann Thomsen	Region of Peel	905-791-7800 @7636	Lori-Ann.Thomsen@peelregion.ca
Pamela Hubbard	PMHubbard & Assoc.	905-524-1188	phubbard@sympatico.ca
Jean-Louis Gaudet	Trow	905-793-9800@2344	jeanlouis.gaudet@trow.com

1- Status of the Environmental Assessment

- The purpose of the meeting is to coordinate the watermains design and construction works with the Town and to avoid obtaining easements.
- Italia provided an update on the status of the project. We are currently in Phase 3 of the EA.

2- Heart Lake Road

- The Town showed a draft plan for Mayfield West area, extending north of Mayfield Road, from Dixie Road to Heart Lake Road (on the east side of Heart Lake Road).
- The plan does not show R.O.W. widening or any areas to be conveyed to the Town by the developers.

- The Town indicated that they may ask for right of way widening from the developers before the plan is finalized.
- The Town indicated that a draft plan is expected for the area west of Heart Lake Road. When the draft plans is submitted and processed, R.O.W. widening may be considered.

3- Timing of the Projects

- Tentative completion dates are 2014 for the watermains and 2015 for the reservoir.
- The Town does not have firm date for widening Heart Lake Road from Mayfield Road to 1,700m north (south of Old School Road).

4- Construction Issues

- Ismail advised that the intent is to close one lane during the construction of the watermains along Heart Lake Road. The work will be staged in section. Traffic control measures will be taken.
- David Atkins supported the concept of closing one lane during the construction of the watermains.
- This arrangement will eliminate the need for a temporary easement along Heart Lake Road.

5- Design Issues

- Trow provided a typical cross section showing the existing road.
- On Heart Lake Road, the proposed location of the watermains is on the side of the road, mainly in the shoulder.
-
- David Hurst needs to know the location of the watermain with respect to the widened portion of the road.
- The Town advised Trow to consider an urban section with catchbasins from Mayfield road to Old School Road. Watermain design should avoid conflicts with proposed catchbasins and chambers. The watermains shall also have sufficient depths if placed under the catchbasins (over 2.0m).
- Trow requested plans and typical cross sections of the proposed road widening.
- The Town advised Trow to request the digital plans from David Sinke of AMEC (Heart Lake EA consultant).
- The Town has no current plans for widening Heart Lake Road north of Old School Road, however the Town requested Trow to use the same criteria as south of old School Road
- The intersection of Heart Lake Road and Old School Road may become a signalized intersection. Trow to move the proposed the valve chamber away from the daylight area.

Actions	
1. Town to advise whether additional right of way will be requested from the developers of Mayfield West Area	Caledon
2. Trow to request the digital plans for Heart Lake Road Widening from AMEC	Trow
3. Watermain design to avoid conflicts with proposed catchbasins and chambers	Trow
4. Trow to move the proposed valve chamber away from the daylight area at the intersection of Heart Lake Road and Old School Road	Trow

Should there be any errors or omissions to these minutes, please contact Maurice Batchoun immediately at 905 793 9800 Ext. 2442.

The new identity of Trow Associates Inc.

Meeting Minutes

Date:	May 16, 2011	Meeting Date:	May 12, 2011
Project Name:	Region of Peel Zone 6 Reservoir and Feedermain Class EA	Project #:	BRA-00306669-A
Subject:	Meeting with the Ministry of Transportation Ontario		

	Name	Organization	Contact No.	E-mail Address
Participants:	Italia Ponce	Region of Peel	905-791-7800 Ext. 4583	italia.ponce@peelregion.ca
	Bernard (Bernie) O'Brien	MTO	416-235-4491	bernard.o'brien@ontario.ca
	Eugene Marshall	MTO	416-235-3883	eugene.marshall@ontario.ca
	Aimee-Rose Tupaz	MTO	416-235-4284	aimeerose.tupaz@ontatio.ca
	Jean-Louis Gaudet	Exp Services	905-793-9800	jeanlouis.gaudet@exp.com
	Maurice Batchoun	Exp Services	905-793-9800	maurice.batchoun@exp.com

