

# **KINGSTON SOLAR LP**

## **Sol-Luce Kingston Solar PV Energy Project**

### **Summary of Project Modifications**



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## 1.0 Introduction

Kingston Solar LP is proposing to develop a 100-megawatt (MWac) ground-mount solar photovoltaic (PV) project to be known as the Sol-Luce Kingston Solar PV Energy Project. The proposed project is generally bounded by Highway 38 to the east, Mud Lake Road/County Road 19 to the west, Quabbin Road to the north, and Highway 401 to the south. The proposed project falls within two municipalities; the City of Kingston to the east and Loyalist Township to the west. A Renewable Energy Approval (REA) application was submitted for this project on September 18, 2012 and received the 'deemed complete' status by the Ministry of Environment (MOE) on February 12, 2013. The project was undergoing technical review by the Ministry of the Environment (MOE) when the clock was stopped to accommodate a Major Design Change and technical changes to the project.

The amendments to the project are comprised of a Major Design Change (i.e., the reallocation of some project components to new lands – see Figure 1 and Figure 2) as well as smaller Technical Changes, primarily due to the availability of more efficient equipment, allowing for a reduction in the number of Medium Voltage Power Platforms (MVPPs) and alternate specifications for the panel modules.

To fulfill the requirements of the Ministry of the Environment, Kingston Solar LP has modified the original REA application and will be holding an additional public meeting to inform stakeholders of the proposed changes. After the meeting has been held, changes will be incorporated based on stakeholder feedback, and the modified application will be re-submitted to the MOE for review and approval.

This *Summary of Project Modifications*, along with full reports in hard copy, are being made available for Aboriginal Communities to review and provide comments prior to the public meeting and submission of the amended REA application to the Ministry of the Environment (MOE). The reports summarized in this document include:

- *Modifications Document* (includes the *Project Description Report*, *Design and Operations Report*, *Construction Plan Report* and *Decommissioning Plan Report* as well as updates to the *Archaeological Assessment* and *Cultural Heritage Screening*);

- Natural Heritage Assessment Addenda (includes the *Records Review, Site Investigation, Evaluation of Significance and Environmental Impact Study*);
- *Natural Heritage Assessment Modifications Document*;
- *Water Assessment and Water Body Report Addendum*; and
- *Revised Noise Study Report*

For Class 3 solar facilities, activities under REA include Aboriginal, public, municipal and agency consultation in order to provide information on the project to these groups and obtain feedback. All consultation activities will be documented in the *Consultation Report Addendum*, which will be submitted to the MOE as part of the amended REA application package following the public meeting.

In accordance with Section 16 of *Ontario Regulation 359/09*, the draft documents must be made available for Aboriginal, municipal and public review. This was fulfilled during the original REA application process in the fall of 2012. For the purpose of the proposed amendment to the project and through consultation with the MOE, Kingston Solar LP is making draft documents available to Aboriginal communities and all other stakeholders at least 30 days prior to the public meeting. These reports will also be made available on the project website 30 days before the public meeting is held, at <http://www.samsungrenewableenergy.ca/kingston>.

## 2.0 Proponent Contact Information

Kingston Solar LP is coordinating and managing the approvals process for the Sol-Luce Kingston Solar PV Energy Project. Contact information for Kingston Solar LP is as follows:

Full Name of Company *Kingston Solar LP*

Address: *55 Standish Court, 9<sup>th</sup> Floor, Mississauga, ON, L5R 4B2*

Telephone: *(905) 501-5658*  
*1-(855) 359-2342*

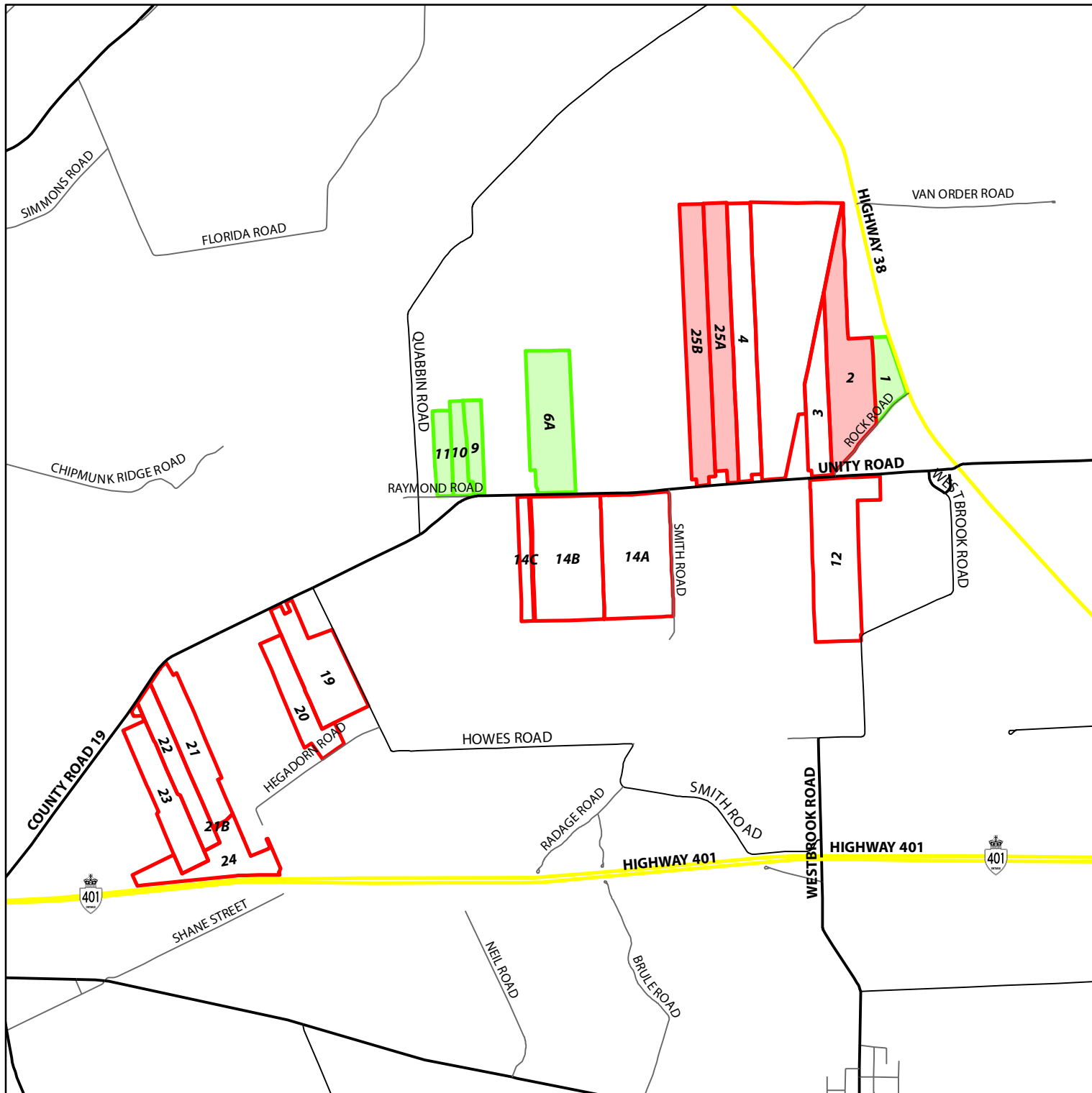
Prime Contact: *A. José De Armas*

Project Website: [www.samsungrenewableenergy.ca/kingston](http://www.samsungrenewableenergy.ca/kingston)

