APPENDIX H

Market Impact Analysis

MAROUS & COMPANY

MARKET IMPACT ANALYSIS

BENTON SOLAR PROJECT
BENTON COUNTY, MINNESOTA

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Real Estate Consultation, Appraisal & Investment Services

September 4, 2024

Benton Solar Project
c/o NextEra Energy Resources
700 Universe Boulevard
Juno Beach, Florida 33401

Attention: Adam Gracia – Development Project Manager

Subject: Market Impact Analysis
Benton Solar Project
Benton County, Minnesota

In accordance with your request, the proposed development of the Benton Solar Project in Benton County, Minnesota, has been analyzed and this market impact analysis has been prepared.

MaRous & Company has conducted similar market impact studies for a variety of clients and for a number of different proposed developments over the last 43 years. Clients have ranged from municipalities, counties, and school districts, to corporations, developers, and citizen's groups. The types of proposals analyzed include commercial developments such as shopping centers and big-box retail facilities; religious facilities such as mosques and mega-churches; residential developments such as high-density multifamily and congregate-care buildings and large single-family subdivisions; recreational uses such as skate parks and lighted high school athletic fields; and industrial uses such as waste transfer stations, landfills, and quarries.

MaRous & Company has conducted numerous market studies of energy-related projects. The solar-related projects include the following by state:

- **Minnesota** – Benton Solar in Benton County
- **Wisconsin** - Badger Hollow Solar Farm in Iowa County, Paris Solar Energy Center in Kenosha County, Darien Solar Energy Center in Rock County and Walworth County, Grant County Solar in Grant County, Koshkonong Solar Energy Center in Dane County, St. Croix Solar in St. Croix County, High Noon Solar Energy Center in Columbia County, Langdon Mills Solar in Columbia County
- **Illinois** - Hickory Point Solar Energy Center in Christian County, Mulligan Solar in Logan County, Black Diamond Solar in Christian County, South Dixon Solar in Lee County, Pleasant Grove Solar in Boone County and McHenry County, Double Black Diamond Solar in Sangamon County and Morgan County, Osagrove Flats Solar in LaSalle County, Pleasant Grove Solar in McHenry and Boone County, Blue Violet Energy Facility in Stephenson County, Kendall Solar in Kendall County, Genoa Solar in DeKalb County, Bull Valley Solar in McHenry County, Cornell Solar in Livingston County, Capron Solar in Boone County, Buffalo Solar in Grundy County, Mural Energy Facility in Vermilion County, Shenandoah Solar in DeKalb County, North Springfield Solar in Winnebago County, Beckham Solar in Livingston County, Sugar Creek Solar in Logan County, Casey Fork Solar in Livingston County, Sandpiper Solar in Rock Island County, Monee Solar I & II in Will County, Fowl Solar in Rock Island County, Alexander-Johnson Farm Solar in Kane County, Greensburg Solar in Decatur County, Coyote Solar in Tazewell County, Pulse Solar II in Lee County

- **Iowa** – Duane Arnold Solar I-II in Linn County, Creston Solar in Union County, and Weaver Solar in Lee County, Rock Creek Solar in Clinton County, Goldfinch Solar in Washington County
- **Michigan** – Cereal City Solar in Calhoun County and Grass Lake Solar in Jackson County
- **Indiana** - Lone Oak Solar Farm in Madison County, Hardy Hills Solar in Clinton County, Mammoth Solar in Pulaski County and Starke County, Cold Spring Solar in Putnam County, Bluestem Solar in LaPorte County
- **Kansas** - Chisholm Trail Solar in Sedgwick County
- **South Dakota** – Grant Solar in McCook County
- **Maryland** - Dorchester County Solar Farms in Dorchester County
- **Solar Projects of the Western Regions of the United States of America** - Arizona, Colorado, Nevada, New Mexico, and Utah in the Southwest Region; Idaho and Oregon in the Northwest Region; Texas in the Southern Great Plains Region; General Research in the Northern Great Plains Region

The wind-related projects include the following by state:

