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DURHAM/YORK RESIDUAL WASTE ENVIRONMENTAL ASSESSMENT CONSULTANTS' CONCLUSION – SHORT LIST OF SITES TO DEVELOP AN ENERGY FROM WASTE FACILITY

The Solid Waste Management Committee recommends the adoption of the recommendations contained in the following report, March 22, 2007, from the Commissioner of Transportation and Works:

1. RECOMMENDATIONS

It is recommended that:

1. Regional Council receive the consultants' short-list of alternative sites on which an energy-from-waste facility could be developed.
2. The staff and consultant team for the Durham/York Residual Waste Environmental Assessment Study be directed to:
 - a. Consult with the public, agencies and stakeholders through a number of different forums to solicit feedback on the short-list of alternative sites.
 - b. Complete the next step of evaluation of the short-list of alternative sites in accordance with the approved Environmental Assessment Terms of Reference.
 - c. Identify a preferred site in accordance with the approved Environmental Assessment Terms of Reference.
 - d. Report the results of the analysis and public input on the short list of sites to Committee and Council.

2. PURPOSE

The purpose of this report is to provide Council with an overview of the evaluation process that resulted in the identification of five sites for the Short List associated with the Durham/York Residual Waste Environmental Assessment Study. Preliminary details regarding the advantages and disadvantages associated with these five sites are discussed. The next steps involved in the process of identifying a preferred site are also highlighted.

3. BACKGROUND

On June 23, 2005, Council adopted Clause 1 of Report No. 4 of the Solid Waste Management Committee recommending a partnership with Durham Region to undertake an individual Environmental Assessment to study residual waste management for the two Regions.

On May 25, 2006, Council received Clause 1 of Report No. 3 of the Solid Waste Management Committee describing the technology review and draft recommendation of the Consultants for the selection of a long-term waste processing system to minimize our landfill needs as part of the Durham/York Residual Waste Environmental Assessment. The draft recommendation was to use a thermal process (i.e., energy from waste, incineration or gasification). On June 22, 2006, Council adopted Clause 1 of Report No. 4 of the Solid Waste Management Committee approving the selection of the preferred system to manage the post diversion residual waste, being study Option 2(a) - Thermal Treatment of Municipal Solid Waste and Recovery of Energy Followed by the Recovery of Materials from the Ash/Char.

4. ANALYSIS AND OPTIONS

The report entitled, “Thermal Facility Site Selection Process – Results of Steps 1-5, Identification of ‘Short-List’ Alternative Sites”, (*see Attachment 1 for the executive summary*) has been prepared by the consultant team as part of the Study to document the step-by-step process followed in the identification of a long-list of alternative sites and the evaluation process that followed, which has resulted in a short-list of sites for further consideration. This consultant’s report will form part of the documentation that will be submitted to the Ministry of the Environment in support of the preferred facility location for the Study. A summary of the consultant’s report is provided in the following sections for the consideration of the Solid Waste Management Committee and Regional Council.