Email: [solucekingston@samsungrenewableenergy.ca](mailto:solucekingston@samsungrenewableenergy.ca)

Sol-luce Kingston Solar PV Energy Project

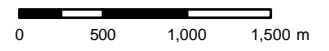
Figure 1:  
Property Boundary of the  
Project Location  
and New Lands



- Highway
- Arterial Road
- Collector Road
- Local Road
- Property Boundary of Project Location Lands
- Removed Properties from Project Location
- Property Where New Lands for Study Occur

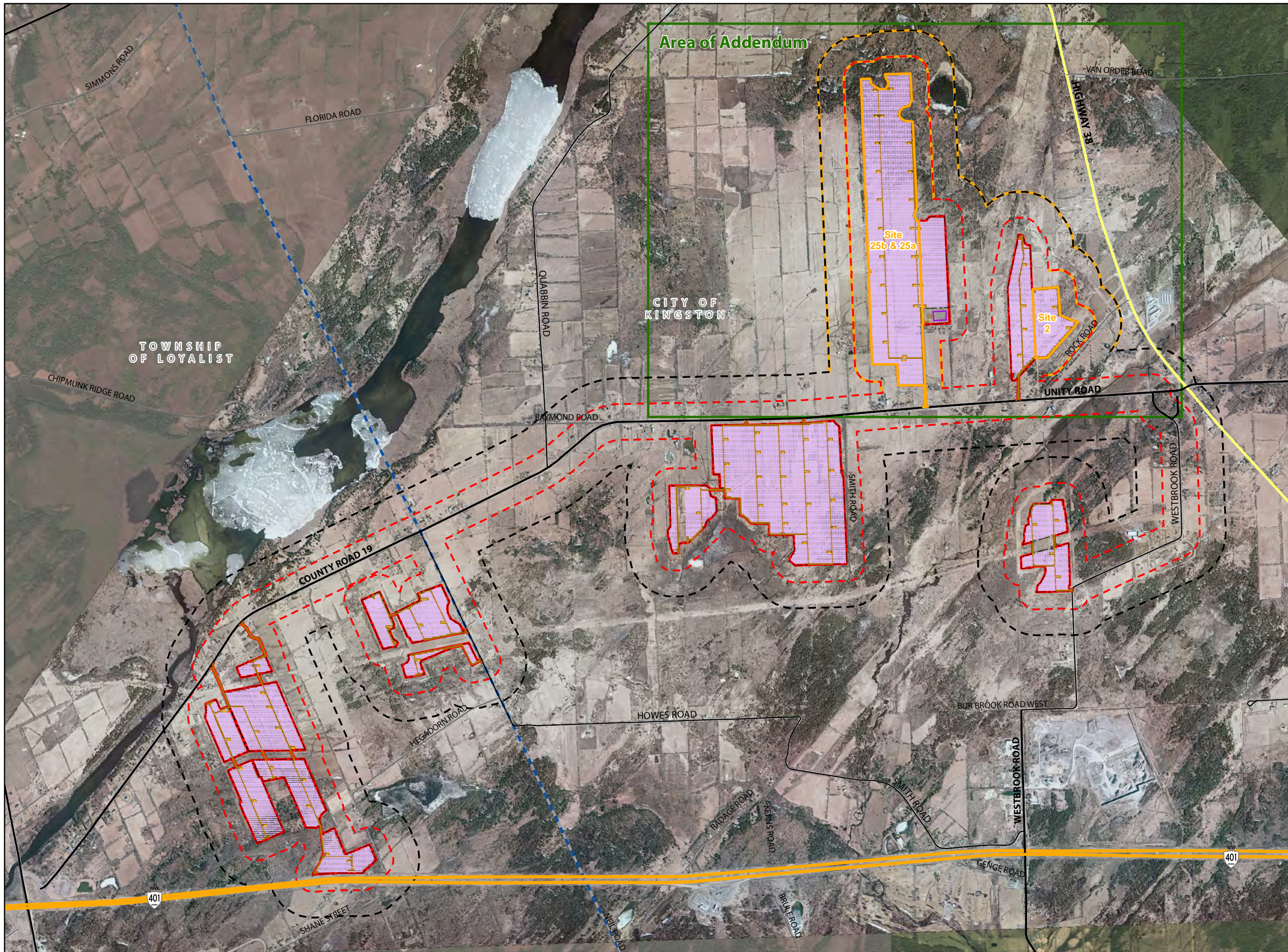


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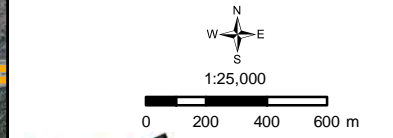
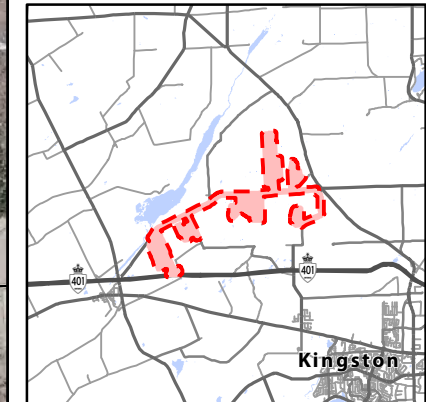


**Sol-luce Kingston Solar PV Energy Project**

**Figure 2  
Project Location**



- Legend**
- Freeway
  - Expressway / Highway
  - Arterial Road
  - Collector Road
  - Local Road
  - Project Location
  - Amended Project Location
  - 120 m Project Location Setback
  - 300 m Project Location Setback
  - 120 m Amended Project Location Setback
  - 300 m Amended Project Location Setback
  - Municipal Boundary
- Project Components**
- Solar Panels
  - Inverters
  - Access Road
  - x Fence
  - Substation





### 3.0 Modifications Document

#### 3.1 Core REA Reports (PDR, DOR, CPR, DPR)

Modifications to the core REA reports (i.e., the Project Description Report, Design and Operations Report, Construction Plan Report and Decommissioning Plan Report) were minor in nature. The changes consisted of small text edits to update project details such as the number of panels, and the number and specifications of Medium Voltage Power Platforms (MVPPs). The edits to these documents did not materially change their content; the general location of the project, construction materials required and decommissioning plan remain the same as was submitted in the original REA application dated September 18, 2012. Further details can be found in the *Modifications Document* in Table 2.

#### 3.2 Archaeological Assessment

Proponents are required to conduct Stage 2 Archaeological Assessment (AA2) as part of their REA application. The original AA2 identified number of archaeological finds which required Stage 3 assessments. Subsequently some of these sites required further Stage 4 assessment. As of the date this Modifications Document was drafted, all the properties which are set to be developed have been fully assessed through Stage 4 (where required) and have subsequently attained compliance letters from the Ministry of Tourism, Culture and Sport (MTCS)

Subsequent Stage 2 Archaeological Assessments were undertaken for the new lands (see Figure 1). New land are identified as Properties #2, 25A, and 25B) in October 2013 by Stantec Consulting. The assessment concluded that no further archaeological assessment of the new lands is required. The assessment was submitted to the Ministry of Tourism, Culture and Sport on October 23, 2013, and a comment letter was received on October 25, 2013. A copy of the comment letter is provided in Appendix A.

