

**Sol-Luce Kingston Solar  
PV Energy Project  
Community Liaison Committee  
Meeting No. 2  
DRAFT MEETING MINUTES**

**KINGSTON  
SOLAR LP**

*Minutes prepared by: AECOM*

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**Sol-Luce Kingston Solar PV Energy Project  
Community Liaison Committee**  
*Minutes from Meeting #2*

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*These meeting minutes were prepared by AECOM. AECOM is providing neutral third-party consultation services for the Sol-Luce Kingston Solar PV Energy Project Community Liaison Committee (CLC). These meeting minutes are not intended to provide verbatim accounts of committee discussions. Rather, they are intended to summarize and document the key points made during the discussions, as well as the outcomes and actions arising from the committee meetings. If you have any questions or comments regarding the Meeting Minutes, please contact:*

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Appendix C – Sol-Luce Kingston Solar PV Energy Project CLC Meeting #2 Presentation

## **1) Community Liaison Committee - Meeting #2**

The second Community Liaison Committee (CLC) meeting for the Sol-Luce Kingston Solar PV Energy Project was held on November 26, 2014 from 6:30 p.m. to 8:30 p.m. at the INVISTA Centre, 1350 Gardiners Road in Kingston, Ontario.

## **2) Welcome and Introductions**

At the start of the meeting, Mark van der Woerd (Committee Facilitator) welcomed the Committee members and the public to the second CLC meeting for the Sol-Luce Kingston Solar PV Energy Project (the Project). In advance of the meeting, a package including the meeting agenda was distributed to the Committee.

Mark introduced himself and Adam Wright from AECOM as third-party facilitators who would strive to create a space where constructive conversations can occur between the CLC and Kingston Solar. He noted that Adam would be taking minutes of the meeting which would be made publicly available following the meeting and posted on the Kingston Solar website.

Mark also introduced Genie Orton from the Napanee and District Chamber of Commerce who joined the CLC following the first meeting. Mark then invited members of the CLC to introduce themselves and state their interest for participating in the CLC. To review a list of CLC members as well as representatives from Kingston Solar in attendance, please see **Appendix A**.

Following the roundtable introductions, Mark then outlined the meeting agenda and asked Committee members if there are any questions before moving forward. None were received.

## **3) Review of Action Items from Meeting #1 and Community Questions Received by CLC Members Since Meeting #1**

Mark noted there were two outstanding action items since the first CLC meeting: 1) to update the Project Study Area map label to ensure there is proper identification of Unity Road and 2) to provide further information about the ownership structure of Kingston Solar. Mark confirmed that the project map was updated to properly label Unity Road and noted that copies were provided in the CLC meeting packages. He also confirmed that Kingston Solar is unable to provide further details about the ownership structure of the entity due to confidentiality agreements currently in place between the parties that own the entity.

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Mark enquired if there were any outstanding comments from the minutes prepared for Meeting #1. No comments were received and the CLC agreed the minutes are considered final.

Mark then asked if the CLC received any questions from the community about the construction of the Project. Stan noted that he forwarded questions to Adam prior to the meeting, and Adam provided an overview of those questions to the CLC:

- What is being done to minimize noise and truck traffic during the construction phase of the project?
- Will the heat generated by the solar panels during summer time create local "hot spots" around the projects?
- What benefit will this project create for the local community, for the long term?
- Are the Kingston Solar landscape plans that were generated to model visual impacts, available for public viewing?
- What type of damage is anticipated in the event of heavy hail storm?

Mark noted that the questions brought forward by Stan were incorporated into the Kingston Solar presentation and would be addressed throughout the course of the meeting. Mark then opened the floor and asked if there are outstanding questions or comments from the community that Kingston Solar should be made aware of. The following questions were received:

**Question 1: Can Kingston Solar provide an update regarding how the dirt on the road is minimized, especially the mud and stones which have a tendency to fly upwards? Can Kingston Solar clarify what the speed limit is in the Project Study Area? There was signage erected stating the speed limit was 60 kilometres per hour but this was recently removed.**

Kingston Solar - Ray Bedard: The construction team is taking efforts to sweep the roads on a regular basis. Much of the dirt that the community is seeing now will be mitigated when the access road construction is complete. Keeping the roads clean is an ongoing challenge during this time of year and the company is doing whatever it can to address any issues that arise.

Regarding the speed limits, Kingston Solar submitted a traffic management plan to the local municipalities prior to construction. That plan noted that the speed limit would be reduced to 60 kilometres per hour and that construction signage would be in place for the duration of the project. However, the signs were removed following conversations with the City of Kingston where Kingston Solar was informed that the permanent speed limit would not be decreased to 60 kilometres per hour but remain at 80 kilometres per hour. As a result, Kingston Solar was advised that the black and white speed limits signs would remain in place and orange construction advisory speed limit signs should be erected that provide a recommended speed limit during construction of 60 kilometres per hour.

**Question 2: Is there potential to use solar powered construction signs?**



Ray: Yes, on the corner of Gardiner Road and Unity Road Kingston Solar will be using solar powered signage. Kingston Solar is in the final stages of placing this signage.

David Oxtoby, Kingston Solar, also noted that there is a local number that people can call to submit construction complaints or concerns and noted that the phone number is (343) 333-5911.

**Question 3: Is there ongoing monitoring of the vegetation following planting? What happens if plants die several months after they are planted? Who is responsible for maintaining the plants?**

Ray: Kingston Solar is responsible for monitoring and maintaining the vegetation that is planted as part of the project. In addition, there is a two year landscaping security agreement in place with the City of Kingston which requires that if any plants die within two years they will be replaced by Kingston Solar.

#### 4) Sol-Luce Kingston Solar PV Energy Project Status Update

Mark then invited David Oxtoby from Kingston Solar to provide the CLC with a status update. To review a copy of the presentation, please refer to **Appendix C**.

David provided the CLC the following overview of the Project:

- Facility to be located on approximately 800 acres of land bridging the City of Kingston and Loyalist Township
- Comprised of approximately 464,500 ground-mounted photovoltaic (“PV”) modules manufactured in Ontario by Canadian Solar Inc.
- Total nameplate capacity of 100MWAC / 140MWDC
- Project includes a 230kV substation connected via a short (200m) tie line to existing Hydro One transmission lines. As a note, the transmission station is well set back from the road,
- The Sol-Luce project is expected to power approximately 17,000 homes.

David then went on to provide an overview of the Construction Process by discipline area and provided highlights of the following:

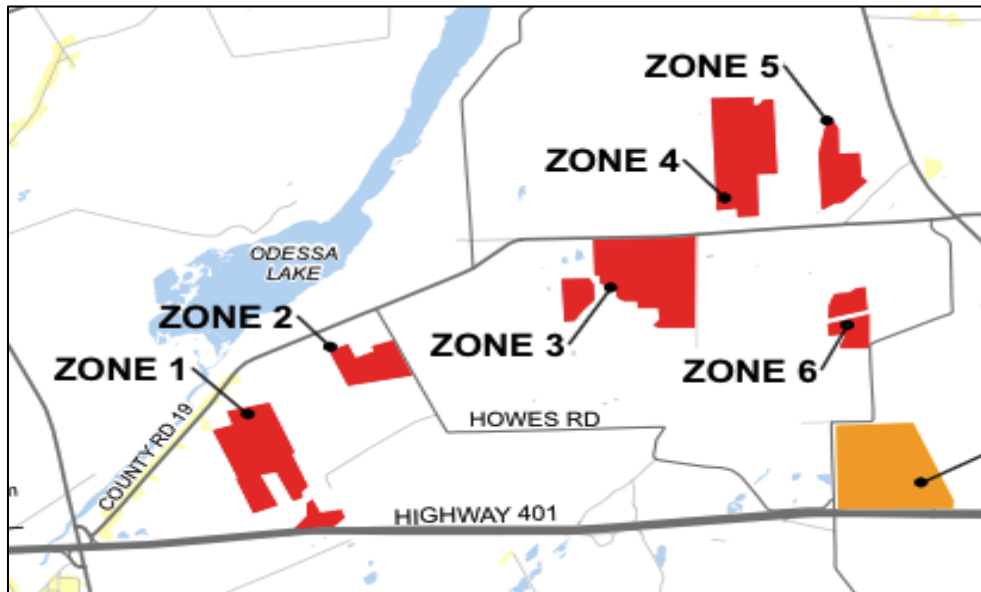
**Civil Works**

- Storm Water Management Plan
- Clearing & Grubbing, Landscaping (we are seeing these actions now)
- Access Road Construction
- Final Grading & Drainage
- Seeding & Landscaping

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<b>Structural Works</b>	<ul style="list-style-type: none"><li>• Inverter House Foundations (switch from DC to AC)</li><li>• Switchyard Foundations</li><li>• Solar Racking Foundations</li><li>• Pole (transmission) Line Foundations</li></ul>
<b>Electrical Works</b>	<ul style="list-style-type: none"><li>• Panel Installation</li><li>• Inverter House Installation</li><li>• Switchyard Equipment Installation</li><li>• Pole Line Conductor and Telecom Installation</li></ul>

David noted that there are six zones in the project. See below for an outline of these zones.