- **Minnesota** - Freeborn County Wind Farm in Freeborn County, Three Waters Wind in Jackson County, Dodge County Wind in Dodge County and Steele County
- **Iowa** - Ida County Wind Farm in Ida County, Palo Alto County Wind Farm in Palo Alto County, Worthwhile Wind in Worth County, Three Waters Wind in Dickinson County, and Shenandoah Hills Wind in Page County and Fremont County, Ida Grove II in Ida County, Red Rock Wind in Clay County, Dickinson County, and Emmet County
- **Illinois** - Grand Ridge V and Otter Creek wind farms in LaSalle County, Pleasant Ridge Wind Farm in Livingston County, Walnut Ridge Wind Farm in Bureau County, McLean County Wind Farm in McLean County, Radford's Run Wind Farm in Macon County, Midland Wind Project in Henry County, Harvest Ridge Wind Project in Douglas County, Lincoln Land Wind in Morgan County, Bennington Wind Project in Marshall County, Goose Creek Wind in Piatt County, Shady Oaks II in Lee County, Osagrove Flats Wind Project in LaSalle County, Sapphire Sky Wind Farm in McLean County, Crescent Ridge Wind Farm in McLean County, Blue Violet Energy Facility in Stephenson County, Tazewell County Wind in Tazewell County, Top Hat Wind in Logan County, Lotus Wind in Macoupin County and Morgan County, Mural Energy Facility in Vermilion County, Camp Creek Wind in McDonough County, Musketeer Wind Energy in Vermilion County, Greenswitch Wind in Macon County
- **Michigan** - Crescent Wind in Hillsdale County, Heartland Farms Wind Project in Gratiot County, and Riverbend Wind in Sanilac County
- **Indiana** - Tippecanoe County Wind Farm in Tippecanoe County and Roaming Bison Wind Farm in Montgomery County, Prairie Creek Wind Blackford County
- **Ohio** - Seneca Wind in Seneca County, Republic Wind in Seneca County and Sandusky County, and Emerson Creek Wind Farm in Erie County, Huron County, and Seneca County

- **New York** - Orangeville Wind Farm in Wyoming County and Alle-Catt Wind Farm in Allegany County, Cattaraugus County, and Wyoming County
- **South Dakota** - Dakota Range Wind Project I, II, & III, in Codington County, Grant County, and Roberts County, Deuel Harvest Wind Farm in Deuel County, Crocker Wind Farm in Clark County, Prevailing Wind Park in Charles Mix County, Bon Homme County, and Hutchinson County, Triple-H Wind Project in Hyde County, Crowned Ridge Wind II in Codington County, Deuel County, and Grant County, Tatanka Ridge Wind Farm in Deuel County, and Sweetland Wind Farm in Hand County
- **Kansas** - Neosho Ridge Wind Farm in Neosho County, Jayhawk Wind in Bourbon County and Crawford County
- **Arizona** - West Camp Wind Farm in Navajo County
- **West Virginia** – Short Mountain Wind in Hardy County

We also have analyzed the impact of transmission lines on adjacent residential uses and a number of proposed natural gas-fired electric plants in various locations.

Table of Contents

Project Summary

Project Information	
Project Name	Benton Solar Project
Location	Benton County, Minnesota
Townships	Minden
Property Type	Solar Farm & Battery Energy Storage System (BESS)
Project Developer	Benton Solar LLC, a wholly owned subsidiary of NextEra Energy Resources
Solar Farm Description	
Footprint Land	≈ 951 Acres
Actual Land Acreage Used by Panels	≈ 632 Acres
Actual Land Acreage Used by BESS	≈ 10 Acres
Panel Height (Min/Max)	Max: ≈ 20 Feet Min: ≈ 4 Feet
Total Capacity	≈ 100 Megawatts
BESS Total Capacity	≈ 100 Megawatts, 4hr
Setbacks	Solar: ⁘ 500 Feet - Municipal Boundary, Rural Subdivision, Federal/State Wildlife Areas, Hunting Preserve, Shooting Range, Trail Right of Way ⁘ 300 Feet – Residential Dwelling ⁘ 100 Feet – Non-Participating Side/Rear Property Line, Federal/State/County Highway Right of Way ⁘ Residences within 1,000 Feet are to be screened from project BESS: The project must meet a standard of under 50 dBA nighttime sound limit, at all residences
Participant Acreage	≈ 1,100 Acres
Project Area Population Density ≈ 4.81 Square Miles	≈ 91.0 Persons Per Square Mile
Ancillary Construction	
Collector substation	Gravel access roads
Security fencing	Transmission lines
Underground connection system	Pollinator seed mix
25-Foot Sound Wall	Temporary laydown yards
Total Cost	≈ $320,000,000

Purpose and Intended Use of the Study

The purpose of this appraisal assignment is to analyze the potential impact, if any, on the value of the surrounding residential properties of the development of a solar farm and battery energy storage system (BESS). The report is intended specifically for the use of the client for a proposed solar farm in Benton County, Minnesota. Any other use or user of this report is considered to be unintended.

