THE CORPORATION OF THE TOWN OF AMHERSTBURG

BY-LAW NO. 2011-15

A by-law to authorize the signing of a Development Agreement.

WHEREAS 1710690 Ontario Inc. has proposed a temporary construction staging area on the property at 265 Concession 3 N to facilitate the establishment of solar energy facilities to be developed on the adjacent lands municipally known as 191 Concession 3 North;

AND WHEREAS the Council of the Town of Amherstburg and owners of the said property have agreed to the terms and conditions of a Development Agreement in the form annexed hereto;

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF AMHERSTBURG HEREBY ENACTS AS FOLLOWS:

- 1. That the Mayor and Clerk be and they are hereby authorized to execute the original and copies of a Development Agreement in the form annexed hereto and affix the Corporate Seal thereto.
- 2. This By-law shall come into force and effect on the date of final passage hereof.

Read a first, second and third time and finally passed this 24th day of January, 2011.

Wayne Hurst

Brenda M. Percv

TOWN OF AMHERSTBURG

DEVELOPMENT AGREEMENT

BETWEEN:

1710690 ONTARIO INC.

-AND-

THE CORPORATION OF THE TOWN OF AMHERSTBURG

DEVELOPMENT AGREEMENT

THIS AGREEMENT made in triplicate this 24th day of January, 2011.

BETWEEN:

1710690 ONTARIO INC. Hereinafter called the "**Owner**"

OF THE FIRST PART;

– and –

THE CORPORATION OF THE TOWN OF AMHERSTBURG Hereinafter called the "Corporation"

OF THE SECOND PART;

WHEREAS the lands affected by this Agreement are described in Schedule "A" attached hereto, and are hereinafter referred to as the "Lands";

AND WHEREAS the Owner warrants that as of the date hereof it is the registered owner of the Lands;

AND WHEREAS the Owner intends to develop a portion of the said Lands for a temporary construction staging area (the "Construction Staging Area") in accordance with the Site Plan attached hereto as Schedule "B", and hereinafter referred to as the "Site Plan", in order to facilitate the establishment of one or more solar energy facilities on adjacent lands;

AND WHEREAS the Corporation passed By-Law 2011-05 (the "Temporary Use By-Law") on January 10, 2011 being a by-law to amend Zoning By-law No. 1999-52, as amended, to permit a temporary Construction Staging Area on the said Lands;

AND WHEREAS the Corporation, as a condition of development of the Construction Staging Area on the said Lands, requires the Owner to enter into a Development Agreement;

AND WHEREAS, in this Agreement the "Owner" includes an individual, an association, a partnership or corporation and, wherever the singular is used therein, it shall be construed as including the plural;

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of other good and valuable consideration and the sum of FIVE (\$5.00) DOLLARS of lawful money of Canada, now paid by each of the parties hereto to the other party hereto, (the receipt of which is hereby acknowledged), the parties hereby covenant and agree as follows:

1. The following Schedules, which are identified by the signatures of the parties to this Agreement, and which are attached hereto, are hereby made a part of this Agreement as fully and to all intents and purposes as though recited in full herein:

SCHEDULE "A"	- Legal description of the Lands
SCHEDULE "B" ("B-1" to "B-8") SCHEDULE "B-1" SCHEDULE "B-2" SCHEDULE "B-3"	- Site Plan Drawings - Overall Site Plan (Drawing C101) - General Notes (Drawing C111) - Abbreviations and Legend (Drawing

SCHEDULE "B-4" SCHEDULE "B-5" SCHEDULE "B-6" SCHEDULE "B-7"

SCHEDULE "B-8"

SCHEDULE "C" ("C-1 to "C-3") SCHEDULE "C-1"

SCHEDULE "C-2"

SCHEDULE "C-3"

SCHEDULE "D"

- Stormwater Management Report

- Demolition Plan (Drawing C131)

- Move On Layout Plan (Drawing C201)

- Typical Fence Details (Drawing C902)

- Monument and Fence Plan (Drawing

- Traffic Control and Signage Details

- Move On Grading and Drainage Plan

- Typical Erosion and Sediment Control

- Grading and Drainage Drawings

- Erosion & Sediment Control Plan

- 2. Schedule "A" hereto describes the Lands.
- 3. Schedule "B" hereto shows:
 - a) Layout of Construction Staging Area on the Lands
 - b) Location of temporary fence
 - c) Location of temporary removal of vegetation from hedgerow
 - d) Location of temporary access roads
 - e) Location of Construction Staging Area on the Lands

4. Schedule "C" hereto shows:

- (a) Grading and drainage details
- (b) Erosion and sediment control details
- 5. Schedule "D" hereto shows:
 - (a) Stormwater Management Report
- 6. Construction and Truck Routes

The haul route during establishment of the Construction Staging Area shall use County Road 10 and Concession 3 North. The Owner shall adhere to load restrictions in effect at the time of construction for both County and municipal roads.

Construction will take place on a daily basis between the hours of 7:30 a.m. and 4:30 p.m., Monday to Friday.

The Owner shall ensure that trucks and equipment leaving the Construction Staging Area are not laden with dirt, mud or debris. The Owner shall keep the highway surfaces clean of any debris and upon notice from the Corporation, the Owner shall immediately clean any debris off the highway. Failure of the Owner to respond will result in the Corporation arranging for the cleaning and invoicing the Owner which expense may also be recovered as municipal taxes with respect to the Lands.

C112)

C241)

(Drawing C801)

(Drawing C211)

(Drawing C231)

Details (Drawing C903)

If any municipal services or highway surfaces of the Corporation are damaged during the development, such damage shall be repaired or replaced by the Owner to the satisfaction of the Corporation. Failure of the Owner to repair or replace such damage will result in the Corporation arranging for the repair and/or replacement and invoicing the Owner which expense may also be recovered as municipal taxes with respect to the Lands.

7. Snow Removal

Snow removal from the access roads and within the Construction Staging Area, if required, shall be the responsibility of the Owner.

8. Driveway Access

All new accesses and/or improvement to existing accesses shall be in consultation with and in accordance with the requirements of the Corporation's Director of Engineering and Infrastructure and Drainage Superintendent and shall be installed at the expense of the Owner.

- 9. Stormwater Management
 - (a) The Owner shall undertake a site grading plan and a stormwater management analysis for the Lands as indicated in Schedule "D" to the satisfaction of the Corporation.
 - (b) The Owner shall install stormwater management measures as approved by the Corporation and the Essex Region Conservation Authority as part of the development of the Lands, to the satisfaction of the Corporation.
 - (c) The Owner shall obtain the necessary permits and/or clearance prior to construction activities and/or site alterations.
 - (d) The Owner shall conduct regular inspections once every two weeks and after each sizable storm event of all sediment and erosion control measures recommended in the approved stormwater management plan during use of the construction staging area.
 - (e) The Owner shall maintain an inspection log which shall be made available for review by the Corporation and the Essex Region Conservation Authority, upon request. The log shall state the name of the inspector, date of the inspection and rectification or replacement measures which were taken to maintain the sediment and erosion control measures. Inspections shall continue until development of the Lands for the Construction Staging Area is complete and approved by the Corporation.

10. Garbage and Refuse

Any garbage or refuse that is stored outside shall be stored in a noncombustible container and maintained so that garbage or refuse does not blow or fall out of the container.

11. Lighting

Any and all lighting shall be installed and maintained in accordance with the standards set out in the Town's Development Manual so as to not, in the opinion of the Corporation interfere with the use or enjoyment of adjacent properties or with the safe flow of traffic on abutting or adjacent streets. In addition to the requirement of full cut-off (directional lighting), the type, amount and intensity of lighting will also be a consideration in consultation with the Corporation to prevent undue light pollution.

12. Fencing

The Owner agrees to construct a fence on those lands indicated on Schedule "B-5" in accordance with the fence detail forming part of Schedule "B-6".

13. Driveways

All driveways for emergency vehicles shall:

- (a) be connected with a public thoroughfare;
- (b) be designed and constructed to support expected loads imposed by firefighting equipment;
- (c) have a clear width of 3 meters at all times;
- (d) have an overhead clearance of not less than 4.5 meters
- (e) have a change in gradient of not more than 1 in 12.5 over a minimum distance of 15.2 meters; and
- (f) have approved signs displayed to indicate the emergency route.

14. Certification by Architect or Professional Engineer

If the Ontario Building Code requires that an architect or professional engineer or both shall be responsible for the field review of any new building or extension provided for in this Agreement, the Owner shall not occupy or use or permit to be occupied or used any said new building or extension until after an architect or professional engineer has given to the Corporation a letter addressed to the Corporation and signed by him certifying that all services on or in the Lands, required for the development of the Construction Staging Area, newly installed by the Owner in connection with such development and not contained within a building, have been installed and completed in a manner satisfactory to the architect or professional engineer.

15. Corporation's Right to Enter

The Corporation through its servants, officers, and agents, including its building inspector, plumbing inspector, fire chief, public works head and municipal engineer may from time to time and at any time and upon reasonable notice to the Owner enter on the Lands to inspect:

- (a) the progress of development;
- (b) the state of maintenance as provided for by this Agreement.

16. Stop Work Orders

In the event of any servant, officer or agent of the Corporation determining upon inspection that the development of the Construction Staging Area is not proceeding in strict accordance with the plans and specifications filed, such servant, officer or agent shall forthwith place a notice requiring all work to be stopped upon the Construction Staging Area and forward a copy by registered mail to the Owner to the address set out below in this Agreement, and the Owner shall forthwith correct the deficiency or deviation.

17. Notices of Non-Compliance

In the event of any servant, officer or agent of the Corporation, upon inspection, being of the opinion that the state of maintenance of works on the Construction Staging Area is not in accordance with the requirements of this Agreement, such servant, officer or agent shall forthwith forward notice of such opinion to the Owner by registered mail to the address set out below in this Agreement, and the owner shall forthwith correct the deficiency to the standard required hereby.

18. Failure to Obey Stop Work Order

In the event that the Owner should fail to obey a stop work order issued under Section 17 hereof, the Owner recognizes the right of the Corporation to apply to the Court for a restraining order.

19. Correction of Deficiencies by Owner

Subject to the rights of the Owner under statute and at law, in the event that the Owner should fail to correct a deviation or deficiency after notice is given pursuant to Section 18, the Corporation, after two (2) weeks notice given to the Owner by registered mail to the address set out below in this Agreement, may correct the deviation or deficiency to the standard hereby required, the expense of which shall be forthwith paid by the Owner on demand by the Corporation, failing which such costs may be recovered as municipal taxes with respect to the Lands.

20. Obligations of Owner upon Expiry of Temporary Use By-Law, and Indemnification

(A) Expiry of Temporary Use By-Law

Upon expiration of the Temporary Use By-Law 2011-05 (including any extension by the Corporation of the term of the Temporary Use By-Law), the Owner shall cease using the Lands for the purposes of a temporary construction staging area, and shall remove or cause to be removed all construction materials, debris, concrete washout residue and machinery and equipment of a temporary nature (including, without limitation, trailers and sanitary holding tanks) which are not permitted under the Temporary Use By-Law ("Machinery and Equipment"). The Owner shall repair or cause the repair, forthwith at his expense, of any damage caused to the Lands by the removal of Machinery and Equipment (the "Machinery and Equipment Removal"). Notwithstanding the foregoing, the owner may elect to retain improvements made during construction which are consistent with the agricultural use permitted by Zoning By-law No. 1999-52, as amended.

(B) Indemnification

The Owner shall at all times indemnify and save the Corporation harmless from and against any claims, demands, losses, costs, charges, expenses, actions and other proceedings (including those in connection with workplace safety and insurance compensation or any similar or successor arrangement) made, brought against, suffered by, imposed on or incurred by the Corporation in respect of any failure by the Owner to fulfill any of its obligations under this Agreement, including but not limited to the costs associated with Machinery and Equipment Removal, incurred by or on behalf of the Corporation, as a result of any loss, damage or injury (including injury resulting in death) to any person or property (including, but not limited to, employees, contractors, agents and property of the Corporation) directly arising out of, resulting from or sustained by reason of the Owner's occupation or use of the Lands for the Construction Staging Area, or any operation in connection therewith or any fixtures or chattels thereon, but excluding those caused by the acts, omissions and negligence of the Corporation and those for whom the Corporation is or was responsible. The Corporation may, in its sole discretion, undertake, in whole or in part, the Machinery and Equipment Renewal and incur the costs associated therewith, and shall collect those costs from the Owner, and/or recover them as municipal taxes with respect to the Lands.