Dan Barnard from Canadian Solar then provided a status update of the project and provided the CLC with the following overview of construction activities currently underway:

- Site Mobilization is complete with Canadian Solar and HB White trailers on site
- Civil work is underway, with clearing and grubbing 60 percent complete
- Silt Fencing underway in Zone 3
- Security Fencing is nearing completion in Zone 4 and commencing in Zone 3
- Access Roads have been cut and are complete in Zone 4 and nearing completion in Zone 3. Commencing in Zone 2
- Laydown Areas are 40 percent complete
- Post Installation is expected to commence this week
- Currently there is no activity in Zone 1.

## 5) Future Construction Plans

David then provided the CLC with highlights from the construction schedule. He noted that:

- Clearing and grubbing will occur between September to November 2014
- Fencing and site grading will occur between September to December 2014
- Solar system construction will take place over a one year period from October 2014 to October 2015.
- Switchyard construction will take place between November 2014 and August 2015.
- Collector lines (new hydro poles) will be installed between March to July 2015.

Following the construction overview, David noted that the project is expected to be complete in the 4th quarter of 2015 (between September to December 2015).

### a. Traffic Management Plan (TMP)

Dan then reviewed the Traffic Management Plan (TMP) and provided the CLC with the following information:

- The TMP was submitted to and approved by the City of Kingston, Loyalist Township, Lennox-Addington and the Ontario Ministry of Transportation (MTO)
- The TMP included plans to route traffic associated with the project away from local traffic where possible. This included constraints for material deliveries from the GTA, material deliveries from the local gravel and concrete suppliers as well as specific requirements for Kingston Solar staff who would be regularly commuting to the project location. In general, the traffic management plan guides traffic around the Project Study Area in a race-track format which follows a clockwise direction. This requires trucks exiting Highway 401 to do so at Wilton Road and circulate along Mud Lake Road / Unity Road to their zone destinations and re-enter Highway 401 at the Gardiners Road interchange.
- Speed reduction, construction warning, traffic control and Zone identification signage has been installed

Dan also noted that any trucks hauling material from the quarry on Westbrook road go north on Westbrook road and then left on Unity road. He emphasized that any trucks that are circulating clockwise in the Project Study Area are most likely associated with the quarry.

**Question 4: I was initially led to believe that there was no construction traffic coming in from Wilton Road. Was the residential density on the eastern portion of Mudlake Road ever taken into consideration in the traffic management plan?**

Dan: The density on Mudlake road was taken into consideration. This had to be balanced with wanting to avoid increased traffic coming in from Highway 38 and Unity Road as there were concerns relating to that intersection stemming from fatal accidents that have occurred in the



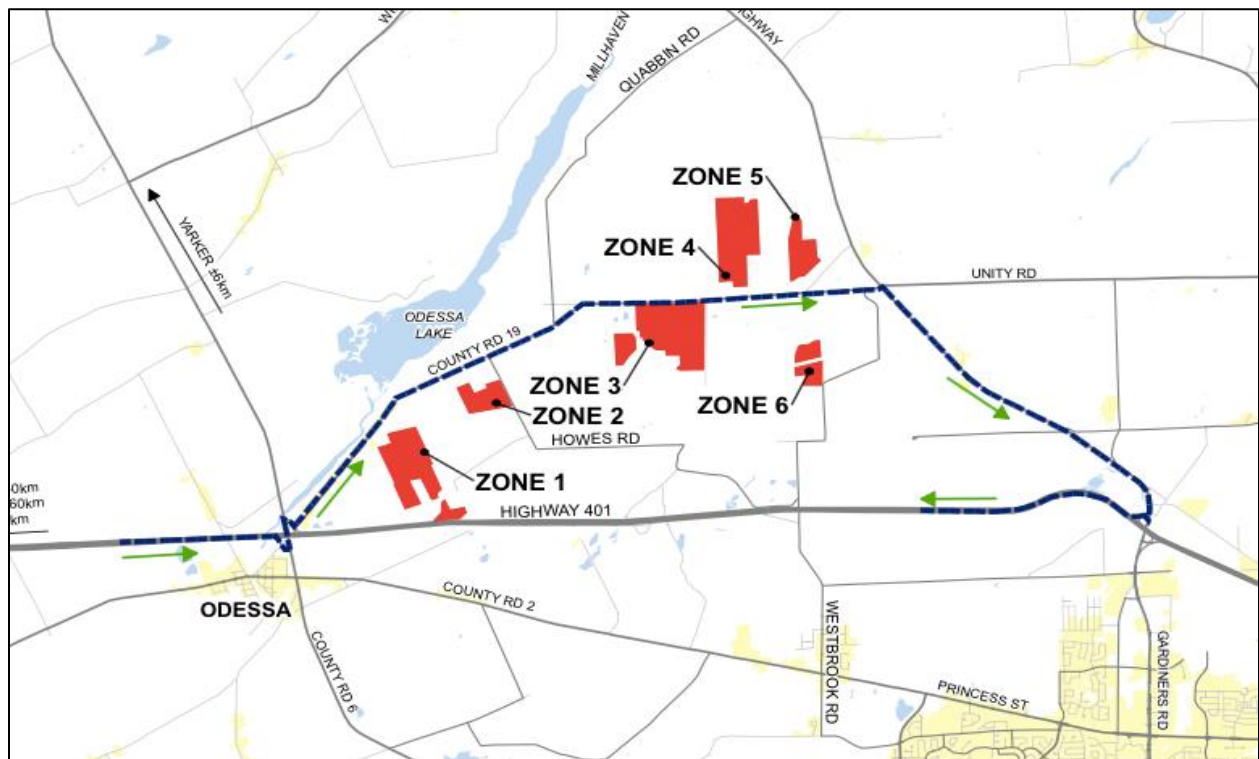
past. The intent was to proactively avoid an increase of traffic at this intersection to reduce the chance of an accident.

**Question 5: Was Loyalist Township involved in the Traffic Management Plan (TMP)?**

Dan: Yes, they were as well as the County of Lennox Addington and the City of Kingston. David also noted that the Ontario Ministry of Transportation (MTO) received a copy of the TMP for review, but . the creation of the TMP was largely driven by the City of Kingston.

**b. Materials Delivery**

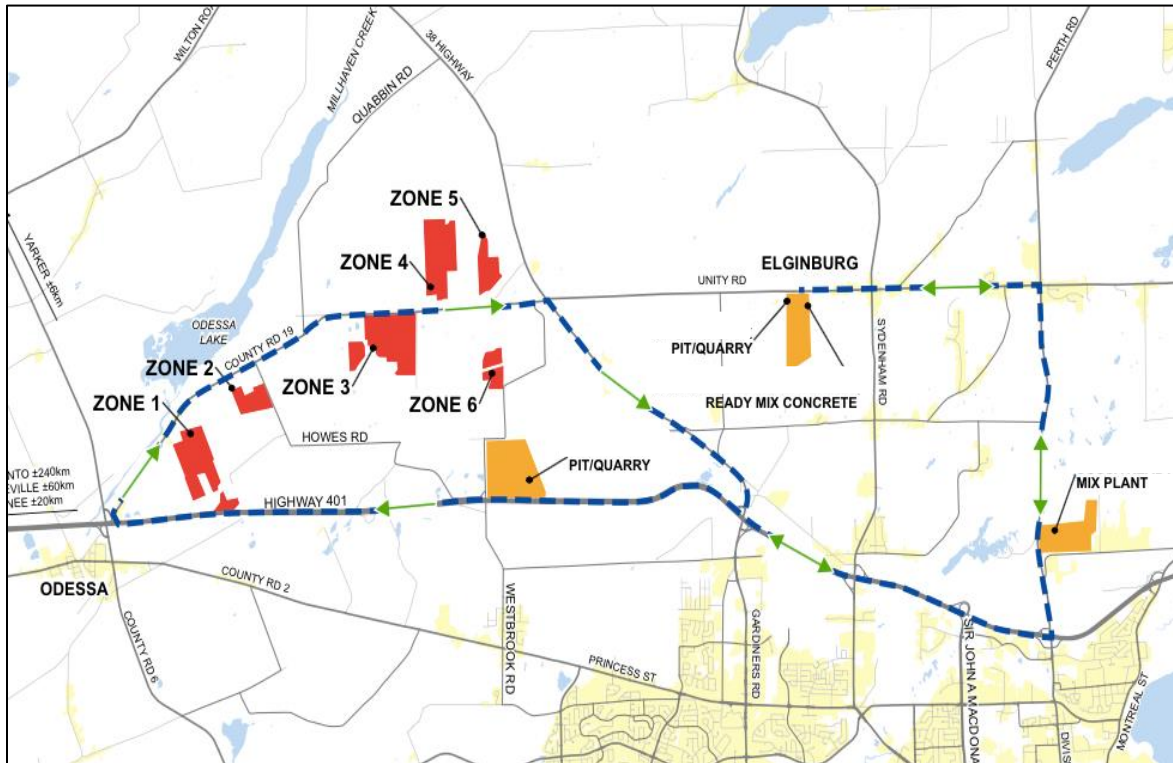
Dan then provided an overview of routing for workers and materials deliveries coming from the greater Toronto area (GTA), with the green arrows highlighting the direction of deliveries (slide 9).



