



## PROPERTY VALUE IMPACT STUDY

### ADJACENT PROPERTY VALUES SOLAR IMPACT STUDY: A STUDY OF NINE EXISTING SOLAR FARMS

Located in Cook, Champaign, LaSalle, and Winnebago Counties, Illinois;  
Porter, Madison, and Marion Counties, Indiana; and Chisago County, Minnesota

**PREPARED FOR:**

Mr. Patrick Dalseth  
Regional Director of Project Development  
SunVest Solar Inc.  
25 N. River Lane  
Geneva, IL 60134

**SUBMITTED BY:**

CohnReznick, LLP  
*Valuation Advisory Services*  
200 S Wacker Drive, Suite 2600  
Chicago, IL 60606

Patricia L. McGarr, MAI, CRE, FRICS  
pat.mcgarr@cohnreznick.com  
Andrew R. Lines, MAI  
andrew.lines@cohnreznick.com

**May 30, 2018**

## EXECUTIVE SUMMARY

The purpose of this real estate impact study is to determine whether the existing solar farm uses under study have had any measurable impact on the value of adjacent properties.

According to the Solar Energy Industries Association (SEIA) 2017 statistics, Illinois had 83.8 Megawatts (MW) of solar panels installed as of year-end 2017, compared to Indiana which has had 275.6 MW of solar panels installed. Minnesota had 744.4 MW of solar installations as of the end of 2017, ranking 6<sup>th</sup> in the nation.

As we are studying the impact of this use on adjacent property values in Illinois, we have only studied established solar farms in the Midwest; this is primarily due to the way soil conditions, climate, and topography differ from region to region and how they contribute to property values.

We have included several of these established solar farms in Illinois, Indiana and Minnesota, focusing on similar rural and suburban areas with neighboring residential homes, that we believe are comparable to those locations proposed in Illinois. Solar farms with a variety of output capacities have been studied because of the existence of residential homes within close proximity. With sales of these adjacent properties, we are able to analyze the property value trends in similar locations as the proposed solar farms.

### Study Features

Our study includes research and analyses of nine existing solar panel farms and the property value trends of the adjacent land uses, including agricultural, single family and residential properties; review of published studies, and discussions with market participants, summarized as follows:

- Solar Farm A (*North Star Solar Farm*) is located near the City of North Branch, in unincorporated Chisago County, Minnesota. The solar farm is a 100 MW solar farm that is situated on approximately 1,000 acres of land and is surrounded by agricultural land uses and some residential uses.
- Solar Farm 1 (*Grand Ridge Solar Farm*) is located near the City of Streator in LaSalle County, Illinois, in a primarily rural area, on two contiguous parcels totaling 160 acres. Surrounding uses consist of agricultural land, some with homesteads, and single family homes to the northwest. We found one adjoining property which qualified for a paired sales analysis.
- Solar Farm 2 (*Rockford Solar Farm*) is located in the City of Rockford in Winnebago County, Illinois, just a little over one mile south of the Chicago-Rockford International Airport and is comprised of three parcels for a total acreage of 182.29 acres. This solar farm construction was announced in March 2011, and completed in October 2012. The surrounding uses include agricultural and industrial land. Many of the surrounding parcels are owned by the Chicago-Rockford International Airport Authority. We found two adjoining properties which qualified for a paired sales analysis.
- Solar Farm 3 (*Exelon City Solar Farm*) is located in the City of Chicago in Cook County, Illinois, in the West Pullman Industrial redevelopment on a 41-acre brownfield site. The solar farm was announced on April 22, 2009 and began operations in July 2010. The surrounding area is primarily populated with single family home uses to the south and west, and vacant industrial land to the north and east. For Solar Farm 3, there were no adjoining properties with sales that fit the criteria to perform a paired sales analysis.

- Solar Farm 4 (*University of Illinois Solar Farm*) is located in the City of Champaign, Champaign County, Illinois, just south of the University Illinois Urbana-Champaign Campus. This solar farm is located on 20.79 acres of land. The solar farm was announced for construction on November 12, 2012, and completed on November 2015. This solar farm is owned and operated by the University of Illinois and is considered one of the largest university solar farms in the country. Surrounding uses include a nature preserve to the east and south, commercial offices to the west, and university-occupied land to the north. There were no adjoining properties with sales that fit the criteria to perform a paired sales analysis for Solar Farm 4.
- Solar Farm 5 (*Dominion Indy Solar Farm III*) is located in a suburban, yet rural area outside of Indianapolis, in Marion County, Indiana, on a parcel totaling 134 acres. The surrounding uses consist of agricultural land to the east, west and south, and a single family subdivision to the north. We found eight adjoining properties which qualified for a paired sales analysis.
- Solar Farm 6 (*Portage Solar Farm*) is located near the City of Portage, in Porter County, Indiana. This solar farm is situated in a residential area on a 56-acre parcel of land. The surrounding uses consist of agricultural land to the north and east, and residential uses such as single family homes to the west and northwest, and multifamily apartments to the south. We found two adjoining properties that qualified for a paired sales analysis.
- Solar Farm 7 (*IMPA Frankton Solar Farm*) is located in the Town of Frankton, in Madison County, Indiana. This solar farm is situated in a fairly rural area and is located on a 13-acre parcel. The surrounding uses consist of single family homes to the east, agricultural land to the south, west, and north, and some baseball fields as well. We found two adjoining properties which qualified for a paired sales analysis.
- Solar Farm 8 (*Valparaiso Solar Farm*) is located near the City of Valparaiso, in Porter County, Indiana. This solar farm is situated in a fairly rural area on two contiguous parcels totaling 27.9 acres. The surrounding uses consist of vacant land to the north, and single family homes to the east, south and west. We considered two adjoining properties which qualified for a paired sales analysis.
- We performed a paired sales analysis for each adjoining property that fit the criteria for analysis that were adjacent to the solar farms we studied. The sales adjacent to solar farms, or Test Areas, were compared to agricultural land sales or single family home sales not adjacent to solar farms within the same county or geographical area as the subject solar farms, or Control Areas.
- **We analyzed 17 adjoining property sales in Test Areas and 70 comparable sales in Control Areas**, collectively, for the Grand Ridge Solar Farm, for the Rockford Solar Farm, the Dominion Indy III Solar Farm, the Portage Solar Farm, the IMPA Frankton Solar Farm, and the Valparaiso LLC Solar Farm, over the past five years. The remaining three solar farms did not have data available for analysis.

## Methodology

The basic premise of this comparative analysis is that if there is any impact on the property values, by virtue of their proximity to a solar farm, it would be reflected by such factors as the range of sale prices, differences in unit sale prices, conditions of sale, and overall marketability. When comparing these factors for properties near the solar farm to properties locationally removed from the solar farm, we would expect to see some emerging and consistent pattern of substantial difference in these comparative elements – if, in fact, there was an effect.

## Results

Illinois is an emerging Solar Farm market, so there are few existing solar farms to study here. We do note that our studies of facilities of various sizes demonstrate the same conclusions: that there is no measurable and consistent difference in property values for properties adjacent to solar farms when compared to similar properties locationally removed from their influence. This is supported by our interviews with local real estate brokers who have stated that there is no difference in price, marketing periods or demand for the homes directly adjacent to the 100 MW Solar Farm in Minnesota, which corroborates exactly what the real estate agents have said about the homes in Illinois adjacent to 2 MW facilities.

We have also reviewed published methodology for measuring impact on property values as well as published studies that specifically analyzed the impact of solar farms on nearby property values. We have also interviewed market participants, including County and Township Assessors, to give us additional insight as to how the market evaluates farm land and single family homes with views of the solar farm. These studies found little to no measurable and consistent difference in value between the Test Area Sales and the Control Area Sales attributed to the proximity to solar farms and are generally considered a compatible use. Considering all of this information, we can conclude that since the Adjoining Property Sales (Test Area Sales) for the existing solar farms analyzed were not adversely affected by their proximity to solar farms, that properties surrounding other solar farms operating in compliance with all regulatory standards will similarly not be adversely affected, in either the short or long term periods.

May 30, 2018

Mr. Patrick Dalseth  
Regional Director of Project Development  
SunVest Solar, Inc  
25 N. River Lane  
Geneva, IL 60134

**SUBJECT:** Property Value Impact Study  
Nine Solar Farms  
Located in Cook, Champaign, LaSalle, and Winnebago Counties, Illinois;  
Porter, Madison, and Marion, Counties, Indiana; and Chisago County, Minnesota

Dear Mr. Dalseth:

CohnReznick is pleased to submit the accompanying adjacent property values impact study of the above referenced subject properties. Per the client's request, we have researched four solar farms in Illinois: Grand Ridge in LaSalle County (Solar Farm 1), Chicago Rockford International Airport in Winnebago County (Solar Farm 2), the Exelon City Solar Farm in Cook County (Solar Farm 3), and the University of Illinois Solar Farm in Champaign County (Solar Farm 4). We have also researched four solar farms in Indiana: Dominion Indy Solar III Farm in Marion County (Solar Farm 5), Portage Solar Farm in Porter County (Solar Farm 6), IMPA Frankton Solar Farm in Madison County (Solar Farm 7), and Valparaiso Solar LLC Farm in Porter County (Solar Farm 8). One additional solar farm in Minnesota, the North Star Solar Farm in Chisago County (Solar Farm A), was also researched.

In forming this report, we have researched and visited the existing solar farms in Illinois and Indiana, researched articles and other published studies, and interviewed real estate professionals and Township Assessors, active in the market where solar farms are located, to gain an understanding of market perceptions.

The purpose of the assignment is to determine whether the proximity of the subject facilities (solar farms) resulted in any significant measurable and consistent impact on adjacent property values, given the existing uses and zoning of nearby property at the time of development. The intended use of our opinions and conclusions is to assist the client in addressing local concerns regarding a solar farm's potential impact on surrounding property values, in addition to addressing the required criteria for obtaining approvals for proposed solar energy uses, such as minimizing the impact on adjacent property values. We have not been asked to value any specific property, and we have not done so. The client for the assignment SunVest Solar Inc.. The report may be used only for the aforementioned purpose and may not be distributed without the written consent of CohnReznick LLP ("CohnReznick").

The assignment is intended to conform to the Uniform Standards of Professional Appraisal Practice (USPAP), the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute as well as applicable state appraisal regulations.

Based on the analysis in the accompanying report, and subject to the definitions, assumptions, and limiting conditions expressed in the report, our opinion is as follows below.

## CONCLUSIONS

We analyzed 17 adjoining property sales and 70 comparable sales, collectively, for the Grand Ridge Solar Farm, the Rockford Solar Farm, the Dominion Indy III Solar Farm, Portage Solar Farm, the Valparaiso LLC Solar Farm, and the IMPA Frankton Solar Farm, over the past five years. We note that proximity to the solar farms has not deterred sales of nearby agricultural land and residential single family homes.

No empirical evidence evolved that indicated a more favorable real estate impact on the Control Area Sales as compared to the adjoining, Test Area Sales with regard to such market elements as:

1. Range of sale prices
2. Differences in unit sale prices
3. Conditions of sale
4. Overall marketability
5. New Development
6. Rate of Appreciation

We have also reviewed published methodology for measuring impact on property values as well as published studies that specifically analyzed the impact of solar farms on nearby property values. We have also interviewed market participants, including Township Assessors, to give us additional insight as to how the market evaluates farm land and single family homes with views of the solar farm.

These studies found little to no measurable and consistent difference in value between the Test Area Sales and the Control Area Sales attributed to the proximity to solar farms and are generally considered a compatible use. Considering all of this information, we can conclude that since the Adjoining Property Sales (Test Area Sales) for the existing solar farms analyzed were not adversely affected by their proximity to solar farms, that properties surrounding other solar farms operating in compliance with all regulatory standards will similarly not be adversely affected, in either the short or long term periods.

If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Very truly yours,

**CohnReznick, LLP**



Andrew R. Lines, MAI  
Principal  
Certified General Real Estate Appraiser  
Illinois License No. #553.001841  
Expires 9/30/2019  
Indiana License No. #CG41500037  
Expires 6/30/2018



Patricia L. McGarr, MAI, CRE, FRICS  
National Director - Valuation Advisory Services  
Certified General Real Estate Appraiser  
Illinois License No. #553.000621  
Expires 9/30/2019  
Indiana License No. #CG49600131  
Expires 6/30/2018



Martin D. Broerman, MAI  
Senior Manager  
Certified General Real Estate Appraiser  
Illinois License No. #553.002252  
Expires 9/30/2019  
Indiana License No. #CG41400050  
Expires 6/30/2018



Sonia K. Singh  
Manager  
Certified General Real Estate Appraiser  
VA License No. #4001017615  
Expires 3/31/2020

# TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY</b> .....	<b>2</b>
<b>SCOPE OF WORK</b> .....	<b>9</b>
<b>OVERVIEW OF SOLAR DEVELOPMENT</b> .....	<b>11</b>
<b>MARKET ANALYSIS OF THE IMPACT ON VALUE FROM SOLAR FARMS</b> .....	<b>15</b>
METHODOLOGY .....	15
PUBLISHED STUDIES .....	16
<b>ADJACENT PROPERTY VALUES IMPACT STUDY</b> .....	<b>18</b>
SOLAR FARM A: NORTH STAR SOLAR FARM, CHISAGO COUNTY, MN.....	20
SOLAR FARM 1: GRAND RIDGE SOLAR FARM, STREATOR, IL .....	21
SOLAR FARM 2: ROCKFORD SOLAR FARM, ROCKFORD, IL.....	24
SOLAR FARM 3: EXELON CITY SOLAR FARM .....	33
SOLAR FARM 4: UNIVERSITY OF ILLINOIS SOLAR FARM, CHAMPAIGN, IL.....	34
SOLAR FARM 5: DOMINION INDY SOLAR III, INDIANAPOLIS, IN .....	35
SOLAR FARM 6: PORTAGE SOLAR FARM, PORTAGE TOWNSHIP, IN .....	39
SOLAR FARM 7: IMPA FRANKTON SOLAR FARM, FRANKTON, IN .....	43
SOLAR FARM 8: VALPARAISO SOLAR LLC, VAPARAISO, IN.....	46
<b>SUMMARY OF ADJOINING USES</b> .....	<b>50</b>
<b>MARKET COMMENTARY</b> .....	<b>51</b>
<b>SOLAR FARM FACTORS ON HARMONY OF USE</b> .....	<b>53</b>
<b>COMPATIBILITY WITH EXISTING USES</b> .....	<b>54</b>
<b>SUMMARY AND FINAL CONCLUSIONS</b> .....	<b>56</b>
<b>CERTIFICATION</b> .....	<b>58</b>
<b>ASSUMPTIONS AND LIMITING CONDITIONS</b> .....	<b>60</b>
<b>ADDENDUM A: APPRAISER QUALIFICATIONS</b> .....	<b>64</b>

*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*



## SCOPE OF WORK

### CLIENT

SunVest Solar Inc.

### INTENDED USERS

SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals.

### INTENDED USE

The intended use of our opinions and conclusions is to assist the client in addressing local concerns regarding a solar farm's potential impact on surrounding property values, in addition to addressing the required criteria for obtaining approvals for proposed solar energy uses, such as minimizing the impact on adjacent property values. The report may be used only for the aforementioned purpose and may not be distributed without the written consent of CohnReznick LLP ("CohnReznick").

### PURPOSE

The purpose of this report is to address local concerns regarding a solar farm use having a perceived impact on surrounding property values, and provide a consulting report that can be submitted to municipal planning departments for the purposes of addressing the required criteria for obtaining approvals for proposed solar energy sites.

### EFFECTIVE DATE

May 23, 2018; Paired sale analyses are current through the end of the first quarter of 2018.

### DATE OF REPORT

May 30, 2018

### PRIOR SERVICES

USPAP requires appraisers to disclose to the client any services they have provided in connection with the subject property in the prior three years, including valuation, consulting, property management, brokerage, or any other services.

This report is a compilation of the Solar Farms which we have studied over the past year, and is not evaluating a specific subject site. In this instance, there is no "subject property" to disclose.

## INSPECTION

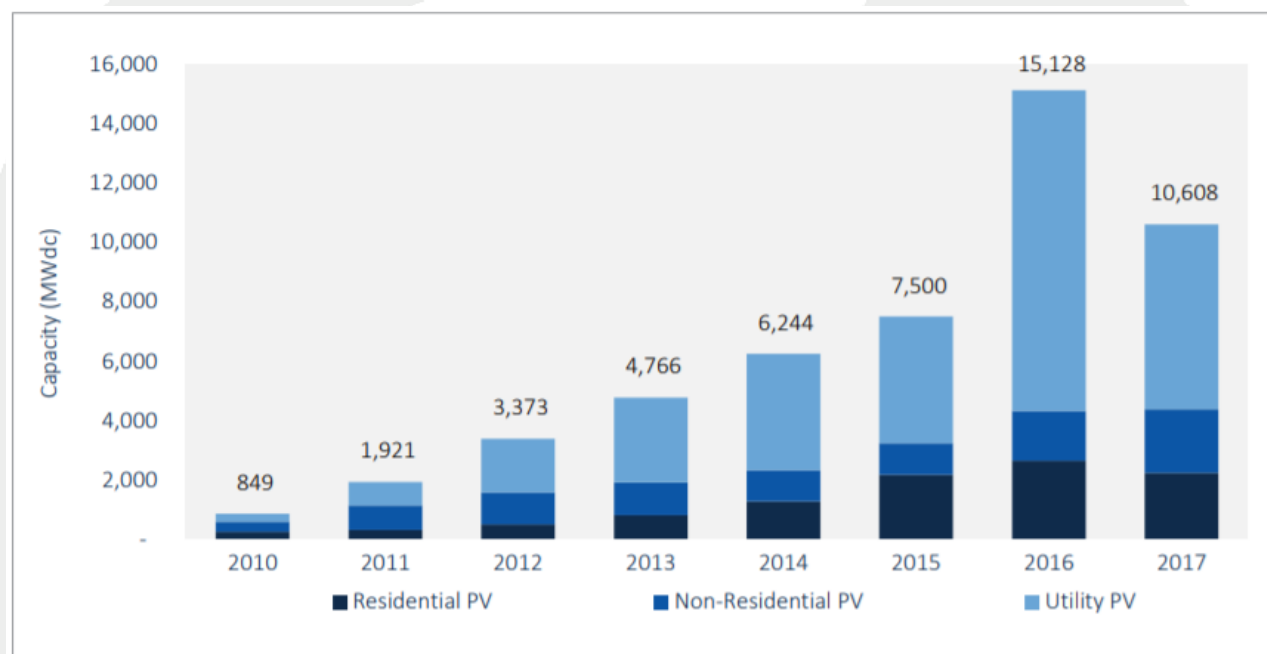
Patricia L. McGarr and Martin D. Broerman have performed an inspection of the exterior of the properties that are the subject of this impact study on various dates in October 2017 and in early 2018. The inspections were conducted via public rights of way.