4.1 Overview of the Long-List Site Identification Methodology Used in the Consultant’s Report

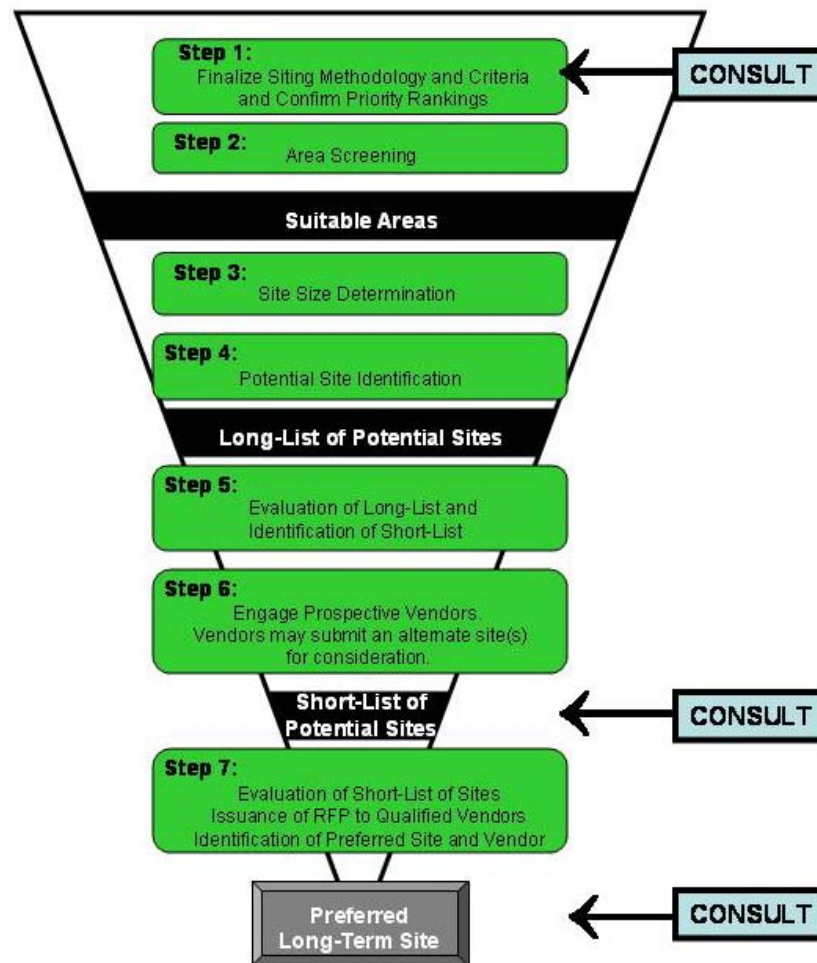
In order to measure and evaluate the potential impacts and to maximize the overall suitability of a site, the scope of the evaluation criteria used in the siting process considered a broadly defined ‘environment’, consistent with the requirements of the Environmental Assessment Act, including:

- Public health and safety and the natural environment;
- Social/cultural considerations;
- Economic/financial considerations;
- Technical considerations; and,

- Legal considerations.

To identify potential impacts, evaluate sites, and identify a preferred site a seven-step facility site selection process, outlined in Figure 1 below was utilized. This seven step methodology was originally presented in the supporting documentation to the approved Environmental Assessment Terms of Reference.