Dan noted that quarry traffic is coming from the Lafarge quarry and Hendrix quarry along Westbrook Road. David also commented that to the extent trucks are arriving from Westbrook Road it reduces the potential construction traffic in the western portion of the project area..

Dan also outlined the routing for the delivery of concrete. Dan walked the CLC through the image on the following page and noted that construction employees will enter the Project Study Area by coming west on Highway 401 and then turn right on County Road 19.

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**Question 6: Is there a timeframe for deliveries?**

Dan: Yes, deliveries are anticipated to begin in Spring, 2015. Materials will be delivered from 7 a.m. to 4 p.m. daily unless during the spring where there are load restrictions in place which require half load deliveries.

**c. Landscape Plans**

Dan then provided the CLC with a high-level overview of the landscape plans and warranties that Kingston Solar has committed too for the Project. Specifically, he noted the following:

- The landscaping plan for the project was developed in consultation with the City of Kingston and Loyalist Township in 2013. As part of that process, Kingston Solar developed models for the landscape plans that described how visual impacts to the surrounding community would be mitigated as part of the Project.
- The landscaping plan was prepared by IBI Group in Waterloo and is posted on the Samsung Renewable Energy website for public review.
- The Project will include berms that will act as a visual barrier between the facility and the community. This berm will be contoured with a naturally undulating design.
- As requested by the City of Kingston Forestry Department, a coniferous component was integrated into the landscape/berm design and will be used to provide vegetative buffering during fall/winter months.

- The revised landscape plans were reviewed by the City of Kingston, Loyalist Township and the Cataraqui Region Conservation Authority and all confirmed that the changes requested by the community and their respective organizations have been met.

David outlined the landscaping plans and noted that diagrams A, B and C in the presentation identify where the new vegetation will be placed and what type of vegetation will be planted. He also showed the CLC visual simulations of the landscaping plan that were included in the plan (refer to slide 16 and 17 of the presentation).

**Question 7: When you plant the trees how high are the trees?**

Dan: The average height is 1 metre to 1.75 metres. The trees will be purchased from local nurseries and heights of the trees will depend on the availability of the trees at the time of planting.

**Question 8: Who will plant the trees and is there a maintenance plan?**

Dan: This will be subcontracted out and Kingston Solar will be placing tender for these works in the spring. Once the subcontractor is selected we will have a better idea of what is proposed for maintenance of the planted trees to ensure they are healthy and survive over the long term. If any trees die over the summer when they are getting established, they will be replaced under warranty in the aforementioned two year security plan.

Mark noted that management of trees including details of where trees are sourced (nursery stock / other) will be added as a topic for the 3rd CLC meeting.

**Question 9: Along some parts of Unity Road in Zone 3 it appears that the berm is complete. However, on the eastern end it looks to be 1.5 metres high but on the western end it appears that there is no berm at all. Is that the final design?**

Dan: No, that is not the final design. The berms are not complete in Zone 3 so it is not what the final berm will look like on the eastern end.

Mark asked if there were other landscaping questions, none were received.

#### **d. Solar Power Technology**

**Question 10: Will the system create local hotspots during the summer?**

David: No, there is not enough mass to hold this heat throughout the night. In places like Arizona, urban heat islands are caused because of the large surface areas of asphalt and concrete in larger metropolitan areas. In many southern U.S. cities, they are looking to mitigate the impact of urban heat islands by placing solar panels over parking lots because the panels do not have mass and shade the paved areas, reducing this effect.

**Question 11: Could the solar equipment be damaged by hail?**

David: The panels are designed to withstand extreme weather events. They are rated to avoid damage from most hail but in extreme circumstances could become damaged.

### **e. Long-term Benefits for the Local Community**

David then outlined that Community benefits relating to the Sol-Luce Kingston Solar PV Energy Project. Specifically, he noted the Project would provide the following:

- Reduce greenhouse gas emissions by generating enough clean electricity to power the equivalent of 17,000 homes in Ontario
- Provide up to 400+ construction jobs for approximately one year
- Increase municipal property taxes paid to the local municipalities for the land used by approximately 10 times what was there previously because of the change from agricultural land to commercial
- Creates operations and maintenance jobs in site and system maintenance as well as subcontractor opportunities for electrical work, vegetation control, snow removal, and security for up to 20 years
- Payment of approximately \$395,000 per a year for 20 years into the Community Vibrancy Fund for 20 years. This relates to nameplate capacity and how much energy is produced in each municipality.

**Comment 1: There is a gentleman with the Loyalist school board who has ideas about a Solar project and was curious if there was funding available for this project.**

Simon Kim from Samsung Renewable Energy noted that this is purely at the discretion of the municipality and Kingston Solar has no input.

**Comment 2: The head planner for the City of Kingston has some ideas as well. The City has said they would consider replacing trees through this fund. As local residents, we should reach out to municipal representatives to get a better understanding of how this money is being spent.**

**Question 12: Of the 400+ jobs created, how many are local?**

Ray: Most of the labour for construction is obtained through the local trade unions. Another factor to consider is the amount of available labour at the local union halls. We do our best to hire local with the people that are available. Regarding the number of expected jobs created, Kingston Solar will provide an update for the 3<sup>rd</sup> meeting based on the most recent projections.

**Question 13: Where is H.B. White located?**

Dan: They are from Brampton but pull people from the local union. HB white is a union contractor unless it is a specialty service that local unions cannot provide.

**Question 14: Are there any jobs which are not unionized?**

David: Typically management jobs associated with the project are non-union. As a note, Kingston Solar is a signatory to all local unions.

**Question 15: Can we have a list of the unions that the project pulls from?**

Dan: While we have to at times pull from other non-local unions, this is not our preference. As construction activities ramp up over the winter this works well for local labour as this is typically

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a slower time of year for many companies. Our labour needs will likely help fill a gap for many construction workers in the Kingston area. Kingston Solar will provide a list of these unions for the 3<sup>rd</sup> meeting.

**Question 16: Who is Kingston Solar using for drilling, are you using All-trade for this?**

Dan: I have not heard anything about using All-trade. We are going to use labour contractors for pouring concrete and filling the holes.

**Question 17: Can you provide the Health and Safety plan and what are your expectations for sub-contractors that you bring in?**

Dan: We cannot provide a copy of our health and safety plan since it is proprietary information, however, we can provide an overview of the healthy protocols and plans that we have in place. We can also share the metrics on how we gauge success relating to health and safety. As a note, there are several aspects to this as each company involved in the project has their own health and Safety plans.

David then provided the CLC with the contact information for the construction and project management team.

Name	Title	Company	Phone	Email
Kingston Solar Construction Hotline			(343) 333-5911	<a href="mailto:info@kingston-solar.com">info@kingston-solar.com</a>
Chris Moran	Project Manager	Kingston Solar	(613) 449-6308	<a href="mailto:cmoran@cclinfrastucture.com">cmoran@cclinfrastucture.com</a>
Dan Barnard	Program Manager	Canadian Solar	(226) 339-5040	<a href="mailto:dan.barnard@canadiansolar.com">dan.barnard@canadiansolar.com</a>
Al Jansen	Construction Manager	Canadian Solar	(226) 971-3941	<a href="mailto:al.jansen@canadiansolar.com">al.jansen@canadiansolar.com</a>
Shahid Pasha	Project Manager	HB White	(289) 233-6953	<a href="mailto:spasha@hbwhitecanada.com">spasha@hbwhitecanada.com</a>

**Question 18: Who is responsible for the airwaves above the project, I believe there is a flight path above the project (Brian Wilson noted that his farm is located on a flight path).**

David: If approval was required, it would have been addressed in the REA process. Also, several airports use solar power at the end of their runways and there have been reflection studies undertaken which have determined that there are no known issues of installing solar panels near airports.

**Question 19: Are there retention ponds at each zone?**

Dan: Yes there are retention ponds at each site.

**Question 20: Any thoughts on creating a project specific newsletter that can be distributed to local members of the public?**

Ray: This is something that Kingston Solar will consider as the project moves forward.