#### 3.3 Cultural Heritage Screening

As part of a REA application, proponents are required to consider potential cultural heritage features within and surrounding the proposed project location. A cultural heritage screening is undertaken, and if potential for cultural heritage resources is confirmed, a full Cultural Heritage Assessment is required and is reviewed by the Ministry of Tourism, Culture and Sport. The original REA application required a cultural heritage screening, which concluded no further

study was required. Additional cultural heritage work was completed for the new lands as part of the archaeological assessment by Stantec in October 2013 and recommended that the cultural heritage features be removed prior to construction of the facility since they have little heritage value. The Ministry of Tourism, Culture and Sport provided their comments on November 5, 2013 and indicated that no further study is required. They also indicated that their comment letter for the original application (dated June 11, 2012) remains valid and that new written comments from MTCS are not required. A copy of the original comment letter and email received November 5 2013 are included in Appendix A.

#### 4.0 Natural Heritage Assessment Addenda

The addenda to the *Natural Heritage Assessment* document new significant natural features, potential negative environmental effects, and recommended mitigation measures as a result of reallocating project components to new lands. A summary of the results of each addendum is provided in the sections below.

##### 4.1 Records Review

A records review was completed, consistent with Section 25 of *Ontario Regulation 359/09*, for the revised project location using secondary source information.

Section 25 of *Ontario Regulation 359/09* states a natural heritage assessment for a renewable energy facility includes a records review to search for and determine whether the project location is:

1. In or within 120 m of a provincial park or conservation reserve,
2. In a natural feature, as defined to be:
  - i. a wetland (coastal wetland, northern wetland or southern wetland),
  - ii. a valleyland,
  - iii. a wildlife habitat,
  - iv. a woodland, or
  - v. an area of natural and scientific interest (ANSI), life science.
3. Within 50 m of an ANSI, earth science, or
4. Within 120 m of a natural feature that is not an ANSI, earth science.

The results of the Records Review are summarized as follows:

- No provincial parks or conservation reserves were identified within the project location or surrounding 300 m;
- No Life Science ANSIs were identified within the project location or surrounding 300 m;
- No Earth Science ANSIs were identified within the project location or surrounding 300 m;
- Nine southern wetlands were identified in the amended project location and/or within the surrounding 120 m and/or 300 m;
- Four woodlands were identified in the amended project location and/or within the surrounding 120 m and/or 300 m;
- No seasonal concentration areas were identified within the project location or surrounding 300 m;
- No rare vegetation communities of conservation concern were identified within the project location or surrounding 300 m;
- No specialized wildlife habitat was identified within the project location or surrounding 300 m;
- Several species of conservation concern have the potential to occur in the general area of the project location;
- No animal movement corridors were identified within the project location or surrounding 300 m;
- Various wildlife species, birds, mammals, herpetozoa, and invertebrates have the potential to occur in the general area of the project location; and
- No part of the project location falls within a provincial plan area (the Oak Ridges Moraine Conservation Plan Area, Niagara Escarpment Plan Area, Greenbelt Natural Heritage System or the Greenbelt Protected Countryside).

#### 4.2 Site Investigation

*Ontario Regulation 359/09* requires that all renewable energy projects conduct a site investigation for all natural heritage features that fall within the project location or the prescribed setback area (*REA* Section 26). The Site Investigation Report is conducted for the purpose of determining:

- whether the results of the analysis summarized in the report prepared under subsection 25 (3) [Records Review Report] are correct or require correction, and identifying any required corrections;
- whether any additional natural features exist, other than those that were identified in the report prepared under subsection 25 (3) [Records Review];
- the boundaries, located within 120 metres of the project location, of any natural feature that was identified in the records review or the site investigation; and
- the distance from the project location to the boundaries [of the natural feature].

It should be noted that species at risk listed under the federal *Endangered Species Act 2007* are being considered separately in consultation with the appropriate agency.

Site investigation field studies were undertaken to refine natural features identified as part of the Records Review and to determine which features have potential significance that require further study.

The following natural features were carried forward for evaluation as part of the Evaluation of Significance Addendum:

- Five units of wetland;
- Three woodlands;
- Sixteen wildlife habitats; including,
  - 3 Waterfowl Stopover and Staging Areas;
  - 1 Raptor Wintering Area;
  - 1 Bat Maternity Colony;
  - 2 Reptile Hibernaculum;
  - 2 Waterfowl Nesting Areas;
  - 1 Woodland Raptor Nesting Habitat;
  - 1 Amphibian Breeding Habitat (Woodland);
  - 1 Marsh Breeding Bird Habitat;
  - 1 Open Country Breeding Bird Habitat;
  - 1 Shrub/Early Successional Breeding Bird Habitat;
  - 1 Habitat for Giant Swallowtail; and,
  - 1 Habitat for Common Nighthawk.

### 4.3 Evaluation of Significance

The aim of the NHA Evaluation of Significance is to evaluate the natural features summarized in the Site Investigation, in accordance with paragraph 3 of subsection 26(3) of *Ontario Regulation 359/09* to determine:

- If a natural feature is significant if it is a woodland, a valleyland or a wildlife habitat; and
- If a natural feature is provincially significant if it is a southern wetland, a northern wetland, a coastal wetland, an area of natural and scientific interest (earth science) or an area of natural and scientific interest (life science).

If a natural feature identified during the site investigation has not been previously evaluated by the MNR, it requires evaluation using criteria and procedures established or accepted by the MNR. Woodlands and valleylands are only assessed for significance if they are south and east of the Canadian Shield as shown in Figure 1 in the *Provincial Policy Statement, 2005*. Where appropriate studies to determine the significance of a wildlife habitat have not been conducted, the Natural Heritage Assessment Guide for Renewable Energy Projects (MNR 2012a) states that a wildlife habitat may be treated as significant. Wildlife habitat treated as significant will be clearly identified in this report and the necessary commitments made in the EIS (MNR 2012a). Where applicable, natural features previously evaluated in the original NHA (AMEC 2012) are carried forward into this Addendum Report.

The evaluation of significance was completed in two stages: the first involved a review of applicable resources and records for the project location and site investigation work; the second involved summarizing the determinations and results of the work completed to evaluate each natural feature for significance. Where possible, data used in the original NHA report was used to determine significance. Where a previous evaluation was not undertaken, the habitat was treated as significant and will be evaluated prior to construction. Overall, data collected from the field took place from October 1 to November 28, 2013 and was primarily targeted at obtaining data to evaluate wetland and woodland areas.