Executive Summary

As a result of the market impact analysis undertaken, the conclusion made is that there is no market data indicating the project will have a negative impact on either rural residential or agricultural property values in the surrounding area. Further, market data from Minnesota, specifically, also supports the conclusion that the project will not have a negative impact on rural residential or agricultural property values in the surrounding area. For agricultural properties that host photovoltaic panels, the additional income from the solar lease may increase the value and marketability of those properties. These conclusions are based on the following:

- The use will meet or exceed all the required development and operating standards.
- Controls are in place to ensure on-going compliance.
- The project area will experience significant financial benefits to the local economy and to the local taxing bodies from the development of the solar farm.
- The solar farm will create well-paid jobs in the area which will benefit overall market demand.
- The finding of fact provided by the Public Service Commission of Wisconsin for the application for a Certificate of Public Convenience and Necessity of Koshkonong Solar Energy Center, LLC in Dane County, Wisconsin on property value impacts expressed that negative impact concerns cannot be substantiated.
- The finding of fact provided by the Public Service Commission of Wisconsin for the application for a Certificate of Public Convenience and Necessity of Badger Hollow Solar Farm LLC in Iowa County, Wisconsin on property value impacts expressed that negative impact concerns cannot be substantiated.
- The finding of fact provided by the Public Service Commission of Wisconsin for the application for a Certificate of Public Convenience and Necessity of Darien Solar Energy Center, LLC in Walworth County, Wisconsin on property value impacts expressed that negative impact concerns cannot be substantiated.
- The finding of fact provided by the Public Service Commission of Wisconsin for the application for a Certificate of Public Convenience and Necessity of Grant County Solar, LLC in Grant County, Wisconsin on property value impacts expressed that negative impact concerns cannot be substantiated.
- The finding of fact provided by the Public Service Commission of Wisconsin for the application for a Certificate of Public Convenience and Necessity of Paris Solar Farm LLC in Kenosha County, Wisconsin on property value impacts expressed that negative impact concerns cannot be substantiated.

- The finding of fact provided by the Public Service Commission of Wisconsin for the application for a Certificate of Public Convenience and Necessity of Two Creeks Solar LLC in Manitowoc County, Wisconsin on property value impacts expressed that there are no negative impacts anticipated.
- An analysis of recent residential sales proximate to existing solar farms in Minnesota and other states, which includes residential sales as close as 165 feet, to photovoltaic panels, did not support any finding that proximity to a photovoltaic panel had any impact on property values.
- An in-depth analysis of recent residential sales proximate to the existing solar farms in North Branch, Minnesota; in Elizabeth City, North Carolina; and in Goldsboro, North Carolina; which includes residential sales within approximately 5,500 feet, and as close as 165 feet, to photovoltaic panels, did not support any finding that proximity to a photovoltaic panel had any impact on property values.
- An analysis of agricultural land values in the area and in other areas of Minnesota with solar farms did not support any finding that the agricultural land values are negatively impacted by the proximity to photovoltaic panels.
- Studies indicate that solar farm leases add value to agricultural land.
- Based on the experience of MaRous & Company; a light-industrial facility, such as a BESS, with little activity, proper screening, and setbacks of 1,000 feet or greater to a residential structure has no negative impact on property value.
- A survey of County Assessors in 35 counties within Minnesota in which solar farms are located determined that there was no market evidence to support a negative impact upon residential property values as a result of the development of and the proximity to a solar farm, and that there were no reductions in assessed valuations.
- A survey of County Assessors in 7 counties within Iowa in which solar farms are located determined that there was no market evidence to support a negative impact upon residential property values as a result of the development of and the proximity to a solar farm, and that there were no reductions in assessed valuations.
- A survey of Township Assessors within 20 counties in Michigan in which solar farms are located determined that there was no market evidence to support a negative impact upon residential property values as a result of the development of and the proximity to a solar farm, and that there were no reductions in assessed valuations.
- A survey of County Assessors in 6 counties within Illinois in which solar farms are located determined that there was no market evidence to support a negative impact upon residential property values as a result of the development of and the proximity to a solar farm, and that there were no reductions in assessed valuations.
- A survey of County Assessors in 11 counties within Wisconsin in which solar farms are located determined that there was no market evidence to support a negative impact upon residential property values as a result of the development of and the proximity to a solar farm, and that there were no reductions in assessed valuations.