Location:	Ministry of Transportation, 1201 Wilson Avenue, Building D, Downsview, ON	Prepared By:	Maurice Batchoun

Distribution:	Anthony Parente	Region of Peel	905-791-7800 Ext. 7833	anthony.parente@peelregion.ca
	Pamela Hubbard	PM Hubbard & Assoc.	905-524-1188	phubbard@sympatico.ca
	Ismail Issa	Exp Services	905-793-9800	ismail.issa@exp.com
	Tahirou Assane	MTO	416-235-5451	tahirou.assane@ontario.ca

Minutes for Meeting #2 MTO		
Item No.	Agenda	Action
1.	Background • Exp. circulated a package to MTO including Zone 6 preferred reservoir site and feedermains preferred route plans and profile, and also geotechnical and hydrogeological assessments. • Exp. requested MTO to provide feedback on the designs especially at the feedermains crossing under Hwy 410. • Exp. noted that the entrance and egress to the preferred reservoir site is from King Street. This is not under the jurisdiction of MTO. • MTO staff members are pleased by having them involved in an early stage of this project.	
2.	Bernie O'Brien's Comments • Right of Way (ROW) limits shall be clearly shown on the drawings. • MTO is concerned primarily with the integrity of Hwy 410. • Shafts shall be placed away from MTO ROW. • Any valve chamber shall be placed at least 14m away from the limit of the MTO ROW.	exp. exp. exp.
3.	Eugene Marshall's Comments • Show Hwy 410 on the Key Plan. • Provide tunnel liner with strength equal to or greater than the bursting strength of the watermain. This is required at the detailed design stage. • The tunnel lagging is not considered a liner. • MTO requires continiously welded steel liner. • Tunnel liner shall extend, as a minimum, accross the entire MTO ROW. • Tunnel shall be placed at least at 5 m depth.	exp. exp. exp.
4.	Additional Greotechnical Information • Additional geotechnical information will be required at the detailed design stage. This may include drilling a borehole within the highway shoulders and median. • MTO provided the publication "Guidelines For Foundatin Engineering – Tunnelling Speciality For Corridor Encrouchment Permit Application" (attached). • MTO requires RAQS approved "High Complexity" tunnelling consultant to undertake the geotechnical works. MTO provied a list of the approved consultants (attached). • MTO advised that a separate encroachment permit is required for the additional geotechnical work within MTO ROW. Geotechnical Consultant to contact Bernie O'Brian to arrange for the permit. • MTO will also require the designated geotechnical engineer to provide site monitoring during the tunnel construction.	

Item No.	Agenda	Action
5.	Highway 410 Preliminary Crossing Design • Exp. is proposing two separate tunnels for the two feedermains. • The two tunnels are preferred over a larger diameter tunnel as the two tunnels will be shallower, hence may avoid the water table. • The geotechnical engineer (duing the detailed design) shall provide recommendations on the value of separation between the two tunnels. • MTO is pleased by the presentation of the detailed plan and profile drawings.	
6.	Heart Lake Bridge over Hwy 410 • Aimee-Rose Tupaz advised that the bridge foundations has been constructed to the ultimate conditions. • Bernie O'Brien advised that MTO will deal with the bridge deficiencies and these should not have impacts on the feedermain design.	
7.	Mayfield Road • As the 900mm feedermain crosses the West-South ramp ROW, MTO requires having the pipe in a liner. • MTO does not require a minimum cover of 5m below the pavement.	
8.	Project Schedule • The design work is scheduled for 2012 • Construction work is scheduled for 2013-2014.	

This communication constitutes our understanding of the items discussed and any conclusions reached. If there are any clarifications or corrections, please advise this author, in writing within four (4) working days of receipt.

Submitted by:

Maurice Batchoun, P. Eng.