Patricia L. McGarr, MAI, Andrew R. Lines, MAI, Martin D. Broerman, MAI, and Sonia K. Singh have viewed the exterior of all comparable data referenced in this report in person, via photographs, or aerial imagery.

## OVERVIEW OF SOLAR DEVELOPMENT

Photovoltaic (PV) cell installations, commonly known as solar cells, increased almost exponentially over the past ten years in the United States as technology and the economic incentives (Solar Investment Tax Credits or ITC) made the installation of solar farms economically reasonable. A majority of these solar farm installations come from larger-scale solar farm developments for utility purposes. The charts below portray the increases of the solar installations in the US as a whole, on an annual basis, historically, courtesy of Solar Energy Industries Association (SEIA) and GTM Research.

**U.S. Annual PV Installations, 2010 - 2017**



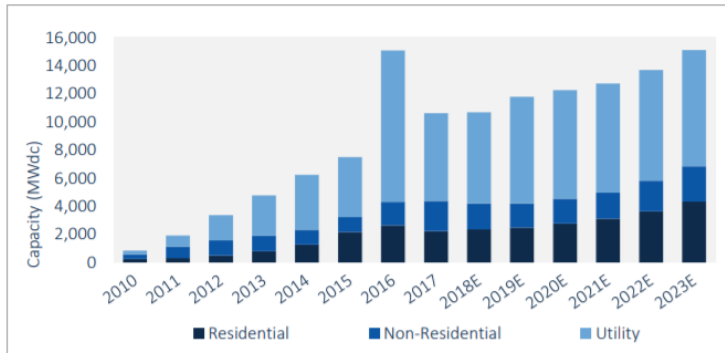
The year 2017 was a transitional year for the solar market. Residential and utility PV both saw installations fall on an annual basis for the first time since 2010, marking a “reset” year for both segments. Meanwhile, the non-residential PV segment was the only market to experience growth in 2017. For residential PV, the downturn in 2017 stems from segment-wide customer acquisition challenges that are constraining growth across most major state markets. Amidst other variables such as loss of state incentives, and competitive landscape trends, there are concerns about the relationship between increasing customer penetration and low installation growth as the pool of attractive early-adopter customers grows increasingly thin in certain markets. While the relationship between market penetration and growth does not fully explain the market downturn, industry experts believe it is increasingly becoming a factor in constraining growth amongst major state markets.

Meanwhile, the year-over-year downturn for utility PV in 2017 was largely expected, due to the massive influx of projects trying to leverage the 30% federal Investment Tax Credit (ITC) in 2016. However, uncertainty surrounding the Section 201 tariffs caused many projects to be shelved in 2017, while other cancellations and interconnection delays resulted in many projects spilling over into 2018.

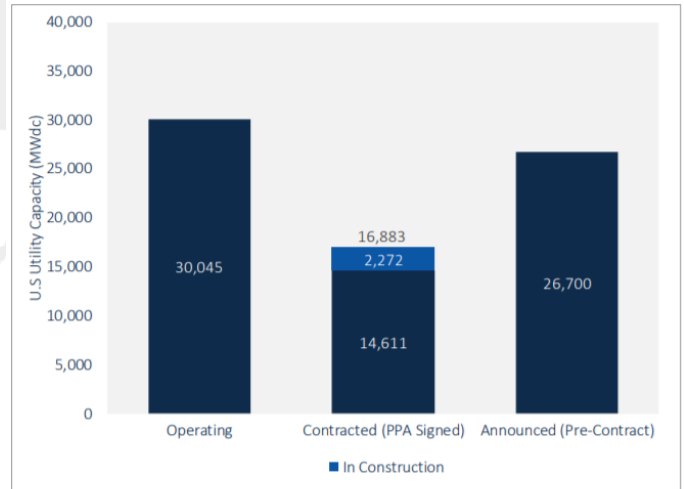
Both closing regulatory windows, and the realization of a robust community-solar pipeline, drove substantial growth in non-residential solar in 2017. This is the second consecutive year for such growth after the space essentially remained flat from 2012-2015.

The pipeline for Utility PV, as of year-end 2017 includes capacity of 43,583 combined from contracted and under construction as well as announced but pre-contract sources, as seen below. This new capacity represents a 45% increase over current operational capacity.

**U.S. Utility PV Pipeline (Year End 2017)**

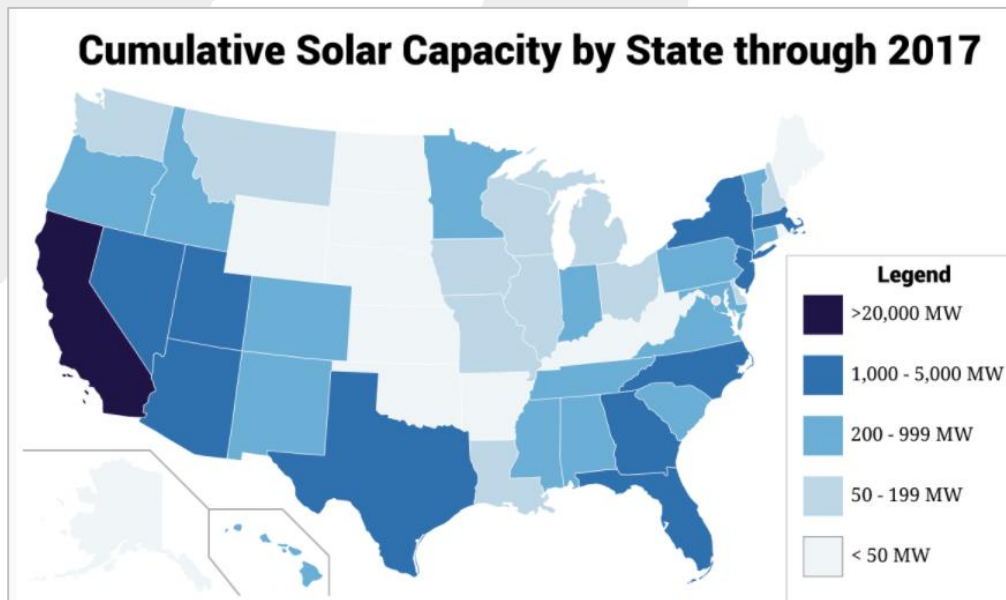


**U.S. PV Installation Forecast, 2010 – 2023E**



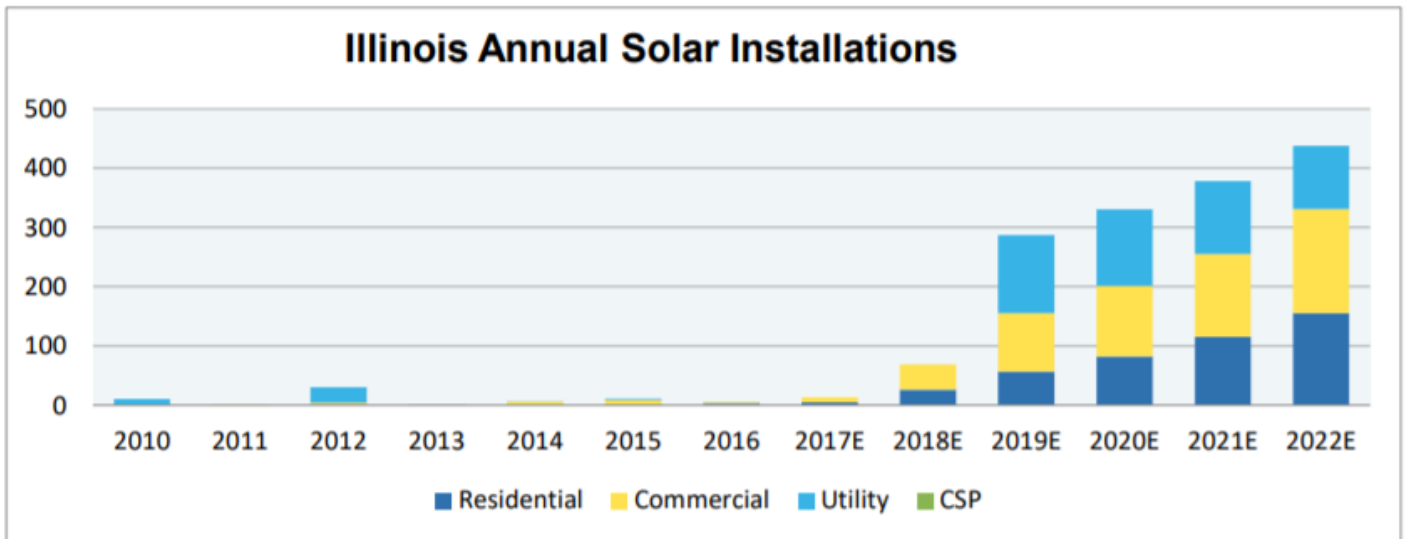
Source: GTM Research, U.S. Utility PV Market Tracker

Nearly 250,000 Americans work in the solar industry. The cost to install solar panels has dropped nationally by 70% since 2010, which has been one cause that led to the increase in installations. The map below portrays solar capacity by state.

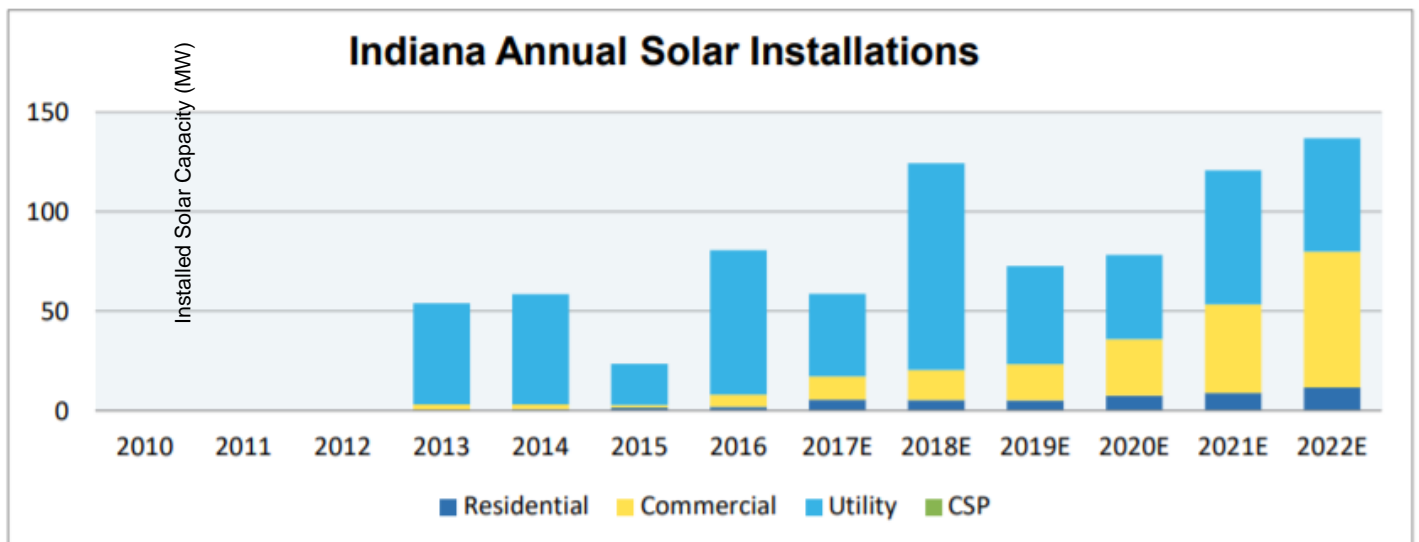


*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*

Illinois has recently picked up investment in solar installations. According to the SEIA, there was \$230.62 million invested in solar, and \$27.52 million as of year-end 2017 alone, nearly a 50% increase in annual investment over 2016. Illinois was ranked 40th in the nation by the SEIA in 2017. Although, Illinois is near the bottom of states with solar production, it ranked 20<sup>th</sup> in solar jobs in 2017.



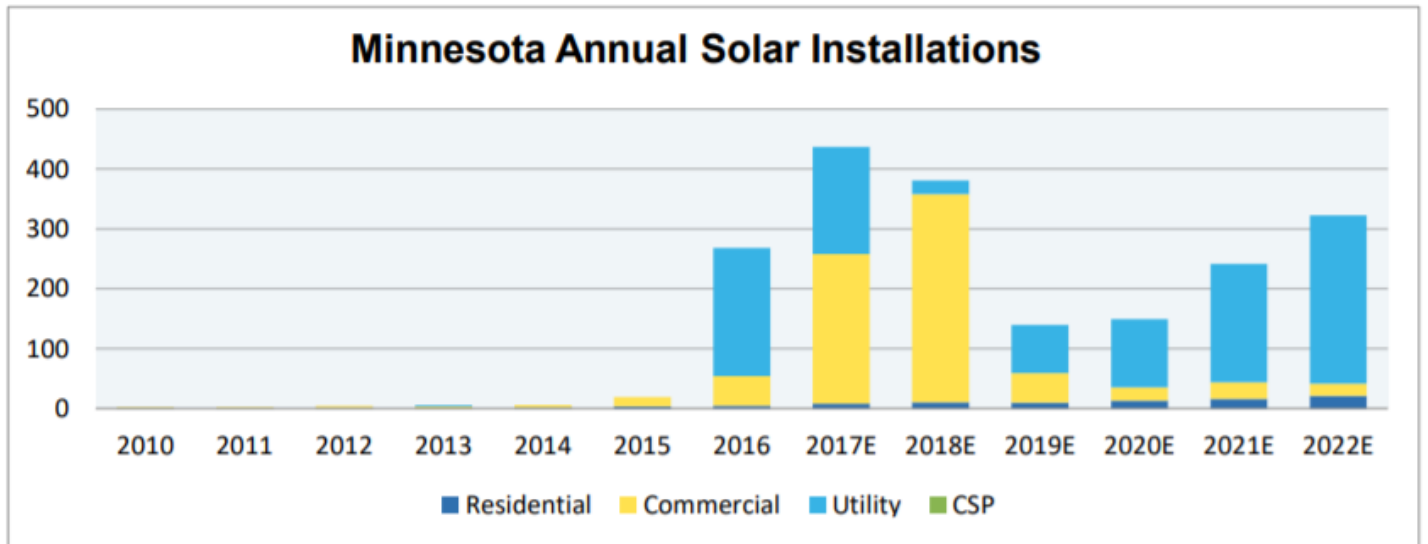
The state of Indiana has clearly seen a significant uptick in solar investments. According to the Solar Energy Industries Association (SEIA), \$438.09 million has been invested in solar, with \$79.75 million being invested in 2017 alone. The increase in solar investments is due to the falling costs of installations. According to the SEIA, solar prices have declined by 52% over the past five years in the state. Currently, solar energy powers 32,000 Indiana homes with 275.5 MW of solar installed. Indiana ranks in the middle of the pack comparatively to other states, at 27th.



Minnesota has also seen a significant increase in solar investments over the past few years. According to the Solar Energy Industries Association (SEIA), \$1,065.54 million has been invested in solar, with \$609.41 million being invested in 2017 alone. According to the SEIA, solar prices have declined by 52% over the past five years

*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*

in the state. Currently, solar energy powers 98,000 Minnesota homes with 744.4 MW of solar installed. Minnesota ranks 6<sup>th</sup> in the nation for solar installations.



*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*

## MARKET ANALYSIS OF THE IMPACT ON VALUE FROM SOLAR FARMS

### METHODOLOGY

According to Randall Bell, PhD, MAI, author of *Real Estate Damages*, published by the Appraisal Institute in 2016, the paired sales analysis is an effective method of determining if there is a detrimental impact on surrounding properties.

*“This type of analysis may compare the subject property or similarly impacted properties called **Test Areas** (at Points B, C, D, E, or F) with unimpaired properties called **Control Areas** (Point A). A comparison may also be made between the unimpaired value of the subject property before and after the discovery of a detrimental condition. If a legitimate detrimental condition exists, there will likely be a **measurable and consistent difference** between the two sets of market data; if not, there will likely be no significant difference between the two sets of data. This process involves the study of a group of sales with a detrimental condition, which are then compared to a group of otherwise similar sales without the detrimental condition.”<sup>1</sup>*

As an approved method, this technique can be utilized to extract the effect of a single characteristic on value. By definition, paired data analysis is “a quantitative technique used to identify and measure adjustments to the sale prices or rents of comparable properties; to apply this technique, sales or rental data on nearly identical properties is analyzed to isolate a single characteristic’s effect on value or rent.”<sup>2</sup> The text further describes that this method is theoretically sound when an abundance of market data is available for analysis. It may be impractical for those property types that do not frequently sell, such as commercial properties. *The Appraisal of Real Estate* states that the lack of data can reduce the strength of the analysis, and that “an adjustment derived from a single pair of sales is not necessarily indicative” of the value of the single difference.

We also utilized a Trend Analysis to adjust our comparable Control Sales to a constant valuation date, the date of the Test Area sale. According to the *Dictionary of Real Estate Appraisal, 6th edition*, a Trend Analysis is defined as:

*“A quantitative technique used to identify and measure trends in the sale prices of comparable properties; useful when sales data on highly comparable properties is lacking but a broad database on properties with less similar characteristics is available. Market sensitivity is investigated by testing various factors that influence sale prices.”*

---

<sup>1</sup> Bell, Randall, PhD, MAI. *Real Estate Damages*. Third ed. Chicago, IL: Appraisal Institute, 2016.