- A survey of County Assessors in 9 counties within Indiana in which solar farms are located determined that there was no market evidence to support a negative impact upon residential property values as a result of the development of and the proximity to a solar farm, and that there were no reductions in assessed valuations.
- A survey of County Assessors in 5 counties within North Carolina in which solar farms are located determined that there was no market evidence to support a negative impact upon residential property values as a result of the development of and the proximity to a solar farm, and that there were no reductions in assessed valuations.
- A survey of County Assessors in 13 counties within Maryland in which solar farms are located determined that there was no market evidence to support a negative impact upon residential property values as a result of the development of and the proximity to a solar farm, and that there were no reductions in assessed valuations.
- A summary of the findings in literature on peer-reviewed studies of solar farms in North America, although not specific to Illinois, reported conclusions that are consistent with our findings.
- A summary of the findings in literature on peer-reviewed studies of BESS in North America, and comparable analysis of BESS.
- A summary of the findings in literature on peer-reviewed studies of wind farms in North America, although not specific to Minnesota, reported conclusions that are consistent with our findings.

Definition of Market Value

When discussing market value, the following definition is used:

The most probable price a property should bring in a competitive and open market under all condition's requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- Buyer and seller are typically motivated.
- Both parties are well informed or well advised and acting in what they consider their own best interests.
- A reasonable time is allowed for exposure in the open market.
- Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto.
- The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.[1]

[1] *(12 C.F.R. Part 34.42(g); 55 Federal Register 34696, August 24, 1990, as amended at 57 Federal Register 12202, April 9, 1992; 59 Federal Register 29499, June 7, 1994)*

Scope of Work and Reporting Process

Information was gathered concerning the real estate market generally and the market of the area surrounding the project specifically. The uses in the surrounding area were considered. The following summarizes the actions taken:

- Review of the Benton County Public Documents and map.
- Review of the project's supporting documents provided by Benton Solar Project.
- Review of the demographics in the area of the proposed solar farm.
- Data on the general market area of the solar farm, and on the other areas in Minnesota and/or Benton County in which existing solar farms are located.
- Data on the market for single-family houses in the immediate area of the proposed solar farm and from other areas in the county from private sources, public sources, and sources from the Benton County and/or Minnesota public records.
- Minnesota and other Midwestern real estate professionals were interviewed concerning recent sales in their area, local market conditions, and the impact of solar farms on property values in the area.
- Properties used for development of the matched pairs were physically inspected by MaRous & Company on the exterior, and photographs of the interiors were reviewed where available.
- Inspections were performed of the subject area and the areas in nearby counties with existing solar farms by Michael S. MaRous on June 22, 2023, and June 23, 2023.

This document is considered to conform to the requirements of the *Uniform Standards of Professional Appraisal Practice and Advisory Opinions* (USPAP). This letter is a brief recapitulation of the appraisal data, analyses, and conclusions; additional supporting documentation is retained in the MaRous & Company office file. There are no extraordinary assumptions or hypothetical conditions included in the market study.

In order to form a judgment concerning the potential impact, if any, on the value of the surrounding residential properties of the approval of the conditional use for the solar farm, the following have been considered:

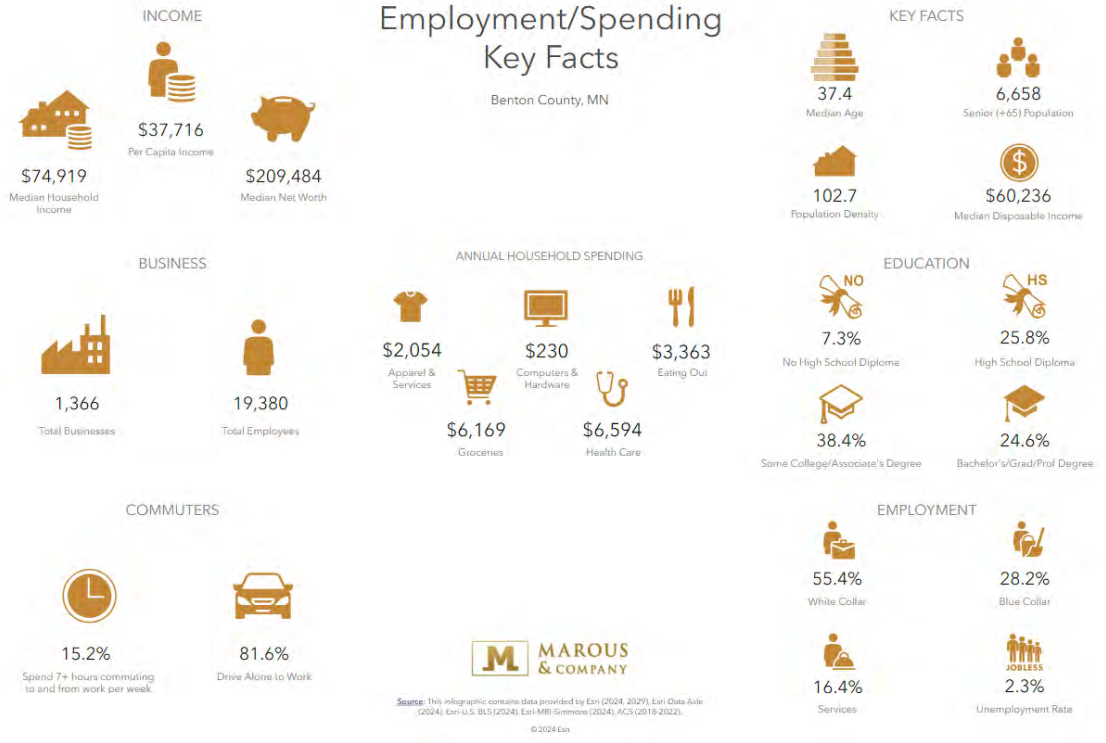
- The character and the value of the residential and agricultural properties in the general area of the existing solar farm.
- Agricultural land values in Benton County, and in other Minnesota counties in which solar farms are located.
- Market trends for both residential and agricultural land within the market area up to the past 5 years.
- The economic impact on the larger community by the proposed solar farm.
- The impact on the value of the surrounding residential and agricultural properties by the proposed solar farm.