In total, 24 candidate significant natural features were identified in the site investigation addendum reports. Of these 24 candidate features, 17 were determined to be significant (i.e., significant, assumed provincially significant, or treated as significant), and four were

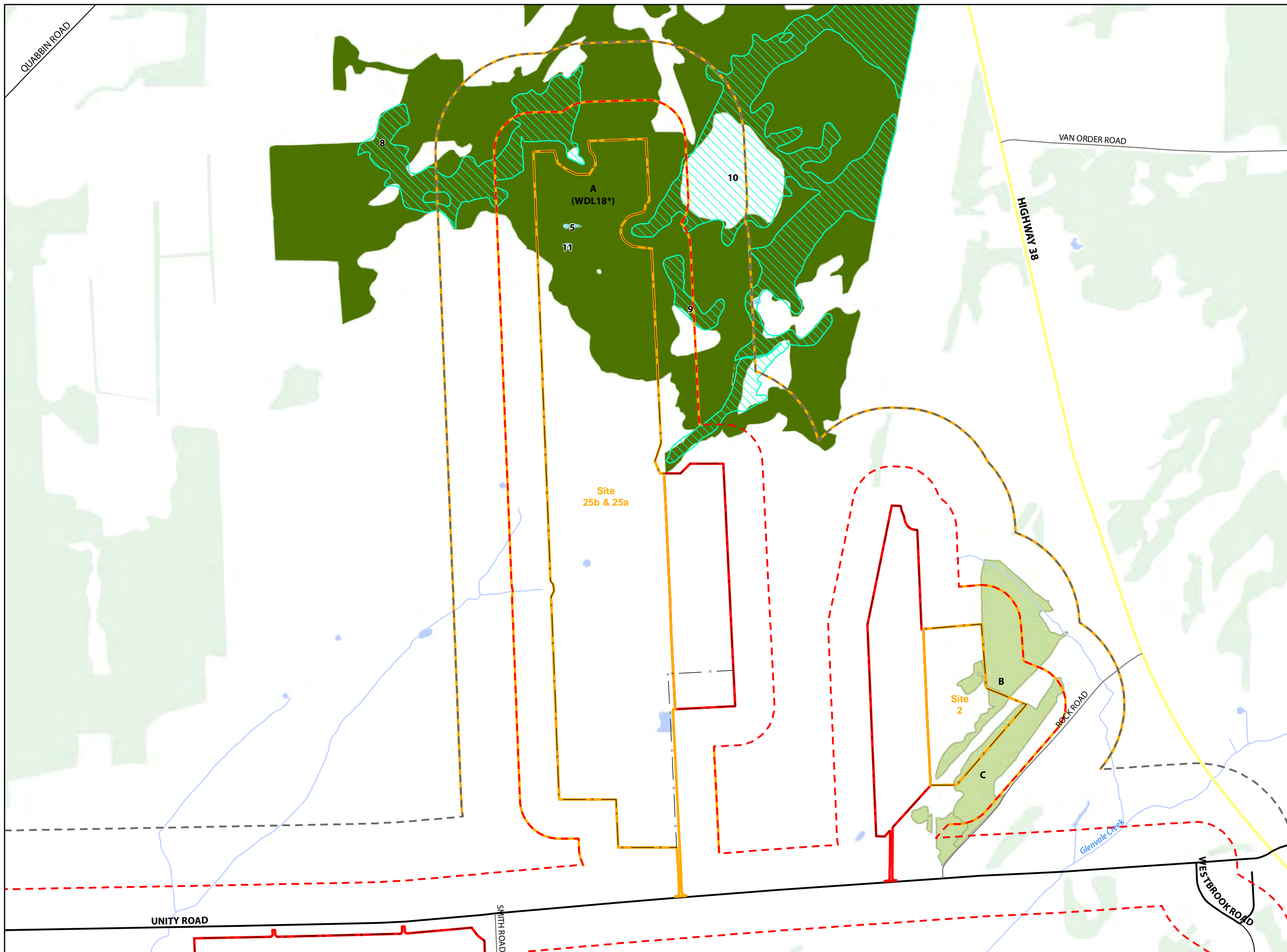
categorized together as Generalized Candidate Significant Wildlife Habitat. The 17 significant natural features include the following (\* indicates identifier used in original NHA report):

- 3 Wetlands assumed significant (Wetlands 8, 9, and 10);
- 1 Significant Woodland (Woodland A[19\*]);
- 1 Significant Open Country Breeding Bird Habitat (OCBB D1[9\*]);
- 1 Significant Shrub/Successional Breeding Bird Habitat (SBB 4\*); and,
- 11 units of candidate wildlife habitat treated as significant:
  - 3 Waterfowl Stopover and Staging Areas (Aquatic);
  - 1 Bat Maternity Colony;
  - 2 Reptile Hibernaculum;
  - 2 Waterfowl Nesting Areas;
  - 1 Amphibian Breeding Habitat (Woodlands);
  - 1 Marsh Breeding Bird Habitat; and,
  - 1 Habitat for Common Nighthawk.

These natural features are shown on Figure 3, 4, 5 and 6.

**Sol-luce Kingston Solar PV Energy Project**

**Figure 3  
Significant Wetlands and Woodlands**



**Legend**

- Expressway / Highway
- Arterial Road
- Collector Road
- Local Road
- Potential Stream
- Fence Line
- Project Location
- Amended Project Location
- 120 m Project Location Setback
- 300 m Project Location Setback
- 120 m Amended Project Location Setback
- 300 m Amended Project Location Setback
- Assumed Provincially Significant Wetland
- Dillon Delineated Wetland (Non-provincially Significant)
- Significant Woodland
- Delineated Non-significant Woodland
- Unevaluated Woodland
- Dug Farm Pond

\*Identifiers in parentheses refer to the original AMEC prepared NHA reports (June 2012)

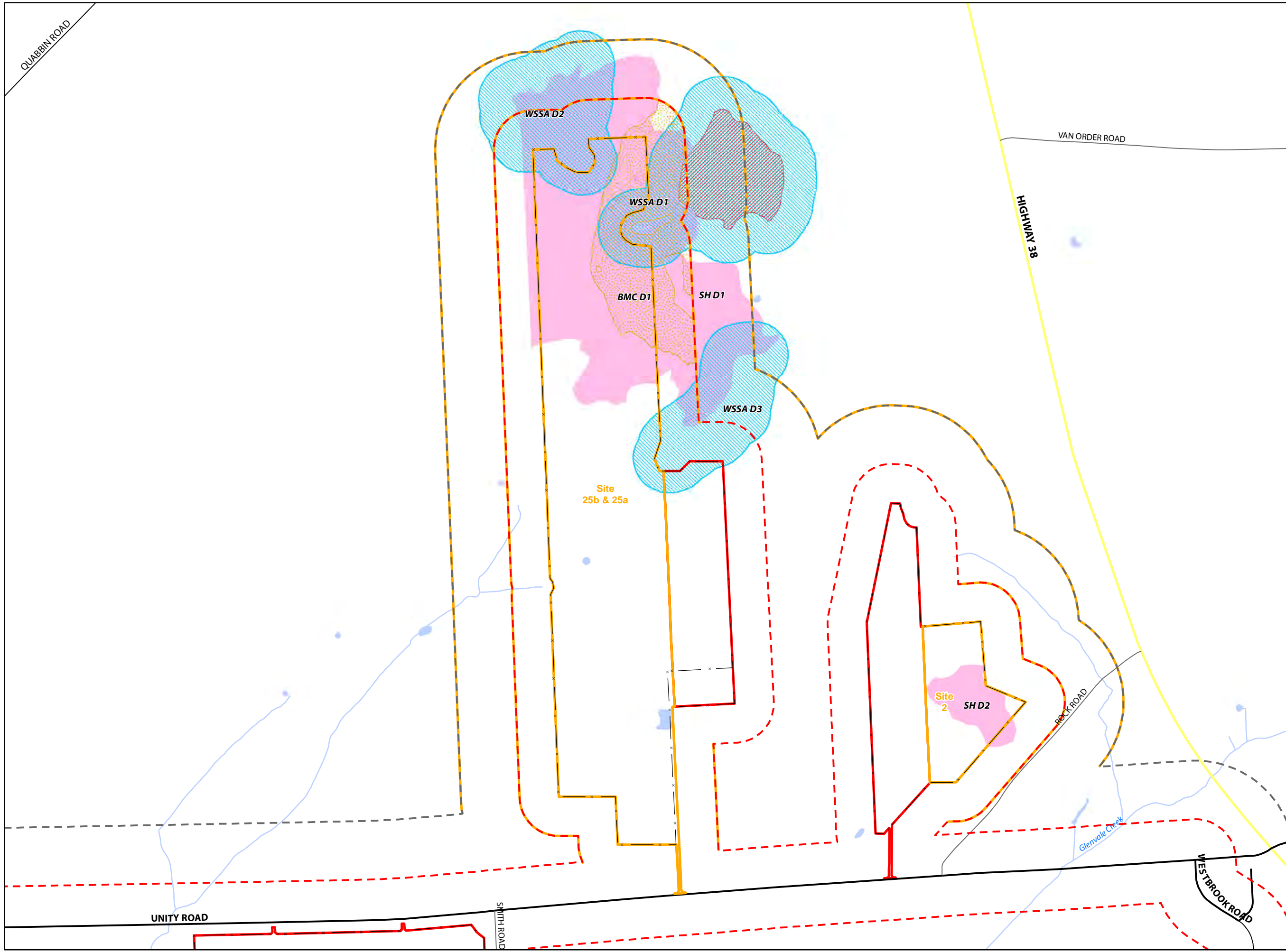
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QUABBIN ROAD