<sup>2</sup> *The Appraisal of Real Estate 14<sup>th</sup> Edition*. Chicago, IL: Appraisal Institute, 2013.

We utilized a Trend Analysis to adjust the Control Sales for market conditions, as this is a variable that affects all properties similarly and can be adjusted for. Given the reduced amount of sale data and sales with highly similar characteristics to the Test Area sales, we concluded that adjusting only for market conditions is reasonable as this is explainable by a linear regression analysis, a form of Trend Analysis. This involved plotting our Control Sales unit sale prices against their sale dates and plotting a “Line of Best Fit” to explain market condition trends. We extracted a monthly appreciation rate for each set of Control Sales and applied that to each respective grouping to normalize the sales to a common valuation date.

## PUBLISHED STUDIES

We have also considered various studies that consider the impact of solar farms on surrounding property values. The studies range from survey-based formal research to less formal analyses.

The studies show that over the past decade, the solar industry has experienced unprecedented growth. Among the factors contributing to its growth were government incentives, significant capacity additions from existing and new entrants and continual innovation. The incentives made the solar photovoltaic (PV) industry economically attractive for many consumers and as a result set the conditions for the boom. A significant amount of farmland trades have been to solar developers, transaction prices for these deals were reported to be between 30 to 50 percent above normal agricultural land prices in 2016. Clean Energy Trends, a publication developed by Clean Edge, reported in 2013 that investments in new capacity of solar farms increased from approximately \$3 billion USD in 2000 to approximately \$91 billion USD in 2013, just short of the record of \$92 billion USD in 2011. Solar PV installations increased from 31 Gigawatts (GW) in 2012 to a record of approximately 37 GW in 2013. As a result, annual solar PV installations exceed annual wind installations for the first time. Before 2011, annual wind installations were double annual solar PV installations.

Solar farms offer a wide array of economic and environmental benefits to surrounding properties. Unlike other energy sources, solar energy does not produce emissions that may cause negative health effects or environmental damage. Solar farms produce a lower electromagnetic field exposure than most household appliances, such as TV and refrigerators, and studies have confirmed there are no health issues related to solar farms.<sup>3</sup> The Solar Foundation measured that the solar industry employed 22 percent more workers in the period from 2013 to 2015. Solar farm construction in rural areas has also dramatically increased the tax value of the land on which they are built, which has provided a financial boost to some counties. According to Duke University’s Center on Globalization, Governance, and Competitiveness (“DUCGCC”), study of solar projects in North Carolina indicated despite the 80% tax abatement, the taxable value of a parcel with a solar farm is significantly larger than the taxable value of that same land under agricultural zoning.

---

<sup>3</sup> “Electromagnetic Field and Public Health.” Media Centre (2013): 1-4. World Health Organization.



Beyond creating jobs, solar farms are also benefiting the overall long-term agricultural health of the community. As explained by ReThink Energy, a conservation foundation, a typical solar farm has more than two-thirds of the field left open and uncovered by solar panels. This unused land, and also all the land beneath the solar panels, will be left to repair naturally. In the long run this is a better use of land since the soil is allowed to recuperate instead of being ploughed and fertilized year in and year out.

A solar farm can greatly increase the value of land, offering some financial security for the property owner over 20 to 25 years. Once solar panel racking systems are removed, the land can revert to its original use.<sup>4</sup>

Studies have also noted that the installation of utility-scale solar on a property has no negative impact on its value. According to a report titled “Mapleton Solar Impact Study” from Kirkland Appraisals, LLC, conducted in Murfreesboro, North Carolina in September 2017, the study found that the proposed solar farm had no impact to adjacent vacant residential, agricultural land, or residential homes. The adjoining land for the paired data sales analysis in the report was primarily low density residential and agricultural uses, although there was one case where the solar farm adjoined to two dense subdivisions of homes.

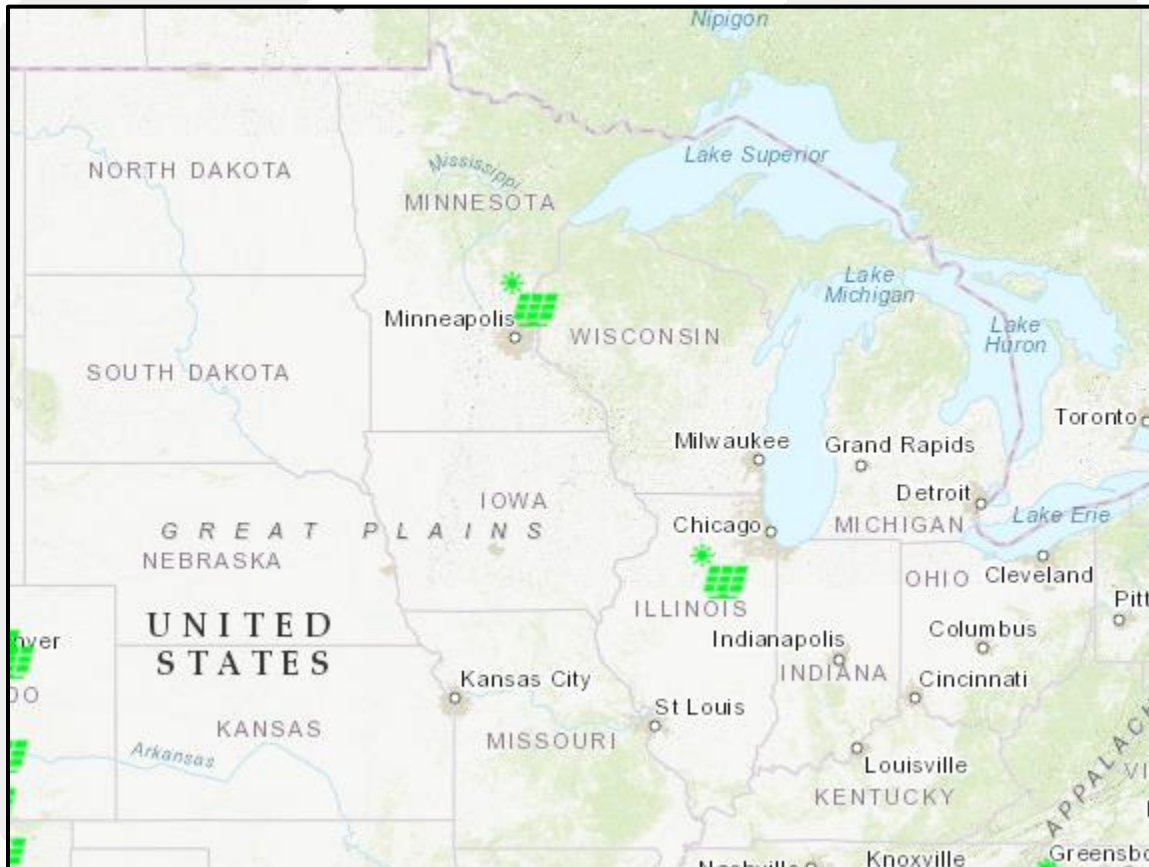
---

<sup>4</sup> NC State Extension. (May 2016). *Landowner Solar Leasing: Contract Terms Explained*. Retrieved from: <https://content.ces.ncsu.edu/landowner-solar-leasing-contract-terms-explained>

## ADJACENT PROPERTY VALUES IMPACT STUDY

We have studied established solar farms in the Midwest specifically, because of the way that regional soil conditions, climate, and topography contribute to property values and their potential for impact on property values. Large installation of solar panels is limited in the Midwestern United States.

Through December 2016, there have been only two major installations in the Midwest: North Star Solar in Chisago County, Minnesota and Grand Ridge Solar in LaSalle County, Illinois. A map illustrating existing solar farms greater than 15 MW is presented below, courtesy of open source data retrieved from the Energy Information Administration (EIA).



In our analysis of existing solar farms, we have included both of these on the following pages. We have chosen to study the North Star solar farm in Minnesota because of its large size, which is less common, and because it is also situated in the Midwest. We also analyzed three other solar farms in Illinois and four in Indiana.

In total, we identified nine solar farms to study with comparable sales where generally the only difference was the attribute under study: proximity to a solar farm.

Ownership and sales history for each adjoining property to an existing solar farm through the effective date of this report is maintained within our workfile. Adjoining properties with no sales data or that sold prior to the development of the solar farm were excluded from further analysis. Adjoining properties that sold during construction were not considered for a paired sales analysis because the impact of being proximate to the solar farm could not be differentiated from the impact of the construction. Adjoining properties that sold in a non-arm's

length transaction (such as a transaction between related parties, bank-owned transaction, or between adjacent owners) were excluded from analysis as these are not considered to be reflective of market price levels. The adjoining properties that remained after exclusions were considered for a paired sale analysis.

The difference in price is considered to be the impact of the proximity to the solar farm. Two types of paired sales analyses were considered based on the availability of data:

- Comparing sales of adjoining properties prior to the announcement of the solar farm to sales of adjoining properties after the completion of the solar farm.
- Comparing sales of adjoining properties after the completion of the solar farm to sales of comparable properties that are proximate to solar farms, but not adjoining to them.

We have considered only one type of paired sales analysis, which was comparing sales of properties proximate to the solar farm (Control Area) to the sales of adjoining properties after the completion of the solar farm project (Test Area). We were unable to compare any sales of adjoining properties that occurred prior to the announcement of the solar farm with the sales of the adjoining properties after the completion of the solar farm project as there were no adjoining properties that sold prior to the announcement of the solar farm, within a reasonable period of time.

We have found Control Area sales data through the Northern Illinois Multiple Listing Service (MLS), Zillow, the Indiana Gateway Sales Disclosure Form website, and the Land Sales Bulletin for Illinois and Indiana, and verified these sales through county records, conversations with brokers, and the County Assessor's office. It is important to note that these Control Area Sales are not adjoining to any solar farm, nor do they have a view of a solar farm from the property. Therefore, the announcement nor the completion of the solar farm use could not have impacted the sales price of these properties.

To make direct comparisons, the sale price of the Control Area sales will need to be adjusted for market conditions to a common date. In this analysis, the common date is the date of the Adjoining Property Sale after the completion of the solar farm. After adjustment, any measurable difference between the sale prices would be indicative of a possible price impact of the solar farm, if any.

We conducted a qualitative analysis of the North Star Solar Farm in Minnesota given differences in geographical location. For the remaining eight existing solar farms in Illinois and Indiana, a summary of the analyses completed for each of solar farms studied is presented on the following pages is. Detail of these analyses is retained within our workfile.

## **SOLAR FARM A: NORTH STAR SOLAR FARM, CHISAGO COUNTY, MN**

**Location:** North Star Solar Farm in Chisago County, MN

**Coordinates:** Latitude 45.47, Longitude -92.91

**PIN:** Multiple

**Owner of Record:** Renewable Energy Asset Co, L.L.C.

**Total Land Size:** ±1,000 Acres

**Date Project Announced:** 2014

**Date Project Completed:** October, 2016

**Output:** 100 MW AC

This solar farm is located approximately four miles southeast of the City of North Branch in unincorporated Chisago County, near the intersection of Route 69 and Route 72. The solar farm was developed by North Star and is the largest solar farm in the Midwest. The solar facility consists of 440,000 solar panels and the project has a power output capacity of 100 MW, enough to power 20,000 homes. The solar farm has agricultural land to the north and west. To the south and east of the project there are a number of residential properties, some nestled within the actual solar farm, surrounded on every side.



Due to limited transaction data, we conducted a qualitative study of the potential impact of the solar farm on neighboring properties. After speaking with six local real estate brokers familiar with the area, we conclude that there has been no discernable impact, positive or negative, on properties surrounding the solar farm. Candace Rindahl of ReMax Results, a real estate broker with 16 years of experience in the area, said that she has been in most of the homes surrounding the solar farm and personally sold two of them. She reported that the neighboring homes sold at market rates comparable to other homes in the area not influenced by the solar farm, and they sold within 45 days of offering, at the end of 2017, which was in line with the market.

## **SOLAR FARM 1: GRAND RIDGE SOLAR FARM, STREATOR, IL**

**Location:** Grand Ridge Solar Farm in LaSalle County, IL

**Coordinates:** Latitude 41.143421, Longitude -88.758340

**PINs:** 34-22-100-000, 34-22-101-000

**Total Land Size:** 160 acres

**Date Project Announced:** December 31, 2010

**Date Project Completed:** July 2012

**Output:** 23 MW DC (20 MW AC)

This solar farm is located at the southeast corner at the intersection of 21<sup>st</sup> and 15<sup>th</sup> roads. The solar farm was developed by Invenergy and is considered to be one of the largest renewable energy centers in the world. It includes a 210 MW wind farm, 20 MW AC project solar and 1.5 MW advanced-energy storage project all in one location. The solar facility consists of twenty individual 1 MW solar inverters and over 155,000 photovoltaic modules supplied by General Electric. The solar farm has vacant agricultural land to the north and east, and natural vegetation to the east and south. The solar plant is located adjacent to Invenergy's wind farm.

**Real Estate Tax Info:** Prior to development of the solar farm, during the period between 2009 and 2011, this 160 acre farm paid real estate taxes of about \$1,500 per 80 acre parcel (\$3,000 per year in total). In the 5 years since the solar farm has been operating, the real estate taxes have increased to about \$1,600 per acre (\$255,000 per year in total). The map on the following page displays the parcels within the solar farm is located (outlined in red). Properties adjoining this parcel are numbered for subsequent analysis.



Solar Farm 1 Adjoining Properties

*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*

Adjoining Property 12 (Test Area) was considered for a paired sales analysis, and we analyzed this property as a single-family home use. We analyzed five Control Area single family home sales on similar lot sizes that sold within a reasonable using a time frame from Adjoining Property 12's sale date, and adjusted the Control Area sales for market conditions using a regression analysis to identify the appropriate monthly market conditions adjustment. The result of our analysis for Solar Farm 1 is presented below.

<b>CohnReznick Paired Sale Analysis - Solar Farm 1</b>		
	<b>Potentially Impacted by Solar Farm</b>	<b>Adjusted Median Price Per SF</b>
Control Area Sales (5)	No: Not adjoining solar farm	\$74.35
Adjoining Property 12 (Test Area)	Yes: Solar Farm was completed by the sale date	\$79.90
<b>Difference</b>		<b>7.46%</b>

Noting the relatively small price differential **over 7%**, it does not appear that Solar Farm 1 impacted the sales price of Adjoining Property 12 in either direction (positive or negative).

## **SOLAR FARM 2: ROCKFORD SOLAR FARM, ROCKFORD, IL**

**Location:** Chicago-Rockford International Airport in Winnebago County, IL

**Coordinates:** Latitude 42.175278, Longitude -89.08833

**PINs:** 15-26-151-005, 15-26-176-003, 15-26-300-009

**Recorded Owner:** Greater Rockford Airport Authority

**Total Land Size:** 182.29 acres

**Total Project Size:** 70 acres (total of three phases)

**Current Project size:** 15 AC (approximate)

**Date Project Announced:** March 30, 2011

**Date Project Completed:** October 2012

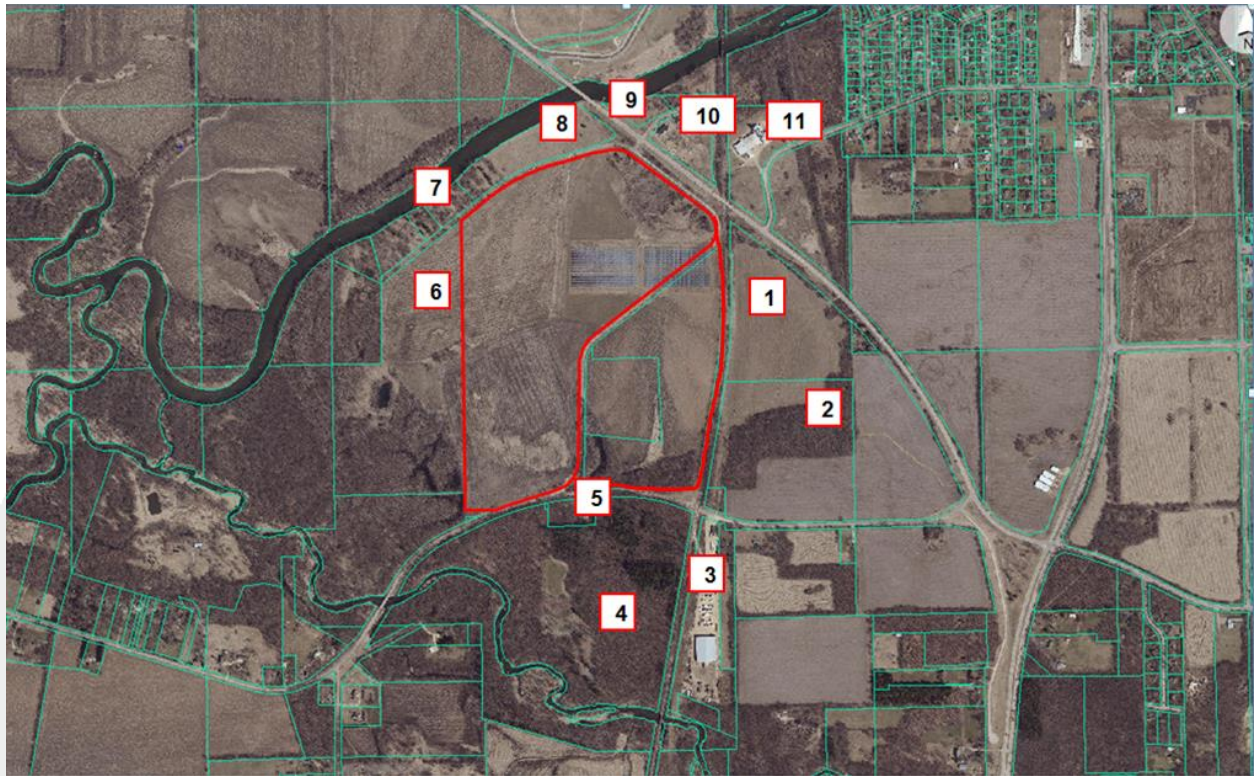
**Current Output:** 3.06 MW (Phase I)

**Future Output:** 62 MW (total three phases)

This solar farm is located in the City of Rockford, near the banks of Rock River which is about 80 miles northwest of Chicago. The project was initiated as a joint venture effort between Wanxiang American Corporation (Wanxiang) and New Generation Power (NGP) under the name Rockford Solar Partners, LLC. The initial goal of the project was to create hundreds of sustainable, green-collar jobs and provide a lasting economic boost to the state of Illinois, and is the largest airport-based solar photovoltaic (PV) electricity generating facility in the US. In the past, the city of Rockford was predominately a blue-collar capital filled with machine shops and factories. However, due to modernization, many of these workplaces have closed. The city now looks to the renewable energy industry to help stimulate the local economy. The project was also part of a larger, state-wide initiative to increase solar power production and reduce dependence on fossil fuels.