Description of Area Demographics and Development Area Analysis

Benton Solar Project Location	
St. Cloud, Minnesota	
2010 Population	65,956 Persons
2020 Population	68,881 Persons
2024 Population	70,875 Persons
Median Home Value in 2024	$268,058
Median Household Income in 2024	$59,608
Number of Households in 2024	28,249
Number of Housing Units in 2024	30,248
Number of Vacant Housing Units in 2024	1,999
Unemployment Rate in 2024	4.5%
Sauk Rapids, Minnesota	
2010 Population	12,816 Persons
2020 Population	13,862 Persons
2024 Population	14,182 Persons
Median Home Value in 2024	$252,652
Median Household Income in 2024	$67,826
Number of Households in 2024	5,769
Number of Housing Units in 2024	6,019
Number of Vacant Housing Units in 2024	250
Unemployment Rate in 2024	1.8%
Foley, Minnesota	
2010 Population	2,620 Persons
2020 Population	2,711 Persons
2024 Population	2,625 Persons
Median Home Value in 2024	$231,607
Median Household Income in 2024	$78,355
Number of Households in 2024	1,002
Number of Housing Units in 2024	1,052
Number of Vacant Housing Units in 2024	50
Unemployment Rate in 2024	2.9%
Minden Township	
2010 Population	1,665 Persons
2020 Population	1,514 Persons
2024 Population	1,601 Persons
Benton County, Minnesota	
2010 Population	38,451 Persons
2020 Population	41,379Persons
2024 Population	41,935 Persons
Median Home Value in 2024	$280,646
Median Household Income in 2024	$74,919
Number of Households in 2024	16,764
Number of Housing Units in 2024	17,701
Number of Vacant Housing Units in 2024	937
Unemployment Rate in 2024	2.3%
Main Roadway Arterials	
North/South	County Highway 23 extends along the northwest edge of the footprint
East/West	County Highway 95 extends through the center of the footprint

Nearest Cities to the Benton Solar Project	
Rice, Minnesota ≈ 13 Miles Northwest of the Footprint	
2010 Population	1,275 Persons
2020 Population	1,975 Persons
2024 Population	2,018 Persons
St. Stephen, Minnesota ≈ 14 Miles Northwest of the Footprint	
2010 Population	851 Persons
2020 Population	797 Persons
2024 Population	791 Persons
Becker, Minnesota ≈ 14 Miles Southeast of the Footprint	
2010 Population	4,524 Persons
2020 Population	4,877 Persons
2024 Population	5,083 Persons
Foreston, Minnesota ≈ 17 Miles Northeast of the Footprint	
2010 Population	533 Persons
2020 Population	559 Persons
2024 Population	625 Persons
Pease, Minnesota ≈ 19 Miles Northeast of the Footprint	
2010 Population	241 Persons
2020 Population	238 Persons
2024 Population	243 Persons
Princeton, Minnesota ≈ 20 Miles East of the Footprint	
2010 Population	851 Persons
2020 Population	797 Persons
2024 Population	791 Persons
Zimmerman, Minnesota ≈ 22 Miles Southeast of the Footprint	
2010 Population	5,188 Persons
2020 Population	6,144 Persons
2024 Population	6,657 Persons

Site to do Business - https://www.stdb.com/



Operational Solar Farms in Proximity to Benton County

The closest operating solar farms to the proposed project include the Haven Solar Project. The solar farm has a total capacity of approximately 3 megawatts and came online in 2019. The Sherburne North Project has a total capacity of approximately 5 megawatts. Nautilus Saint Cloud Solar has a total capacity of approximately 5 megawatt. The Held Solar Project has a total capacity of approximately 5 megawatts. GSPP Held LLC has a total capacity of approximately 3 megawatt. Novel Solar Two has a total capacity of approximately 5 megawatts. North Star Solar has a total capacity of approximately 100 megawatts and came online in 2017.