FIGURE 1:
Seven Step Facility Site Selection Process

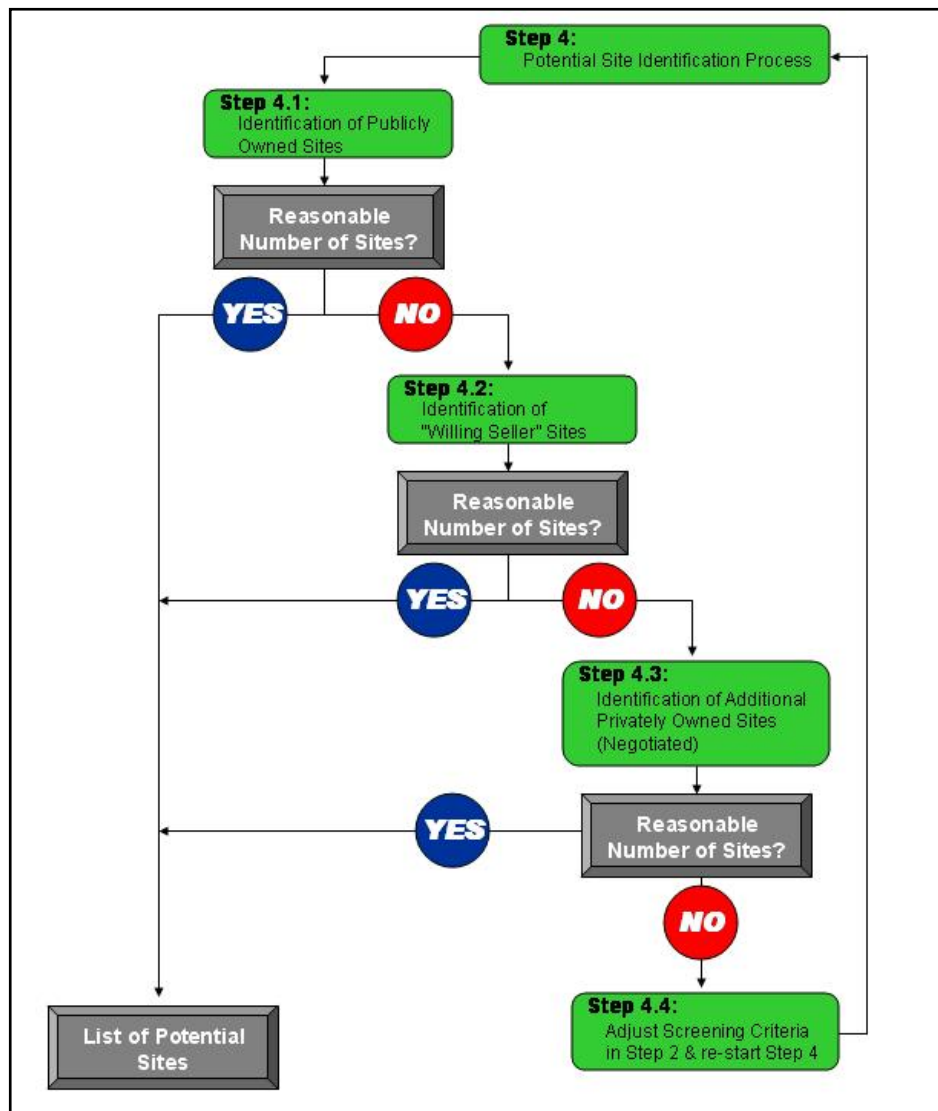


The attached executive summary (Attachment 1), and associated report presents the results of Step 1 to Step 5 of the siting process. The remainder of this staff report will discuss the activities associated with identifying the short list of sites, and proposed future activities.

4.2 Step 4: Potential Site Identification

The purpose of Step 4 is to identify a long-list of potential sites within the suitable areas defined in Step 2. Sites were screened to ensure they meet the minimum site size requirements defined in Step 3. A more detailed description of the activities associated with Step 4, is included in Figure 2.

FIGURE 2:
Overview of Step 4- Potential Site Identification Process



Siting opportunities were identified in the following order:

1. Publicly Owned Sites.
2. Willing Seller Properties.
3. Additional Privately Owned Sites.

The purpose of soliciting interest from a broad range of property owners was to promote the development of a long list of sites offering a greater range of alternatives and opportunities.

4.2.1 Identification of Publicly Owned Sites

Publicly owned lands that were considered surplus or were un-used or un-developed within the suitable areas (Step 2) that met the minimum site size requirement (Step 3) were identified. These sites were identified through discussions with both Regional Real Estate departments and through contact with other public agency representatives.

4.2.2 Identification of Willing Seller Sites

In addition to publicly owned land, sites where the owner would be interested in selling the site (willing sellers) were also identified and considered as potential sites. In order to qualify as a willing seller the site must have been offered for consideration by the owner of the subject property. The owner of a willing seller site must be prepared to enter into an agreement with Durham and York. To identify potential sites that met the willing seller criteria, the Regions undertook two public calls as described in sections 4.2.2.1 and 4.2.2.2.

4.2.2.1 November 2006 - Call for Willing Sellers

On November 21, 2006 the Regions of Durham and York issued a 'Call for Willing Sellers' (the Call) to a wide range of agencies that may be interested in identifying a site to be considered as part of this process. Distribution included the following:

- Area Municipal Property Contacts, Planning and Public Works Directors, and Chief Administrative Officers/City Managers.
- Commercial Realtors and Real Estate Boards operating in Durham and York Regions.
- Ontario Industrial Associations with members in Durham and York Regions.
- Chambers of Commerce.

Specifically, the Call identified the nature of the proposed land use; the initial required screening criteria and some of the potential energy outputs from the facility. As a result of this Call, five sites were identified that met the requirements of Step 2 and Step 3 in Figure 1.

4.2.2.2 February 2007 - Request for Expressions of Interest

Based on the results of the November 2006 'Call for Willing Sellers', it was determined that a broader range of potential interested parties should be contacted and a second Call issued. On February 9, 2007, a formal Request for Expressions of Interest for 'Potential

Sites for a Proposed New Thermal Waste Treatment Facility for the Regions of Durham and York' was issued by Durham Region's Purchasing Department. A number of parties were invited to participate through the following means:

- Distribution to all those contacted in November as part of the 'Call for Willing Sellers'.
- Distribution to major energy users within Durham and York that may provide a potential market for heat and/or steam generated at the facility. These users were identified through a number of industrial directories and through the assistance of both Regions' Economic Development departments.
- Public Notification in local newspapers.
- Distribution to approximately 100 Energy-from-Waste technology vendors who have been identified throughout the Environmental Assessment study as potential respondents to a competitive process for the proposed facility, as indicated in Step 6. A separate report will be provided to Council at a later date outlining the procurement activities associated with the prequalification of vendors.
- Posting on the Region of Durham's Purchasing Website.