The total cost of Rockford Solar Partner's proposed three-phase, project was approximately \$127 million and was financed six months prior to the date it was announced. In March 2010, the solar project received a \$4 million USD grant from the Illinois Department of Commerce and Economic Opportunity (DCEO). The first phase of development was completed in October 2012. A railroad track runs along the solar farm to the east, and a series of natural bushes and trees line the panels to the north. There is no proximate natural vegetation to the western and southern areas near the panels; however, there is approximately 1,080 feet between most western solar panel and the western property line. Additionally, there is approximately 2,045 feet between the most southern solar panel and the southern property line. The map on the following page displays the parcels within the solar farm is located (outlined in red). Properties adjoining this parcel are numbered for subsequent analysis.





*Solar Farm 2 Adjoining Properties*

*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*

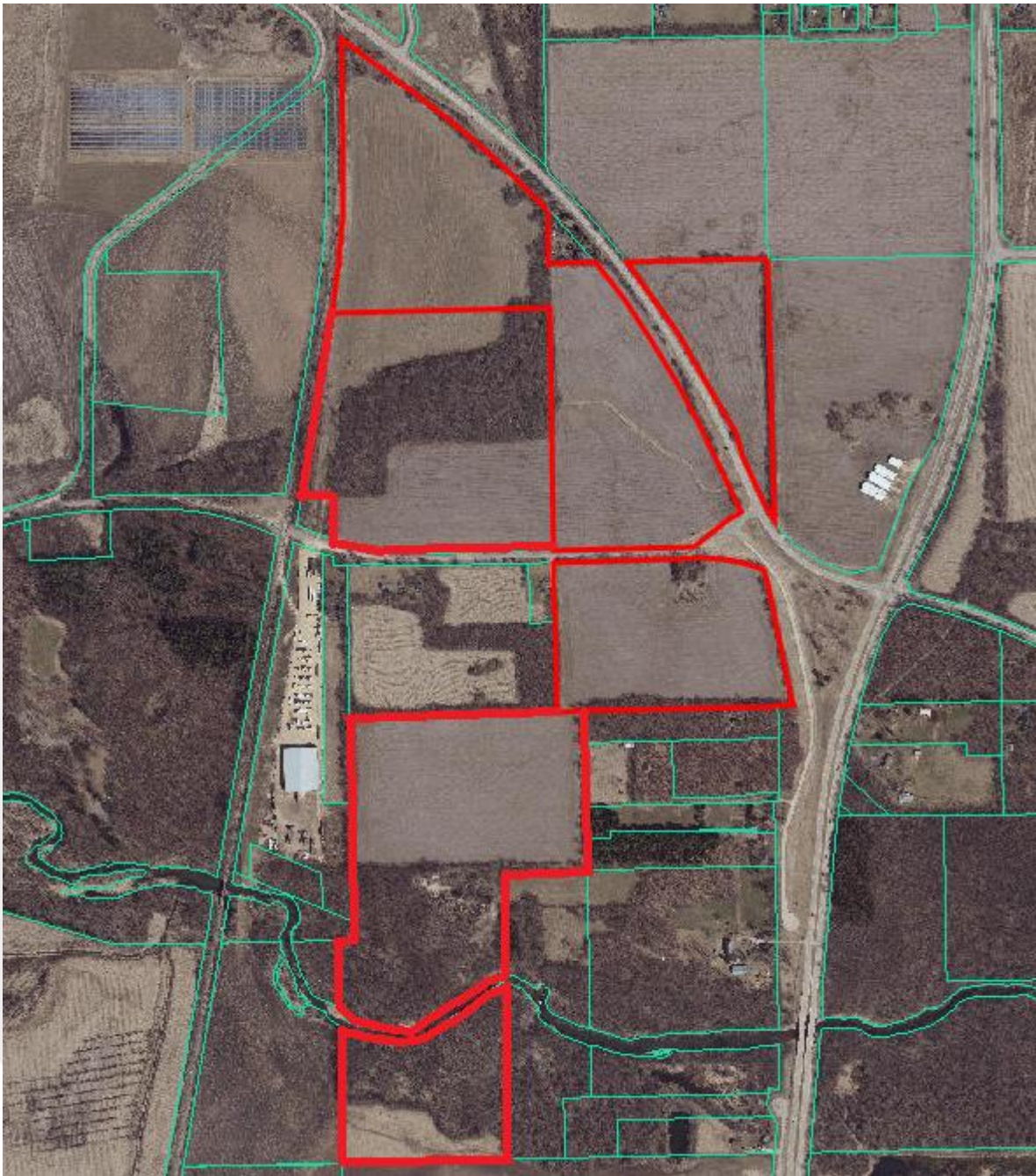
Adjoining Properties 1 and 2 (Test Area) were considered for a paired sales analysis, and we analyzed this property as agricultural land. Adjoining Properties 1 and 2 were sold in 2017, which is a reasonable time after completion of the solar farm. These two parcels sold with a third, contiguous parcel that measures 66.83 acres, for a total size of 214.7 acres, reflecting a unit sale price of \$3,942 per acre. Therefore, Adjoining Properties 1 and 2 (Test Area) were considered for a paired sales analysis. Since these properties were sold together, along with a third contiguous parcel, we have considered it as one sale (Test Area Sale). An aerial image of all three of the parcels that sold is presented on the following page, with the parcels outlined in red. Adjoining Property 1 is located within flood zone AE, which has a 1% annual chance of flood hazard, and the contiguous parcel located within flood zone AE and within a regulatory floodway. The contiguous parcel also contains freshwater forested/shrub wetlands on site. The floodplain, floodway and wetlands maps are all presented on the following pages. Additionally, the entire site has a relatively low Productivity Index (PI) of 103. Farm land unit prices are primarily influenced by productivity.

**For soils in Illinois, optimum soil PI ranges from 47 to 147.** Soil productivity ratings under optimum management for Illinois farmland on this scale are as follows.

Soil Rating	PI Range	Soil Class
Excellent	133-147	Class A
Good	117-132	Class B
Average	100-116	Class C
Fair	Less than 100	

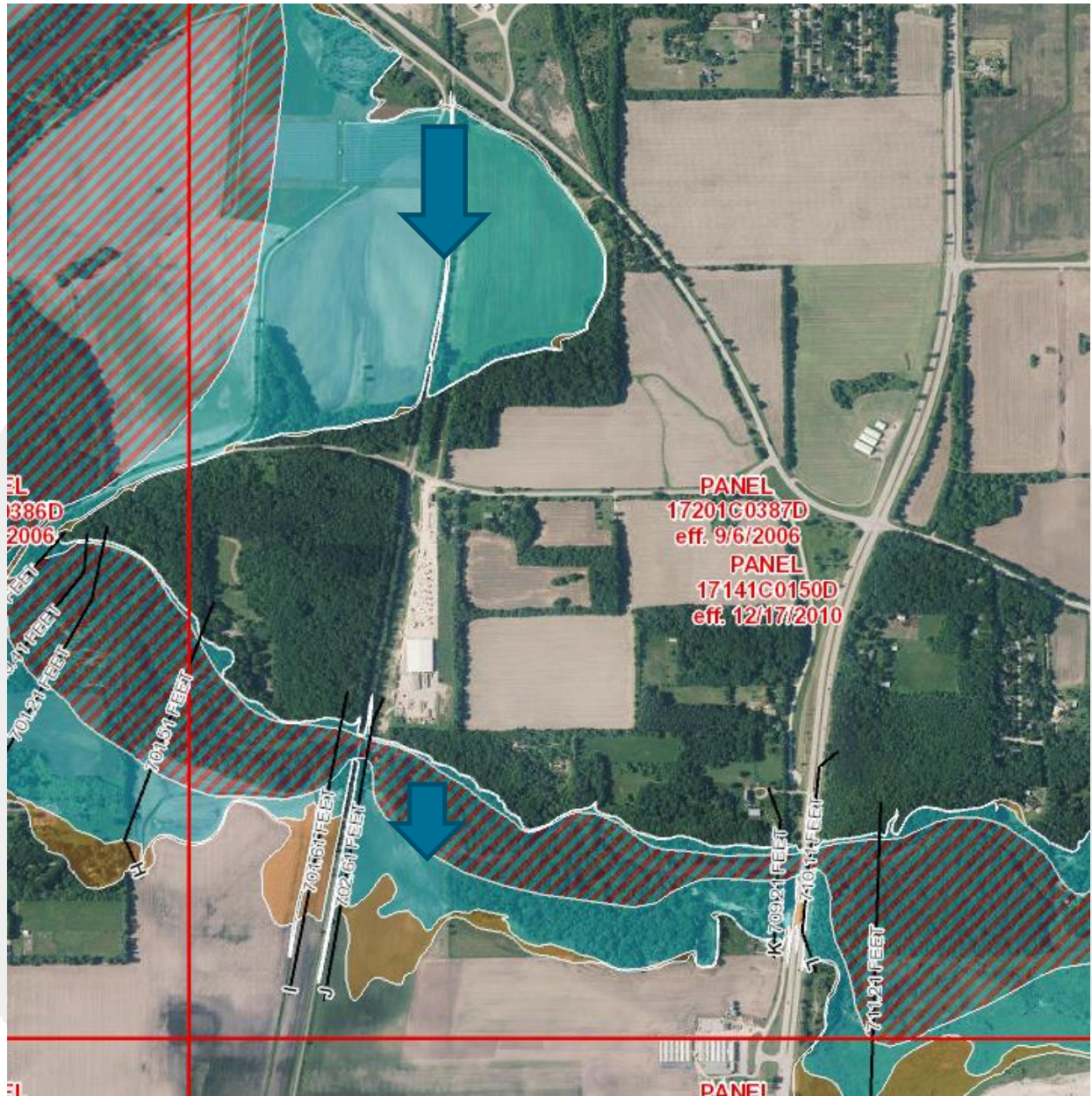
We have presented the adjoining property’s surety soil map on the following pages as well.

*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client’s legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*



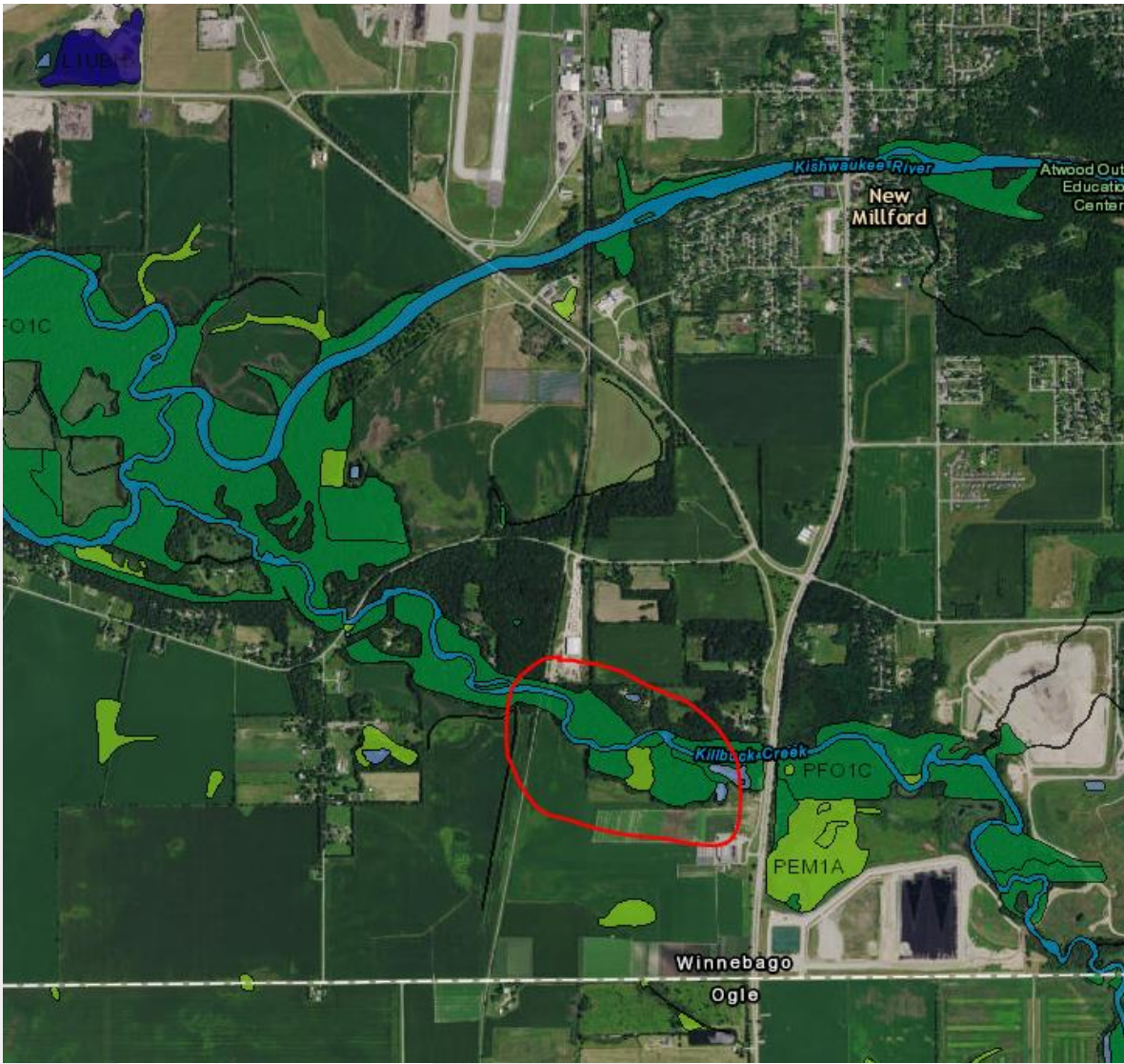
*Adjoining Properties 1 and 2 (and Contiguous Parcel) Parcel Map*

*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*



Adjoining Properties 1 and 2 (and Contiguous Parcel) Floodplain Map

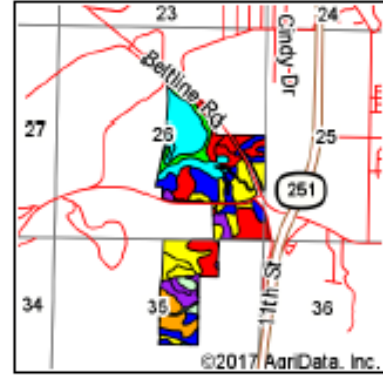
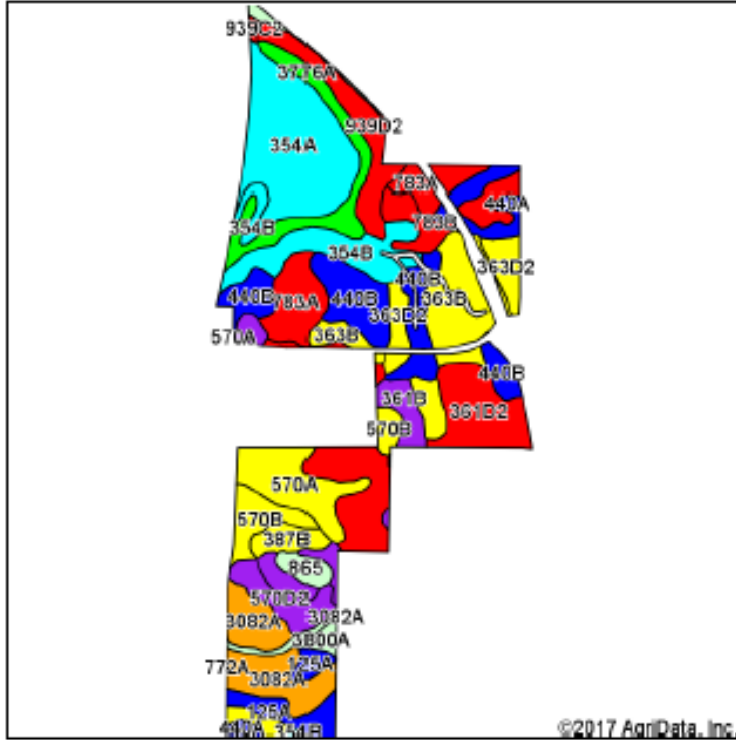
*Disclaimer:* This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



*Adjoining Properties 1 and 2 (and Contiguous Parcel) Wetlands Map*

*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*

## Soils Map



**State:** Illinois  
**County:** Winnebago  
**Location:** 26-43N-1E  
**Township:** Rockford  
**Acres:** 221.61  
**Date:** 8/12/2017