Residential Sales Nearest to the Project Area

Like many areas of Minnesota, this area is primarily rural in nature. In addition to farms, there are single-family houses situated on either smaller lots or larger farmsteads adjacent to the project. The following table summarizes a sample of recent sales of these types of residences in the general area of the proposed Benton Solar Project which consisted of sales that had consistent data across private and public sources. A map illustrating the location of each of these sales is included in the addenda to this market impact study.

MOST RECENT SINGLE-FAMILY RESIDENTIAL SALES SUMMARY
IN THE AREA NEAREST TO THE PROPOSED BENTON SOLAR PROJECT

No.	Location	Sale Price	Sale Date	Site Size (Acres)	Year Built	Building Size (Sq. Ft.)	Sale Price Per Sq. Ft. of Bldg. Area Incl. Land
1	5317 13th St. NE Sauk Rapids, MN 56379	$111,675	9/11/23	0.72	1962	1,140	$97.96
2	1399 75th Ave. NE Sauk Rapids, MN 56379	$275,000	7/31/24	4.00	1918	1,167	$235.65
3	7165 Duelm Rd. NE Sauk Rapids, MN 56379	$325,000	3/5/24	1.55	1970	2,290	$141.92
4	2015 65th Ave. NE Sauk Rapids, MN 56379	$375,000	8/1/24	5.00	1980	1,516	$247.36
5	6130 Highway 95 NE Sauk Rapids, MN 56379	$511,850	10/9/23	3.10	1963	3,012	$169.94
6	1362 65th Ave. NE Sauk Rapids, MN 56379	$805,000	7/19/22	40.09	2005	1,440	$559.03

The above table outlines the recent single-family residential sales in and around the project area that were performed under the definition of market value. Some of the remaining single-family residential sales discovered in the project area were bought and sold between related parties and cannot be considered to be sold at arm's length; and therefore, do not conform to the definition of market value.

Project Description

The project currently proposes to generate up to 100 megawatts within approximately 951 acres of land. The solar panels will be approximately 4 feet to 20 feet tall and will include a 100-megawatt battery energy storage system (BESS). The proposed project will consist of one irregular-shaped site within Benton County, Minnesota. The proposed project area is described in a map in the addenda to this market study. All photovoltaic panels will be new, and none will be experimental or prototype equipment.

Total project cost is estimated to be approximately $320,000,000. Ancillary construction includes gravel-covered access roads, a substation, underground connection system, site security and approximately 7-foot-tall fencing, transmission line, pollinator site vegetation, 25-foot sound wall, and three temporary laydown yards. Agreements with Benton County and with townships impacted will identify roads to be used, and to repair any damage caused by the project. All standard Benton County building setback requirements will be met.

Project Benefits

Taxes	
Property	Property taxes are currently estimated to be approximately $7,500,000 over the 30-year life of the project.
Beneficiaries	County and Township
Land Agreements	
Participating Landowner Lease Payments	Annual payments will be made to participating landowners
Job Creation	
Temporary/Construction	150-300 Construction Jobs
Permanent	3-5 Permanent Jobs
Induced Impacts due to Construction	
Indirect Impacts	Permit payments to the county and anticipated increase in household spending to local businesses, as well as spending from the construction workers who will require services and supplies

Factors that Affect Property Values Considered

Appearance

- Utility-grade solar farms have a passive use of the land they occupy and are compatible with rural or agricultural uses in their immediate area. Solar panels, typically, have a low-profile with a height of up to 15 feet causing the visual impact from street level to be minimal. Fencing is commonly utilized around a solar facility.
- Utility-grade battery energy storage systems, or BESS, have a passive use of the land they occupy and are compatible with rural or agricultural uses in their immediate area. Battery containers, typically can be closely described as appearing similar to shipping containers, have a somewhat low-profile with a height of up to 20 feet, causing the visual impact from street level to be generally minimal. A sound wall is commonly utilized to block any sound that may come from the cooling condenser, as it may get loud in the warmer months.
    - Below you will see photographs of other common agricultural structures, such as ethanol plants, grain storage facilities, commercial greenhouses, hog farms, dairy farms, poultry farms, wind farms, and solar farms.