21. Change or Amendment to this Agreement

In the event that the Owner wishes to change at any time any of the building structures or facilities described in the plans annexed or referred to herein, or to otherwise amend this Agreement, it shall make an application to the Council of the Corporation for approval of such change or amendment and shall not proceed to implement such change or amendment until approval is given by such Council, or in default by the Ontario Municipal Board under the appeal procedure set out in Section 41(12) of the *Planning Act*, R.S.O. 1990.

22. No Rights Obtained against Corporation

This Agreement and the provisions thereof do not give the Owner or any other person acquiring any interest in the Lands any rights against the Corporation with respect to the failure of the Owner to perform or fully perform any of its obligations under this Agreement or any negligence of the Owner in its performance of the said obligations.

23. Agreement Binds Lands

It is specifically acknowledged and agreed that the burden of this Agreement shall run with the Lands. In this Agreement, "Owner" shall include any Owner of the Lands from time to time.

24. Enurement

This Agreement, including all its covenants, provisos, conditions and schedules shall enure to the benefit of and be binding upon the Parties hereto and their respective heirs, executors, administrators, successors and assigns.

25. Financial Securities

The Owner shall deliver to the Corporation a financial guarantee (certified cheque or irrevocable letter of credit - self renewing without burden of proof) for 50% of the value of on-site improvements required to be constructed under this Agreement (exclusive of the value buildings and structures on the Lands) in addition to financial security in the amount of 100% of the value of all off-site works required to be constructed under The Owner's engineer and landscape architect shall this Agreement. provide a certified estimate of the value of such on-site and off-site work for consideration and approval by the Corporation's Director of Engineering and Infrastructure. Once the Corporation has inspected and approved the construction/installation/planting of such on-site and off-site works, the said financial guarantee and financial security shall be returned, without interest, by the Corporation to the Owner, save and except for an amount equal to 15% of the value of such on-site and off-site improvements, which amount shall be retained by the Corporation for a period of one year following completion of construction of such works as security for the maintenance of such works by the Owner, and which amount shall be returned, without interest, by the Corporation to the Corporation Owner upon the approval by the of the construction/installation of the said works at the end of such one year period

26. Due Authorization by Corporation

The Corporation hereby represents that the Corporation has the necessary power, authority and capacity to enter into this Agreement and to perform its obligations under this Agreement on the terms and subject to the conditions set out herein, and that the execution and delivery of this Agreement and performance by the Corporation of its obligations hereunder have been duly authorized by all requisite corporate and other proceedings on the part of the Corporation.

27. Notice

Any notice, direction, certificate, consent, determination or other communication required or permitted to be given or made under this Agreement shall be in writing and shall be effectively given and made if (i) delivered personally, (ii) sent by registered mail, or (iii) sent by electronic mail or other similar means of electronic communication, in each case to the applicable address set out below:

(a) if to the Owner, to:

1710690 Ontario Inc. P.O. Box 517 4955 Walker Road Windsor, ON N9A 6M6 Attention: Loris Collavino Facsimile: (519) 737-6464

(b) if to the Corporation, to:

The Corporation of the Town of Amherstburg 271 Sandwich Street South Amherstburg, ON N9V 2A5 Attention: Planning Coordinator Facsimile: (519) 736-9859

Any such communication so given or made shall be deemed to have been given or made and to have been received on the day of delivery if delivered, or on the day of sending by electronic or other means of recorded electronic communication, provided that such day in either event is a day other than a Saturday, Sunday or statutory holiday in the Province of Ontario (a "Business Day") and the communication is so delivered or sent before 4:30 p.m. EST on such day. Any such communication sent by registered mail shall be deemed to have been given and made and to have been received on the third Business Day following the mailing thereof; provided however that no such communication shall be mailed during any actual or apprehended disruption of postal service. Otherwise, such communication shall be deemed to have been given and made and to have been received on the next following Business Day. Any such communication given or made in any other manner shall be deemed to have been given or made and to have been received only upon actual receipt.

Any party may from time to time change its address under this Section 27 by notice to the other parties given in the manner provided by this Section 27.

28. Counterparts

This Agreement may be signed in counterparts, including counterparts by facsimile, each of which shall be deemed an original and all of which when taken together shall constitute one instrument.

29. Governing Law

This Agreement shall be governed by and interpreted and enforced in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein.

IN WITNESS WHEREOF the parties have executed this Agreement.

1710690 ONTARIO INC. Per: Name: 0 al Aline Title: RESIDEN Per: Name Title:

I/We have the authority to bind the Corporation

THE CORPORATION OF THE TOWN OF AMHERSBURG				
Per:	Udence laure			
	Mayor			
Per:	Propode M. Porod			
	Brenda M. Percy Clerk			

We have the authority to bind the Corporation

Legal Description of the Lands

PIN 01543-0173 (LT)

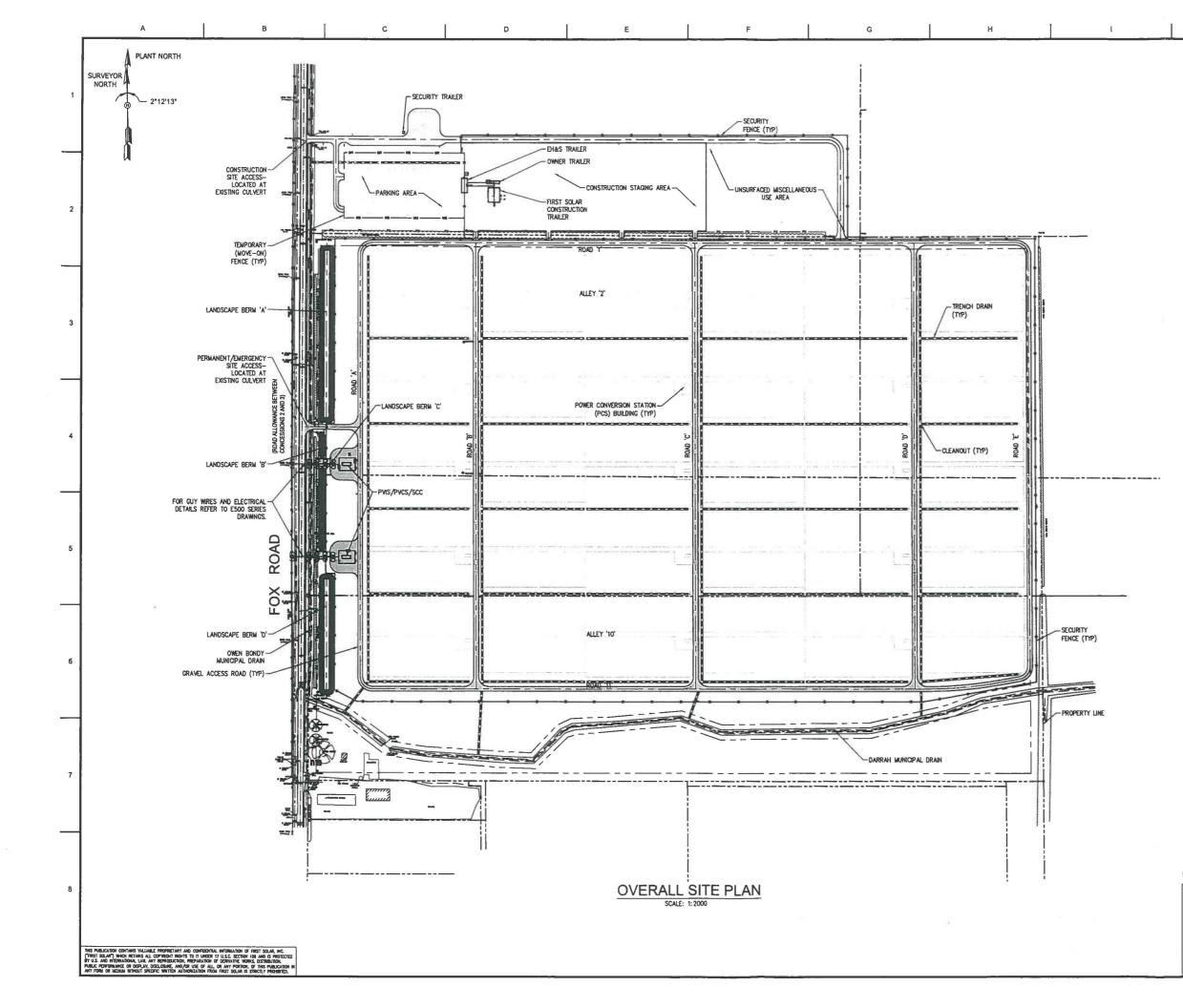
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1710690 ONTARIO INC. Per: COLLAVINO Name LORIS Title: PRESIDENT Per: Name. Title:

I/We have the authority to bind the Corporation

THE CORPORATION OF THE TOWN OF AMHERSBURG Per: (Wayne Hurst Mayor Per: Brenda M. Perdy Clerk

We have the authority to bind the Corporation



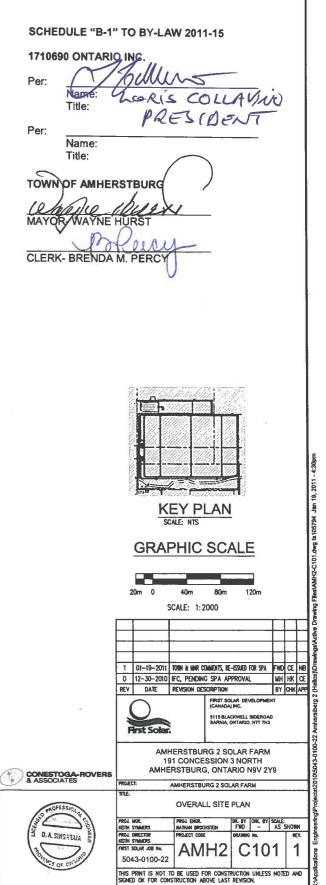
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1. FOR GENERAL NOTES, SEE DWG C111.

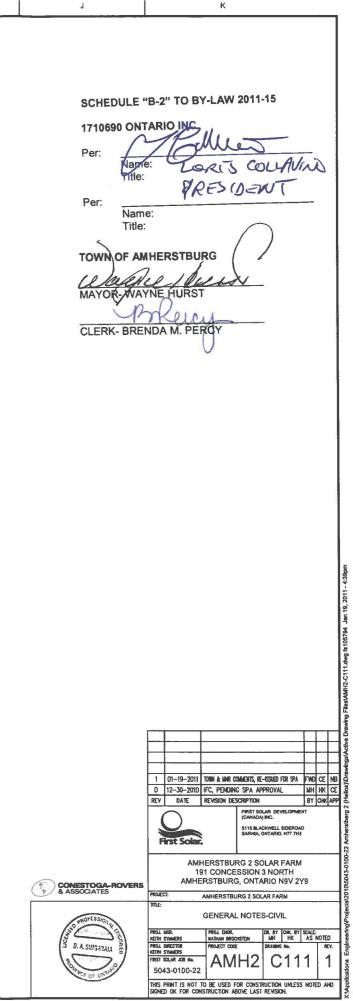
2. FOR LEGEND AND ABBREVIATIONS, SEE DWG C112.