## 6) Public Delegations

At each meeting there is an opportunity for delegations from members of the public. No requests for delegations were received for this meeting.

## 7) Future Items for Discussion / Meeting Evaluation

At the conclusion of the meeting, Mark asked if the Committee members had any specific questions or items that they wished to be discussed at the next meeting. The following items were suggested.

- At some stage the CLC requested that they be provided a tour of the project. There was a suggestion that the Committee could use a van or bus to tour the site, but that for safety reasons people would not be allowed to get out in construction areas.
- The Committee requested more descriptions and images of the construction activities underway for the Project.

## 8) Next Meeting

The third CLC meeting is tentatively scheduled for Spring 2015 (late April early May).

## 9) Summary of Action Items

ID	Action item	Lead
M2A1	Provide further details regarding tree monitoring and management at CLC Meeting #3	Kingston Solar
M2A2	Provide details at CLC Meeting #3 on how much additional revenue is produced from taxation of Solar Farms compared to the taxes that would have been accrued from Agricultural production in the project area.	Kingston Solar
M2A3	Provide update at CLC Meeting #3 on projected number of jobs the project will create.	Kingston Solar
M2A4	Provide a list of the unions that the Sol-Luce Kingston Solar PV Energy Project pulls from at CLC Meeting #3.	Kingston Solar
M2A5	Provide a high level review of the project's Health and Safety plans at CLC Meeting #3.	Kingston Solar
M2A6	Explore opportunities for the CLC to participate in a site tour of the facility.	Kingston Solar

## **Appendix A – List of Attendees**



**Sol-Luce Kingston Solar PV Energy Project**  
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<b>Name</b>	<b>Organization / Role (if any)</b>	<b>Attendance</b>
<b>COMMITTEE MEMBERS</b>		
<b>Richard De Wolfe</b>	Resident / Landowner within 1km of the project	Present
<b>Laura Lee Morris</b>	Resident / Landowner within 1km of the project	Absent
<b>Lance Norman</b>	Resident / Landowner within 1km of the project	Present
<b>Stanley Collins</b>	County Resident / Landowner	Present
<b>Crystal Kuhlman</b>	County Resident / Landowner	Present
<b>Lori Loucks</b>	Lands Resource Consultation representative from Hiawatha First Nation	Present
<b>Brian Wilson</b>	County Resident and Agricultural Community	Present
<b>Canadian Solar Solutions Inc. (CSSI)</b>		
<b>Dan Barnard</b>	Project Manager	Present
<b>Gary McCall</b>		Present
<b>Samsung Renewable Energy Inc. (Samsung)</b>		
<b>Simon Kim</b>	General Manager, Solar Business Development	Present
<b>CarbonFree Technology</b>		
<b>David Oxtoby</b>	CEO	Present
<b>Kingston Solar LP</b>		
<b>Chris Moran</b>	Project Manager	Present
<b>Muzaffer Eryigit</b>	Construction Manager, Civil	Present
<b>Jason Woods</b>	Project Director	Present
<b>Randy McPherson</b>	Site Q.A. Manager	Present
<b>David Pettit</b>	Project Coordinator	Present
<b>HB White</b>		
<b>Ray Bedard</b>	Project Engineer	Present
<b>Shahid Pasha</b>	Project Manager	Present
<b>FACILITATION</b>		
<b>Mark van der Woerd</b>	AECOM	Present
<b>Adam Wright</b>	AECOM	Present





**Appendix B – Sol-Luce Kingston Solar PV Energy Project**  
**CLC Meeting #2 Agenda**

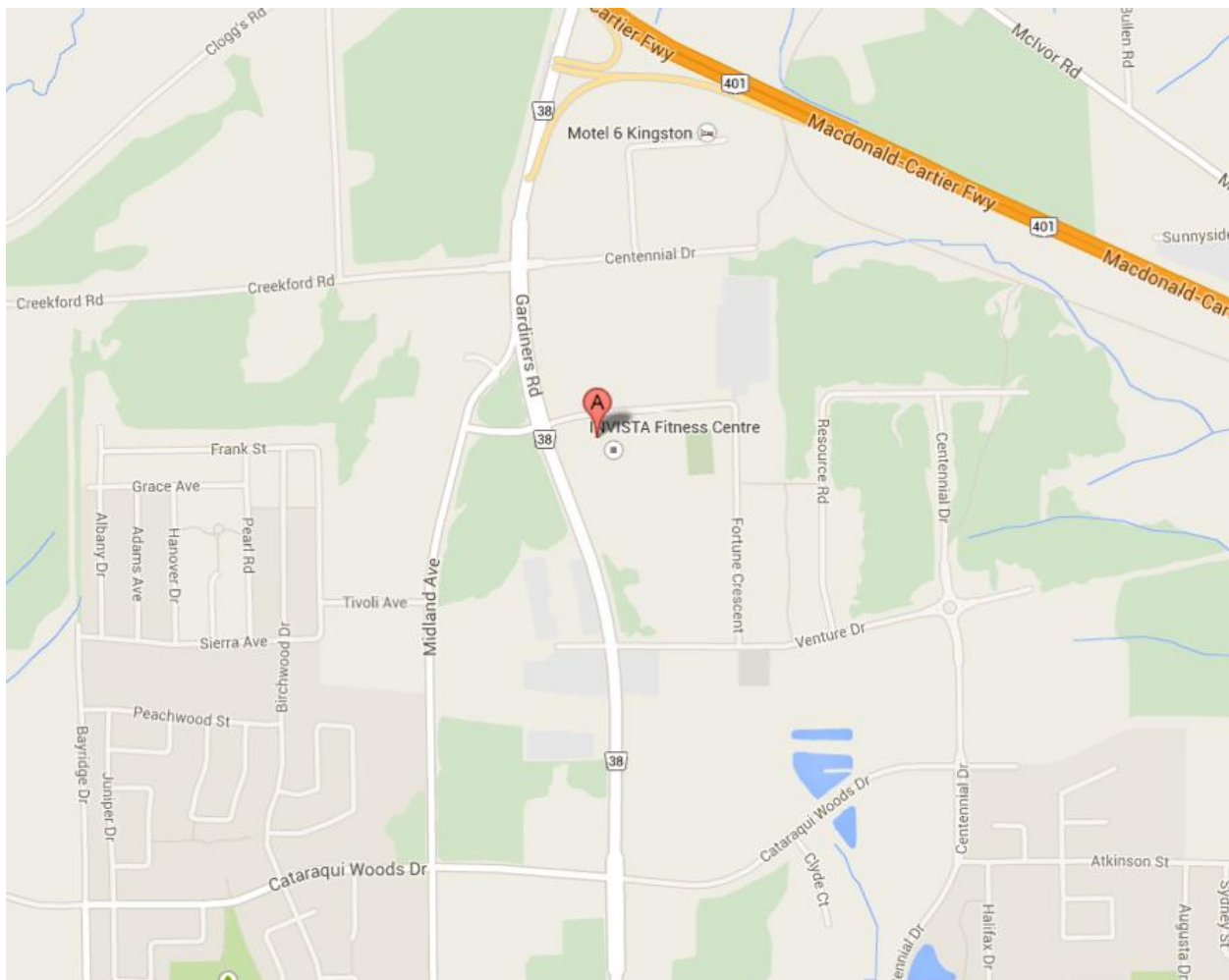
## Sol-Luce Energy Project

### *CLC Meeting #2*

#### Meeting Logistics

- Date: November 26<sup>th</sup>, 2014
- Time: 6:30 p.m. to 8:30 p.m.  
*(A light supper will be provided from 6:00 p.m. to 6:30 p.m.)*
- Location: INVISTA Centre (Downstairs A&B)  
1350 Gardiners Road  
Kingston, Ontario K7P 0E5

#### Map of Venue Location for CLC Meeting #2



## Sol-Luce Energy Project

### CLC Meeting #2

#### Meeting Agenda

<i>Time</i>	<i>Agenda Item</i>	<i>Lead</i>
6:30 p.m.	<b>Introduction</b> <ul style="list-style-type: none"> <li>▪ Welcome from the Project Team</li> <li>▪ Roundtable check-in with CLC members</li> </ul>	AECOM
6:40 p.m.	<b>Review of Action Items from Meeting #1 &amp; Community Questions Received by CLC Members Since Meeting #1</b>	AECOM
7:05 p.m.	<b>Sol-Luce Energy Project Status Update</b> <ul style="list-style-type: none"> <li>▪ Overview of the project schedule</li> <li>▪ Work completed to date</li> <li>▪ Opportunity for questions of clarification and discussion</li> </ul>	Presentation: Kingston Solar  Discussion: AECOM
7:25 p.m.	<b>Future Construction Plans</b> <ul style="list-style-type: none"> <li>▪ Overview of facility construction process and milestone schedule</li> <li>▪ Opportunity for questions of clarification and discussion</li> </ul>	Presentation: Kingston Solar  Discussion: AECOM
7:45 p.m.	<b>Public Delegations</b> <ul style="list-style-type: none"> <li>▪ If received, AECOM to facilitate public delegations</li> </ul>	AECOM
8:15 p.m.	<b>Future Items for Discussion / Meeting Evaluation</b> <ul style="list-style-type: none"> <li>▪ Discussion to gather suggestions about potential presentation topics for future meetings</li> <li>▪ Meeting evaluation – what went well, what could be improved</li> </ul>	AECOM
8:25 p.m.	<b>Next Meeting</b> <ul style="list-style-type: none"> <li>▪ Confirmation of timing for the next meeting</li> </ul>	AECOM