Area Symbol: IL201, Soil Area Version: 12													
Code	Soil Description	Acres	Percent of field	Il. State Productivity Index Legend	Subsoil rooting	Corn Bu/A	Soybeans Bu/A	Wheat Bu/A	Oats Bu/A b	Sorghum c Bu/A	Alfalfa d/hay, T/A	Grass-le gume e hay, T/A	Crop productivity index for optimum management
354A	Hononegah loamy coarse sand, 0 to 2 percent slopes	26.25	11.8%		FAV	114	37	47	56	0	0.00	3.51	84
**361D2	Kodder loam, 6 to 12 percent slopes, eroded	24.37	11.0%		FAV	**127	**43	**52	**60	0	**3.26	0.00	**95
**440B	Jasper silt loam, 2 to 5 percent slopes	20.62	9.3%		FAV	**173	**56	**70	**93	0	**5.71	0.00	**129
783A	Flagler sandy loam, 0 to 2 percent slopes	15.47	7.0%		FAV	129	44	51	60	0	2.88	0.00	96
3082A	Millington silt loam, 0 to 2 percent slopes, frequently flooded	14.42	6.5%		FAV	171	54	65	79	0	0.00	5.14	125
**363B	Griswold loam, 2 to 4 percent slopes	14.14	6.4%		FAV	**154	**51	**63	**76	0	**4.72	0.00	**116
570A	Martinsville silt loam, 0 to 2 percent slopes	14.05	6.3%		FAV	155	49	63	75	0	4.52	0.00	114
**354B	Hononegah loamy coarse sand, 2 to 6 percent slopes	13.59	6.1%		FAV	**113	**37	**47	**55	0	0.00	**3.47	**83
3776A	Comfrey loam, 0 to 2 percent slopes, frequently flooded	10.63	4.8%		FAV	185	61	69	89	0	0.00	5.52	138
**939D2	Rodman-Warsaw complex, 6 to 12 percent slopes, eroded	10.31	4.7%		UNF	**113	**40	**45	**54	0	0.00	**3.82	**88
**570B	Martinsville silt loam, 2 to 4 percent slopes	7.37	3.3%		FAV	**153	**49	**62	**74	0	**4.47	0.00	**113

*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*

**363D2	Griswold loam, 6 to 12 percent slopes, eroded	6.67	3.0%		FAV	**145	**48	**60	**72	0	**4.44	0.00	**109
125A	Belma loam, 0 to 2 percent slopes	6.23	2.8%		FAV	176	57	70	90	0	0.00	6.38	129
**570D2	Martinsville silt loam, 6 to 12 percent slopes, eroded	6.00	2.7%		FAV	**144	**46	**59	**70	0	**4.20	0.00	**106
440A	Jasper silt loam, 0 to 2 percent slopes	5.58	2.5%		FAV	175	57	71	94	0	5.77	0.00	130
**783B	Flagler sandy loam, 2 to 6 percent slopes	4.38	2.0%		FAV	**128	**44	**50	**59	0	**2.85	0.00	**95
**361B	Kidder loam, 2 to 4 percent slopes	4.16	1.9%		FAV	**136	**46	**55	**63	0	**3.47	0.00	**101
**327D2	Fox silt loam, 6 to 12 percent slopes, eroded	3.74	1.7%		FAV	**139	**45	**55	**68	0	**3.26	0.00	**101
**387B	Ockley silt loam, 2 to 5 percent slopes	3.54	1.6%		FAV	**154	**49	**60	**78	0	**5.34	0.00	**114
865	Pfb, gravel	2.52	1.1%								.00	.00	
**290D2	Warsaw loam, 6 to 12 percent slopes, eroded	1.80	0.8%		FAV	**150	**48	**60	**76	0	**4.78	0.00	**111
W	Water	1.44	0.6%										
**332B	Billet sandy loam, 2 to 5 percent slopes	1.43	0.6%		FAV	**134	**44	**53	**63	0	**2.98	0.00	**98
3800A	Psammets, 0 to 2 percent slopes, frequently flooded	1.41	0.6%								.00	.00	
802B	Orthents, loamy, undulating	1.11	0.5%								.00	.00	
**939C2	Rodman-Warsaw complex, 4 to 6 percent slopes, eroded	0.38	0.2%		UNF	**116	**41	**47	**56	0	0.00	**3.94	**91
Weighted Average						188.3	46.7	66.8	88.2	-	2.62	1.67	108.4

Table: Optimum Crop Productivity Ratings for Illinois Soil by K.R. Olson and J.M. Lang, Office of Research, ACES, University of Illinois at Champaign-Urbana. Version: 1/2/2012 Amended Table S2 B611

Crop yields and productivity indices for optimum management (B611) are maintained at the following NRES web site:

<https://www.ideals.illinois.edu/handle/2142/1027/>

\*\* Indexes adjusted for slope and erosion according to Bulletin 811 Table S3

a UNF = unfavorable; FAV = favorable

b Soils in the southern region were not rated for oats and are shown with a zero "0".

c Soils in the northern region or in both regions were not rated for grain sorghum and are shown with a zero "0".

d Soils in the poorly drained group were not rated for alfalfa and are shown with a zero "0".

e Soils in the well drained group were not rated for grass-legume and are shown with a zero "0".

\*c: Using Capabilities Class Dominant Condition Aggregation Method

Soils data provided by USDA and NRCS. Soils data provided by University of Illinois at Champaign-Urbana.

It is important to note that Adjoining Property 2 and the third contiguous parcel have heavily wooded areas on their parcels. The following table outlines the characteristics of Adjoining Property 1-2 and the third contiguous parcel.

Adjoining Properties 1-2 with Third Parcel									
Status	PIN	Address	Sale Price	Site Size (AC)	PI Index	Improvements	Wooded Area %	Sale Price/AC	Sale Date
Sold	15-26-400-003, 15-26-400-001; 15-35-200-001	N/A	\$846,555	214.7	103.4	None	25%	\$3,943	Apr-17

We analyzed seven Control Area agricultural sales on similar lot sizes that sold within a reasonable time frame from Adjoining Properties 1 and 2's sale date, and adjusted the Control Area sales for market conditions using a trend analysis leveraging sale data in Winnebago County for agricultural land sales to identify the appropriate monthly market conditions adjustment. We have excluded sales of strictly residential land and included sales of unimproved land that would be mainly used for agricultural purposes and had lower PIs like the Adjoining Properties. The result of our analysis for Solar Farm 2 is presented below.

CohnReznick Paired Sale Analysis - Solar Farm 2		
	Potentially Impacted by Solar Farm	Adjusted Median Price Per Acre
Control Area Sales (7)	No: Not adjoining solar farm	\$4,075
Adjoining Properties 1-2 (Test Area)	Yes: Solar Farm was completed by the sale date	\$3,943
<b>Difference</b>		<b>-3.23%</b>

The unit sale price of Adjoining Properties 1 and 2 (Test Area) was slightly lower than the median adjusted unit sale price of Control Area Sales. As a general rule, agricultural land values are most heavily influenced by the productivity of the soil. The Test Area Sale had an overall Productivity Index of 103.4; while the 7 Comparable Land Sales had an overall average Productivity Index of 116.9, which is 13% higher than the Test Area Sale. Noting the relatively small price differential of 3% for the land with the lower Productivity Index, the data does not reflect an impact on value associated with proximity to the existing solar farm.



**SOLAR FARM 3: EXELON CITY SOLAR FARM, CHICAGO, IL****Location:** Exelon City Solar in Chicago, Cook County, IL**Coordinates:** Latitude 41.675800, Longitude -87.651400**PIN:** 25-29-203-003-0000**Recorded Owner:** Exelon Solar Chicago, LLC**Total Land Size:** 41 acres**Date Project Announced:** April 22, 2009**Date Project Completed:** July 2010**Output:** 10 MW DC (9 MW AC)

This solar farm is located in the West Pullman Industrial redevelopment on a 41-acre brownfield site. The Exelon City Solar Plant was developed in collaboration with SunPower Corporation who designed and manufactured the solar farm. The plant currently stands as one of the nation's largest urban PV plant, at 10MW-DC (9MW-AC). Prior to construction of the solar farm, this site was vacant for over 30 years with only the foundations of former building structures remaining. It was reported that the site included environmental contamination and required a significant amount of clean up before the project started. Exelon and SunPower both had the vision of turning the abandoned inner-city landscape into a productive space for the local economy.

Construction of the project cost Exelon an estimated \$62 million USD. The company hopes to recoup more costs by eventually selling solar renewable energy credits and taking advantage of the local real estate and federal tax incentives. Illinois offers 30 percent rebates on the total cost of installing solar or wind systems to homeowners and businesses, and 50 percent rebates for governmental and nonprofits, with a maximum of \$50,000. Also, there are federal tax credits for up to 30 percent of costs available to homeowners and businesses that buy solar or wind energy systems. While most power plant projects encounter a measure of opposition from one source or another, Exelon City Solar is an exception. The project is considered to be an income producing, secure, quiet, and attractive addition to the City of Chicago and the West Pullman community.

The solar plant is able to generate up to 14,000 megawatt-hours of electricity per year, which enough to power 1,500 homes a year. It is estimated that the solar farm reduces carbon emissions by 31.2 million pounds of greenhouse gas emissions annually, equivalent to planting 3,200 acres of trees or taking more than 2,500 cars off the road.

For Solar Farm 3, there were no adjoining properties with sales that fit the criteria to perform a paired sales analysis.

## **SOLAR FARM 4: UNIVERSITY OF ILLINOIS SOLAR FARM, CHAMPAIGN, IL**

**Location:** University of Illinois at Urbana-Champaign in Champaign County, IL

**Coordinates:** Latitude 40.08223, Longitude -88.244399

**PIN:** 03-20-25-226-006

**Recorded Owner:** Phoenix Solar South Farms

**Total Land Size:** 20.79 acres

**Date Project Announced:** November 12, 2012

**Date Project Completed:** November 2015

**Output:** 5.87 MW

The solar farm is located south of Windsor Road and east of US Route 45, near the University of Illinois, and is considered to be one of the largest university solar arrays in the country. The university signed a 10-year power purchase agreement with Phoenix South Solar Farms, LLC in November 2012 to purchase all electricity produced by the solar farm and deliver it directly to the campus grid. In addition, the university will own/receive all current and future Renewable Energy Certificates (RECs) and emission credits associated with energy from the solar farm. In addition, Phoenix South Solar Farms was hired to design, build, and operate the solar farm. The solar farm produces an estimated 7.86 million kilowatt-hours (kWh) annually or approximately two percent of the annual electrical demand for the university campus. Additional research estimates the solar farm will generate up to 91 percent of its original output even in year 20 of the project and collect energy for up to 40 years. The total cost of the project was approximately \$15.5 million over 20 years, of which the Student Sustainability Committee provided \$1.05 million USD and the Campus Utility Budget provided \$4.25 million USD. There is natural vegetation of small trees and bushes to the east, north, and west.

For Solar Farm 4, there were no adjoining properties with sales that fit the criteria to perform a paired sales analysis.

## **SOLAR FARM 5: DOMINION INDY SOLAR III, INDIANAPOLIS, IN**

**Location:** Dominion Indy Solar III, in Indianapolis, Marion County, IN

**Coordinates:** Latitude 39.3914.16, Longitude -86.153485

**PIN:** 49-13-13-113-001.000-200

**Recorded Owner:** PLH Inc

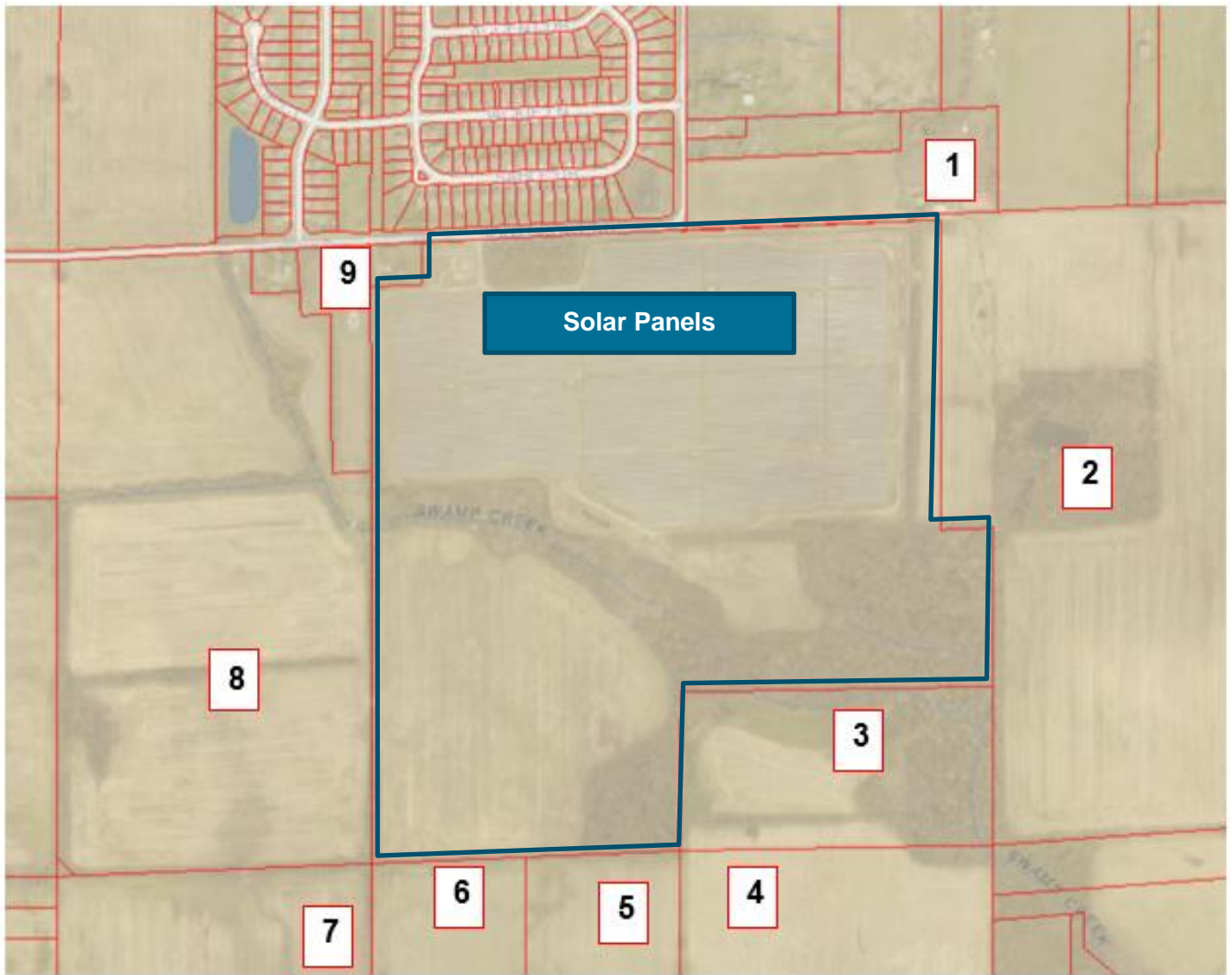
**Total Land Size:** 134 acres

**Date Project Announced:** August 2012

**Date Project Completed:** December 2013

**Output:** 11.9 MW DC (8.6 MW AC)

This solar farm is located on the southern side of West Southport Road, located approximately eight and a half miles from the heart of Indianapolis. The solar farm was developed by Dominion Renewable Energy. This solar farm is ground mounted has the capacity for 11.9 Megawatts (MW) of power. The panels are mounted in a fixed tilt fashion and there are 12 inverters in this solar farm. The solar farm is lined by a chain link fence that surrounds all of the solar panels. Additionally, there are some natural bushes and trees on all sides of the property; this vegetation has been in place since before development of the solar farm. The maps on the following pages display the parcels within the solar farm is located (outlined in blue). Properties adjoining this parcel are numbered for subsequent analysis.



*Solar Farm 5 Adjoining Properties*

We identified a total of eight adjoining properties that were considered for a paired sale analysis. Adjoining Property 2 (Test Area) was analyzed agricultural land. Adjoining Properties 11, 13, 14, 18, 20, 22, and 24 were analyzed as single-family home uses.

Adjoining Property 2 was a vacant agricultural parcel and we identified and analyzed four Control Area Sales that were comparable in location and use. The Control Area Sales for Adjoining Property 2 are land tracts that were larger than 20 acres and utilized specifically as farmland. We excluded sales between related parties, split transactions, and those with significant improvements.

Control Area sales for Adjoining Property 2 were adjusted for market conditions using a regression and trend analysis to identify the appropriate monthly market condition adjustment. Using the sale data published in the *Land Sales Bulletin*, from January 2016 through December 2017, which includes reliable and credible data for analysis, we extracted a monthly rate of change of 0.50%. The results of our analysis for Adjoining Property 2 for Solar Farm 5 is presented on the following page.

*Disclaimer:* This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.

*Ag Land Matched Pair Analysis*

CohnReznick Paired Sale Analysis - Solar Farm 5		
	Potentially Impacted by Solar Farm	Adjusted Median Price Per Acre
Control Area Sales (4)	No: Not adjoining solar farm	\$8,091
Adjoining Property 2 (Test Area)	Yes: Solar Farm was completed by the sale date	\$8,210
<b>Difference</b>		<b>1.47%</b>

**Crossfield Subdivision:** The remaining seven of the Adjoining Properties (Test Areas) were considered for a paired sales analysis consisted of single-family home. The adjoining properties that were included in our paired sales analysis were divided into two groupings, based on the sale dates of the Control Sales, as detailed below.



*Solar Farm 5 Adjoining Propertie*

**Disclaimer:** This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.

Group	Adj. Property #	Address	Sale Price	Site Size (AC)	Beds	Baths	Year Built	Square Feet	Sale date	PSF
1	11	5933 SABLE DR	\$ 140,000	0.31	3	1.5	2006	2412	12/9/2015	\$ 58.04
2	13	5921 SABLE DR	\$ 160,000	0.24	4	1.5	2006	2412	9/6/2017	\$ 66.33
2	14	5915 SABLE DR	\$ 147,000	0.23	3	2.5	2009	2028	5/10/2017	\$ 72.49
2	18	5841 SABLE DR	\$ 149,000	0.23	3	2.5	2009	1962	10/3/2017	\$ 75.94
1	20	5829 SABLE DR	\$ 131,750	0.23	4	2.5	2011	2190	12/9/2015	\$ 60.16
1	22	5813 SABLE DR	\$ 127,000	0.23	4	1.5	2005	2080	3/4/2015	\$ 61.06
1	24	5737 SABLE DR	\$ 120,000	0.23	3	2.5	2010	2136	2/3/2014	\$ 56.18

For Group 1 (Sales in 2014 – 2015), we analyzed eight Control Area sales that sold within a reasonable time frame from the average sale date of the Group 1 Test Area sales. For Group 2 (Sales in 2017), we analyzed a separate grouping of nine Control Area sales that sold within a reasonable time frame from the average sale date of the Group 2 Test Area sales.