3. FOR SITE HORIZONTAL AND VERTICAL CONTROL MONUMENTS, SEE DWG. C241.



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	THIS PUBLICATION CONTAINS VALUABLE PROPRETARY IND COM ("FIRST SQLAP") INICIA RETAINS ALL COPYRIGHT INCH'S TO IT IS U.S. WO BYDRIATOMAL DULK ANY REPRODUCEDUR, PROVA PUBLIC PERFORMANCE OR DISPLAY, DISCLOSURE, AND/DR USE ANY FORM OR MEDIUM WITHOUT SPECIFIC WATTER AUTHORIZATI	UNDER 17 U.S.C. SECTION 106 AND IS PROTECTED RADON OF DERIVATIVE WORKS, DISTRIBUTION,		1998 - 1996 - 1996 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 -						



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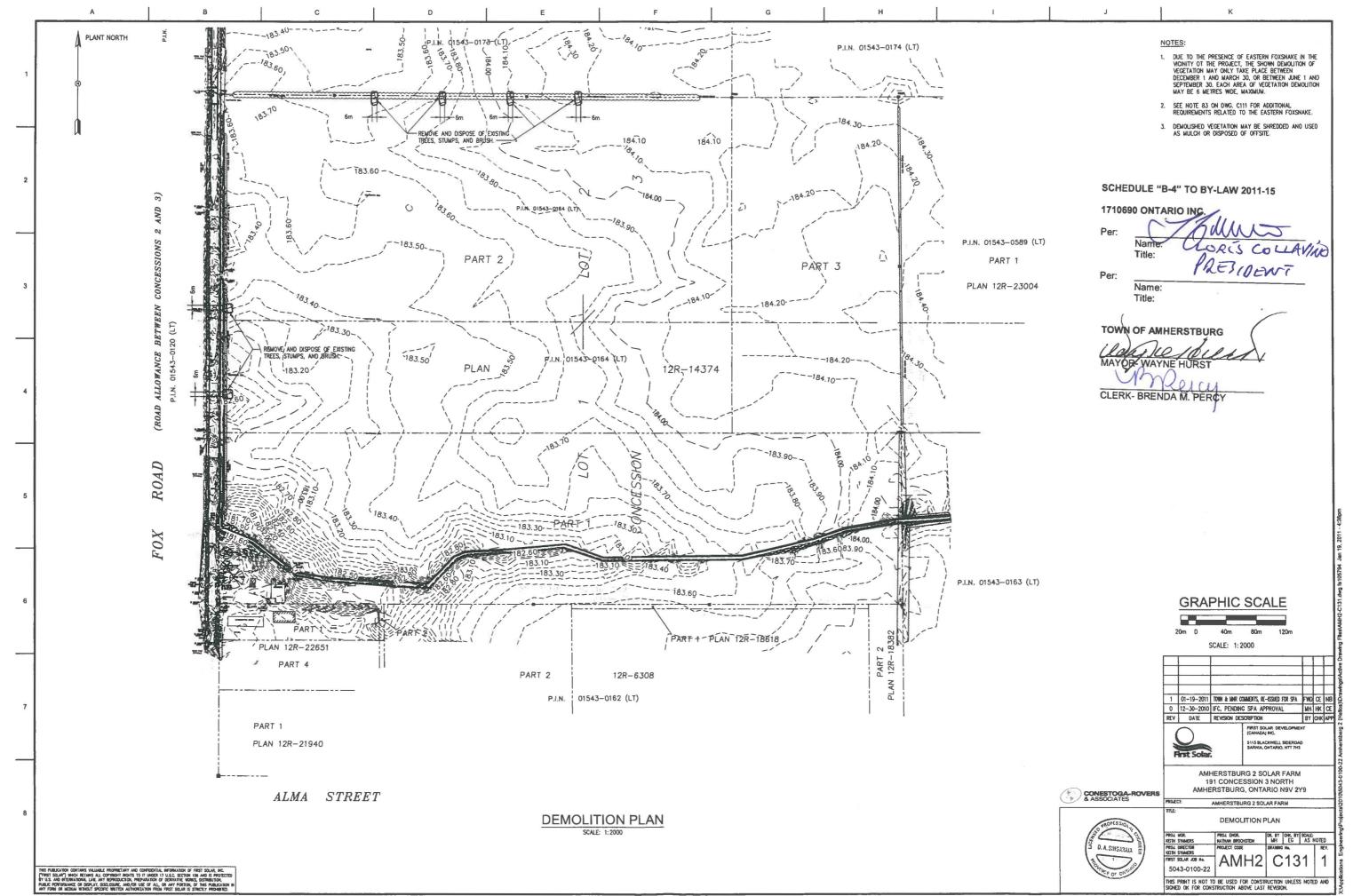
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	eq eter ex	Equal Existing to be rea Existing	IOVED				PROPOSED A		DARY					
	FF FG FH	Finished Floor Finished grade Fire Hydrant							ID ELECTRICAL WRI	NG				
4	PL FSE/FS FT	FLOW LINE FIRST SOLAR ELECTI FOOT/FEET	ac first solar						ANSMISSION LINE					
	GA GB GALV	GAGE/ GUAGE GRADE BREAK GALVANIZE						TION IN DRAIN						
	GR HP HT	grade High point Height						rised of 4 sub-	ARRAYS					
-	HZ ID INV	FREQUENCY (CYCLE INSIDE DIAMETER INVERT	PER SECOND)				— Sue Array (4 p							
	JB K XW	JUNCTION BOX KEY OPERATED KILOWATT(S)					DEMOLITION	AREA						
5	ւ Մ Ա	LINE LINEAR FEET LIVE LOAD					LANDSCAPE	BERM						
	MFR MAX MH MTL	MANUFACTURED MAXIMUM MANHOLE					TEMPORARY	TOPSOIL STO	CKPILE					
	M IL MW MDM	METAL MEGAWATT MPMMUM NUMBER					MANAGED ME	IEADOW						
	N NC NOM	NEUTRAL NORMALLY CLOSED NOMINAL					TALL GRASS	PRAIRIE						
	NTS DC 00	not to scale on center outside diameter							ULTURAL PRODUCTION					
6	R PCC POF	PROPERTY LINE PRECAST CONCRETE POUND PER CUBIC F				[22222]	OR APPROPRIAT	TE GROUND COV	ER					
	PCS PH POC	POWER CONVERSION PHASE POINT OF CONNECTION	ON				GRAVEL							
	PVC PVCS PVIS	POLYVINYL CHLORIDE PHOTOVOLTAIC COME PHOTOVOLTAIC INTER		ł										
\neg	R RC RGS	RADIUS REINFORCED CONCRE RIGID GALVANIZED S	ETE											
	R/W SD SL	RIGHT OF WAY STORM DIRAIN STREET LIGHT												
7	SPEC SPMDD SQ	SPECIFICATION STANDARD PROCTOR SQUARE	R Maximum QRY Denisty											
	SS SST STA	SANITARY SEWER STAINLESS STEEL STATION												
	STD STL	STANDARD STEEL												
Η	SW T TB	switch Telephone Terminal Block											18	
	temp Thk Tw	TEMPORARY THICK TOP OF WALL												
8	typ Vif Vert	Typical Verify in Field Veritical												
	₩ ₩/	WATT(S) WITH												
	WP XFMR	WEATHERPROOF TRANSFORMER												
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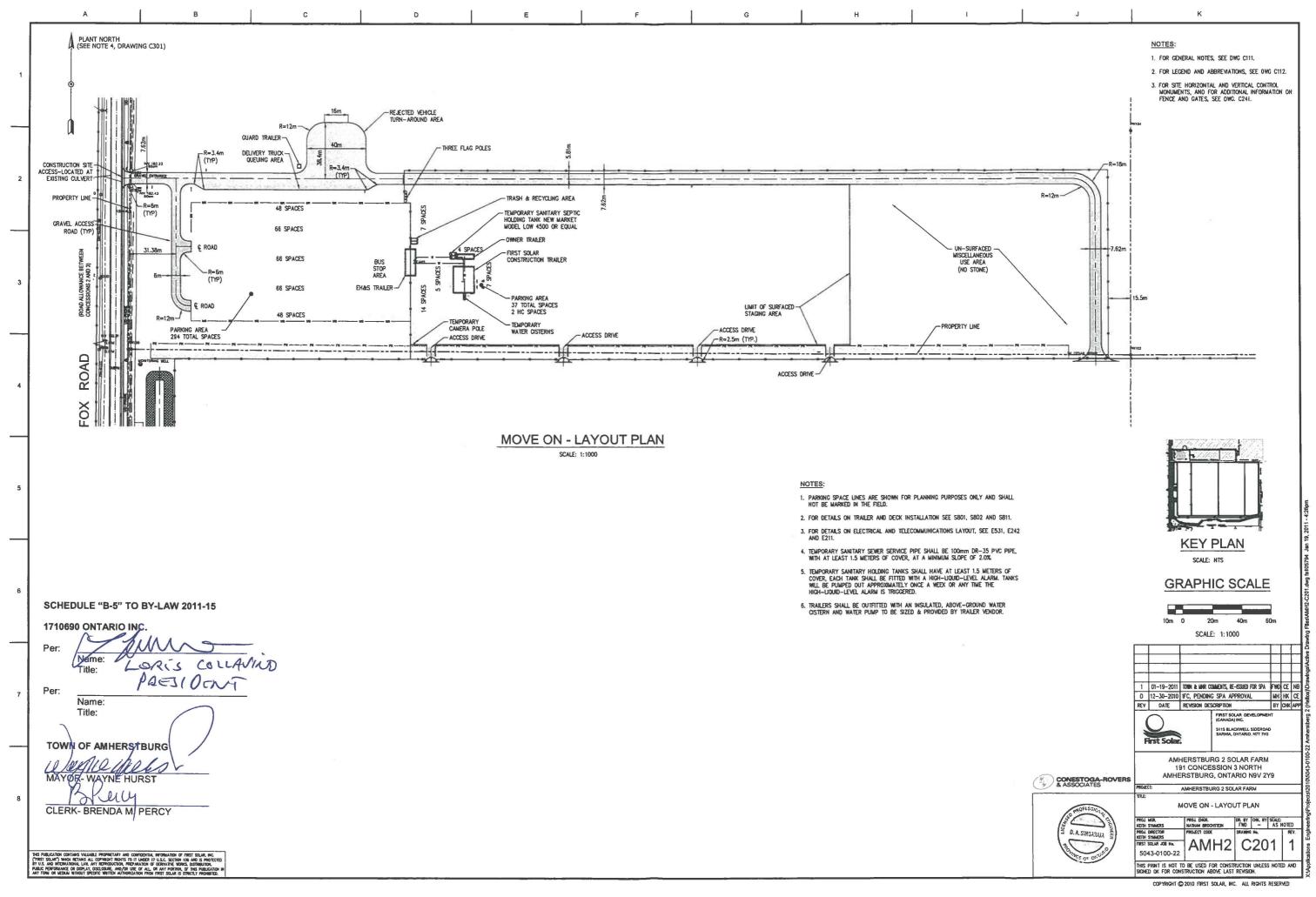
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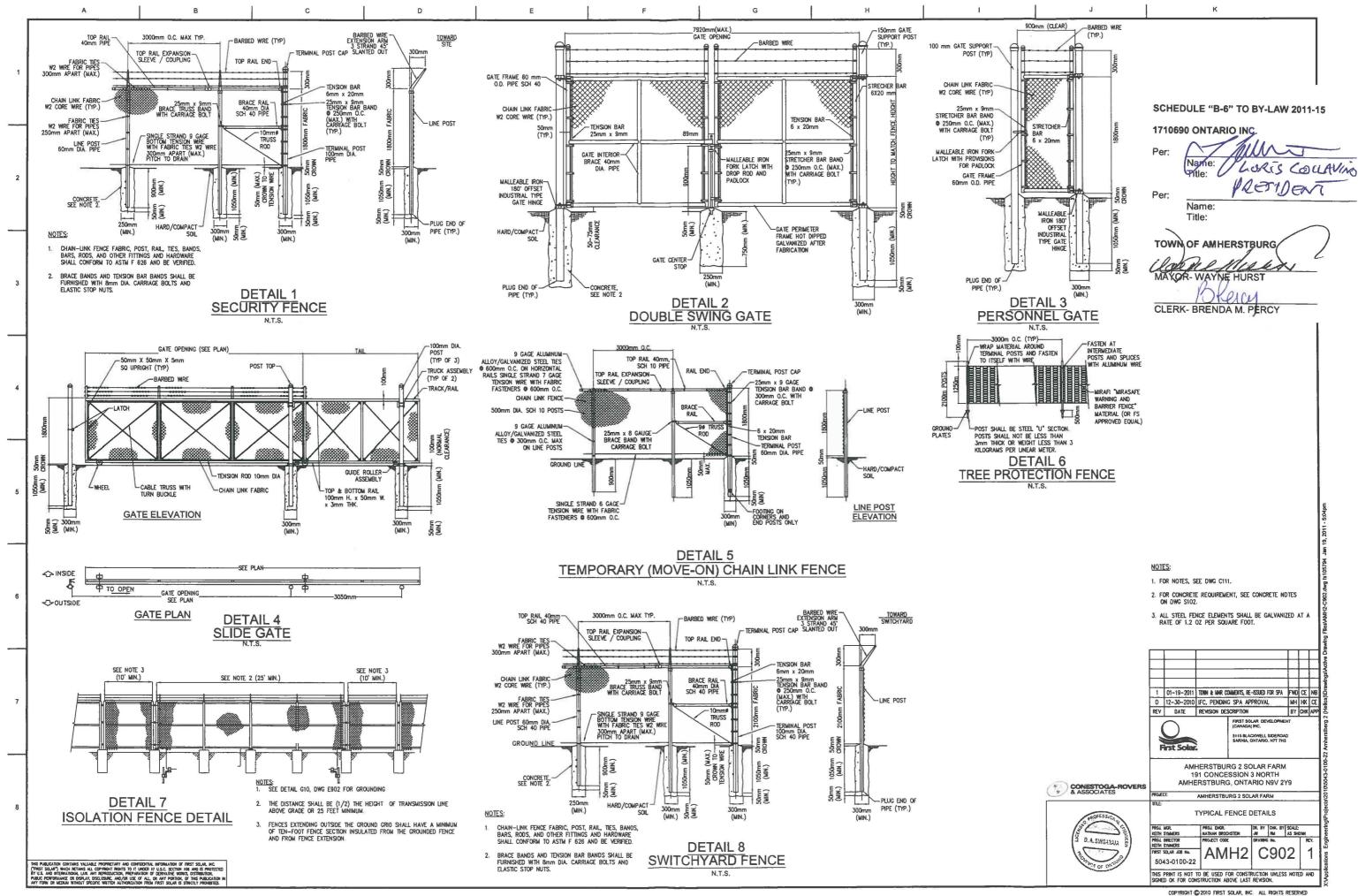
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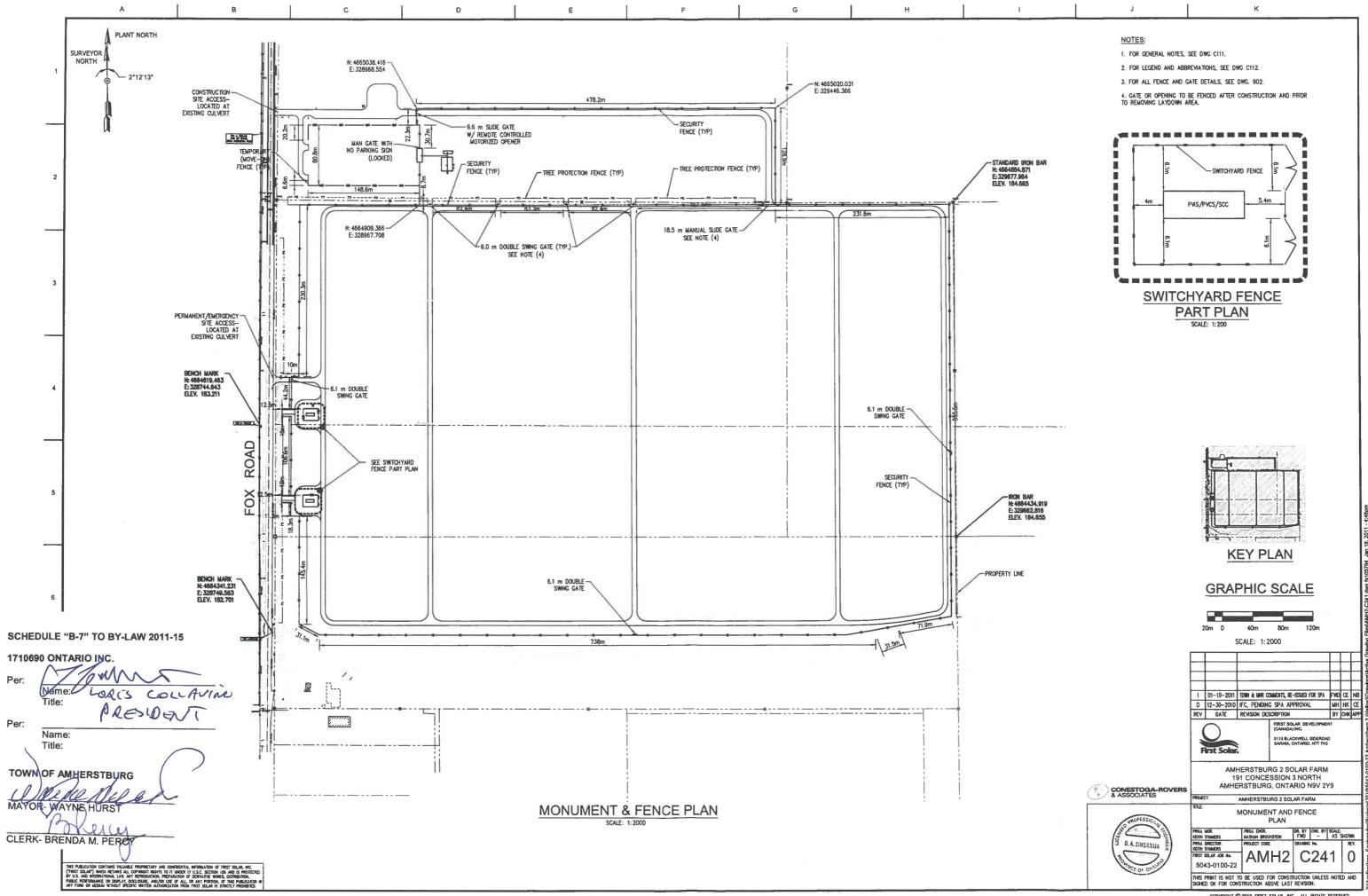
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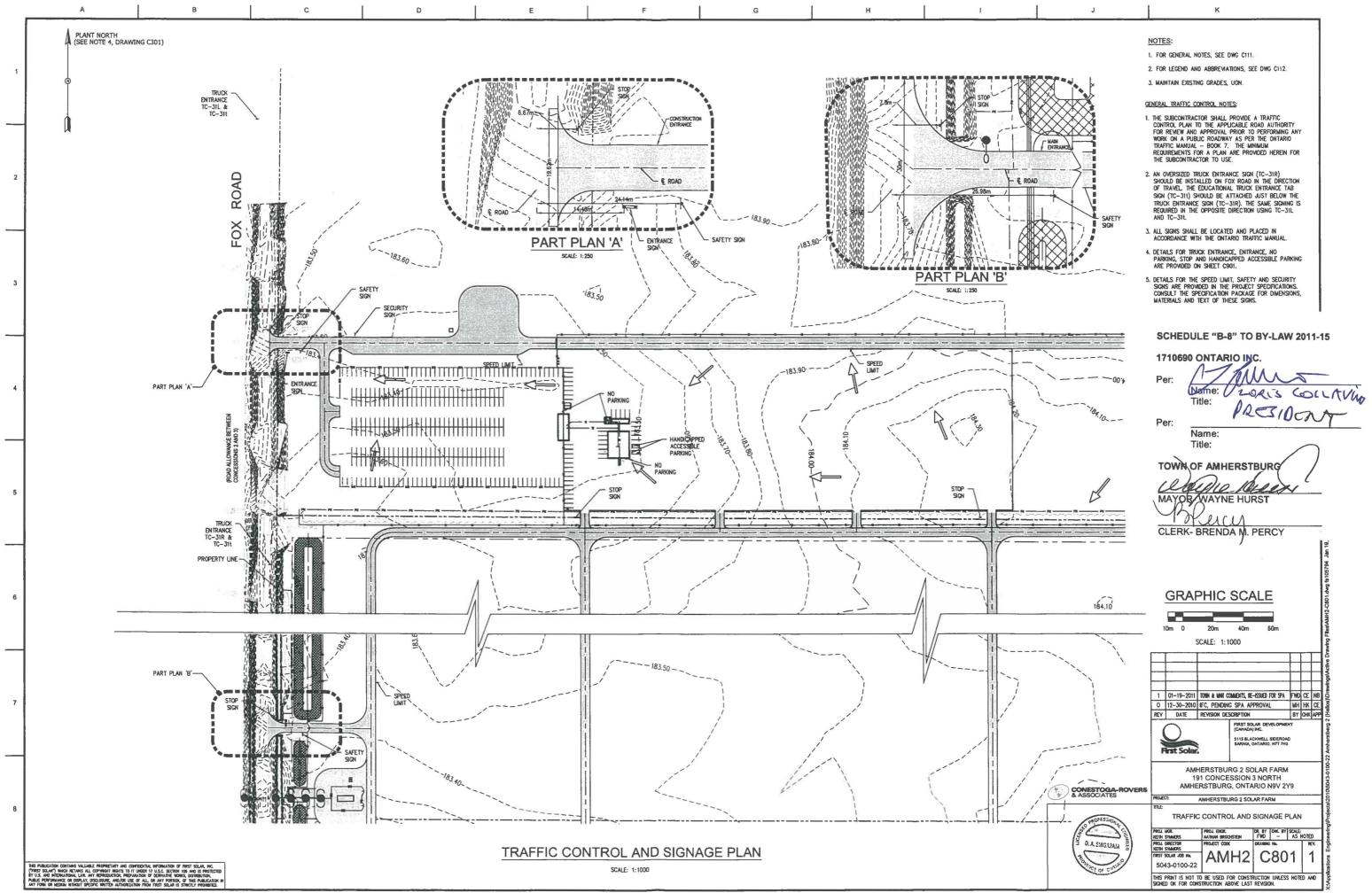
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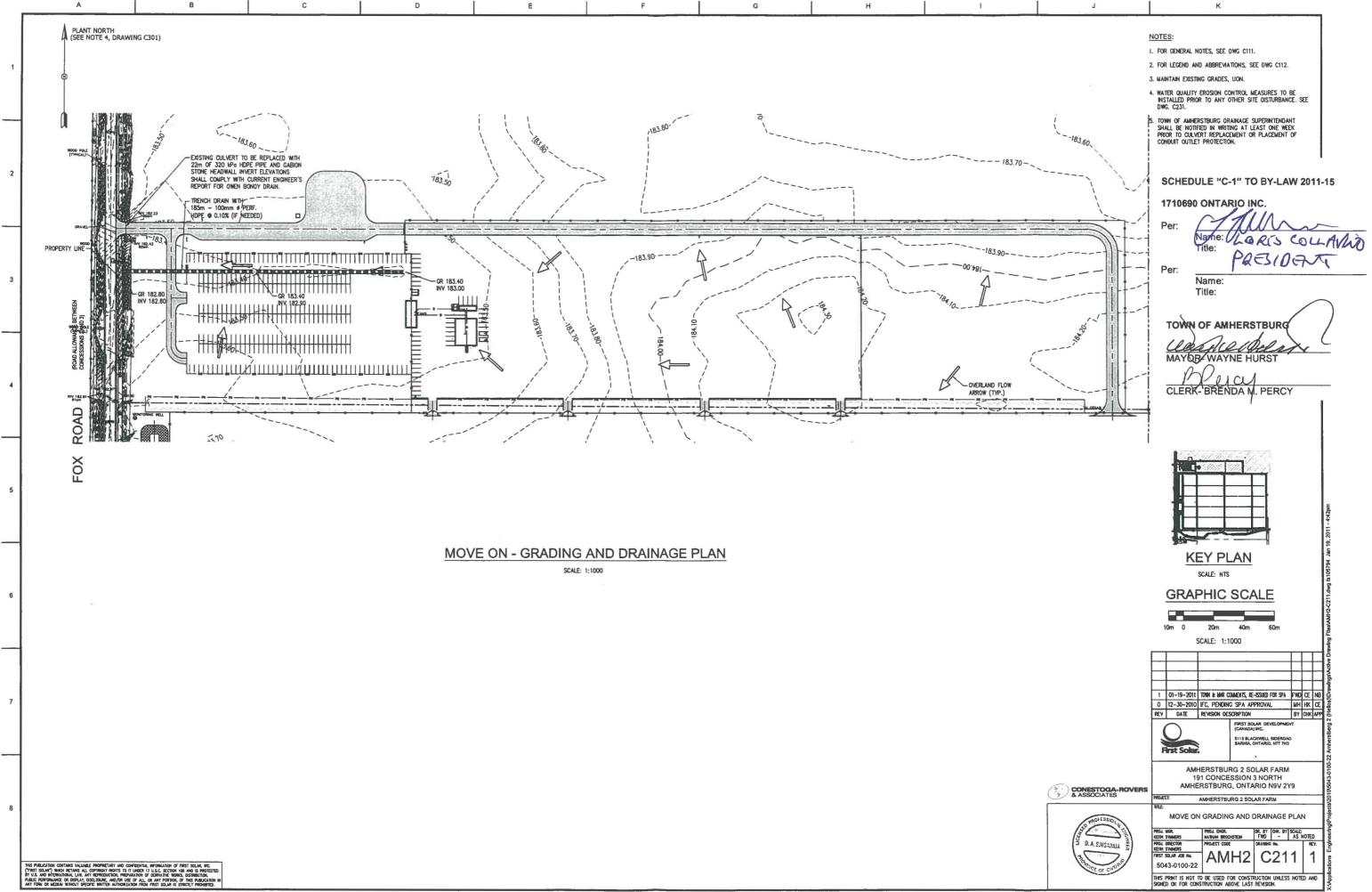