**Appendix C – Sol-Luce Kingston Solar PV Energy Project  
CLC Meeting #2 Presentation**



# KINGSTON SOLAR LP

## Sol-Luce Project Overview

*November 26, 2014*

**KINGSTON**  
**SOLAR LP**

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- Construction Overview
- Traffic Management Plan
- Landscaping Plan
- Solar Technology Questions
- Community Benefits
- Contact Info

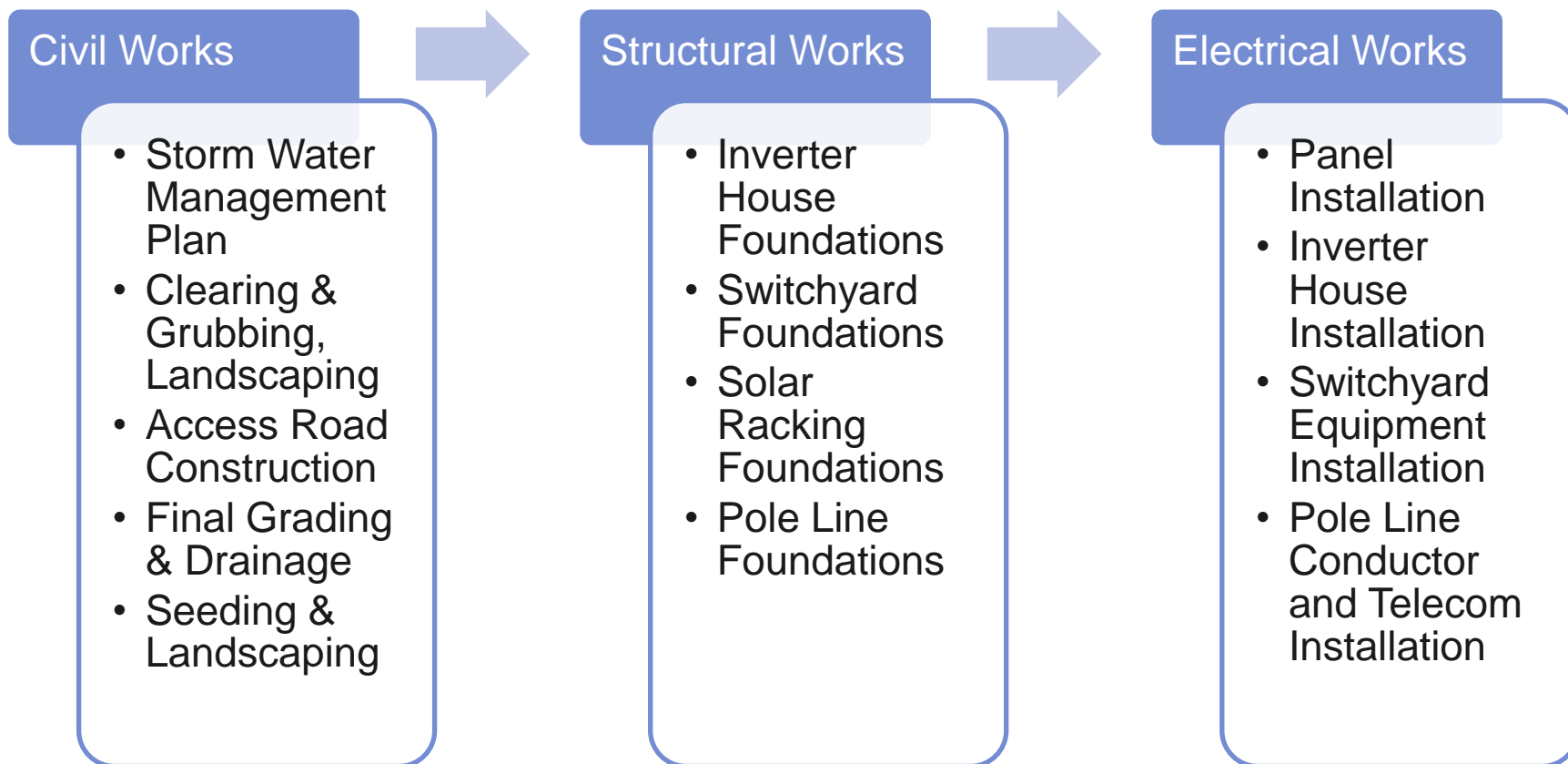
## PROJECT OVERVIEW

- Facility to be located on approximately 800 acres of land bridging the City of Kingston and Loyalist Township
- Comprised of approximately 464,500 ground-mounted photovoltaic (“PV”) modules manufactured in Ontario by Canadian Solar Solutions Inc.
- Total nameplate capacity of 100MWAC / 140MWDC
- Project includes a 230kV substation connected via a short (200m) tie line to existing Hydro One transmission lines

Clean electricity generated will power 17,000 households

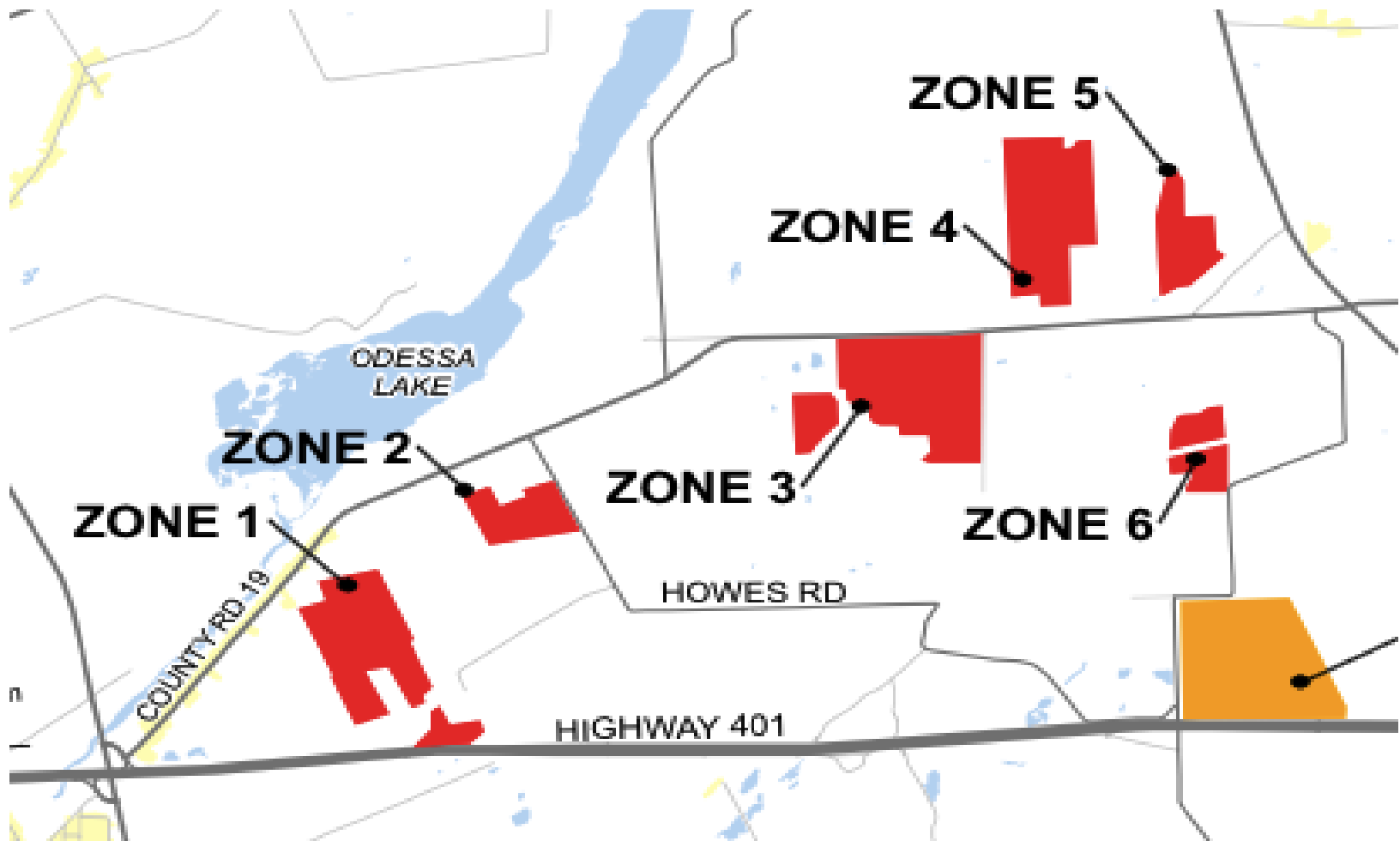


# CONSTRUCTION PROCESS





## PROJECT DIVIDED INTO 6 ZONES



## PROJECT STATUS UPDATE

- Site Mobilization is complete with Canadian Solar and HB White trailers on site
- Civil work is underway, with clearing and grubbing 60% complete
- Silt Fencing underway in Zone 3
- Security Fencing is nearing completion in Zone 4 and commencing in Zone 3
- Access Roads have been cut and are complete in Zone 4 and nearing completion in Zone 3. Commencing in Zone 2
- Laydown Areas are 40% complete
- Post Installation is expected to commence this week