# Sol-luce Kingston Solar PV Energy Project

## Figure 4 Significant Wildlife Habitat Seasonal Concentration Areas



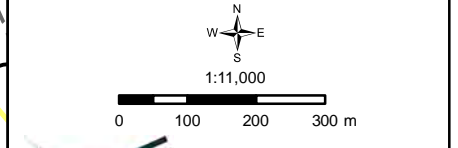
### Legend

- Expressway / Highway
- Arterial Road
- Collector Road
- Local Road
- Potential Stream
- Fence Line
- Project Location
- Amended Project Location
- 120 m Project Location Setback
- 300 m Project Location Setback
- 120 m Amended Project Location Setback
- 300 m Amended Project Location Setback
- Dug Farm Pond

### Seasonal Concentration Areas

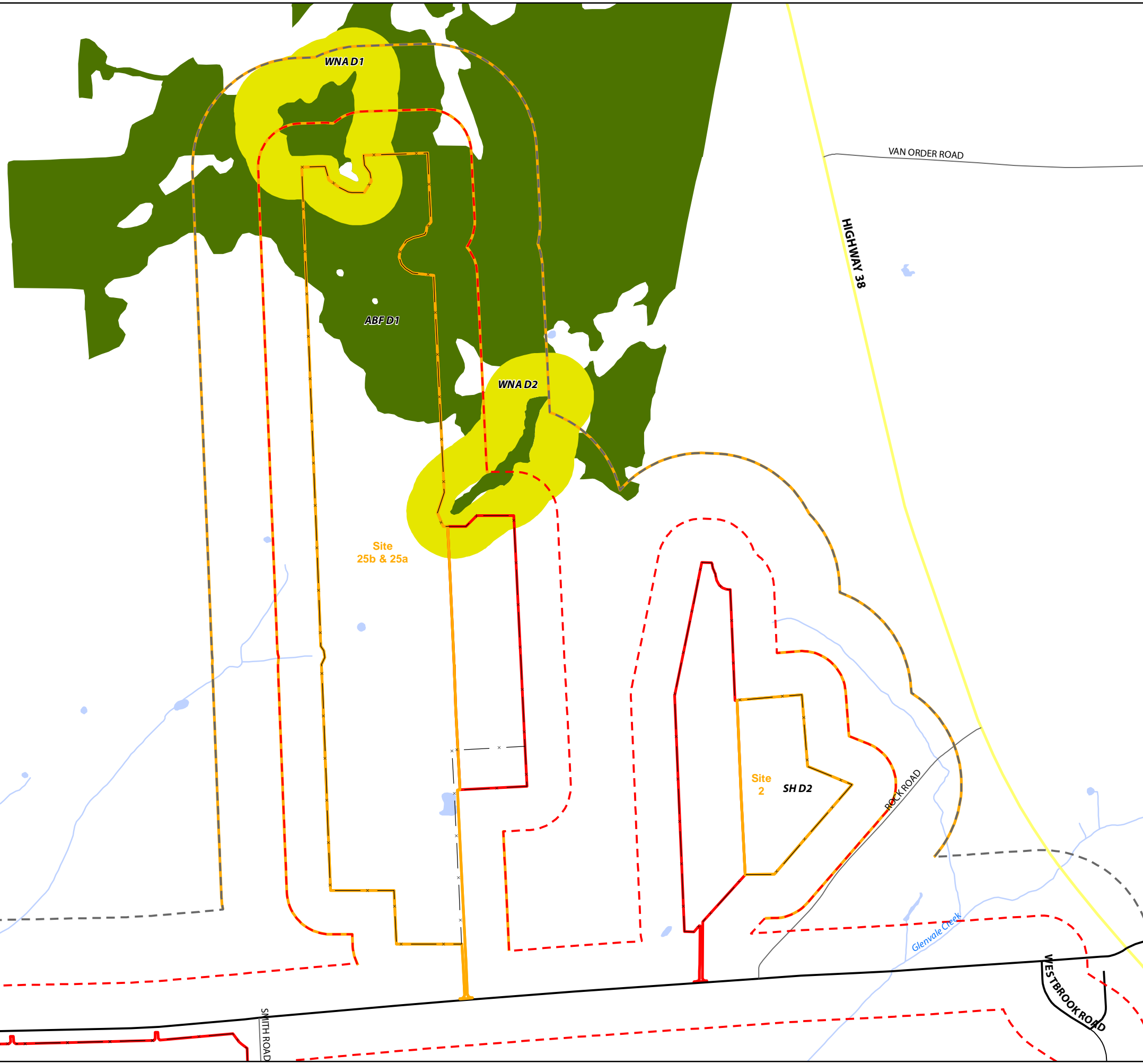
- Bat Maternity Colony (BMC)
- Waterfowl Stopover and Staging Area (Aquatic) (WSSA)
- Reptile Hibernaculum (SH)
- Generalized Candidate Significant Wildlife Habitat

\*Identifiers in parentheses refer to the original AMEC prepared NHA reports (June 2012)





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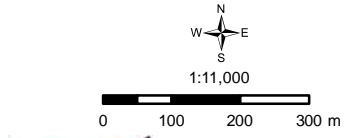
**Sol-luce Kingston Solar PV Energy Project**

**Figure 5  
Significant Wildlife Habitat -  
Specialised Wildlife Habitat**

**Legend**

- Expressway / Highway
- Arterial Road
- Collector Road
- Local Road
- Potential Stream
- Fence Line
- Project Location
- Amended Project Location
- 120 m Project Location Setback
- 300 m Project Location Setback
- 120 m Amended Project Location Setback
- 300 m Amended Project Location Setback
- Dug Farm Pond
- Specialised Wildlife Habitat**
- Waterfowl Nesting Area (WNA)
- Amphibian Breeding Habitat (Woodland) (ABF)

\*Identifiers in parentheses refer to the original AMEC prepared NHA reports (June 2012)