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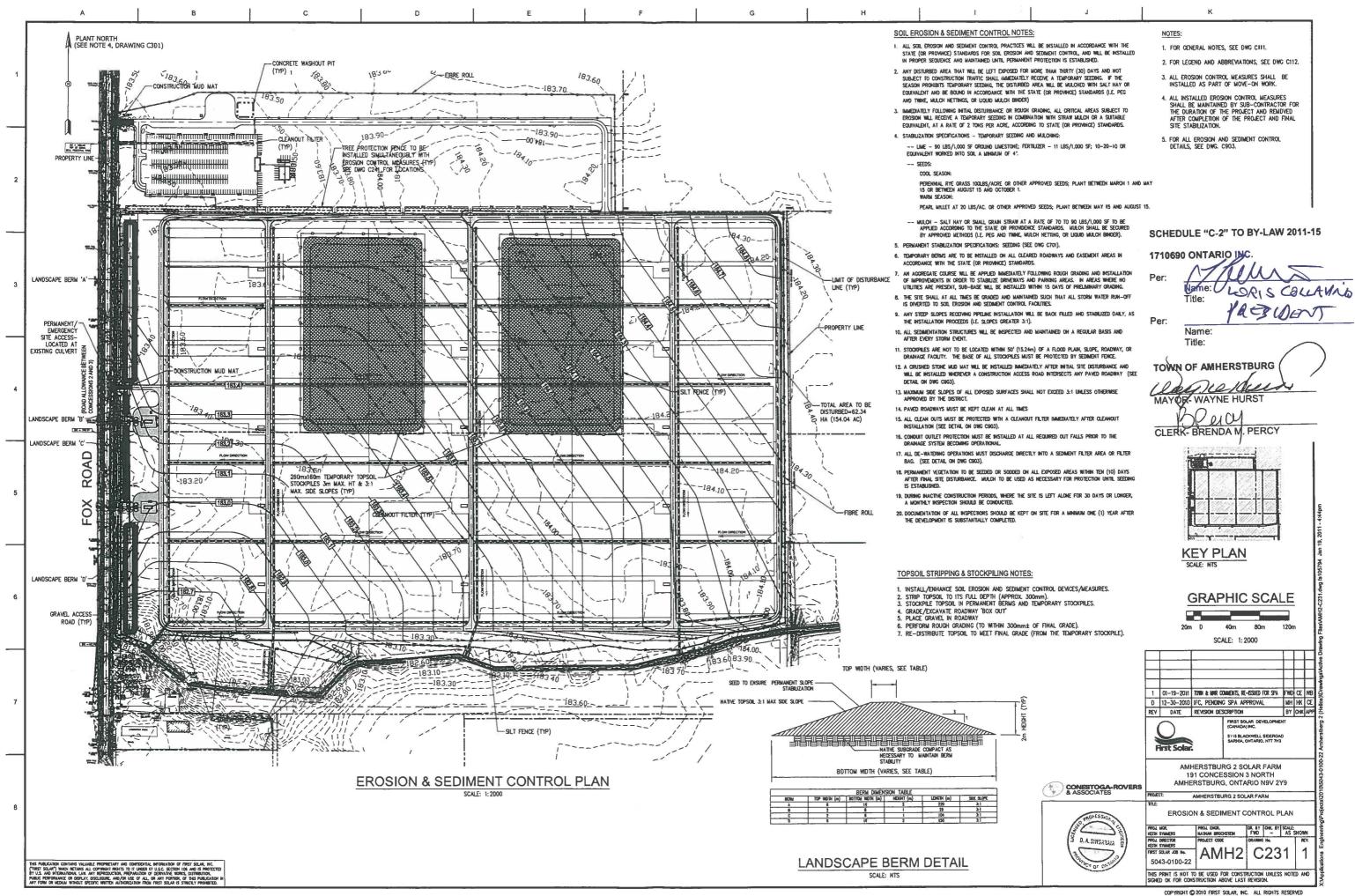