In addition to the public notifications, two information sessions were held. The information sessions were held as follows:

Information Session #1 – Wednesday, February 14th, 2007, 3pm to 6pm, Durham Region Headquarters.

Information Session #2 – Thursday, February 15th, 2007, 3pm to 6pm, York Region's Waste Management Centre.

In total, 15 individuals attended the information sessions. As a result of this Request for Expressions of Interest process, an additional four sites were identified for consideration.

4.3 Step 5: The Long-list of Alternative Sites

The activities associated with Step 4 resulted in the identification of a total of twelve sites that formed the long-list of alternative sites. These sites represent both publicly (three) and privately (nine) owned properties in Durham and York Regions and are considered to offer a sufficient and reasonable range of opportunities and alternatives to proceed with the siting evaluation process. The long-list of sites is outlined in Attachment 1.

The application of the area screening criteria and the site size and configuration criteria resulted in five sites being removed from further consideration. As a result, seven sites were carried forward and evaluated as a part of the long-list evaluation.

4.3.1 Evaluation of the Long-List of Alternative Sites

The purpose of this Step is to initiate preliminary evaluation of the long list of prospective sites and result in a short-list that will then be examined in greater detail. For the purpose of this investigation, sites were deemed unsuitable if they exhibited major technical, social and/or environmental disadvantages relative to other sites on the list. Sites that met the preliminary evaluation criteria were then promoted to further consideration at the short-list stage.

4.4 Identification of the Short-list of Sites

In accordance with the approved Environmental Assessment Terms of Reference, the evaluation of the long-list of alternative sites incorporates a comparative evaluation process that was confirmed through consultation with Durham and York Region residents.

Based on the application of relative advantages and disadvantages, five sites have been identified as warranting further, more extensive, comparative evaluation. These sites are summarized in the following sections of this report, and the relative advantages and disadvantages identified at the long list stage (Step 5), are also summarized. These sites are referenced as the short-list of alternative sites. The short-list of sites including site maps is presented in Attachment 1, and is also discussed at greater depth in the appended Consultant's report.

4.4.1 Short-List Site: Clarington 01/02

Site Clarington 01/02 is made up of two parcels of undeveloped lands, south of Highway 401 in the Municipality of Clarington. Parcel 01 is located between Courtice Road and Osbourne Road and Parcel 02 is located south of Osbourne Road. The Courtice Water Pollution Control Plant, which is scheduled to be completed in 2007, is being built just south of Parcel 01 and west of Parcel 02. The Darlington Nuclear Generating Station is located in close proximity to the east. Each Parcel is approximately 12.1 hectares in area and both parcels are located in the Clarington Energy Park and are municipally owned.

- Advantages Identified :
 - Potential access to heat load
 - Close proximity to Highway 401
 - Existing Industrial Area
 - Part of Clarington Energy Park
 - Site Owned by Durham Region
- Disadvantages Identified:
 - No significant disadvantages identified at this time.

4.4.2 Short-List Site: Clarington 03

Site Clarington 03 is undeveloped land in the Municipality of Clarington, located south of Highway 401 and west of the South Service Road. A number of residences and farms are located north and south of the property. A creek appears to run along the inner west edge of the property. The site size is approximately 18 hectares, and it is privately owned.

- Advantages Identified:
 - Close proximity to Highway 401
 - Existing planned industrial/ commercial area
- Disadvantages Identified:
 - Site acquisition required
 - Potential issues with on-site Natural Features

4.4.3 Short-List Site: Clarington 04

Site Clarington 04 is undeveloped land, south of Highway 401 between Bennett Road and the South Service Road, in the Municipality of Clarington. The lands east and west of the site are undeveloped and are currently used for agricultural purposes. A number of residences and farms are located north of the property. The site size is approximately 15 hectares, and it is privately owned.

- Advantages Identified:
 - Close proximity to Highway 401
 - Existing planned industrial/ commercial area
- Disadvantages Identified:
 - Site acquisition required

4.4.4 Short-List Site: Clarington 05

Site Clarington 05 is undeveloped land, south of Highway 401 between Courtice Road and Osbourne Road, in the Municipality of Clarington. The site size is approximately 26 hectares. This site is located in the Clarington Energy Park, and is privately owned.