Ethanol Plant

Grain Storage Facility

Commercial Greenhouse

Hog Farm

Dairy Farm

Poultry Farm

BESS

Wind Farm

Solar Farm

Environment & Sustainability[2]

- "Solar technologies offer a number of environmental benefits, including the reduction of greenhouse gas emissions and waste in comparison to fuel-based energy sources. [Environmental conditions], sustainability, and recycling are all concerns of the solar industry, which is taking steps to address environmental issues through the lifecycle of solar products."
- "Solar energy plays an important role in transitioning the U.S. to a low-carbon, sustainable future. Solar energy technologies can provide innovative, cost-effective solutions to reduce emissions in a number of sectors of the economy."

Noise and Odor

- Photovoltaic panels and battery energy storage systems do not emit sound themselves. However, the power conversion stations, tracking system motors, cooling systems, and main transformer are audible, therefore, anything louder than a low hum is typically behind a sound barrier to meet or be well below the maximum decibel level. Solar farms and battery energy storage systems do not produce any odor.

Traffic

- Due to the low maintenance requirements of solar farms and battery energy storage systems, there is an insignificant amount of traffic that is associated with solar and energy storage projects.

Hazardous Materials

- Solar farms and battery energy storage systems are reported to not produce any hazardous materials, toxins, or associated odors.

Public Services

- Infrastructure Benefits
  - Development of solar farms and creating the ability to store the energy positively impacts the resiliency of the power grid. Further, building utility scale solar farms increases the need for local construction workers. Solar farms also pay significant real estate taxes that go to the surrounding community to improve existing infrastructure.
- Schools
  - Real estate taxes or voluntary payments paid by solar farms benefit schools with greater funding. As well as funding, they do not add extra students to the classrooms causing overcrowding, such as a residential development that would add new families and students.
- Public Safety
  - The real estate taxes paid by solar farms also benefit public safety concerns by adding funding to first responder departments. This funding could add benefit by giving more opportunities for training, allowing for better equipment, upgrading existing departments, and creating higher salaries.

[2] *Environment & Sustainability.* https://www.seia.org/initiative-topics/environment

Market Impact Analysis

A market impact analysis is undertaken to develop an opinion as to whether the proposed solar farm will have an effect on the value of residential uses and/or agricultural land in proximity to the panels and BESS. This analysis includes:

- A matched pair analyzing the impact on value of residential properties proximate to a solar farm and/or battery energy storage system (BESS) nearest Benton County, Minnesota, as well as matched pairs developed in counties with similar demographics, land use, and economic characteristics of other states with a presence of solar energy, specifically, Wisconsin, Iowa, Illinois, Indiana, Michigan, Arizona, and North Carolina.
- The value of agricultural land near Benton County.
- The results of a survey of assessors in Minnesota, Iowa, Michigan, Illinois, Indiana, Wisconsin, North Carolina, and Maryland with existing solar farms with a capacity over 1 megawatt in their respective jurisdictions.
- Interviews of local real estate professionals concerning solar farms.
- The results of a survey of assessors in Minnesota, Iowa, Illinois, Michigan, South Dakota, and Indiana with existing wind farms with over 25 turbines in their respective jurisdictions.
- The results of several academic and peer-reviewed studies of the impact of solar panels, battery energy storage systems, and wind turbines on residential property values.

Matched Pair Analysis

A matched pair analysis is a methodology which analyzes the importance of a selected characteristic, in this instance proximity to a photovoltaic panel, to the value of a property.[3] This technique compares the sale of a property in proximity to the selected characteristic to the sale of a similar property in the same market area and under similar market conditions but without the proximity to the selected characteristic.

An analysis of properties proximate to established solar farms in other states, specifically Wisconsin, Iowa, Illinois, Indiana, Michigan, and Arizona, was conducted to further analyze any potential impact on value to residential properties proximate to solar farms. The need to supplement data from other states is due to the lack of larger solar farms in Minnesota, apart from North Star Solar, which is analyzed along with two North Carolina solar farms is in the section following the matched pair analysis.