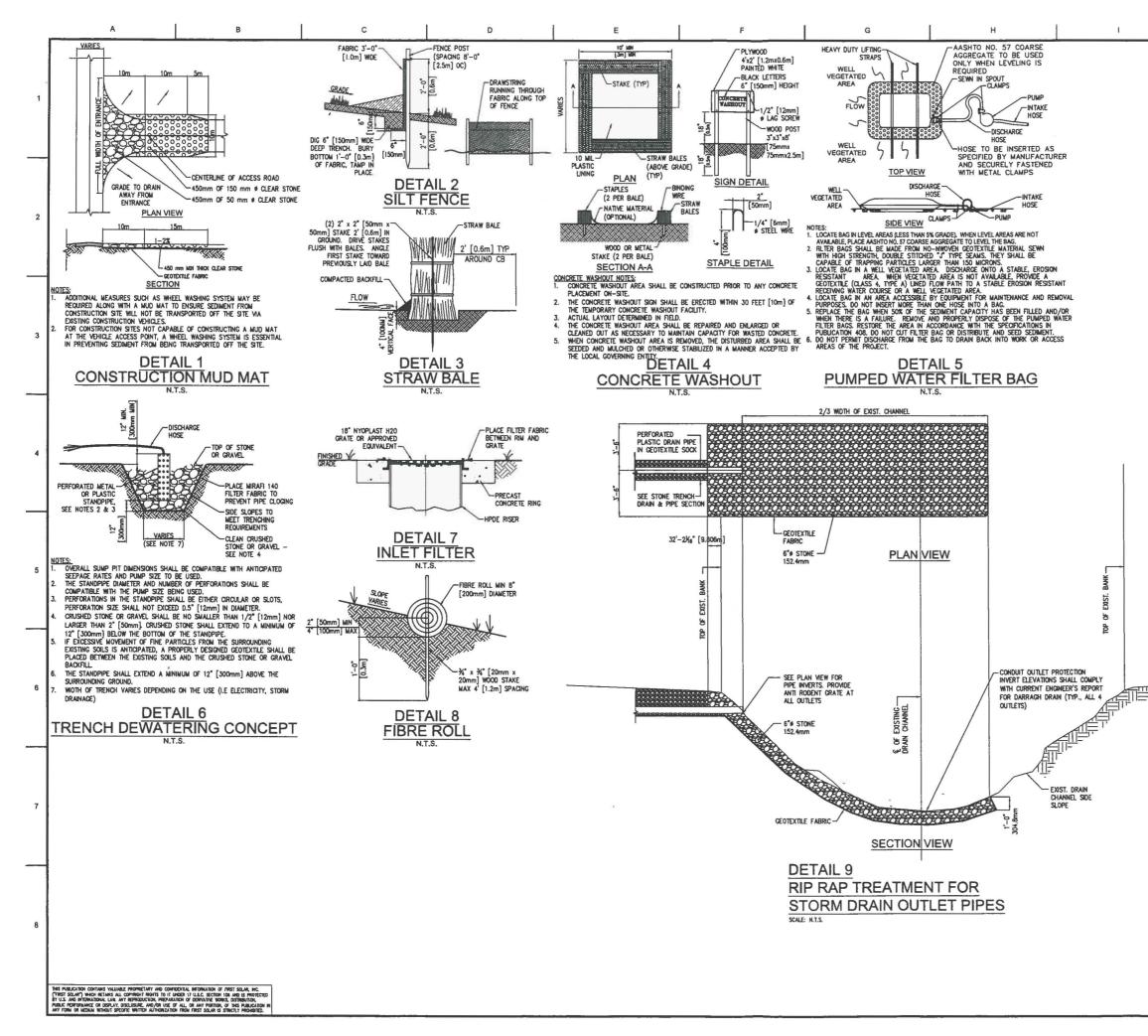
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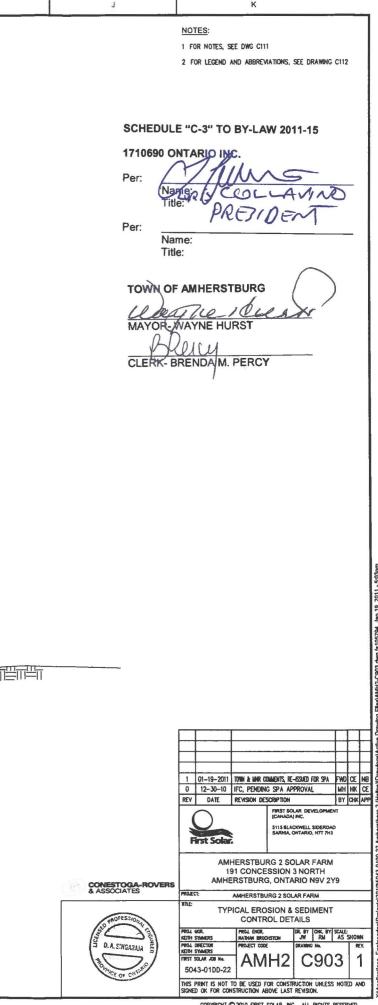
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STORMWATER MANAGEMENT PLAN AMHERSTBURG 2 SOLAR FARM

191 CONCESSION ROAD 3 NORTH (FOX ROAD), AMHERSTBURG, ONTARIO

Prepared For: First Solar Development (Canada) Inc

SCHEDULE "D" TO BY-LAW 2011-15

1710690 ONTARIO Per: me: OR'S COU itle. PREJIDENT Per: Name: Title: TOWN OF AMHERSTBURG CLERK- BRENDA M. PERCY

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NOVEMBER 2010 Ref. no. 073209 (1) Prepared by: Conestoga-Rovers & Associates

651 Colby Drive Waterloo, Ontario Canada N2V 1C2

Office: (519) 884-0510 Fax: (519) 884-0525

web: http://www.CRAworld.com

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1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) has prepared the following stormwater management plan (SWM Plan) for a proposed 61.6 hectare (ha) 15 MegaWatt (MW) photovoltaic or solar power plant located at 191 Concession 3 North in the Town of Amherstburg, Ontario (Site). The developed portion of the Site is bounded to the south by Darrah Drain, to the west by Concession Road 3 North (Fox Road) followed by the Owen Bondy Drain, and to the north and east by agricultural lands. The Site is surrounded by agricultural lands to the north, east, and south and by industrial lands to the west. Alma Street is located further to the south. Figure 1 presents the Site location information. This SWM Plan was developed with reference to standards provided by the Ministry of the Environment.

The purpose of this study is to assess the quantity and quality control requirements for the proposed development. These requirements were assessed in terms of the Ministry of the Environment (MOE) criteria as per the Stormwater Management Planning and Design Manual (March 2003) for water quality and water quantity control. The impacts of the proposed conditions on the downstream receiving drain are assessed and a proposed stormwater management methodology is presented.

In preparation of this report, CRA reviewed Site specific survey information representing existing conditions, geotechnical reports, previous studies, assessed available satellite imagery, conducted Site visits, and communicated with the Town of Amherstburg and the Essex Region Conservation Authority (ERCA).

1

2.0 BACKGROUND

The purpose of the project is to generate electricity using photovoltaic solar panels as a renewable energy source by collecting and converting the energy from the sun into electricity. The proposed development Site area will consist of a series of solar panel arrays, photovoltaic combiner switchgear, and access roads. Presently the Site is utilized for agriculture.

CRA has conducted preliminary discussions with both the ERCA and with the Town of Amherstburg regarding specific design requirements for the Site. It is understood that Darrah Drain and the roadside ditch (Owen Bondy Drain) along Fox Road are municipal drains and therefore fall under the requirements of the Municipal Drainage Act. CRA has contacted ERCA regarding the limits of the regulated area and any specific requirements relating to work within the regulated area. At the time of writing of this report specific information regarding requirements of the Municipal Drainage Act and the Conservation Authorities Act has not been received. However, the drainage design and this stormwater management plan are anticipated to address the requirements of these acts.

Further discussion on drainage is provided in subsequent sections of this report.

3.0 EXISTING CONDITIONS

A topographic survey of the Site area was conducted on behalf of First Solar in October 2010 (as shown on attached Drawing C121). A Site visit was conducted by CRA on November 19, 2010. The Site has a very shallow grade and, in general, surface water drains overland to the south and west to surrounding Municipal Drains as shown on Figure 2. The overall average slope to the south and west is approximately 0.3 percent.