- Advantages Identified:
 - Potential access to heat load
 - Close proximity to Highway 401
 - Existing Industrial Area
 - Part of Clarington Energy Park

- Disadvantages Identified:
 - Site acquisition required

4.4.5 Short-List Site: East Gwillimbury 01

Site East Gwillimbury 01 is located in the Town of East Gwillimbury. York Region's Waste Management Centre is located immediately west of the site, and one of the Region's Household Hazardous Waste and Recycling Depots is directly south. The site is approximately 11 hectares in size, and owned by York Region. This site is located within areas covered under the Greenbelt Plan. Consideration of potential development of a waste management facility is allowed on this site due to the site-specific Official Plan and zoning by-law approvals that were issued before the Greenbelt Plan took effect. Inclusion of this site on the short-list is to allow for public consultation on this matter along with other criteria to be used in the comparative evaluation of the other short-listed sites. The Consultant's report discusses this matter in greater detail.

- Advantages Identified:
 - Close proximity to Highway 404
 - Existing industrial/commercial area
 - Potential for shared infrastructure with York Region's Waste Management Centre
 - Site owned by York Region
- Disadvantages Identified:
 - No significant disadvantages identified at this time

4.5 Implication of Possible Reform to the Environmental Assessment Process

Over the past year the Ontario Ministry of Environment has been developing a regulation under the Environmental Assessment Act that would streamline the planning and approvals process for certain waste management facilities, such as energy from waste plants. The final regulation is expected to be released in the next few weeks and is expected to include an environmental screening process that has been used successfully in the energy sector for a number of years.

If this proposed regulation comes into effect within the next several months, Durham and York could have an option to switch to the new screening process and select a preferred site for the facility in a more streamlined fashion rather than following the process and criteria set out in the approved Environmental Assessment Terms of Reference. The draft regulation identified a 60-day period for proponents involved in full Environmental Assessments to choose, if they wish, to switch to the new screening process.

If Durham and York were to switch to the new screening process much of the technical work undertaken to-date would be applicable to completing the eventual screening process. The decision to select thermal treatment as the preferred technology and the decision on selecting a preferred site for the facility would then be subject to the rigors of the new screening process.

Staff will report to the Joint Waste Management Group and Committee on the new regulation once it is issued by the Province.

4.6 Step 7: Further Evaluation and Data Collection

Step 7, outlined in Figure 1, will result in the identification of the preferred site for the development of the energy from waste facility. The required components to complete within the framework of Step 7 include public consultation on the short list, a more detailed evaluation of each site based on the collection of site specific data such as soil samples, air quality, and archaeological testing.

Upon completion of the Step 7 processes, a preferred site will be identified by the consulting team, and recommended to Council early in the Fall of this year.

5. FINANCIAL IMPLICATIONS

The Solid Waste Management Capital budget for 2007 is \$1,150,000, in order to continue with phase 2 of the Residual Waste Environmental Assessment Study, which includes all the consultant and staff costs required for the selection of the preferred site for the development of the energy from waste facility.

The construction of the facility is scheduled to begin in 2009. Funds will be included in the appropriate future year capital and operating budgets of the Solid Waste Management Division following the authorization of Regional Council to proceed with the construction of the facility. The estimated construction costs for a 250,000 tonnes/year processing facility are between \$225,000,000 and \$250,000,000.

6. LOCAL MUNICIPAL IMPACT

The local municipalities are critical partners in finding a site for a long-term waste management solution in York Region. Involvement with the municipalities has been ongoing throughout the Environmental Assessment process to date.

The siting of a waste facility will impact one local municipality in either York or Durham Regions. Staff and elected officials will be invited to attend or participate in all public meetings and other different forums that will be used to solicit feedback on the short-list of alternative sites and on the selection of the preferred site. As the selection process

proceeds, there will be the need for specific input and involvement from the Town of East Gwillimbury as site East Gwillimbury 01, located within its boundaries, is one of the five short-listed sites being considered.

7. CONCLUSION

The Regions of York and Durham are involved in an Environmental Assessment to find a long-term solution to manage their residual waste. This Study represents a significant commitment to develop a Durham/York based solution to manage the waste remaining after our diversion efforts. Upon receipt of the consultant's report on the short-list of alternative sites identified for the development of an energy from waste processing facility, staff and the consultant team for the Durham/York Residual Waste Environmental Assessment Study require authorization from Council to take the appropriate steps recommended herein to identify the preferred site and report back to York and Durham Regional Councils.

For more information on this report contact Angelos Bacopoulos, Senior Project Manager of the Solid Waste Management Branch at 905-806-5544 in the Transportation and Works Department.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is included with this report.)