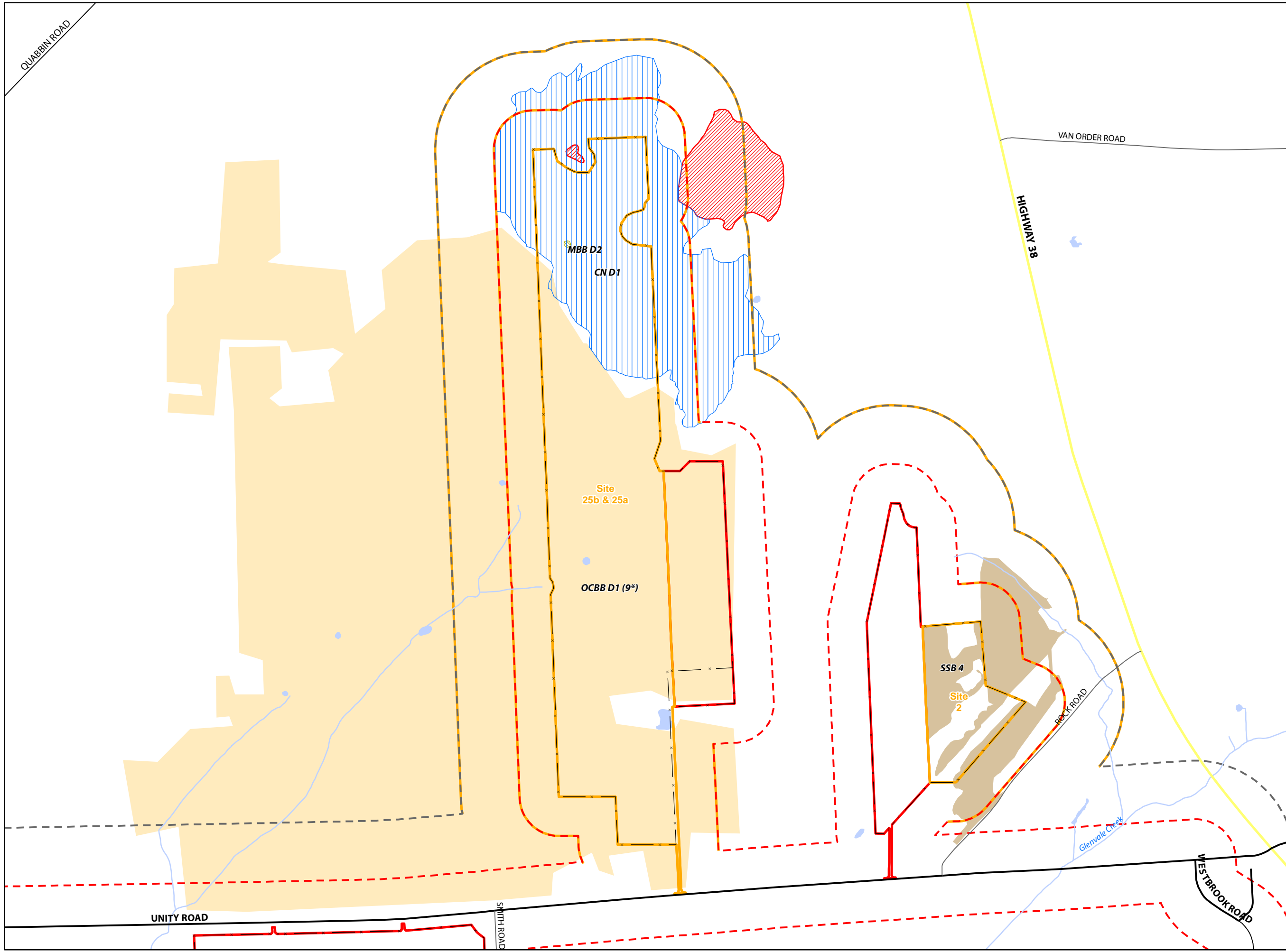
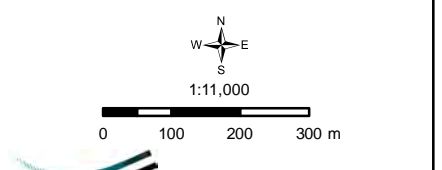
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# Sol-luce Kingston Solar PV Energy Project

## Figure 6 Significant Wildlife Habitat - Habitat of Species of Conservation Concern

- Legend**
- Expressway / Highway
  - Arterial Road
  - Collector Road
  - Local Road
  - Potential Stream
  - Fence Line
  - Project Location
  - Amended Project Location
  - 120 m Project Location Setback
  - 300 m Project Location Setback
  - 120 m Amended Project Location Setback
  - 300 m Amended Project Location Setback
  - Dug Farm Pond
- Species of Conservation Concern**
- Marsh Breeding Bird Habitat (MBB D2)
  - Habitat for Common Nighthawk (CN)
  - Open Country Bird Breeding Habitat (OCBB)
  - Shrub/Early Successional Bird Breeding Habitat (SSB)\*
- \*Treated as Significant
- Generalized Candidate Significant Wildlife Habitat

Identifiers in parentheses refer to the original AMEC prepared NHA reports (June 2012)



#### 4.4 Environmental Impact Study

An environmental impact study addendum was completed according to Section 27 of Ontario Regulation 359/09. This evaluation was preceded by a records review addendum, a site investigation addendum and an evaluation of significance addendum, as per Sections 25-27 of Ontario Regulation 359/09, respectively. By completing an EIS Addendum Report in accordance with procedures established by the MNR for a NHA EIS, Subsection (1) of Section 38 (Ontario Regulation 359/09) may permit project components to be constructed and installed within 120 meters of a significant or provincially significant natural feature. This report is consistent with Section 38 of Ontario Regulation 359/09, which details that an EIS (Addendum) Report must include the following:

- Identification and assessment of any negative environmental effects of the project on a natural feature, provincial park or conservation reserve;
- Identification of mitigation measures in respect of any negative environmental effects;
- Description of how the environmental effects monitoring plan in the Design and Operations Report addresses any negative environmental effects; and,
- Description of how the construction plan report addresses any negative environmental effects.

The NHA EIS Addendum Report was completed to mitigate any potential negative environmental effects to the following significant or provincially significant natural features (Please note "\*" indicates identifier used in original AMEC prepared NHA reports):

- 3 Wetlands assumed significant (Wetlands 8, 9, and 10);
- 1 Significant Woodland (Woodland A[19\*]);
- 1 Significant Open Country Breeding Bird Habitat (OCBB D1[9\*]);
- 1 Significant Shrub/Successional Breeding Bird Habitat (SBB 4\*); and,
- 11 units of candidate wildlife habitat treated as significant:
  - 3 Waterfowl Stopover and Staging Areas (Aquatic);
  - 1 Bat Maternity Colony;
  - 2 Reptile Hibernaculum;
  - 2 Waterfowl Nesting Areas;
  - 1 Amphibian Breeding Habitat (Woodlands);

- 1 Marsh Breeding Bird Habitat; and,
- 1 Habitat for Common Nighthawk.