Control Area sales in Groups 1 and 2 were adjusted for market conditions using a regression analysis to identify the appropriate monthly market condition adjustment. The results of our are presented:

CohnReznick Paired Sale Analysis - Solar Farm 5		
Group 1	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF
Control Area Sales (8)	No: Not adjoining solar farm	\$57.84
Group 1 (Test Area)	Yes: Solar Farm was completed by the sale date	\$59.81
<b>Difference</b>		<b>3.40%</b>

CohnReznick Paired Sale Analysis - Solar Farm 5		
Group 2	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF
Control Area Sales (9)	No: Not adjoining solar farm	\$71.52
Group 2 (Test Area)	Yes: Solar Farm was completed by the sale date	\$73.47
<b>Difference</b>		<b>2.74%</b>

Noting the relatively small price differential, in which the Test Area Sales were slightly higher than the median for the Control Areas Sales, it does not appear that Solar Farm 5 had any negative impact on adjoining property values. In addition, the homes in both groups were appreciating at consistent rates.

## SOLAR FARM 6: PORTAGE SOLAR FARM, PORTAGE TOWNSHIP, IN

**Location:** Portage Solar Farm in Porter County, IN

**Coordinates:** Latitude 41.333263, Longitude -87.093015

**PIN:** 64-06-19-176-001.000-015

**Recorded Owner:** PLH Inc

**Total Project Size:** 56 AC

**Date Project Announced:** February 2012

**Date Project Completed:** September 2012

**Output:** 1.5 MW DC (1.96 MW AC)

This solar farm is located on the south side of Robbins Road, located just outside the City of Portage. The solar farm was developed by Ecos Energy, who is a subsidiary of Allco Renewable Energy Limited. This solar farm is ground mounted has the capacity for 1.5 Megawatts (MW) of power, which is enough to power 300 homes. This solar farm consists of 7,128 solar modules which are of a fixed tilt installation, and contains three inverters. The solar farm is fenced from adjacent properties by a fence that surrounds all of the solar panels. Natural vegetation borders the western and northern sides of the solar farm.

**Real Estate Tax Info:** The 56 acres of farm land was paying \$1,400 per year in taxes. After the solar farm was developed, only 13 acres (23% of the site) was reassessed and the remaining 43 acres continued to be farmed. The total real estate tax bill increased to \$16,350 per year after the solar farm was built, including both uses on the site. This indicates that the real estate taxes for the solar farm increased from \$25 per acre to \$1,175 per acre after the solar farm was developed. The map on the following page displays the parcels within the solar farm is located (outlined in red). Properties adjoining this parcel are numbered for subsequent analysis.



Solar Farm 6 Adjoining Properties

*Disclaimer:* This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.





Solar Farm 6 Adjoining Properties

Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.

Adjoining Properties 1 and 7 (Test Areas) were each considered for a paired sales analysis. Adjoining Property 1 was analyzed as homestead/small farm land tract since at the time of purchase the site was used as agricultural land. The buyer bought it as vacant land and subsequently built a home on site. Adjoining Property 7 was analyzed as a single-family home use.

For Adjoining Property 1, we analyzed nine Control Area homestead/small farm land tract sales that sold within a reasonable time frame from Adjoining Property 1's sale date. For Adjoining Property 7, we analyzed seven Control Area single family home sales that sold within a reasonable time frame from Adjoining Property 7's sale date. All Control area sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

The result of our analyses for Solar Farm 6 is presented below.

<b>CohnReznick Paired Sale Analysis - Solar Farm 6</b>		
	<b>Potentially Impacted by Solar Farm</b>	<b>Adjusted Median Price Per Acre</b>
Control Area Sales (9)	No: Not adjoining solar farm	\$7,674
Adjoining Property 1 (Test Area)	Yes: Solar Farm was completed by the sale date	\$8,000
<b>Difference</b>		<b>4.25%</b>

<b>CohnReznick Paired Sale Analysis - Solar Farm 6</b>		
	<b>Potentially Impacted by Solar Farm?</b>	<b>Adjusted Median Price Per SF</b>
Control Area Sales (7)	No: Not adjoining solar farm	\$84.27
Adjoining Property 7 (Test Area)	Yes: Solar Farm was completed by the sale date	\$84.35
<b>Difference</b>		<b>0.10%</b>

Noting the relatively small price differential, with both adjacent sales (Adjoining Property 1 or 7) having higher unit sale prices than the Control Area sales, it does not appear that Solar Farm 6 had any negative impact on adjacent property values.

## **SOLAR FARM 7: IMPA FRANKTON SOLAR FARM, FRANKTON, IN**

**Location:** IMPA Frankton Solar Farm in Madison County, IN

**Coordinates:** Latitude 40.125701; Longitude -85.4626.88

**PIN:** 48-08-06-500-012.001-020

**Recorded Owner:** IMPA

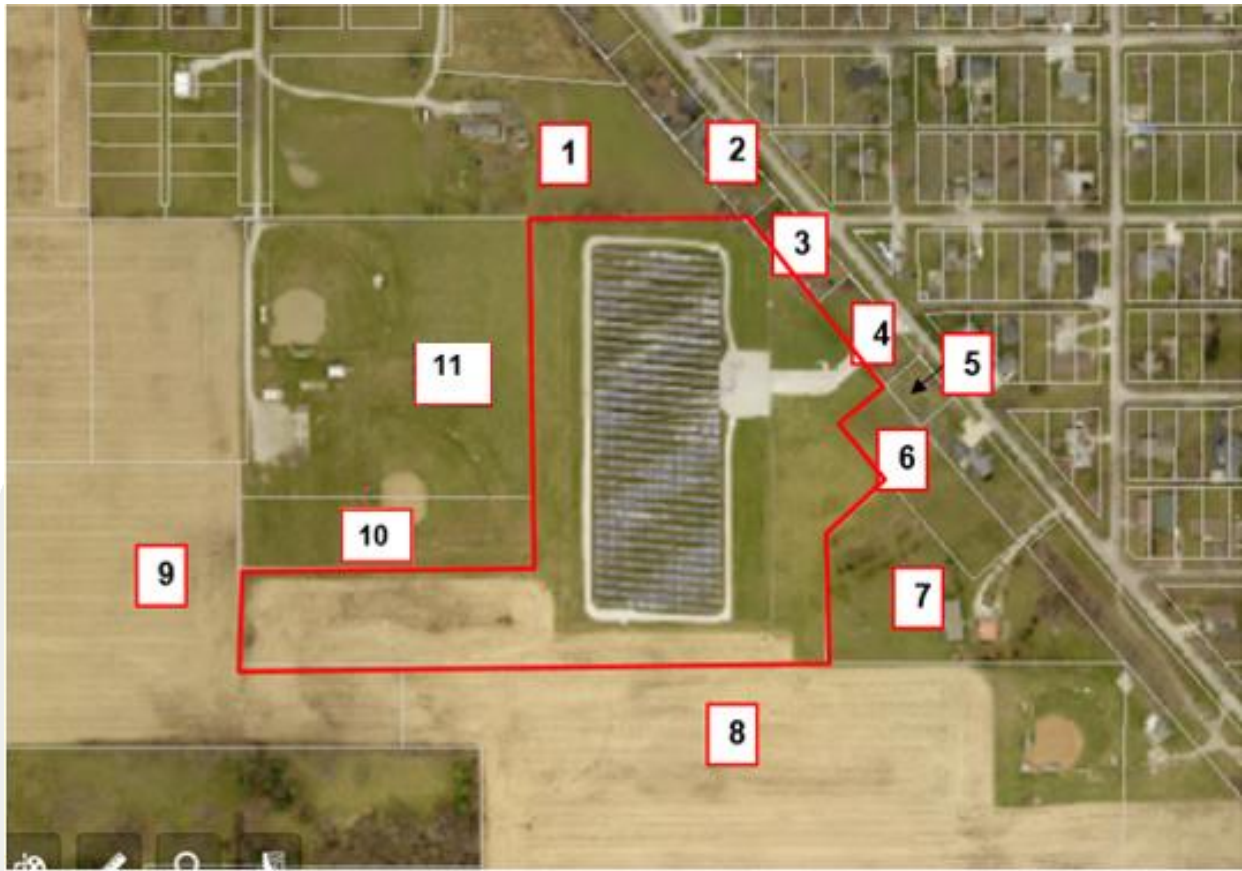
**Total Land Size:** 13 acres

**Date Project Announced:** November 2013

**Date Project Completed:** June 2014

**Output:** 1.426 MW

This solar farm is located on the west side of South Lafayette Street, located in the Town of Frankton. IMPA Frankton Solar Farm was built in 2014 in joint effort by Inovateus Solar and Indian Municipal Power Agency (IMPA). This solar farm has the capacity for 1 MW and its expected annual output is 1,426 MWh (megawatt hours). The solar farm is separated off from their adjacent properties by a 6' fence that surrounds the entirety of the solar panels. From our inspection of the site we note that the driveway to access the panels slopes downward and allows some views of the site. The map on the following page displays the parcels within the solar farm is located (outlined in red). Properties adjoining this parcel are numbered for subsequent analysis.



*Solar Farm 7 Adjoining Properties*

*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*

Adjoining Properties 2 and 7 (Test Areas) were each considered for a paired sales analysis. Adjoining Property 2 was manufactured single family home use. Adjoining Property 7 was analyzed as a single-family home use.

For Adjoining Property 2, we analyzed six Control Area sales that sold within a reasonable time frame from Adjoining Property 2's sale date. For Adjoining Property 7, we analyzed five Control Area sales that sold within a reasonable time frame from Adjoining Property 7's sale date. All Control area sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

The result of our analyses for Solar Farm 7 is presented below.

<b>CohnReznick Paired Sale Analysis - Solar Farm 7</b>		
	<b>Potentially Impacted by Solar Farm</b>	<b>Adjusted Median Price Per SF</b>
Control Area Sales (6)	No: Not adjoining solar farm	\$28.42
Adjoining Property 2 (Test Area)	Yes: Solar Farm was completed by the sale date	\$28.58
<b>Difference</b>		<b>0.56%</b>

<b>CohnReznick Paired Sale Analysis - Solar Farm 7</b>		
	<b>Potentially Impacted by Solar Farm</b>	<b>Adjusted Median Price Per SF</b>
Control Area Sales (5)	No: Not adjoining solar farm	\$51.47
Adjoining Property 7 (Test Area)	Yes: Solar Farm was completed by the sale date	\$52.40
<b>Difference</b>		<b>1.81%</b>

Noting the relatively small price differential, in which both Adjoining Property Sales 2 and 7 sold at a slightly higher unit sale price than the Control Area Sales, it does not appear that Solar Farm 7 had any negative impact on adjoining property sales.

## **SOLAR FARM 8: VALPARAISO SOLAR LLC, VAPARAISO, IN**

**Location:** Valparaiso Solar LLC, in Porter County, IN

**Coordinates:** Latitude 41.301180, Longitude -87.094055

**PIN:** 64-09-07-152-001.000-019, 64-09-07-152-002.000-019

**Recorded Owner:** PLH Inc

**Total Land Size:** 27.9 acres

**Date Project Announced:** March 2012

**Date Project Completed:** December 20, 2012

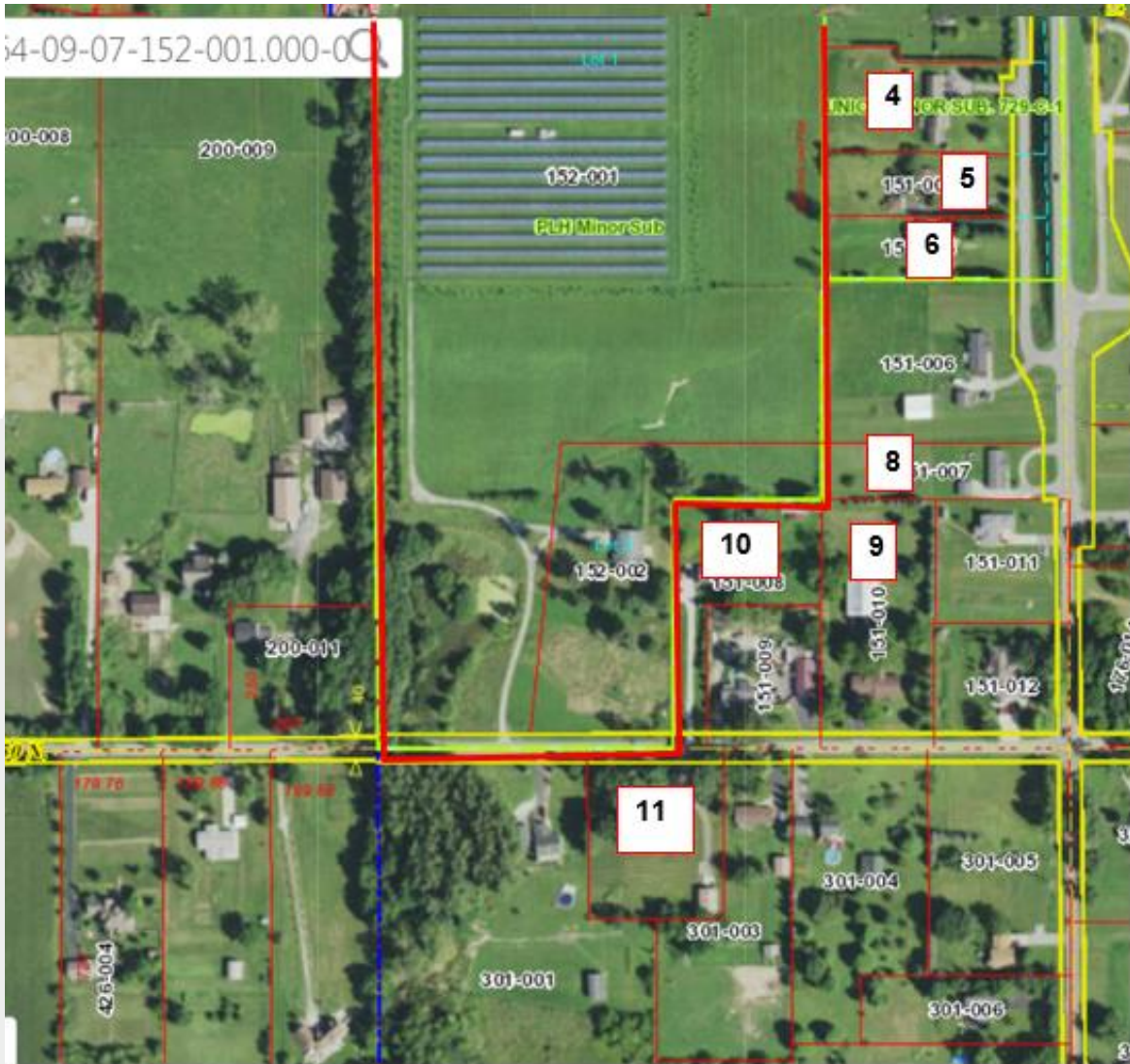
**Output:** 1.3 MW DC (1 MW AC)

This solar farm is located on the southern side of Indiana Route 130 (Railroad Ave), located approximately 35 miles southwest of the Chicago Loop. The solar farm was developed by Sustainable Power Group LLC and has ground mounted capacity for 1.3 Megawatts (MW) of power. The panels are mounted in a fixed tilt fashion and there are 2 inverters in this solar farm. The solar farm is lined by a chain link fence that surrounds all of the solar panels. Additionally, there are some natural bushes and trees to the north and west of the solar panels; this vegetation has been in place since before development of the solar farm. Other small trees were planted spaced out around the perimeter of the solar farm after development. From our inspection, the solar panels cannot be seen from Indiana State Route 130 from the north, nor on N 475 W Road to the east as this is a raised roadway. The adjacent properties to the east of the solar panels have full view of the panels from their backyards. The maps on the following pages display the parcels within the solar farm is located (outlined in red). Properties adjoining this parcel are numbered for subsequent analysis.



Solar Farm 8 Adjoining Properties

Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



Solar Farm 8 Adjoining Properties

Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



Adjoining Properties 10 and 14 (Test Areas) were each considered for a paired sales analysis. Both were analyzed as single-family home uses.

For Adjoining Property 10, we analyzed five Control Area sales that sold within a reasonable time frame from Adjoining Property 10's sale date. For Adjoining Property 14, we analyzed five Control Area sales that sold within a reasonable time frame from Adjoining Property 14's sale date. All Control area sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

The result of our analyses for Solar Farm 8 is presented below.

<b>CohnReznick Paired Sale Analysis - Solar Farm 8</b>		
	<b>Potentially Impacted by Solar Farm</b>	<b>Adjusted Median Price Per SF</b>
Control Area Sales (5)	No: Not adjoining solar farm	\$79.95
Adjoining Property 10 (Test Area)	Yes: Solar Farm was completed by the sale date	\$82.42
<b>Difference</b>		<b>3.09%</b>

<b>CohnReznick Paired Sale Analysis - Solar Farm 8</b>		
	<b>Potentially Impacted by Solar Farm</b>	<b>Adjusted Median Price Per SF</b>
Control Area Sales (5)	No: Not adjoining solar farm	\$64.07
Adjoining Property 14 (Test Area)	Yes: Solar Farm was completed by the sale date	\$62.11
<b>Difference</b>		<b>-3.06%</b>

Noting the relatively small price differential, with one matched pair reflecting a unit sale price of 3% higher for the Adjoining Property sale and the other Adjoining Property sale reflecting a 3% lower unit sale price, it does not appear that Solar Farm 8 negatively impacted the sales price of Adjoining Property 10 or 14 in any consistent way.

## SUMMARY OF ADJOINING USES

The table below summarizes each subject solar farm's adjoining uses.