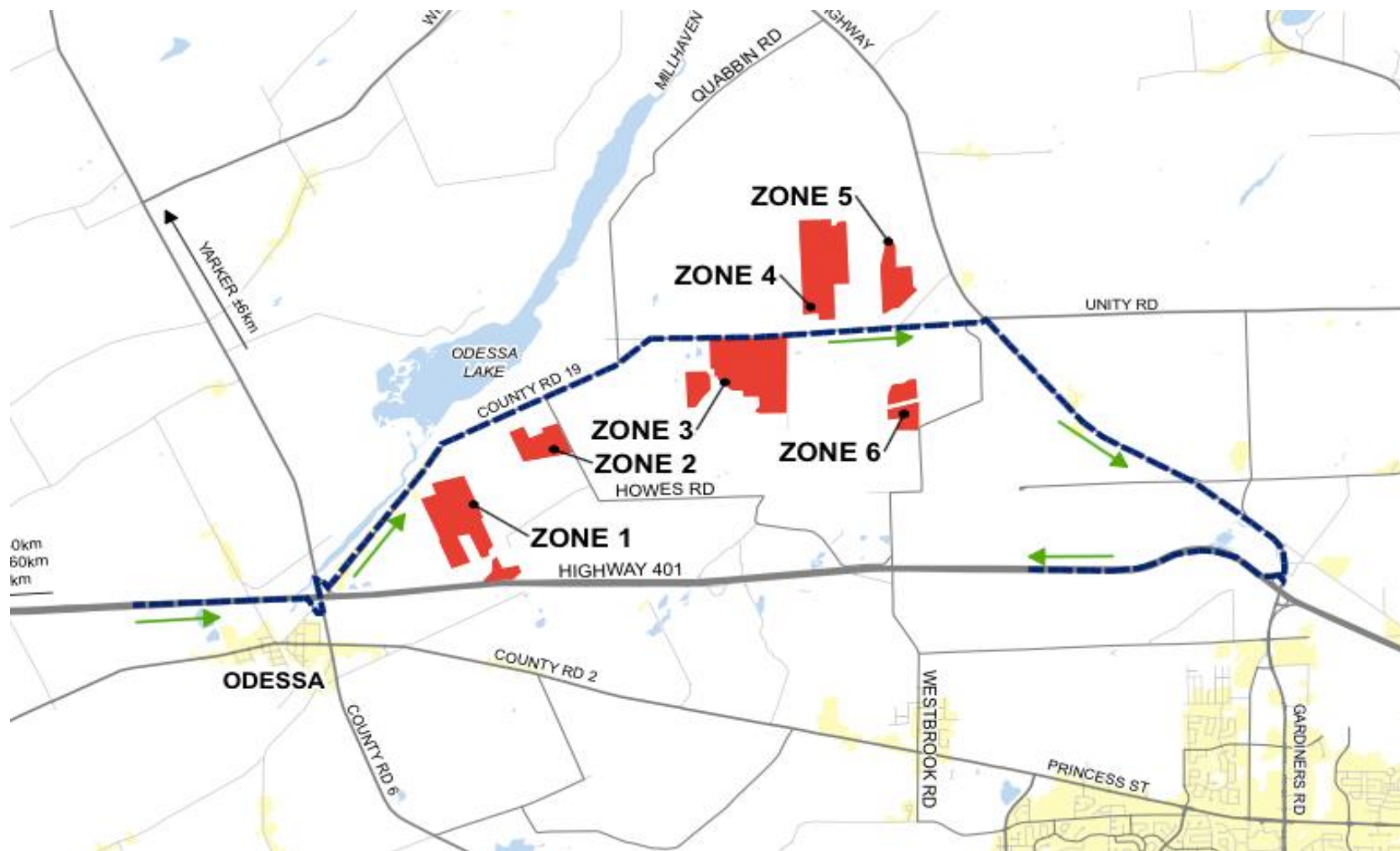
## EXPECTED CONSTRUCTION SCHEDULE

- Clearing & Grubbing Sep 2014 – Nov 2014
- Fencing & Site Grading Sep 2014 – Dec 2014
- Solar Zones Construction Oct 2014 – Oct 2015
- Switchyard Construction Nov 2014 – Aug 2015
- Collector Lines (New Hydro Poles) Mar 2015 – Jul 2015
- Final Completion Sept 2015 – Dec 2015

## RECOMMENDATIONS FROM TRAFFIC MANAGEMENT PLAN

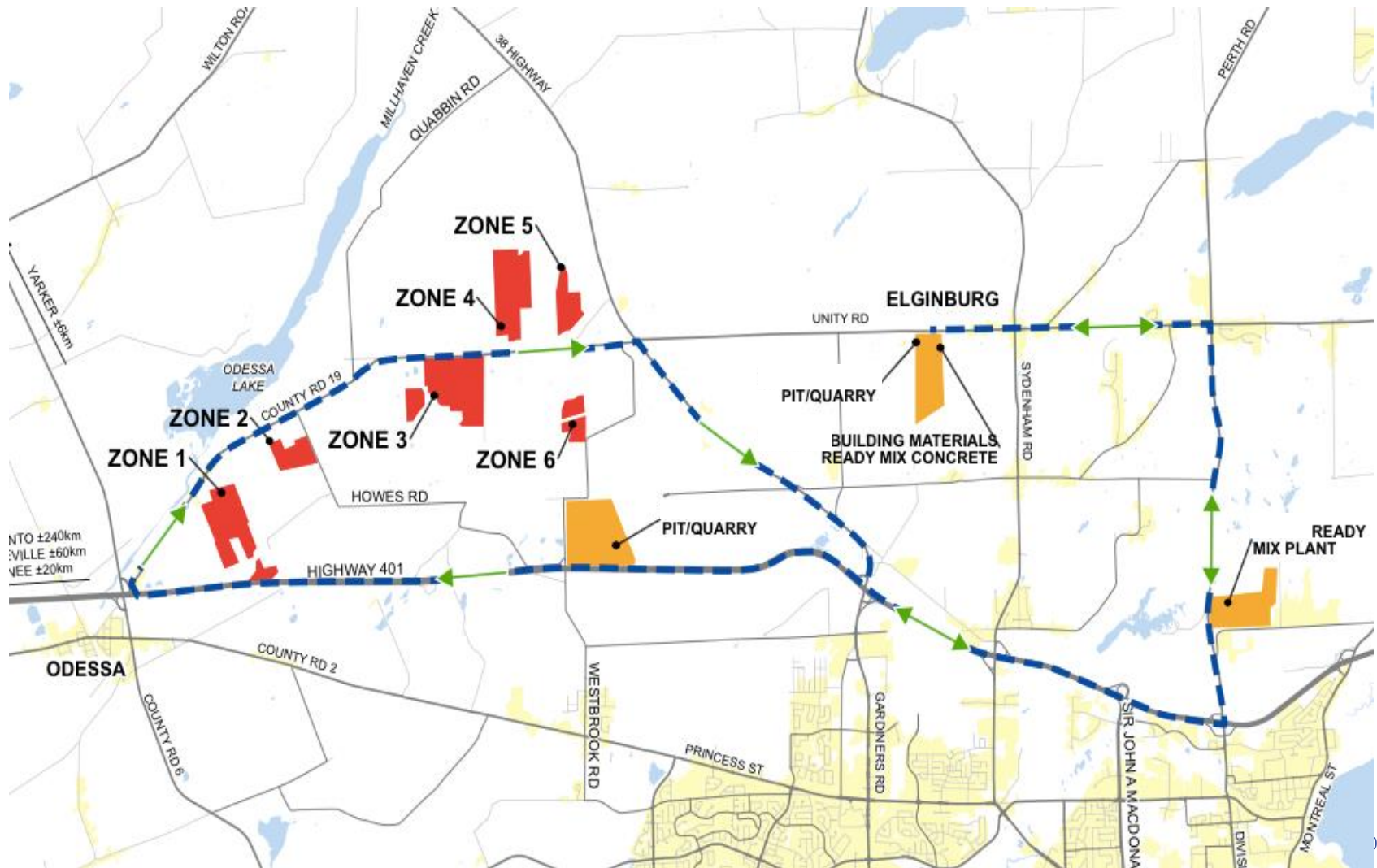
- Implement routing constraints for material deliveries from the GTA, material deliveries from the local gravel and concrete suppliers, and regular commuters. The proposed race-track route follows a clockwise direction, getting trucks to exit Highway 401 at Wilton Road and circulate along Mud Lake Road / Unity Road to their zone destinations and re-enter Highway 401 at the Gardiners Road interchange.
- It is also proposed that concrete trucks from the Souza and Cruickshank plants utilize Perth Road, Highway 401 and Wilton Road instead of Gardiners Road.
- Schedule truck deliveries to avoid the peak hours of traffic in the morning and afternoon peaks.
- Pursue measures to mitigate or avoid placing delivery trucks on Mud Lake Road north due to the half load season.
- Provide way-finding signage system in accordance with MTO and municipality requirements to reinforce routing and timing constraints to truck drivers.
- Install paved site entrances to the satisfaction of the County and the City prior to construction of the solar farm.
- Observe and obey agency noise by-laws or obtain exemptions as required.