The Site area is approximately 61.6 hectares (ha). Based on CRA's Site visit and a review of available plans, there are no major off-Site contributing drainage areas that drain onto the Site. The existing vegetative cover consists of cultivated agricultural land with row crops for the majority of the Site and wild grasses and shrubs along the perimeter of the Site. At the time of CRA's Site visit, the fields consisted of primarily bare soil with minimal residual vegetation after cultivation. Darrah Drain is surrounded by shrubs, wild grasses and some trees. Wild grasses and shrubs can be found along the eastside of Owen Bondy Drain. Due to the very shallow grade on-Site and the uncertainty of the locations of sub-surface tile drains, sub-catchment delineations were estimated based on the best available information. The survey provided to CRA by First Solar was used for sub-catchment delineation.

There are two existing corrugated metal pipe (CMP) culverts (approximately 900 millimetres [mm] in diameter) along Darrah Drain within the property limits and two existing CMP culverts (approximately 600 mm in diameter) across the Owen Bondy Drain along the Fox Road frontage. There was approximately 100 to 200 mm of water in the culverts on Darrah Drain at the time of the Site inspection with minimal active flow. The culverts along the Owen Bondy Drain were dry at the time of the Site inspection. Darrah Drain and the Owen Bondy Drain confluence at the southwest corner of the Site and cross beneath Fox Road via a concrete box culvert. Darrah Drain ultimately discharges to Big Creek, therefore the Site lays within the Big Creek watershed.

The Site was delineated into three sub-catchments to determine off-Site discharge characteristics as shown on Figure 2. The northern portion of the Site (sub-catchment 100) drains overland to the Owen Bondy drainage ditch on the east side of Concession Road 3 North (Fox Road). Sub-catchment 101 drains overland to the Owen Bondy Drain and via tile drains to Darrah Drain. The runoff from sub-catchment 102 drains via tile drains and overland to the Darrah Drain located to the south of the Site.

In general, several penetrations of the tile drain of varying sizes were observed into the Darrah Drain along the southern edge of the Site; however, no penetrations were

observed into the Owen Bondy Drain along Fox Road. The exposed portions of the tile drains consisted of Corrugated Metal Pipes (CMP) and Polyethylene (PE). The exact location and sizes of tile drains have not been verified in preparation of this report.

Site soils consist of approximately 200 mm to 380 mm of clayey topsoil underlain by silty clay till (Golder Associates, 2008). In general, groundwater is encountered over 5 m below grade (Golder Associates, 2008).

4.0 PROPOSED CONDITIONS

Proposed conditions includes a series of fixed angle photovoltaic arrays over vegetative ground cover, photovoltaic combiner switchgear shelters, gravel access roads, and gravel parking areas as shown on Drawing C311. The majority of the Site is proposed to be utilized for solar panels underlain with vegetative ground cover. Proposed grades on-Site are very shallow (approximately 0.25 percent in general) and similar to existing conditions. Sub-catchment delineations were estimated based on the proposed grading plan provided to CRA by First Solar as shown on Figure 3.

The northern portion of the Site (sub-catchment 200) consists of the Phase I (or Move-On) areas consisting of gravel cover parking and staging areas as shown on Drawing C211. This area will retain existing grades and drains west overland to the Owen Bondy Drain, a drainage ditch on the east side of Concession Road 3 North (Fox Road). The primary construction period Site entrance will be to this area via an existing entrance from Fox Road. The existing culvert crossing for the entrance across the Owen Bondy Drain will be maintained.

Drainage within the photovoltaic array (Phase II) areas is proposed to be via overland flow and subdrains ultimately to Darrah Drain and is designated as sub-catchment 201 as shown on Figure 3. The proposed grading and drainage plan for Phase II is shown on Drawing C311. This drawing presents the layout of the subdrain system with pipe sizes, slopes and inverts specified On Drawing C312. The subdrain system's primary function is to provide drainage during the construction period; therefore, fairly shallow slopes were utilized and shallow bury depths were utilized. The subdrain system has cleanouts located at each starting run and at all pipe intersections. Outlets into Darrah Drain will be constructed with rip rap protection and rodent grates.

The photovoltaic arrays are typically installed with the lowest portion of the panels a minimum of 600 mm above grade with short grass land cover as depicted on attached Figure 4 which presents a photograph of a typical installation. Therefore, the runoff from the arrays will drain onto vegetated surfaces and sheet flow consistent with existing conditions.

All areas of the Site, with the exception of access roads and gravel parking lots, will be covered with topsoil and vegetated.

Comparison of the proposed conditions peak flows to existing conditions peak flows reveals that there is a decrease in peak flows for the 25 mm through the 100-year storm. It should be noted that in conducting the modelling effort, a simplistic hydrologic model

was created assuming overland flow. This assumption was made as it is expected that during intense storm events, such as the synthetic 3 hour duration storm events modelled, the majority of the runoff will be directed overland to the outlet. The decrease in peak flow is largely due to the change in the vegetation type from row crops during existing conditions to a fully vegetated area during proposed conditions. It is expected that with row cropping conditions, the fields would have consisted of minimum vegetation for approximately 50 percent of the year. However, under proposed conditions the vegetative cover is selected to include a low maintenance seed mix which will not be mowed resulting in permanent vegetative cover throughout the year.

There are no detrimental water quality impacts anticipated for this Site under proposed conditions. It is expected that there will be an improvement in long term water quality discharged from the Site, as the proposed use consists of minimal Site disturbance and a fully vegetated Site.

5.0 HYDROLOGIC MODELLING

The urban stormwater model MIDUSS 4.72 was used to calculate the surface runoff resulting from the 25 mm and 4 hour duration MOE water quality storm, 2-year, 5-year, 10-year, 25-year, 50-year, and 100-year return period with a 3-hour Chicago rainfall distribution. The storm parameters used for the hydrologic modelling were developed from precipitation data provided by the Atmospheric Environment Service (AES) for the Harrow CDA meteorological station which is closest to the Site. A summary of the distribution parameters used in the modelling is provided in Table 1.

Other model input parameters, including sub-catchment areas, overland flow lengths, Soil Conservation Service (SCS) runoff Curve Numbers (CN), percent imperviousness, Manning's roughness coefficients, and initial abstraction were entered into the model based on the review of available data and standard engineering practice.

Figure 2 and Figure 3 illustrate existing and proposed conditions at the Site and the delineated sub-catchment areas. The hydrologic model input parameters for existing and proposed conditions are summarized in Tables 2 and 3, respectively. A summary of runoff peak flows and discharge volumes calculated using the hydrologic model is provided in Tables 4 and 5. Output from the model for existing and proposed conditions is provided in Appendices A and B, respectively.

6.0 EROSION AND SEDIMENT CONTROL PLAN

The purpose of erosion and sediment controls is to minimize the potential release of pollutants, and specifically sediments, directly or indirectly into downstream receiving waters. To achieve this objective, erosion and sediment controls will be utilized during construction as presented on Drawing C231. Erosion and sediment controls to be implemented during construction activities will include, as a minimum, minimizing Site disturbance, stabilized construction entrances, silt fence, fibre rolls, straw check dams, inlet filters, gravel access roads, and implementation of vegetative cover. A row of perimeter silt fencing or fibre rolls will be placed around the work Site to eliminate migration of sediment during construction. All disturbed areas will be vegetated with approved non-invasive native species of grasses. The seed mix will be designed to include low maintenance mixes with shade tolerance and low heights for utilization under the photovoltaic arrays.

Additional controls may be necessary during construction to prevent discharge of sediment-laden runoff from the Site. These additional controls may include, but not be limited to, additional silt fence, rock rip-rap channel linings, geotextile erosion control matting, rock check dams, straw bale check dams, temporary vegetation, and filter media.

All erosion and sediment control measures will be implemented prior to and during land disturbing activities and will be maintained throughout the duration of construction until the Site is fully stabilized with the establishment of vegetation.

7.0 MONITORING PLAN

It is proposed that during construction activities, visual monitoring be conducted bi-weekly and within 24 hours of any rainfall event of 12 mm or more. During the construction period, monitoring shall consist of visual observation for the effectiveness of the sediment and erosion controls and sediment migration off-Site. These sediment control measures shall be inspected to ensure that they have been properly installed and continue to function as designed. The controls shall be maintained and accumulated sediments removed once their capture capacity has been decreased by one-third. The outlets shall also be inspected for signs of sediment migration off-Site. In the event that sediments have migrated off-Site, additional sediment controls shall be implemented as necessary to ensure that no additional sediment escapes from the Site and any sediment that has migrated off-Site shall be removed.

Construction inspections shall be conducted until such time as the photovoltaic or solar panels and associated construction activities are completed and the vegetation has established itself to a density equivalent to 70 percent of the background native vegetation density. It is anticipated that the plantings will require one growing season to fully grow in. The monitoring program conducted during construction and the grow-in period shall consist of visual inspections and a written log.

8.0 CONCLUSION AND RECOMMENDATIONS

The stormwater management measures proposed for the Amherstburg Solar 2 photovolaic power plant were designed to mitigate the impacts of development on surface waters. The proposed measures include the following:

- Implementing a construction period sediment and erosion control plan
- Maintaining and enhancing subsurface drainage with the installation of subdrains
- Providing connections to the Municipal Drain with rodent protection
- Providing vegetative cover for the majority of the Site through all seasons

These measures are designed to reduce the impacts associated with this project from a surface water quantity and quality perspective, while allowing for the safe use of the site as a photovoltaic power generation facility.

We kindly request approval for the construction and operation of the stormwater management features at this facility, based on the information provided in this report.

9.0 <u>REFERENCES</u>

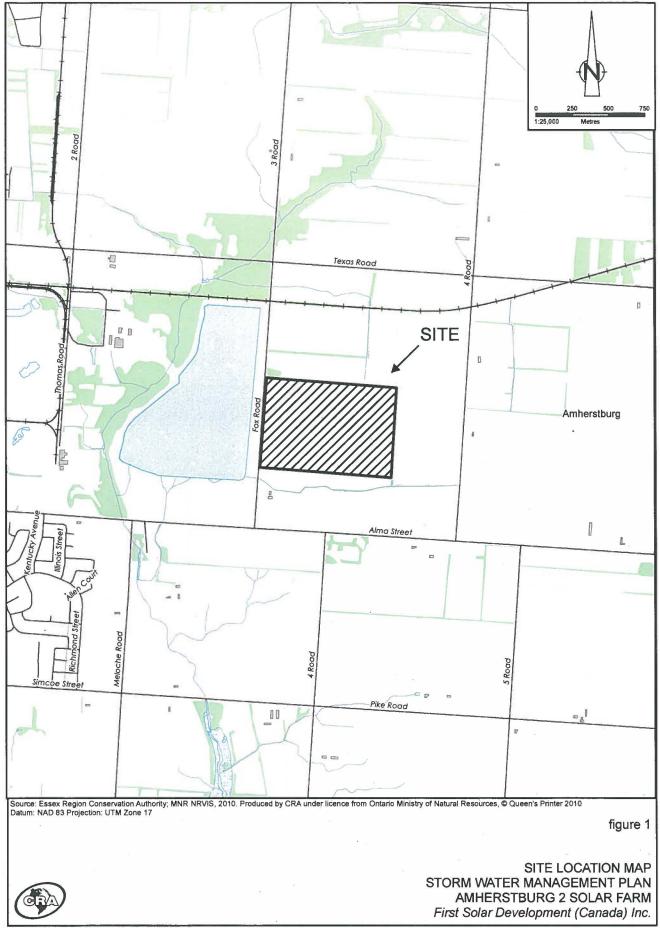
Golder Associates, 2008. Final Report, Geotechnical Investigation Three Development Sites, SunPower Corporation, Systems, Town of Amherstburg, Ontario.