Solar Farm	Parcel ID	Owner	Acreage % of Surrounding Agricultural Uses	Acreage % of Surrounding Residential Uses	Acreage % of Surrounding Industrial Uses	Acreage % of Surrounding Office Uses	Acreage % of Surrounding Other Uses	Average Distance from Panels to Improvements
Grand Ridge	34-22-100-000; 32-22-101-000	Missel, Eugene / Dorothy Ttee	97.60%	1.40%	0.00%	0.00%	1.00%	553
Rockford	15-26-151-003, -300-009, -176-003	Greater Rockford Airport Authority	50.30%	0.00%	49.70%	0.00%	0.00%	1,876
Exelon City	25-29-20-300-30000	Exelon Solar Chicago, LLC	0.00%	3.20%	74.90%	5.20%	16.70%	257
University of Illinois	03-20-25-266-006	Phoenix Solar South Farms	60.60%	0.00%	0.00%	3.90%	35.50%	552
Indy Solar III	49-13-13-113-001.000-200	Indy Solar Development LLC	97.70%	2.30%	0.00%	0.00%	0.00%	474
Portage	64-06-19-176-001.000-015	PLH LLC	65.50%	34.50%	0.00%	0.00%	0.00%	991
IMPA Frankton	48-08-06-500-012.001-020	IMPA	76.30%	5.70%	0.00%	0.00%	18.00%	236
Valparaiso Solar LLC	64-09-07-152-001.000-019, 64-09-07-152-002.000-019	PLH Inc	81.60%	18.40%	0.00%	0.00%	0.00%	659

Overall, the vast majority of the surrounding acreage for each comparable solar farm is made up of agricultural land, some of which have homesteads. There are also smaller single family home sites that adjoin to the solar farms we have studied. We have found that these comparable solar farms are sound comparables in terms of adjoining uses, location, and size.

Nine of the eleven paired sales analyses reflected sales of property adjoining an existing solar farm in which the unit sale prices were effectively the same or higher (+0.10% to +7.46%) than the comparable Control Area sales that were not near any solar farms.

Considering this analysis, we conclude that there was no demonstrated measurable and consistent impact on adjacent property values that was associated with proximity to solar farms.

## MARKET COMMENTARY

We have additionally contacted market participants such as appraisers, brokers, and developers familiar with property values around solar farms in Minnesota, Illinois and Indiana. Our conversations with these market participants are noted below.

We spoke with Candace Rindahl of ReMax Results, a real estate broker with 16 years of experience in the area around the North Star solar farm in Chisago County, Minnesota. Rindahl said that she has been in most of the homes surrounding the solar farm and personally sold two of them after completion of the solar farm. She reported that the neighboring homes sold at market rates comparable to other homes in the area not influenced by the solar farm, and they sold within 45 days of offering, at the end of 2017, which was in line with the market. Rindahl said there appeared to be no impact of the **North Star** solar farm on neighboring property values.

In Otter Creek Township, in LaSalle County, Illinois, we spoke with Viki Crouch, the Township Assessor, and she said that there has been no impact on property values due to their proximity to the **Grand Ridge Solar Farm.**

We also contacted the selling broker of the Adjoining Property 12 of the **Grand Ridge Solar Farm**, Tina Sergenti with Coldwell Banker, and were told that the proximity of the solar farm had no impact on the marketing time or selling price of the property.

We spoke with Ken Crowley, Rockford Township Assessor in Winnebago County, Illinois, who stated that he has seen no impact on property values in his township as an effect of proximity to the **Rockford Solar Farm.**

We spoke with James Weisiger, the Champaign Township Assessor in Champaign County, where the **University of Illinois Solar Farm** is located and he noted that no one has petitioned to have their property assessments lowered and there appears to have been no impact on property values as a result of proximity to the solar farm.

We interviewed Missy Tetrick, a Commercial Valuation Analyst for the Marion County Indiana Assessor. She mentioned the **Indy Solar I, II, and III sites** and stated that she saw no impact on land or property prices from proximity to these solar farms.

We spoke with Ken Surface, a Senior Vice President of Nexus Group. Nexus Group is a large valuation group in Indiana and has been hired by 20 counties in Indiana regarding property assessments. Mr. Surface is familiar with the solar farm sites in Harrison County (**Lanesville Solar Farm**) and Monroe County (**Ellettsville Solar Farm**) and stated he has noticed no impact on property values from proximity to these sites.

We spoke to Mendy Lassaline, the County Assessor for Perry County, Indiana. She stated that she has seen no impact on land or residences from proximity to the solar farm in her county (**IMPA Tell City Solar Park**).

We interviewed Patti St. Clair, the Chief Deputy to the St. Josephs County Assessor in Indiana. She stated that she has seen no impact from proximity to the solar farm on land or properties in her county (**Olive PV Solar Farm**). Additionally, she stated that no appeals have come in to her office stating that this solar farm has had any negative effect.

According to Betty Smith-Hanson, the Wayne County Assessor in Indiana, there has been no impact on land or property values from proximity to the solar farm in her county (**IMPA Richmond Solar Park**).

## SOLAR FARM FACTORS ON HARMONY OF USE

The data from the solar farms included in this Property Value Impact Study, clearly indicates that solar farms are generally a compatible use with agricultural and residential uses.

The following section analyzes specific physical characteristics of solar farms and is based on research and our solar farm site visits.

**Appearance:** Most solar panels have a similar appearance to a greenhouse or single story residence and are usually not more than 10 feet high. As previously mentioned, developers generally surround a solar farm with a fence and often leave existing perimeter foliage, which minimizes the visibility of the farm. The physical characteristics of solar farms are compatible with adjoining agricultural and residential uses.

**Noise:** Solar panels in general are effectively silent and noise levels are minimal, similar to ambient noise. The only two sources of noise include the tracking motors and inverters housed in a sound-proofed container, which produce a quiet hum. However, neither source are typically heard outside the facility fence.

**Odor:** Solar panels do not produce any byproduct or odor.

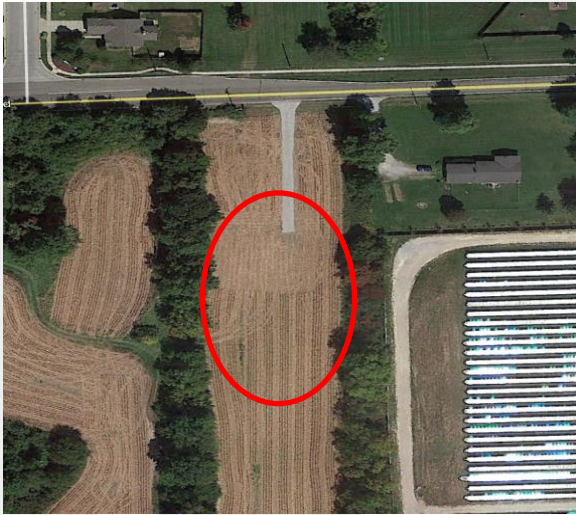
**Traffic:** The solar farm does not require regular maintenance from on-site employees and as a result does not attract traffic during daily operation aside from the initial construction and installation of the farm.

**Hazardous Material:** Modern solar panel arrays are constructed to U.S. government standards. Testing shows that modern solar modules are both safe to dispose of in landfills, and are also safe in worst case conditions of abandonment or damage in a disaster.

## COMPATIBILITY WITH EXISTING USES

We have examined multiple instances where adjoining property owners have developed homes next to an operational solar farm, which shows that the presence of solar farms has not deterred new development. Supporting images are presented below and on the following page.

For Solar Farm 5, the adjacent land to the west was purchased and subsequently developed with a large estate home – after the solar panels had been in operation for years.



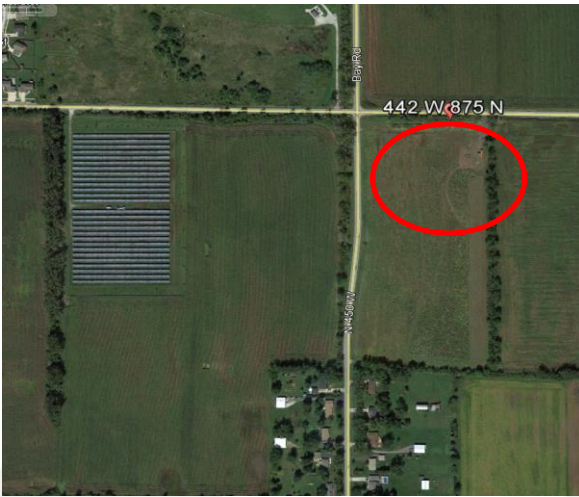
*Dominion INDY III Solar Farm (Solar Farm 5)  
September 2014*



*Dominion INDY III Solar Farm (Solar Farm 5)  
October 2016*



*New Estate Home sold on March 24, 2015 for \$449,545 (Built-in Swimming Pool)*



*Portage Solar Farm (Solar Farm 6)  
October 2015*



*Portage Solar Farm (Solar Farm 6)  
October 2016*



*4,255 square foot estate home under construction, adjacent to Portage Solar Farm (Solar Farm 6)  
On-site pond, pool and attached garage (cost estimated at \$465,000) April 2018*

## SUMMARY AND FINAL CONCLUSIONS

We have reviewed published methodology for measuring impact on property values as well as published studies that analyzed the impact of solar farms on property values. We have also interviewed market participants to give us additional insight as to how the market evaluates farm land and single family homes with views of the solar farm. These studies found little to no measurable and consistent difference between the Test Area Sales and the Control Area Sales attributed to the solar farms, and are generally considered a compatible use. We then can conclude that since the Adjoining Property Sales (Test Area Sales) were not adversely affected by their proximity to the solar farm, that properties surrounding other proposed solar farms operating in compliance with all regulatory standards will similarly not be adversely affected, in either the short or long term periods.

The purpose of this property value impact study is to determine whether the presence of a solar farm has caused a measurable and consistent difference in values between the Test Area Sales and the Control Area Sales. A summary of our findings for the paired sales analyses is presented below.

<b>CohnReznick Impact Study Analysis Conclusions</b>						
Solar Farm	Adj. Property Number	Adjoining Property Sale (Test Area) Price Per Unit	Control Area Sales Median Price Per Unit	% Difference	Impact Found	
1	Grand Ridge Solar	12	\$79.90	\$74.35	+7.46%	No Impact
2	Rockford Solar	1 & 2	\$3,943	\$4,075	-3.23%	No Impact
5	Indy Solar III Solar	2	\$8,210	\$8,091	+1.47%	No Impact
	Indy Solar III Solar	Group 1	\$59.81	\$57.84	+3.40%	No Impact
	Indy Solar III Solar	Group 2	\$73.47	\$71.52	+2.74%	No Impact
6	Portage Solar	1	\$8,000	\$7,674	+4.25%	No Impact
	Portage Solar	7	\$84.35	\$84.27	+0.10%	No Impact
7	IMPA Frankton Solar	2	\$25.58	\$28.42	+0.56%	No Impact
	IMPA Frankton Solar	7	\$52.40	\$51.47	+1.81%	No Impact
8	Valparaiso Solar	10	\$82.42	\$79.95	+3.09%	No Impact
	Valparaiso Solar	14	\$62.11	\$64.07	-3.06%	No Impact
<b>Average Variance in Sale Prices for Test to Control Areas</b>				<b>+1.69%</b>		

Based upon our examination, research, and analyses of the existing solar farm uses, the surrounding areas, and an extensive market database, we have concluded that **no consistent negative impact has occurred to adjacent property that could be attributed to proximity to the adjacent solar farm**, with regard to unit sale prices or other influential market indicators. This conclusion has been confirmed by numerous County Assessors who have also investigated this use's potential impact.



If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Respectfully submitted,

**CohnReznick, LLP**



Andrew R. Lines, MAI  
Principal  
Certified General Real Estate Appraiser  
Illinois License No. #553.001841  
Expires 9/30/2019  
Indiana License No. #CG41500037  
Expires 6/30/2018



Patricia L. McGarr, MAI, CRE, FRICS  
National Director - Valuation Advisory Services  
Certified General Real Estate Appraiser  
Illinois License No. #553.000621  
Expires 9/30/2019  
Indiana License No. #CG49600131  
Expires 6/30/2018



Martin D. Broerman, MAI  
Senior Manager  
Certified General Real Estate Appraiser  
Illinois License No. #553.002252  
Expires 9/30/2019  
Indiana License No. #CG41400050  
Expires 6/30/2018



Sonia K. Singh  
Manager  
Certified General Real Estate Appraiser  
VA License No. #4001017615  
Expires 3/31/2020

## CERTIFICATION

We certify that, to the best of our knowledge and belief:

1. The statements of fact and data reported are true and correct.
2. The reported analyses, opinions, and conclusions in this consulting report are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
3. We have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
4. We have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
5. We have no bias with respect to the property that is the subject of this report or the parties involved with this assignment.
6. Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
7. Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this report.
8. Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute, which includes the Uniform Standards of Professional Appraisal Practice (USPAP).
9. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
10. Patricia L. McGarr, MAI, CRE, FRICS and Martin D. Broerman, MAI have made a personal inspection of the properties that is the subject of this work. Patricia L. McGarr, MAI, CRE, FRICS, Martin D. Broerman, MAI, Andrew R. Lines, MAI and Sonia K. Singh have viewed the exterior of all comparable data referenced in this report in person, via photographs, or aerial imagery.
11. We have not relied on unsupported conclusions relating to characteristics such as race, color, religion, national origin, gender, marital status, familial status, age, and receipt of public assistance income, handicap, or an unsupported conclusion that homogeneity of such characteristics is necessary to maximize value.
12. Michael F. Antypas and Amanda G. Edwards provided significant appraisal consulting assistance to the persons signing this certification.
13. We have experience in reviewing properties similar to the subject and are in compliance with the Competency Rule of USPAP.
14. As of the date of this report, Patricia L. McGarr, MAI, CRE, FRICS, Andrew R. Lines, MAI, and Martin D. Broerman, MAI have completed the continuing education program of the Appraisal Institute.
15. As of the date of this report, Sonia K. Singh has completed the Standards and Ethics Education Requirements for Candidates of the Appraisal Institute.

If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Respectfully submitted,

**CohnReznick, LLP**



Andrew R. Lines, MAI  
Principal  
Certified General Real Estate Appraiser  
Illinois License No. #553.001841  
Expires 9/30/2019  
Indiana License No. #CG41500037  
Expires 6/30/2018



Patricia L. McGarr, MAI, CRE, FRICS  
National Director - Valuation Advisory Services  
Certified General Real Estate Appraiser  
Illinois License No. #553.000621  
Expires 9/30/2019  
Indiana License No. #CG49600131  
Expires 6/30/2018



Martin D. Broerman, MAI  
Senior Manager  
Certified General Real Estate Appraiser  
Illinois License No. #553.002252  
Expires 9/30/2019  
Indiana License No. #CG41400050  
Expires 6/30/2018



Sonia K. Singh  
Manager  
Certified General Real Estate Appraiser  
VA License No. #4001017615  
Expires 3/31/2020

## ASSUMPTIONS AND LIMITING CONDITIONS

This report is based on the following assumptions, except as otherwise noted in the report.

1. The title is marketable and free and clear of all liens, encumbrances, encroachments, easements and restrictions. The property is under responsible ownership and competent management and is available for its highest and best use.
2. There are no existing judgments or pending or threatened litigation that could affect the value of the property.
3. There are no hidden or undisclosed conditions of the land or of the improvements that would render the property more or less valuable. Furthermore, there is no asbestos in the property.
4. The revenue stamps placed on any deed referenced herein to indicate the sale price are in correct relation to the actual dollar amount of the transaction.
5. The property is in compliance with all applicable building, environmental, zoning, and other federal, state and local laws, regulations and codes.
6. The information furnished by others is believed to be reliable, but no warranty is given for its accuracy.

This report is subject to the following limiting conditions, except as otherwise noted in the report.

1. An appraisal is inherently subjective and represents our opinion as to the value of the property appraised.
2. The conclusions stated in our appraisal apply only as of the effective date of the appraisal, and no representation is made as to the effect of subsequent events.
3. No changes in any federal, state or local laws, regulations or codes (including, without limitation, the Internal Revenue Code) are anticipated.
4. No environmental impact studies were either requested or made in conjunction with this appraisal, and we reserve the right to revise or rescind any of the value opinions based upon any subsequent environmental impact studies. If any environmental impact statement is required by law, the appraisal assumes that such statement will be favorable and will be approved by the appropriate regulatory bodies.
5. Unless otherwise agreed to in writing, we are not required to give testimony, respond to any subpoena or attend any court, governmental or other hearing with reference to the property without compensation relative to such additional employment.
6. We have made no survey of the property and assume no responsibility in connection with such matters. Any sketch or survey of the property included in this report is for illustrative purposes only and should not be considered to be scaled accurately for size. The appraisal covers the property as described in this report, and the areas and dimensions set forth are assumed to be correct.
7. No opinion is expressed as to the value of subsurface oil, gas or mineral rights, if any, and we have assumed that the property is not subject to surface entry for the exploration or removal of such materials, unless otherwise noted in our appraisal.
8. We accept no responsibility for considerations requiring expertise in other fields. Such considerations include, but are not limited to, legal descriptions and other legal matters such as legal title, geologic considerations such as soils and seismic stability, and civil, mechanical, electrical, structural and other engineering and environmental matters.