# ROUTING FOR WORKERS AND MATERIAL DELIVERIES





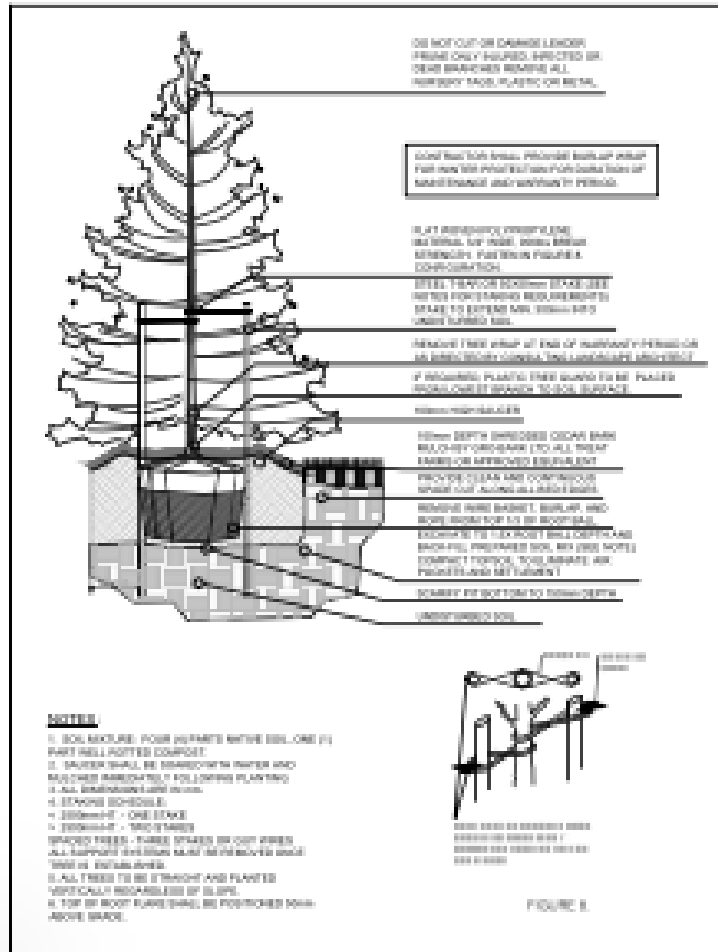
# ROUTING FOR CONCRETE TRUCKS



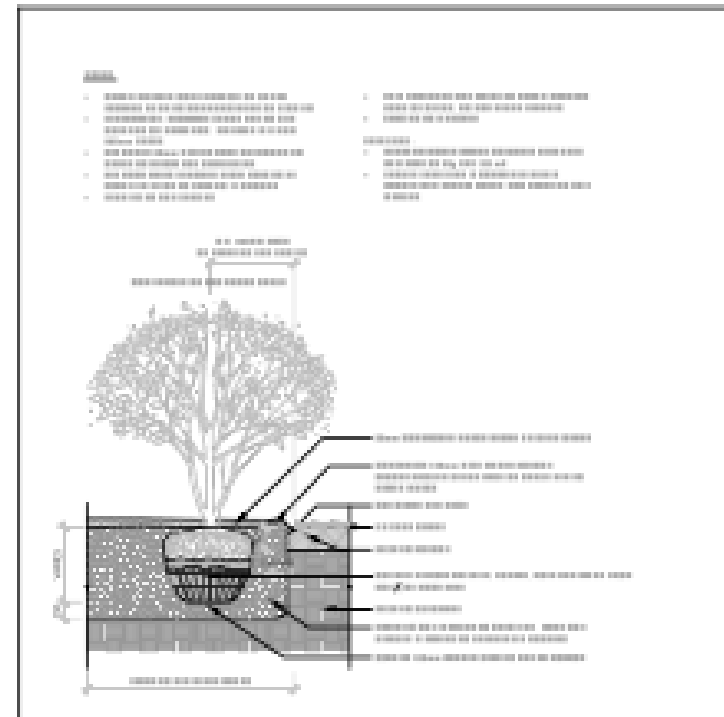
## LANDSCAPING PLANS

- Through consultation with the City of Kingston and Loyalist Township in 2013, Kingston Solar landscape plans were generated to model visual impacts
- Plan prepared by IBI Group of Waterloo – to be posted on Samsung Renewable Energy website
- Berms are to be contoured with a naturally undulating design
- As requested by the City of Kingston Forestry Department, a coniferous component will be used in the vegetative buffering
- The revised landscape plans were reviewed by the City of Kingston, Loyalist Township and the Cataraqui Region Conservation Authority and all confirmed that the requested changes have been applied to the project

# LANDSCAPING PLAN – TYPES OF VEGETATION



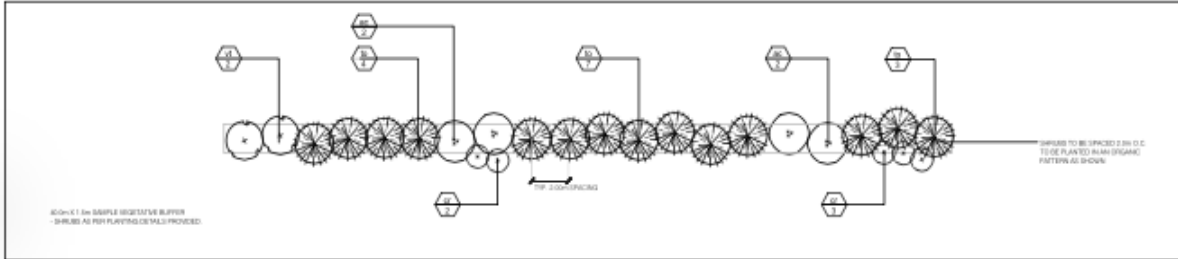
**D1** BALLED & BURLAPPED WIRE BASKET CONIFEROUS TREE  
 N.T.A.



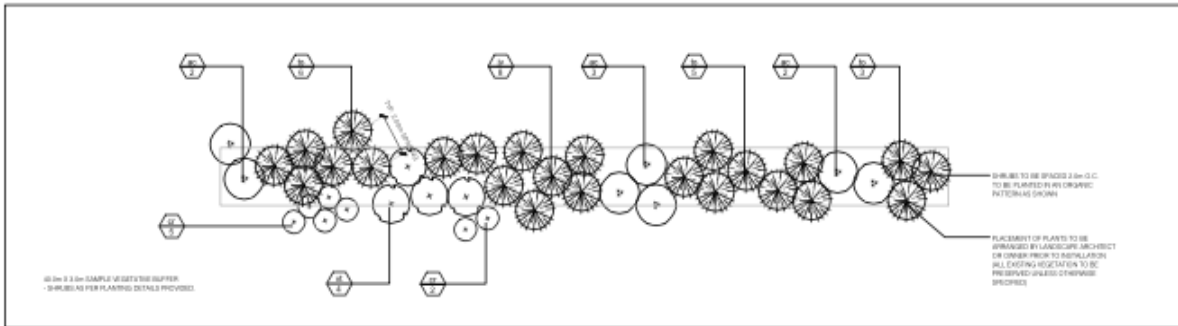
**D2** SHRUB INSTALLATION  
 N.T.A.