All of Which is Respectfully Submitted, CONESTOGA-ROVERS & ASSOCIATES

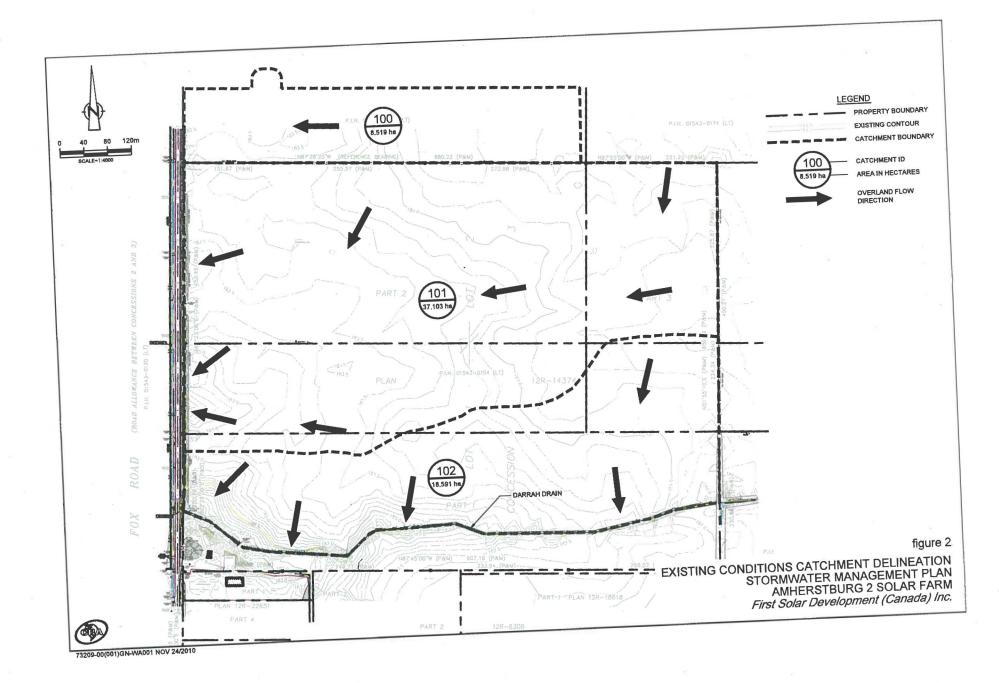


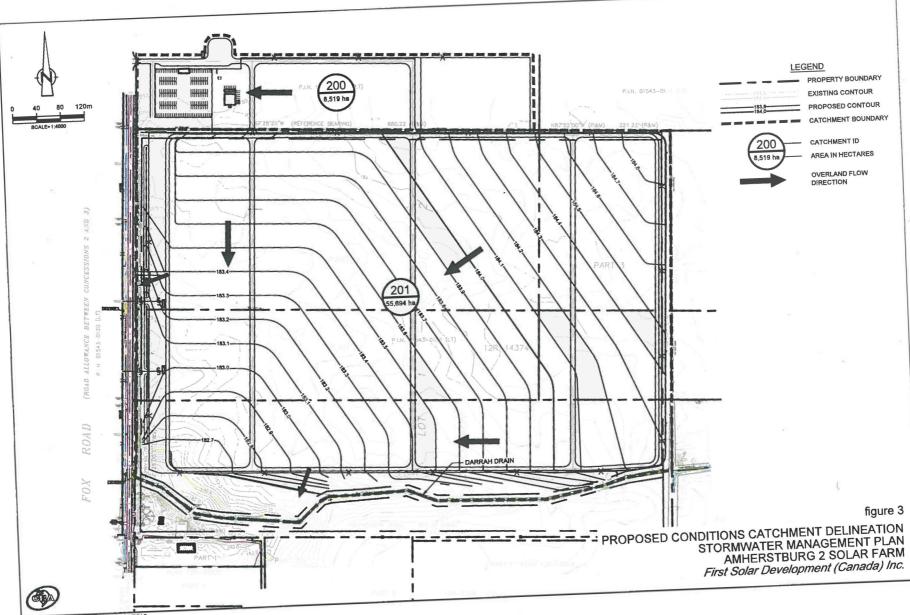
Dilan Singaraja, P. Eng.

Sukhmani Bola, B.Eng. FOR

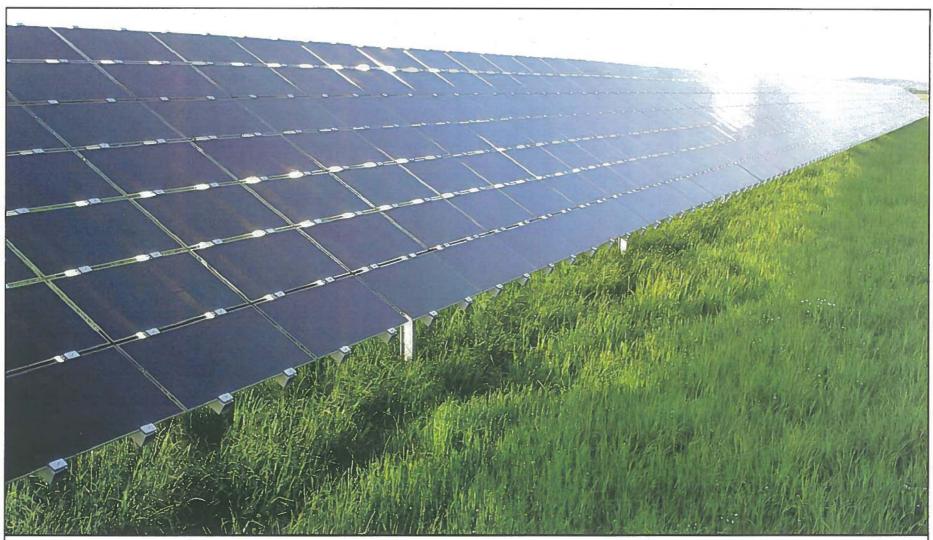


073209-00(REP001)GIS-WA002 November 25, 2010









SOURCE: WWW.FIRSTSOLAR.COM

figure 4

TYPICAL PHOTOVOLTAIC PANEL INSTALLATION PHOTOGRAPH STORMWATER MANAGEMENT PLAN AMHERSTBURG 2 SOLAR FARM *First Solar Development (Canada) Inc.*

73209-00(001)GN-WA003 NOV 25/2010

DESIGN STORMS STORMWATER MANAGEMENT PLAN 191 CONCESSION 3 NORTH, AMHERSTBURG, ONTARIO First Solar Development (Canada) Inc.

Design Storms

Return Period	Rainfall Depth ²	Dur	ation
	(<i>mm</i>)	(hr)
25 mm ¹	25.0		4
2-Year	32.4		3
5-Year	47.7		3
10-Year	57.9		3
25-Year	70.7		3
50-Year	80.2		3
100-Year	89.7		3

Notes:

1. The 25 mm storm is the Ministry of the Environment (MOE) Quality Storm.

2. Harrow CDA, Ontario (6133360). Rainfall Intensity Duration Frequency Values. 2003. Atmospheric Environment Service. Environment Canada.

EXISTING CONDITIONS SUBCATCHMENT PARAMETERS STORMWATER MANAGEMENT PLAN 191 CONCESSION 3 NORTH, AMHERSTBURG, ONTARIO First Solar Development (Canada) Inc.

Subcatchment	Area	Flow Length	Slope	% Impervious	Soil Group	Cl	N ¹	Initial Abstr	nction ² (mm)	Mann	ing's N
	(ha)	<i>(m)</i>	(%)	(%)		Pervious	Impervious	Pervious	Impervious	Pervious	Impervious
100	8.519	206	0.156	0	CD	87	98	3.795	0.518	0.035	0.011
101	37.103	828	0.157	0	CD	87	98	3.795	0.518	0.035	0.011
102	18.591	184	0.652	0	CD	87	98	3.795	0.518	0.035	0.011

Total

Notes:

1. Soil Conservation Service (SCS) Curve Number.

64.2

2. 0.1*((25400/CN)-254)

PROPOSED CONDITIONS SUBCATCHMENT PARAMETERS STORMWATER MANAGEMENT PLAN 191 CONCESSION 3 NORTH, AMHERSTBURG, ONTARIO First Solar Development (Canada) Inc.

Subcatchment	Area	Flow Length	Slope	% Impervious	Soil Group	Cl	N ¹	Initial Abstra	action ² (mm)	Mann	ing's N
	(ha)	(m)	(%)	(%)		Pervious	Impervious	Pervious	Impervious	Pervious	Impervious
200	8.519	206	0.156	0	CD	89	98	3.102	0.518	0.029	0.011
201	55.694	978	0.257	0	CD	75	98	8.371	0.518	0.035	0.011

Total 64.2

Notes:

1. Soil Conservation Service (SCS) Curve Number.

2. 0.1*((25400/CN)-254)

3. CN for subcatchment 201 is a weighted average of 95% meadow and 5% gravel cover types

4. CN for subcatchment 200 is a weighted average of 70% gravel and 30% dirt cover types

PEAK FLOWS SUMMARY STORMWATER MANAGEMENT PLAN 191 CONCESSION 3 NORTH, AMHERSTBURG, ONTARIO First Solar Development (Canada) Inc.

Existing Conditions

Catchment ID	25 mm	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year
	(m ³ /s)						
100	0.112	0.256	0.617	0.935	1.376	1.702	2.085
101	0.234	0.549	1.334	2.016	3.041	3.864	4.775
102	0.352	0.833	1.937	2.764	3.978	4.984	6.005
Total Runoff	0.524	1.223	2.907	4.422	6.540	8.179	9.830

Proposed Conditions

Catchment ID	25 mm	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year
	(m ³ /s)						
200	0.158	0.344	0.789	1.129	1.627	2.019	2.416
, 201	0.076	0.246	0.844	1.465	2.420	3.300	4.245
Total Runoff	0.174	0.418	1.088	1.734	2.715	3.671	4.839

SUMMARY OF VOLUMES STORMWATER MANAGEMENT PLAN 191 CONCESSION 3 NORTH, AMHERSTBURG, ONTARIO First Solar Development (Canada) lnc.

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Existing Conditions

Catchment ID	25 mm	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year
j.	(m ³)						
		÷					
100	647	1041	2004	2706	3632	4343	5067
101	2819	4534	8726	11785	15822	18921	22088
102	1412	2271	4369	5901	7920	9478	11053
Total Volume Runoff	4879	7846	15100	20392	27374	32742	38208

Proposed Conditions

Catchment ID	25 mm	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year
1.5. ž 18.	(m ³)						
200	766	1198	2228	2966	3925	4662	5404
201	1520	2935	6944	10177	14711	18345	22171
Total Volume Runoff	2286	4132	9173	13143	18637	23007	27575
4							