Mitigation measures and monitoring plans were outlined for each of the above natural features and are summarized as follows:

- Minimize impacts to breeding birds and roosting bats (April 15 to August 1) by working outside of the breeding season where possible. Should clearing be required during the breeding bird season, nest searches conducted by a qualified person must be completed. Construction may occur on cleared lands during this time period provided that no additional vegetation must be cleared.
- Limits of construction work to be staked in the field in order to minimize disturbance to the wetland habitat and wildlife. Construction envelope to be clearly demarcated and kept as small as possible.
- The construction workforce will be made aware that there is a potential for wildlife occurring on the Project Location and instructed to take measures for avoiding wildlife whenever possible.
- Re-vegetate cleared lands with native species post-construction
- Develop and implement an erosion and sediment control plan. The proposed preparation activities will be designed and implemented so as not to alter off-site drainage patterns and will not significantly alter the elevations throughout the Project Location.
- Internal project access roads to be constructed at or near grade and the use of impermeable materials avoided where possible to promote groundwater recharge.
- Vehicle speeds to be restricted to 15 km/hr or less on the Project site and speed limit signage posted.
- Noise abatement devices will be used on construction and support equipment present on the site with the objective of keeping the noise level within the acceptable construction noise standards and help maintain air quality.
- Bat-specific mitigation measures include the following;
  - A restoration/replacement plan will be created within one year of the habitat being evaluated as significant, in consultation with and agreed upon by MNR.

- Should the habitat be evaluated to be not significant, a restoration/replacement plan for the delineated habitat will not be required;
  - Replacement of bat habitat will be at a minimum of 1:1 ratio for all habitat that will be removed;
  - Replacement habitat will be connected to an existing FOD or FOM community, the same or similar size of the original habitat;
  - Location of the replacement habitat will be determined in consultation with MNR, with preference of it being located in the same geographic township;
  - The owner of the land where the replacement habitat will occur will enter in an agreement whereby the trees will not be cut for a time agreed upon by MNR;
  - Monitoring of the replacement habitat will occur in the 1<sup>st</sup>, 2<sup>nd</sup>, and 5<sup>th</sup> year to monitor habitat growth. Monitoring will then be required once every five years until the end of the agreement or until agreed upon in consultation with MNR; and,
  - All monitoring and assessments are to be conducted by a qualified biologist or forester.
- Post-construction monitoring of significant wildlife habitats; including, bird breeding surveys, amphibian breeding surveys, reptile surveys, and bat acoustic surveys.

## 5.0 Natural Heritage Assessment Modifications Document

The Modifications Document for the Natural Heritage Assessment discusses natural features and setback limits that are no longer applicable to the Sol-Luce Kingston Solar PV Energy Project. The report is summarized below:

- Woodland and wetland units identified as part of the Records Review are no longer applicable to the NHA reports;
- Several woodland, wetland and wildlife habitat areas and their related setback limits identified as part of the Site Investigation Report are no longer applicable to the NHA reports;
- Mitigation measures proposed as part of the Evaluation of Significance Report were edited and/or removed based on addenda to the NHA; and

- Mitigation measures were added as part of the Environmental Impact Study as they relate to impacts to woodlands, breeding birds and silt fencing based on addenda to the NHA.

#### 6.0 Water Assessment and Water Body Report Addendum

The *Water Assessment and Water Body Report*, comprised of a records review and site investigation, is prepared to determine potential water bodies that may occur within the project location or within 120 m and 300 m of the project location. The report also considers potential environmental effects to water bodies considered significant and to propose mitigation measures. The original *Water Assessment and Water Body Report* for the project identified crossing locations and three encroachments of less than 30 metres to an adjacent water body and recommended that mitigation measures be implemented during the construction and operation phases of the project to adequately protect these features. An addendum to the *Water Assessment and Water Body Report* has been prepared as part of the major design change to the project, and concludes that there are no additional applicable water bodies within the amended project location. Therefore, no new mitigation measures are recommended that were not previously considered as part of the original REA application (see Figure 7).

QUABBIN ROAD

VAN ORDER ROAD

HIGHWAY 38

ROCK ROAD

WESTBROOK ROAD

UNITY ROAD

SMITH ROAD

Site 25b & 25a

Site 2

GC Trib 2b.j  
GC Trib 2b

83 m

35 m

B

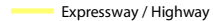

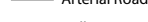

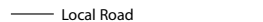

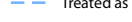
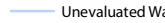


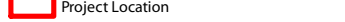

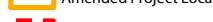
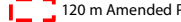
A

Glenvale Creek

# Sol-luce Kingston Solar PV Energy Project

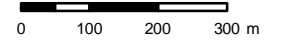
## Figure 7 Water Body Site Investigation

### Legend

-  Expressway / Highway
-  Arterial Road
-  Collector Road
-  Local Road
-  Treated as Intermittent Stream
-  Unevaluated Water Body
-  Fence Line
-  Project Location
-  Amended Project Location
-  120 m Amended Project Location Setback
-  300 m Amended Project Location Setback
-  A Dug Farm Pond
-  Unevaluated Wetland
-  Woodland (MNR)



1:11,000



Created By: GM  
 Checked By: JLP  
 Date Created: 11/25/2013  
 Date Modified: 11/25/2013  
 File Path: I:\GIS\138504 Kingston Solar REA Amendment Mapping\Water Body Assessment\