9. The distribution of the total valuation in the report between land and improvements applies only under the reported highest and best use of the property. The allocations of value for land and improvements must not be used in conjunction with any other appraisal and are invalid if so used. The appraisal report shall be considered only in its entirety. No part of the appraisal report shall be utilized separately or out of context.
10. Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraisers, or any reference to the Appraisal Institute) shall be disseminated through advertising media, public relations media, news media or any other means of communication (including without limitation prospectuses, private offering memoranda and other offering material provided to prospective investors) without the prior written consent of the person signing the report.
11. Information, estimates and opinions contained in the report, obtained from third-party sources are assumed to be reliable and have not been independently verified.
12. Any income and expense estimates contained in the appraisal report are used only for the purpose of estimating value and do not constitute predictions of future operating results.
13. If the property is subject to one or more leases, any estimate of residual value contained in the appraisal may be particularly affected by significant changes in the condition of the economy, of the real estate industry, or of the appraised property at the time these leases expire or otherwise terminate.
14. No consideration has been given to personal property located on the premises or to the cost of moving or relocating such personal property; only the real property has been considered.
15. The current purchasing power of the dollar is the basis for the value stated in our appraisal; we have assumed that no extreme fluctuations in economic cycles will occur.
16. The value found herein is subject to these and to any other assumptions or conditions set forth in the body of this report but which may have been omitted from this list of Assumptions and Limiting Conditions.
17. The analyses contained in the report necessarily incorporate numerous estimates and assumptions regarding property performance, general and local business and economic conditions, the absence of material changes in the competitive environment and other matters. Some estimates or assumptions, however, inevitably will not materialize, and unanticipated events and circumstances may occur; therefore, actual results achieved during the period covered by our analysis will vary from our estimates, and the variations may be material.
18. The *Americans with Disabilities Act (ADA)* became effective January 26, 1992. We have not made a specific survey or analysis of any property to determine whether the physical aspects of the improvements meet the *ADA* accessibility guidelines. In as much as compliance matches each owner's financial ability with the cost to cure the non-conforming physical characteristics of a property, we cannot comment on compliance to *ADA*. Given that compliance can change with each owner's financial ability to cure non-accessibility, the value of the subject does not consider possible non-compliance. A specific study of both the owner's financial ability and the cost to cure any deficiencies would be needed for the Department of Justice to determine compliance.
19. The appraisal report is prepared for the exclusive benefit of the Client, its subsidiaries and/or affiliates. It may not be used or relied upon by any other party. All parties who use or rely upon any information in the report without our written consent do so at their own risk.
20. No studies have been provided to us indicating the presence or absence of hazardous materials on the subject property or in the improvements, and our valuation is predicated upon the assumption that the

subject property is free and clear of any environment hazards including, without limitation, hazardous wastes, toxic substances and mold. No representations or warranties are made regarding the environmental condition of the subject property and the person signing the report shall not be responsible for any such environmental conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because we are not experts in the field of environmental conditions, the appraisal report cannot be considered as an environmental assessment of the subject property.

21. The person signing the report may have reviewed available flood maps and may have noted in the appraisal report whether the subject property is located in an identified Special Flood Hazard Area. We are not qualified to detect such areas and therefore do not guarantee such determinations. The presence of flood plain areas and/or wetlands may affect the value of the property, and the value conclusion is predicated on the assumption that wetlands are non-existent or minimal.
22. CohnReznick is not a building or environmental inspector. CohnReznick does not guarantee that the subject property is free of defects or environmental problems. Mold may be present in the subject property and a professional inspection is recommended.
23. The appraisal report and value conclusion for an appraisal assumes the satisfactory completion of construction, repairs or alterations in a workmanlike manner.
24. CohnReznick an independently owned and operated company, has prepared the appraisal for the specific purpose stated elsewhere in the report. The intended use of the appraisal is stated in the General Information section of the report. The use of the appraisal report by anyone other than the Client is prohibited except as otherwise provided. Accordingly, the appraisal report is addressed to and shall be solely for the Client's use and benefit unless we provide our prior written consent. We expressly reserve the unrestricted right to withhold our consent to your disclosure of the appraisal report (or any part thereof including, without limitation, conclusions of value and our identity), to any third parties. Stated again for clarification, unless our prior written consent is obtained, no third party may rely on the appraisal report (even if their reliance was foreseeable).
25. The conclusions of this report are estimates based on known current trends and reasonably foreseeable future occurrences. These estimates are based partly on property information, data obtained in public records, interviews, existing trends, buyer-seller decision criteria in the current market, and research conducted by third parties, and such data are not always completely reliable. CohnReznick and the undersigned are not responsible for these and other future occurrences that could not have reasonably been foreseen on the effective date of this assignment. Furthermore, it is inevitable that some assumptions will not materialize and that unanticipated events may occur that will likely affect actual performance. While we are of the opinion that our findings are reasonable based on current market conditions, we do not represent that these estimates will actually be achieved, as they are subject to considerable risk and uncertainty. Moreover, we assume competent and effective management and marketing for the duration of the projected holding period of this property.
26. All prospective value estimates presented in this report are estimates and forecasts which are prospective in nature and are subject to considerable risk and uncertainty. In addition to the contingencies noted in the preceding paragraph, several events may occur that could substantially alter the outcome of our estimates such as, but not limited to changes in the economy, interest rates, and capitalization rates, behavior of consumers, investors and lenders, fire and other physical destruction, changes in title or

conveyances of easements and deed restrictions, etc. It is assumed that conditions reasonably foreseeable at the present time are consistent or similar with the future.

27. While this appraisal has been proofed for typographical errors, mathematical inaccuracies, and other discrepancies, others may be discovered in subsequent reviews performed by the client or their designated agent. We reserve the right to correct any typographical errors, mathematical inaccuracies, or other discrepancies that may affect the estimate of value contained in the report. These corrections will be corrected promptly upon the written request of the client.



**ADDENDUM A:  
APPRAISER QUALIFICATIONS**

*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*





# Patricia L. McGarr, MAI, CRE, FRICS, CRA

Principal,  
National Director, Valuation Advisory Services

200 S. Wacker Drive, Suite 2600  
Chicago, IL 60606  
312-508-5802  
patricia.mcgarr@cohnreznick.com  
[www.cohnreznick.com](http://www.cohnreznick.com)

Patricia L. McGarr, MAI, CRE, FRICS, CRA, is a principal and National Director of CohnReznick Advisory Group's Valuation Advisory Services practice who is based in Chicago. Pat's experience includes market value appraisals of varied property types for acquisition, condemnation, mortgage, estate, ad valorem tax, litigation, zoning, and other purposes. Pat has been involved in the real estate business since 1980. From June 1980 to January 1984, she was involved with the sales and brokerage of residential and commercial properties. Her responsibilities during this time included the formation, management, and training of sales staff in addition to her sales, marketing, and analytical functions. Of special note was her development of a commercial division for a major Chicago-area brokerage firm.

Since January 1984, Pat has been exclusively involved in the valuation of real estate. Her experience includes the valuation of a wide variety of property types including residential, commercial, industrial, and special purpose properties including such diverse subjects as quarries, marinas, riverboat gaming sites, shopping centers, manufacturing plants, and office buildings. She is also experienced in the valuation of leasehold and leased fee interests. Pat has performed appraisal assignments throughout Illinois and the Chicago Metropolitan area as well as Wisconsin, Indiana, Michigan, New York, New Jersey, California, Nevada, Florida, Utah, Texas, and Ohio. Pat has gained substantial experience in the study and analysis of the establishment and expansion of sanitary landfills in various metropolitan areas including the preparation of real estate impact studies to address criteria required by Senate Bill 172. She has also developed an accepted format for allocating value of a landfill operation between real property, landfill improvements, and franchise (permits) value.

Over the past several years, Pat has developed a valuation group that specializes in serving utility companies establish new utility corridors for electric power transmission and pipelines. This includes determining acquisition budgets, easement acquisitions, and litigation support. Pat has considerable experience in performing valuation impact studies on potential detrimental conditions and has studied properties adjoining landfills, waste transfer stations, stone quarries, cellular towers, schools, electrical power transmission lines, "Big Box" retail facilities, levies, properties with restrictive covenants, landmark districts, environmental contamination, airports, material defects in construction, stigma, and loss of view amenity for residential high rises.

Pat has qualified as an expert valuation witness in numerous local, state and federal courts.

Pat's has participated in specialized real estate appraisal education and has completed more than 50 courses and seminars offered by the Appraisal Institute totaling more than 600 classroom hours, including real estate transaction courses as a prerequisite to obtaining a State of Illinois Real Estate Salesman License.

Pat has earned the professional designations of Counselors of Real Estate (CRE), Member of the Appraisal Institute (MAI), Fellow of Royal Institution of Chartered Surveyors (FRICS) and Certified Review Appraiser (CRA). She is also a certified general real estate appraiser with active licenses in California, District of Columbia, Florida, Illinois, Indiana, Las Vegas, Maryland, New Jersey, New York, Texas and Wisconsin.

*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*

**COHN**  **REZNICK**

## Education

- North Park University: Bachelor of Science, General Studies

## Professional Affiliations

- National Association of Realtors
- CREW Commercial Real Estate Executive Women
- IRWA International Right Of Way Association

*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*



## Andrew R. Lines, MAI

Principal – Real Estate Valuation,  
Valuation Advisory Services

200 S. Wacker Drive, Suite 2600  
Chicago, IL 60606  
312-508-5892  
andrew.lines@cohnreznick.com  
[www.cohnreznick.com](http://www.cohnreznick.com)

Andrew R. Lines, MAI, is a partner for CohnReznick Advisory Group's Valuation Advisory practice who is based in the Chicago office and has been a CohnReznick employee for over six years. Andrew has been involved in the real estate business for more than 15 years and has performed valuations on a wide variety of real property types including single- and multi-unit residential (including LIHTC), student housing, office, retail, industrial, mixed-use and special purpose properties including landfills, waste transfer stations, marinas, hospitals, universities, telecommunications facilities, data centers, self-storage facilities, racetracks, CCRCs, and railroad corridors. He is also experienced in the valuation of leasehold, leased fee, and partial interests, as well as purchase price allocations (GAAP, IFRS and IRC 1060) for financial reporting.

Valuations have been completed nationwide for a variety of assignments including mortgage financing, litigation, tax appeal, estate gifts, asset management, workouts, and restructuring, as well as valuation for financial reporting including purchase price allocations (ASC 805), impairment studies, and appraisals for investment company guidelines and REIS standards. Andrew has qualified as an expert witness, providing testimony for eminent domain cases in the states of IL and MD. Andrew has also performed appraisal review assignments for accounting purposes (audit support), asset management, litigation and as an evaluator for a large Midwest regional bank.

Andrew has earned the professional designation of Member of the Appraisal Institute (MAI). He has also qualified for certified general commercial real estate appraiser licenses in Arizona, California, Maryland, Florida, Wisconsin, Georgia, Illinois, Indiana, New Jersey and New York. Temporary licenses have been granted in Connecticut, Colorado, Ohio, Pennsylvania, Idaho, Kansas, Minnesota and South Carolina.

### Education

- Syracuse University: Bachelor of Fine Arts

### Professional Affiliations

- Chicago Chapter of the Appraisal Institute - Alternate Regional Representative (2016 - Present)
- International Real Estate Management (IREM)
- National Council of Real Estate Investment Fiduciaries (NCREIF)

## Community Involvement

- Fellows Alumni Network - World Business Chicago, Founding member
- Syracuse University Regional Council - Active Member
- Syracuse University Alumni Association of Chicago, Past Board member
- Chicago Friends School - Board Member

*Disclaimer: This report is limited to the intended use, intended users (SunVest Solar Inc.; other intended users may include the client's legal and accounting site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.*



# Martin D. Broerman, MAI

## Senior Manager, Valuation Advisory Services

200 S. Wacker Drive, Suite 2600  
Chicago, IL 60606  
312-508-5452  
martin.broerman@cohnreznick.com  
[www.cohnreznick.com](http://www.cohnreznick.com)

Martin D. Broerman, MAI is a senior manager in CohnReznick Advisory Group's Valuation Advisory Services practice and is based in the Chicago office. He has been involved in the commercial real estate valuation business for more than 11 years. Martin's experience includes market value appraisals of varied property types for portfolio analysis, acquisition/disposition, condemnation, financing, estate planning, tax appeal, litigation, and other purposes. He performs valuations on a wide variety of real property types including retail, industrial, office, residential, and special purpose properties.

Martin's retail assignments have ranged from freestanding retail stores to shopping centers of all varieties. His industrial assignments include distribution warehouses, cold storage warehouses, R&D facilities, truck terminals, manufacturing facilities and data centers. Martin's office assignments include hi-rise downtown offices, low- to mid-rise suburban offices, and medical office buildings. His residential assignments include single family homes, apartment projects of all sizes, residential subdivisions, and condominium developments/conversions. Martin's specialized real estate assignments include portfolio analysis, utility corridors, right-of-way projects, pipelines, mixed-use properties, ground leaseholds, healthcare facilities, parking garages, vacant land, and various easement valuations. His extensive experience in commercial real estate is focused on properties located in the Chicago metropolitan area, but includes significant assets located nationwide.

Martin has served an array of clients, including municipalities, lenders, law firms, investment firms, utility companies, private corporations, educational institutions, developers, and various governmental agencies including the Illinois Department of Transportation (IDOT) and General Services Administration (GSA).

Martin is a certified general real estate appraiser with active licenses in Illinois, Indiana and Ohio.

### Education

- DePaul University: Bachelor of Science, Commerce, Finance
- Triton College: Associate of Arts, Business Administration

### Professional Affiliations

- Appraisal Institute
- International Right-of-Way Association



# Sonia K. Singh

## Manager, Valuation Advisory Services

7501 Wisconsin Avenue, Suite 400E  
Bethesda, Maryland 20814  
301-280-5193  
sonia.singh@cohnreznick.com  
[www.cohnreznick.com](http://www.cohnreznick.com)

Sonia K. Singh is a manager in CohnReznick Advisory Group's Valuation Advisory practice who is based in the Bethesda office. She has been engaged in real estate valuation and other real estate consulting services for the past six years and has valued over \$3.5 billion in real property.

She is adept at valuing a variety of real estate property types across the United States, including the following: right-of-way acquisitions for utility corridors; single- and multi-tenant industrial buildings; historic redevelopment projects; freestanding and retail shopping centers; trophy, class A office buildings; continuing care retirement communities; marinas; car dealerships; athletic clubs; boutique and luxury flag hotels with for-sale residential villas; and medical office buildings with a surgical center. Real estate appraisals have been prepared for pending litigation matters, estate planning, estate & gift tax purposes, and asset management.

In addition to real estate appraisal services, she has completed over 2,500 hours related to generating purchase price allocations for the acquisition of tangible and intangible assets for financial reporting purposes under the guidance of ASC 805 and early adoption of ASU 2017-01. Other experienced real estate consulting services include appraisal review and statistical analysis. Several impact studies were prepared by her and her peers measuring the impact, if any, of economic and environmental influences on property values.

Other services she provided significant assistance with include useful life analysis of real estate assets and valuation of minority interests for gift and estate tax purposes. In addition, she has developed several financial forecasts for proposed real estate development to illustrate profit measures as well as return on capital for potential investors.

Sonia is a certified general real estate appraiser with active licenses in the District of Columbia, Maryland, and Virginia. She has also completed the following actuarial exams: Probability, Financial Mathematics, and Models for Financial Economics.

### Education

- University of Illinois: Bachelor of Science, Actuarial Science

### Professional Affiliations

- Appraisal Institute - Candidate for Designation
- Urban Land Institute - Associate Member
- Certified General Real Estate Appraiser Licenses in the States of DC, MD, and VA

# Michael F. Antypas

## Consultant, Valuation Advisory Services

7501 Wisconsin Avenue, Suite 400E  
Bethesda, Maryland 20814  
301-280-2741  
michael.antypas@cohnreznick.com  
[www.cohnreznick.com](http://www.cohnreznick.com)

Michael Antypas is a consultant in CohnReznick Advisory Group's Valuation Advisory Services practice and is based in the Bethesda office. He has assisted other associates and appraisers in the valuation of a variety of retail shopping centers, hotels, market rate and restricted rental apartment properties, Class A office complexes with GSA tenants, mixed-use properties, developable land, and single family rental home portfolios owned by REITs. He has also completed solar farm impact studies, appraisals for eminent domain disputes, as well as purchase price allocations on various senior living facilities, medical office buildings, and retail centers. In addition, Michael is certified in working with Argus Enterprise valuation software. He is a practicing affiliate in the Appraisal Institute and is working towards becoming a Certified General Real Estate Appraiser.

He graduated from the Villanova School of Business in May of 2016. Some of his other experience working in Real Estate originated through interning with commercial brokers. Throughout his senior year in college, Michael interned with Newmark Grubb Knight Frank as a Capital Markets intern. There he helped create and revise many marketing packages for the firm's senior managing directors. He also assisted in developing underwriting models and projections for offering memorandums. He also worked with a boutique restaurant broker in Washington D.C, Papadopoulos Properties where he compiled market research for his client's use and surveyed prospective restaurants to gauge their interest in expanding to the Washington D.C. market.

### Education

- Villanova University: Bachelor of Business Administration, Finance and Real Estate, Minor in Business Analytics

### Certifications

- Argus Enterprise Certified

### Professional Affiliations

- Appraisal Institute, Practicing Affiliate

# Amanda G. Edwards

## Consultant, Valuation Advisory Services

200 S. Wacker Drive, Suite 2600  
Chicago, Illinois 60606  
312-508-5453  
amanda.edwards@cohnreznick.com  
www.cohnreznick.com

Amanda Edwards is a consultant in CohnReznick's Valuation Advisory Services practice group and is based in Chicago. Amanda has assisted other associates and appraisers in the valuation of a variety of industrial properties, medical office, hotels, rental apartment properties, condominium developments, retail and mixed-use properties, developable and open space land, and single family subdivisions. She has also assisted with appraisals and continuing consulting for eminent domain disputes. Amanda is a practicing affiliate in the Appraisal Institute and is working towards becoming a Certified General Real Estate Appraiser.

Before joining CohnReznick, Amanda worked at the Inland Group of companies valuing and underwriting as well as assisting in the closing of commercial mortgage loans, nationwide. Property types included industrial, office, multi-family, retail and hotel, with an emphasis on value-add properties and construction projects. Amanda has also worked as a commercial lender for builder-developer housing at Fifth Third Bank. She has also worked valuing senior housing properties and associated business models for a senior housing firm with properties throughout the Chicago area.

Amanda has spent considerable time in the consulting environment, developing and conducting in-depth interviews for primary research for a variety of industries such as technology, financial institutions, and industrial manufacturing.

### Education

- Bryn Mawr College, Bachelor of Arts

### Professional Affiliations

- Appraisal Institute, Practicing Affiliate
- Chicago Real Estate Council - Member

### Other Affiliations

- Bryn Mawr College Club of Chicago - President