APPENDIX A

MODEL OUTPUT FILES FOR EXISTING CONDITIONS

```
Output File (4.7) 3209 25m. Pre opened 2010-11-23 16:15
      Units used are defined by G =
                                    9.810
          48
              971
                      5.000 are MAXDT MAXHYD & DTMIN values
      Licensee: Conestoga-Rovers & Associates Limited
35
      COMMENT
          line(s) of comment
     6
      * Project #73209-00 - First Solar
      * Existing Conditions - Amherstburg 2 Solar Farm
                                                             *
      * GV
                                                             *
      * November 2010
      23
      FILE RAINFALL
          1=READ: 2=WRITE
     1
           25MD 001.HYT
    12
                              is Filename
     HYDROGRAPH DISPLAY
27
          is # of Hyeto/Hydrograph chosen
     1
      Depth = .2500000E+02 mm
      IMPERVIOUS
3
         1
               Option 1=SCS CN/C; 2=Horton; 3=Green-Ampt; 4=Repeat
       .011
               Manning "n"
               SCS Curve No or C
     98.000
       .100
               Ia/S Coefficient
       .518
               Initial Abstraction
      START
14
          1=Zero; 2=Define
     1
      CATCHMENT
4
    100.000
               ID No.ó 99999
      8.519
               Area in hectares
               Length (PERV) metres
    206.000
       .156
               Gradient (%)
       .000
               Per cent Impervious
    206.000
               Length (IMPERV)
       .000
               %Imp. with Zero Dpth
               Option 1=SCS CN/C; 2=Horton; 3=Green-Ampt; 4=Repeat
         1
       .035
               Manning "n"
     87.000
               SCS Curve No or C
       .100
               Ia/S Coefficient
      3.795
               Initial Abstraction
          1
              Option 1=Trianglr; 2=Rectanglr; 3=SWM HYD; 4=Lin. Reserv
             .112
                      .000
                                 .000
                                           .000 c.m/s
                       .000
                                         C perv/imperv/total
             .304
                                 .304
15
      ADD RUNOFF
             .112
                       .112
                                 .000
                                           .000 c.m/s
27
      HYDROGRAPH DISPLAY
           is # of Hyeto/Hydrograph chosen
     4
      Volume = .6474271E+03 c.m
      CATCHMENT
4
    101.000 ID No.ó 99999
     37.103
               Area in hectares
    828.000
               Length (PERV) metres
       .157
               Gradient (%)
               Per cent Impervious
       .000
    828.000
               Length (IMPERV)
```

```
.000
                 %Imp. with Zero Dpth
          1
                 Option 1=SCS CN/C; 2=Horton; 3=Green-Ampt; 4=Repeat
        .035
                 Manning "n"
      87.000
                 SCS Curve No or C
        .100
                 Ia/S Coefficient
       3.795
                 Initial Abstraction
                 Option 1=Trianglr; 2=Rectanglr; 3=SWM HYD; 4=Lin. Reserv
           1
              .234
                         .112
                                     .000
                                                .000 c.m/s
              .304
                         .000
                                     .304
                                              C perv/imperv/total
15
       ADD RUNOFF
                                                .000 c.m/s
              .234
                                     .000
                          .301
27
       HYDROGRAPH DISPLAY
            is # of Hyeto/Hydrograph chosen
       Volume = .2819404E+04 c.m
       CATCHMENT
 4
     102.000
                 ID No.6 99999
      18.591
                 Area in hectares
                 Length (PERV) metres
     184.000
        .652
                 Gradient (%)
        .000
                 Per cent Impervious
     184.000
                 Length (IMPERV)
        .000
                 %Imp. with Zero Dpth
          1
                 Option 1=SCS CN/C; 2=Horton; 3=Green-Ampt; 4=Repeat
        .035
                 Manning "n"
      87.000
                 SCS Curve No or C
        .100
                 Ia/S Coefficient
       3.795
                 Initial Abstraction
           1
                 Option 1=Trianglr; 2=Rectanglr; 3=SWM HYD; 4=Lin. Reserv
              .352
                         .301
                                     .000
                                                .000 c.m/s
              .304
                          .000
                                     .304
                                              C perv/imperv/total
15
       ADD RUNOFF
              .352
                                     .000
                                                .000 c.m/s
                         .524
27
       HYDROGRAPH DISPLAY
            is # of Hyeto/Hydrograph chosen
      4
       Volume
                  .1412154E+04 c.m
              =
20
       MANUAL
```

```
Output File (4.7) 3209_100.PRE opened 2010-11-23 16:06
      Units used are defined by G =
                                     9.810
                      5.000 are MAXDT MAXHYD & DTMIN values
          36
             978
      Licensee: Conestoga-Rovers & Associates Limited
      COMMENT
35
          line(s) of comment
     6
      ******
                                          ..................
      * Project #73209-00 - First Solar
      * Existing Conditions - Amherstburg 2 Solar Farm
      * GV
      * November 2010
      23
      FILE RAINFALL
     1
           1=READ: 2=WRITE
           ST2CS100.HYT
                              is Filename
    12
27
     HYDROGRAPH DISPLAY
           is # of Hyeto/Hydrograph chosen
     1
      Depth = .8969974E+02 mm
      IMPERVIOUS
3
         1
               Option 1=SCS CN/C; 2=Horton; 3=Green-Ampt; 4=Repeat
       .011
               Manning "n"
     98.000
                SCS Curve No or C
       .100
                Ia/S Coefficient
       .518
               Initial Abstraction
14
      START
           1=Zero; 2=Define
     1
4
      CATCHMENT
    100.000 ID No.ó 99999
      8.519
               Area in hectares
    206.000
               Length (PERV) metres
               Gradient (%)
       .156
       .000
               Per cent Impervious
    206.000
               Length (IMPERV)
       .000
               %Imp. with Zero Dpth
               Option 1=SCS CN/C; 2=Horton; 3=Green-Ampt; 4=Repeat
          1
       .035
               Manning "n"
     87.000
               SCS Curve No or C
       .100
                Ia/S Coefficient
      3.795
               Initial Abstraction
               Option 1=Trianglr; 2=Rectanglr; 3=SWM HYD; 4=Lin. Reserv
          1
                                 .000
            2.085
                       .000
                                            .000 c.m/s
             .663
                       .000
                                  .663
                                          C perv/imperv/total
15
      ADD RUNOFF
                                  .000
            2.085
                      2.085
                                            .000 c.m/s
27
      HYDROGRAPH DISPLAY
           is # of Hyeto/Hydrograph chosen
     4
      Volume = .5067001E+04 c.m
4 .
      CATCHMENT
                ID No.6 99999
    101.000
     37.103
               Area in hectares
    828.000
               Length (PERV) metres
               Gradient (%)
       .157
       .000
                Per cent Impervious
    828.000
               Length (IMPERV)
```

```
.000
                 %Imp. with Zero Dpth
                 Option 1=SCS CN/C; 2=Horton; 3=Green-Ampt; 4=Repeat
           1
        .035
                 Manning "n"
      87.000
                 SCS Curve No or C
        .100
                 Ia/S Coefficient
       3.795
                 Initial Abstraction
                 Option 1=Trianglr; 2=Rectanglr; 3=SWM HYD; 4=Lin. Reserv
           1
             4.775
                        2.085
                                     .000
                                                .000 c.m/s
                                              C perv/imperv/total
              .664
                          .000
                                     .664
15
       ADD RUNOFF
                         5.787
                                     .000
                                                 .000 c.m/s
             4.775
27
       HYDROGRAPH DISPLAY
            is # of Hyeto/Hydrograph chosen
      4
       Volume = .2208809E+05 c.m
 4
       CATCHMENT
     102.000
                 ID No.6 99999
      18.591
                 Area in hectares
     184.000
                 Length (PERV) metres
        .652
                 Gradient (%)
                 Per cent Impervious
        .000
     184.000
                 Length (IMPERV)
        .000
                 %Imp. with Zero Dpth
           1
                 Option 1=SCS CN/C; 2=Horton; 3=Green-Ampt; 4=Repeat
        .035
                 Manning "n"
      87.000
                 SCS Curve No or C
        .100
                 Ia/S Coefficient
       3.795
                 Initial Abstraction
                 Option 1=Trianglr; 2=Rectanglr; 3=SWM HYD; 4=Lin. Reserv
           1
                                     .000
             6.005
                         5.787
                                                 .000 c.m/s
                                     .663
                                              C perv/imperv/total
              .663
                          .000
15
       ADD RUNOFF
                                                 .000 c.m/s
             6.005
                         9.830
                                     .000
27
       HYDROGRAPH DISPLAY
            is # of Hyeto/Hydrograph chosen
      4
       Volume = .1105305E+05 c.m
20
       MANUAL
```

APPENDIX B

MODEL OUTPUT FILES FOR PROPOSED CONDITIONS

```
Output File (4.7) 3209 25m.PST opened 2010-11-24 8:48
      Units used are defined by G =
                                   9.810
                     5.000 are MAXDT MAXHYD & DTMIN values
         48 971
      Licensee: Conestoga-Rovers & Associates Limited
35
      COMMENT
     6
        line(s) of comment
      * Project #73209-00 - First Solar
      * Proposed Conditions - Amherstburg 2 Solar Farm
      * GV
      * November 2010
      FILE RAINFALL
23
     1
          1=READ: 2=WRITE
          25MD 001.HYT
    12
                             is Filename
27
      HYDROGRAPH DISPLAY
     1
          is # of Hyeto/Hydrograph chosen
      Depth = .2500000E+02 mm
3
      IMPERVIOUS
         1
               Option 1=SCS CN/C; 2=Horton; 3=Green-Ampt; 4=Repeat
       .011
               Manning "n"
     98.000
               SCS Curve No or C
       .100
               Ia/S Coefficient
       .518
               Initial Abstraction
14
      START
     1
          1=Zero; 2=Define
      CATCHMENT
4
               ID No.6 99999
    200.000
      8.519
               Area in hectares
               Length (PERV) metres
    206.000
               Gradient (%)
       .156
               Per cent Impervious
       .000
    206.000
               Length (IMPERV)
       .000
               %Imp. with Zero Dpth
         1
               Option 1=SCS CN/C; 2=Horton; 3=Green-Ampt; 4=Repeat
               Manning "n"
       .029
     89.000
               SCS Curve No or C
       .100
               Ia/S Coefficient
      3.102
               Initial Abstraction
               Option 1=Trianglr; 2=Rectanglr; 3=SWM HYD; 4=Lin. Reserv
         1
            .158
                    .000
                              .000
                                          .000 c.m/s
            .360
                      .000
                                .360
                                     C perv/imperv/total
15
      ADD RUNOFF
            .158
                                .000
                                          .000 c.m/s
                      .158
27
      HYDROGRAPH DISPLAY
     4
          is # of Hyeto/Hydrograph chosen
      Volume = .7659152E+03 c.m
      CATCHMENT
 4
               ID No.ó 99999
    201.000
     55.694
               Area in hectares
               Length (PERV) metres
    978.000
       .257
               Gradient (%)
       .000
             Per cent Impervious
    978.000
               Length (IMPERV)
```

	.000	-	vith Zero Dpt			
	1			2 = Horton;	3=Green-Ampt;	4=Repeat
	.035	Manning	ſ "n"			
	75.000	SCS Cur	ve No or C			
	.100	Ia/S Co	oefficient			
	8.371	Initial	Abstraction	ı		
	1	Option	1=Trianglr;	2=Rectang	<pre>lr; 3=SWM HYD;</pre>	4=Lin. Reserv
		076	.158	.000	.000 c.m/s	
	-	109	.000	.109	C perv/imperv/	total
15	ADD RUNC	OFF				
		076	.174	.000	.000 c.m/s	
27	HYDROGRA	APH DISPLA	AY .			
	4 is	# of Hyet	.o/Hydrograpl	n chosen		
	Volume	= .15202	294E+04 c.m			
20	MANUAL					

```
Output File (4.7) 3209 100.PST opened 2010-11-24 9:10
      Units used are defined by G =
                                    9.810
         36 978
                     5.000 . are MAXDT MAXHYD & DTMIN values
      Licensee: Conestoga-Rovers & Associates Limited
35
      COMMENT
         line(s) of comment
     6
      * Project #73209-00 - First Solar
      * Proposed Conditions - Amherstburg 2 Solar Farm
      * GV
      * November 2010
      23
      FILE RAINFALL
          1=READ: 2=WRITE
     1
    12
          ST2CS100.HYT
                             is Filename
27
      HYDROGRAPH DISPLAY
     1
          is # of Hyeto/Hydrograph chosen
      Depth = .8969974E+02 \text{ mm}
3
      IMPERVIOUS
         1
               Option 1=SCS CN/C; 2=Horton; 3=Green-Ampt; 4=Repeat
       .011
               Manning "n"
     98.000
               SCS Curve No or C
       .100
               Ia/S Coefficient
               Initial Abstraction
       .518
14
      START
     1
          1=Zero; 2=Define
4
      CATCHMENT
    200,000
               ID No.6 99999
      8.519
               Area in hectares
               Length (PERV) metres
    206.000
       .156
               Gradient (%)
               Per cent Impervious
       .000
    206.000
               Length (IMPERV)
       .000
               %Imp. with Zero Dpth
         1
               Option 1=SCS CN/C; 2=Horton; 3=Green-Ampt; 4=Repeat
       .029
               Manning "n"
     89.000
               SCS Curve No or C
       .100
               Ia/S Coefficient
      3.102
               Initial Abstraction
              Option 1=Trianglr; 2=Rectanglr; 3=SWM HYD; 4=Lin. Reserv
          1
                     .000
           2.416
                               .000
                                          .000 c.m/s
             .707
                      .000
                                .707
                                         C perv/imperv/total
      ADD RUNOFF
15
           2.416
                     2.416
                                 .000
                                          .000 c.m/s
27
      HYDROGRAPH DISPLAY
          is # of Hyeto/Hydrograph chosen
     4
      Volume = .5403529E+04 c.m
      CATCHMENT
4
    201.000
               ID No.ó 99999
     55.694
               Area in hectares
               Length (PERV) metres
    978.000
               Gradient (%)
       .257
       .000
               Per cent Impervious
    978.000
               Length (IMPERV)
```

	-	with Zero Dpt			
			2=Horton;	3=Green-Ampt;	4=Repeat
	.035 Manniı	ıg "n"			
	75.000 SCS Ci	arve No or C			
	.100 Ia/S (Coefficient			
	8.371 Initia	al Abstraction	ı		
	1 Option	1 1=Trianglr;	2=Rectang	<pre>lr; 3=SWM HYD;</pre>	4=Lin. Reserv
	4,245	2.416	.000	.000 c.m/s	
	.444	.000	.444	C perv/imperv/	total
15	ADD RUNOFF		181		
	4.245	4.839	.000	.000 c.m/s	
27	HYDROGRAPH DISPI	LAY			X
	4 is # of Hye	eto/Hydrograpl	n chosen		
	Volume = .221'	7114E+05 c.m			
20	MANUAL				