# DETAILS OF LANDSCAPING PLANS - BUFFERS A AND B



D3 BUFFER A - 1.5m WIDE VEGETATIVE BUFFER  
SCALE: 1/8"



D4 BUFFER B - 3.0m WIDE VEGETATIVE BUFFER  
SCALE: 1/8"

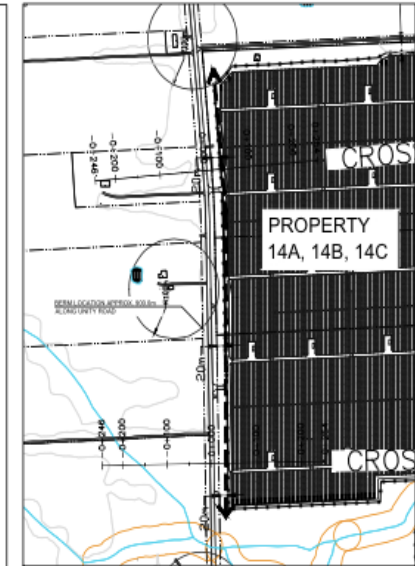
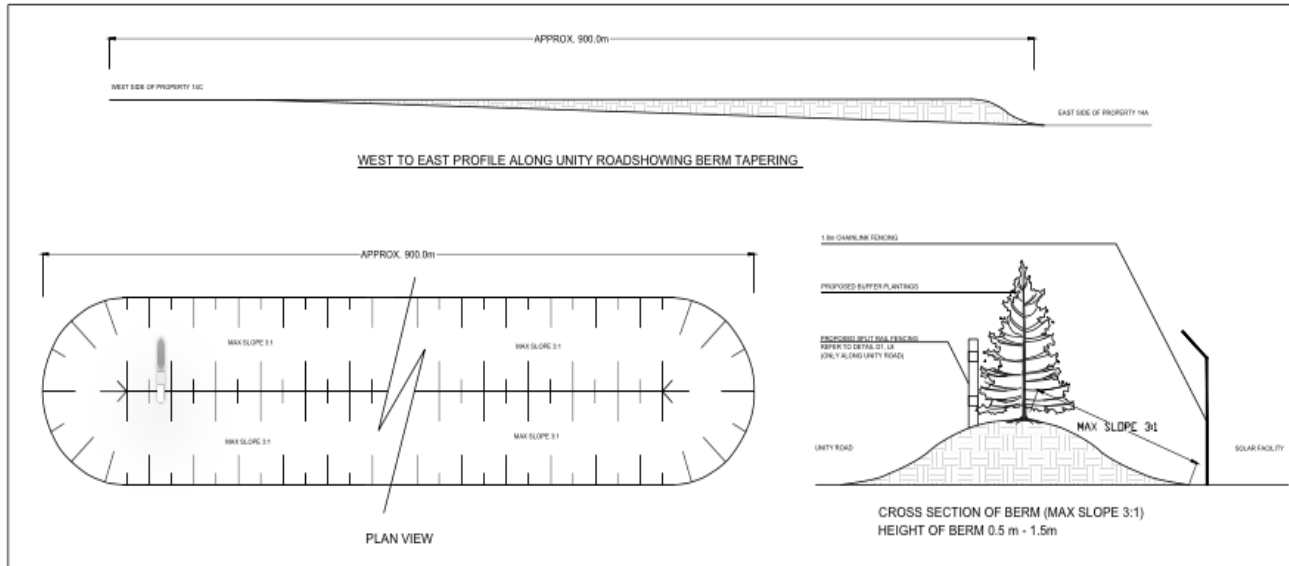
## BUFFER A - VEGETATIVE BUFFER PLANT LIST

KEY	BOTANICAL NAME	COMMON NAME	CAL.	SIZE	COND.	MATURE HEIGHT (ft)	MATURE SPREAD (ft)	MIN. O.C. (ft)	QNTY.	QNTY. TOTAL	
ac	<i>Azalea/clar canadensis</i>	Sensiberry	175cm	B.S.	6.6	9.0	2.6	4	107		
cr	<i>Cornus racemosa</i>	Gray Dogwood	175cm	B.S.	3.6	2.5	1.6	6	134		
vl	<i>Viburnum 9-lobum</i>	High Bush Cranberry	175cm	B.S.	3.6	3.0	2.6	2	53		
tc	<i>Thuja occidentalis</i>	White Cedar	175cm	B.S.	28.0	2.5	2.6	14	375		
									TOTAL	25	669

## BUFFER B - ENHANCED VEGETATIVE BUFFER PLANT LIST

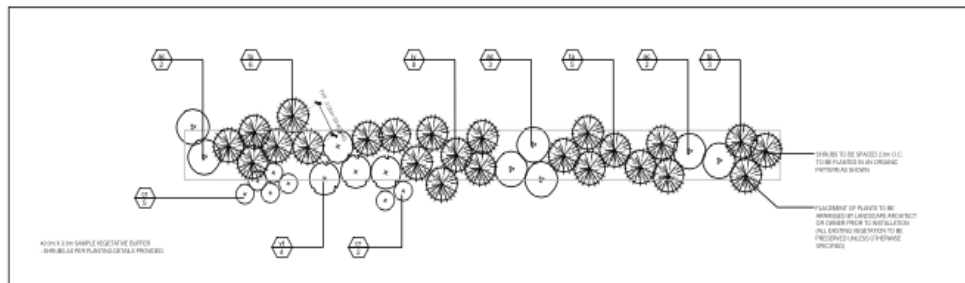
KEY	BOTANICAL NAME	COMMON NAME	CAL.	SIZE	COND.	MATURE HEIGHT (ft)	MATURE SPREAD (ft)	MIN. O.C. (ft)	QNTY.	QNTY. TOTAL	
<b>BUFFER B</b>											
ac	<i>Azalea/clar canadensis</i>	Sensiberry	175cm	B.S.	6.6	3.0	2.6	7	167		
cr	<i>Cornus racemosa</i>	Gray Dogwood	175cm	B.S.	3.6	2.5	1.6	7	167		
vl	<i>Viburnum 9-lobum</i>	High Bush Cranberry	175cm	B.S.	3.6	3.0	2.6	3	68		
tc	<i>Thuja occidentalis</i>	White Cedar	175cm	B.S.	28.0	2.0	2.6	9	202		
ev	<i>Juniperus virginiana</i>	Eastern Red Cedar	175cm	B.S.	16.0	3.0	2.6	8	183		
									TOTAL	34	764

# DETAILS OF LANDSCAPING PLANS – BUFFER C



D2 HEIGHT BEHIND BERM ALONG PROPERTIES 14A, 14B, 14C (REFER TO PLANS FOR BERM LOCATIONS)

E1 BERM LOCATION KEY MAP



D3 BUFFER C - 1.5M WIDE VEGETATIVE BUFFER ON TOP OF BERM

**BUFFER C - ENHANCED VEGETATIVE BUFFER PLANT LIST**

KEY	BOTANICAL NAME	COMMON NAME	CAL.	SIZE	COND.	MATURE HEIGHT (M)	MATURE SPREAD (M)	MIN. C.C. SPACING (M)	QTY.	QTY. TOTAL	
<b>BUFFER B</b>											
06	<i>Arundo donax</i>	Reed/Rattler	175cm	B.S.	0.0	3.0	2.0	7	273		
07	<i>Cyperus tenuiflorus</i>	Grass (Meadow)	175cm	B.S.	2.0	2.5	1.5	7	273		
11	<i>Stachys triflorus</i>	Large Bush (Caulis)	175cm	B.S.	1.0	5.0	2.5	3	47		
16	<i>Thuja occidentalis</i>	White Cedar	175cm	B.S.	20.0	2.0	2.5	6	361		
17	<i>Juniperus virginiana</i>	Canadian Red Cedar	175cm	B.S.	15.0	3.0	2.5	6	312		
									TOTAL	36	736

## QUESTIONS ABOUT SOLAR POWER TECHNOLOGY

- Will the system create local hotspots during the summer? - No
- Could the equipment be damaged by hail? – Only if hailstones are very large



# LANDSCAPING PLAN – VISUAL SIMULATIONS





# LANDSCAPING PLAN – MITIGATION PLANTING



## LONG-TERM BENEFITS FOR LOCAL COMMUNITY

- Help Ontario reduce greenhouse gas emissions by generating enough clean electricity to power 17,000 homes
- 650 jobs onsite for approximately one year
- Annual payments made to Community Vibrancy Funds for Kingston and Loyalist Township for 20 years
- Municipal property taxes increase by ~10x because of change from Agricultural to Commercial classification
- Creates operations & maintenance jobs in plant & system maintenance, repairs, electrical work, system monitoring, vegetation control, snow removal, security, etc. for 20 years


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**KINGSTON  
SOLAR LP**