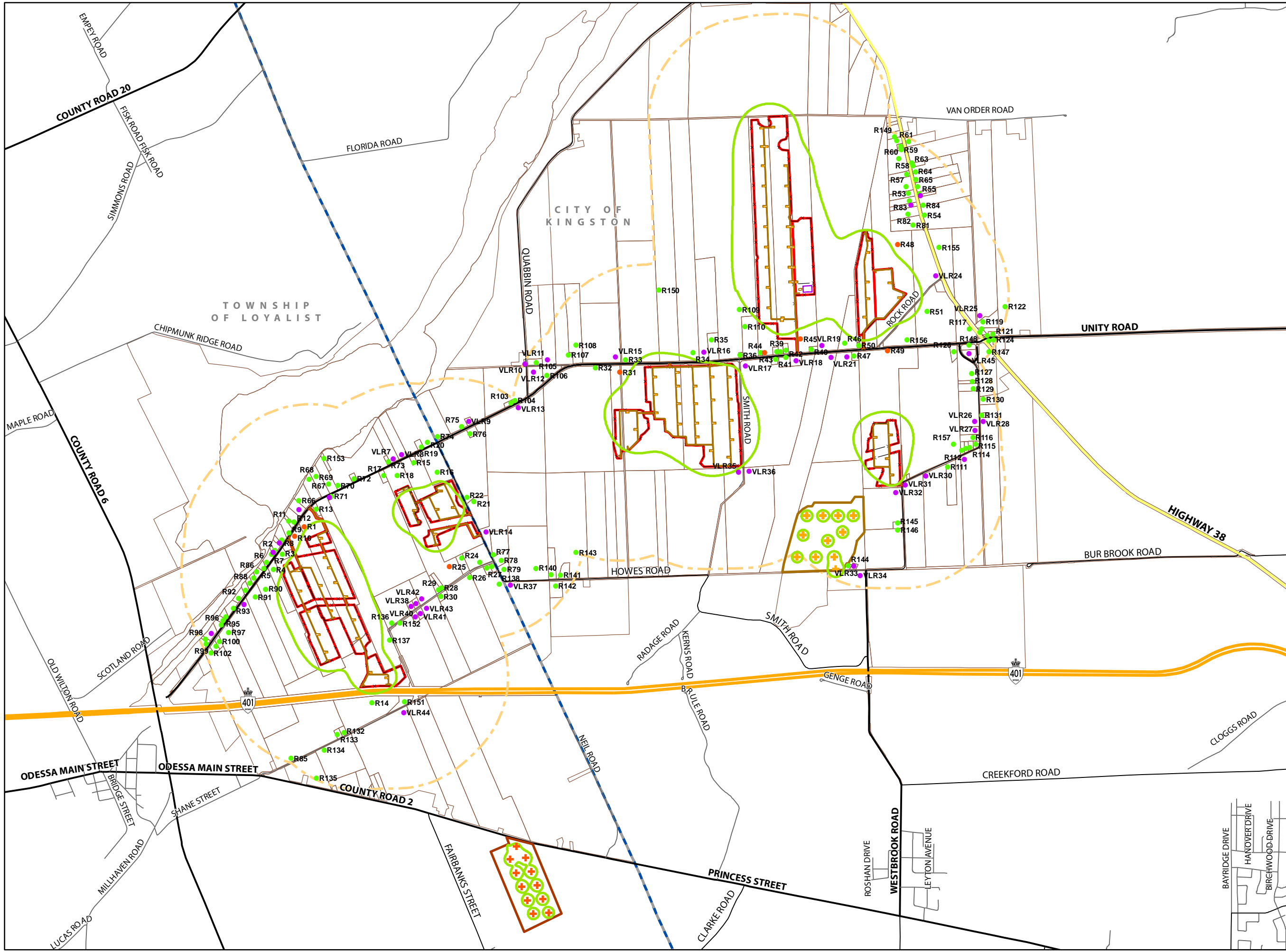
## 7.0 Revised Noise Study Report

The *Noise Study Report* provides the results of noise modelling to demonstrate that the proposed facility meets the sound power level standards of the MOE. The original *Noise Study Report* indicated that no mitigation measures would be required to mitigate the noise from the 97 Medium Voltage Power Platforms (MVPPs) and one substation transformer associated with the Sol-Luce Kingston Solar PV Energy Project, or to mitigate noise sources from neighbouring solar facilities (SunE Westbrook Solar Farm and the Kingston Gardiner Hwy 2 South Solar Energy Project). The updated *Noise Study Report* concludes that the Sol-Luce Kingston Solar PV Energy Project can be constructed in compliance with MOE standards, provided that acoustic louvers are installed at 14 of the 78 MVPPs (see Figure 8 and Figure 9).

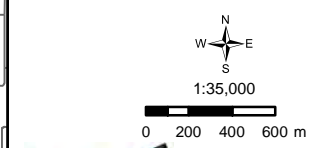


Sol-luce Kingston Solar PV Energy Project

Figure 8  
Predicted Noise Level  
Contours at 1.5m Height

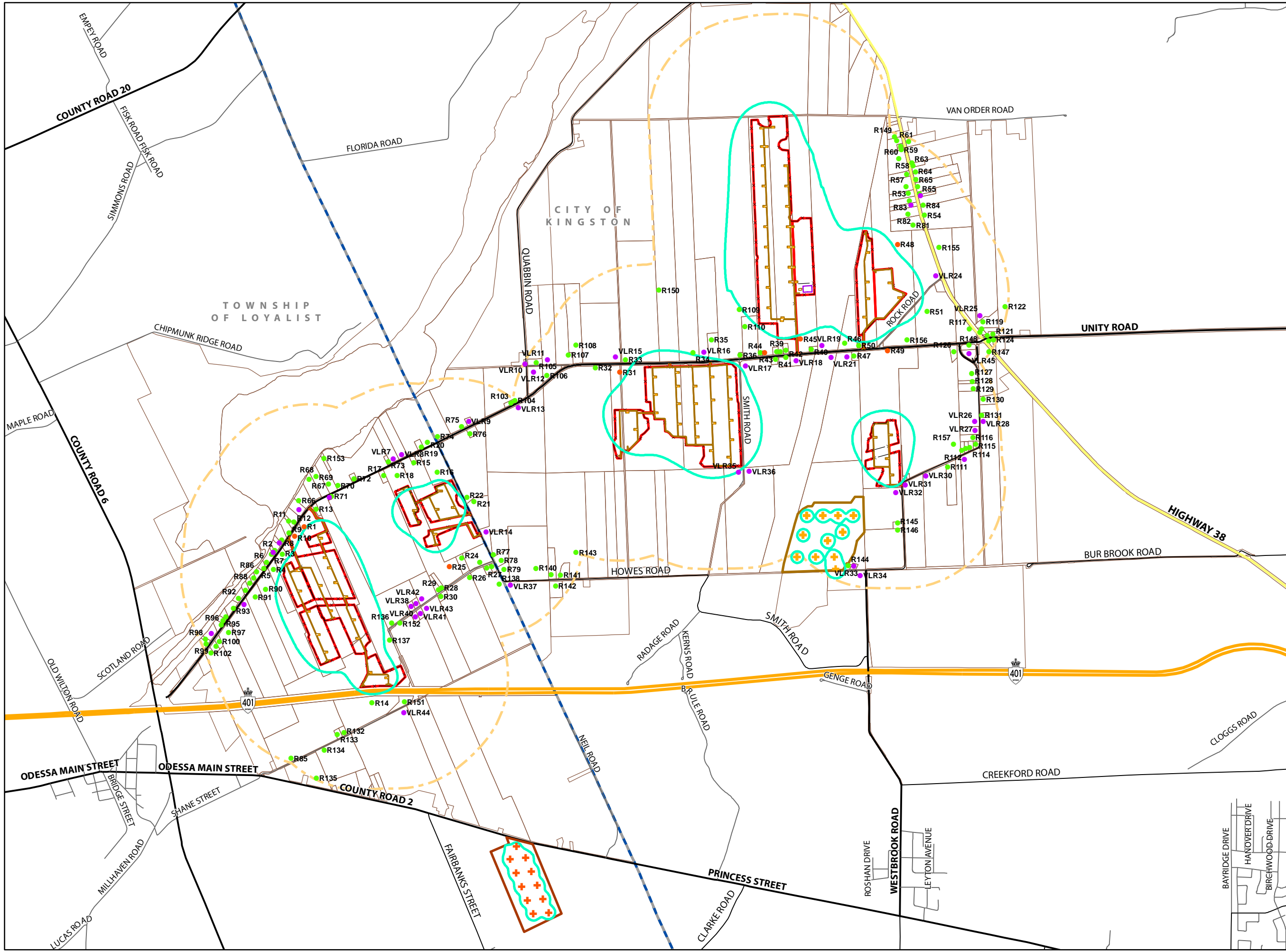


- Non-Participating Noise Receptor
- Participating Noise Receptor
- Vacant Lot Receptor
- ⊕ Kingston Gardiner Hwy2 Noise Source
- ⊕ SunE Westbrook Noise Source
- 40 dBA Noise Contour at 1.5 m Height
- Kingston Gardiner Hwy 2 South Solar Farm
- SunE Westbrook Solar Farm
- - - 1000 m Project Setback
- Freeway
- Expressway / Highway
- Arterial Road
- Collector Road
- Local Road
- ▭ Project Boundary
- ▭ Parcel Boundary



Sol-luce Kingston Solar PV Energy Project

Figure 9  
Predicted Noise Level  
Contours at 4.5m Height



- Non-Participating Noise Receptor
- Participating Noise Receptor
- Vacant Lot Receptor
- + Kingston Gardiner Hwy2 Noise Source
- + SunE Westbrook Noise Source
- 40 dBA Noise Contour at 4.5 m Height
- Kingston Gardiner Hwy 2 South Solar Farm
- SunE Westbrook Solar Farm
- 1000 m Project Setback
- Freeway
- Expressway / Highway
- Arterial Road
- Collector Road
- Local Road
- Project Boundary
- Parcel Boundary