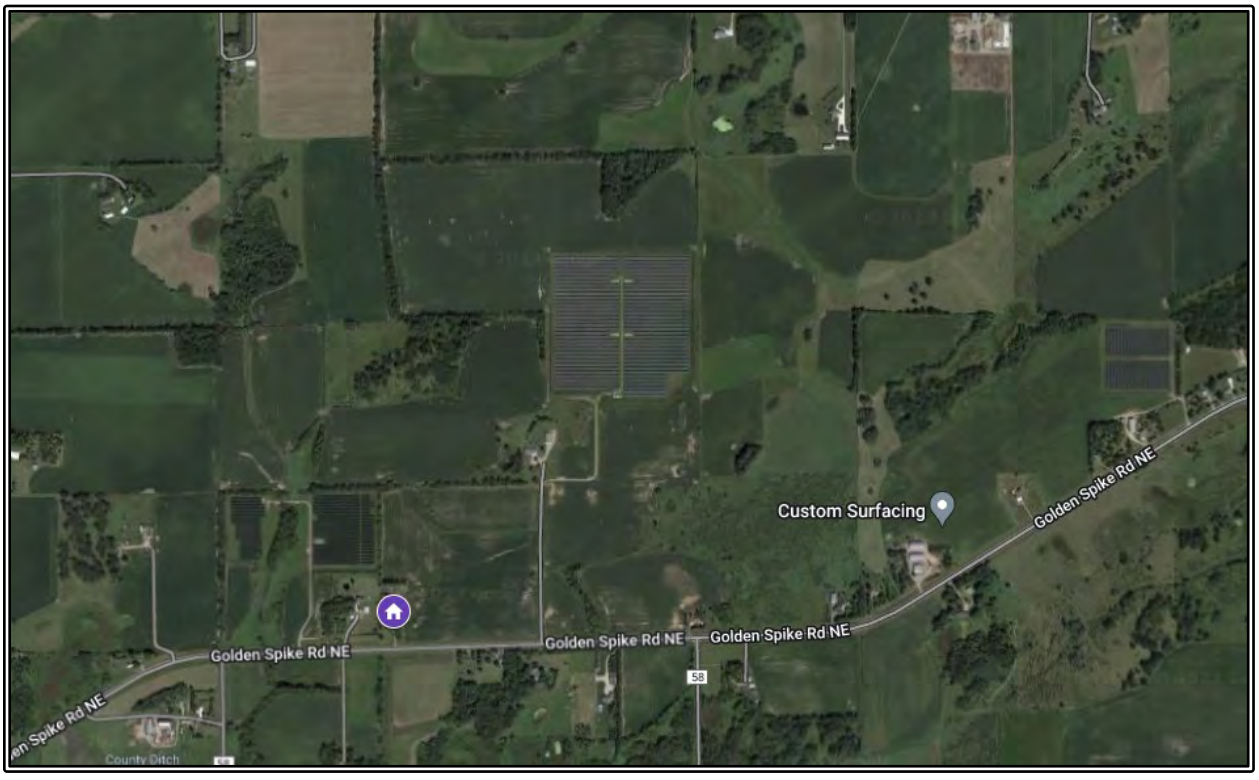
[3] *See the discussion "Paired Sales Analysis" and "Sale/Resale Analysis" in Bell, Randall, MAI, Real Estate Damages, Applied Economics and Detrimental Conditions, Second Edition, Appraisal Institute, 2008, pages 25-27. The ideal is to review a sale and resale of a property in proximity to a selected characteristic, to compare it to a sale and resale of a similar property without such proximity, and to then analyze whether the proximity to the selected characteristic influenced the change in value. However, in rural areas it usually is not possible to find data for this type of "pure pair" analysis.*

Minnesota Analysis - Benton County Matched Pair No. 1

Matched Pair #1 considers the sale of a property located at 3779 Golden Spike Road NE, Sauk Rapids, sold in November 2022. This house is approximately 450 feet from the nearest photovoltaic panel of Delphinus Community Solar.

This property is compared with a similar property located at 14061 15th Ave NE, Rice, that was sold in July 2020, which is not located proximate to any photovoltaic panels. The salient details of these two properties are summarized in the following table.

The following aerial map illustrates the relationship of the 3779 Golden Spike Road NE property to the closest photovoltaic panels.



BENTON COUNTY MATCHED PAIR NO. 1		
	1A - Proximate to a Photovoltaic Panel	**1B - Not Proximate to a Photovoltaic Panel**
Address	3779 Golden Spike Rd. NE Sauk Rapids, MN 56379	14061 15th Ave. NE Rice, MN 56367
Distance from P.V. Panel (Ft.)	450	N/A
Sale Date	November 9, 2022	July 3, 2020
Sale Price	$181,000	$203,000
Sale Price/Sq. Ft. (A.G.)	$143.65	$103.89
Year Built	1959	1948
Building Size (Sq. Ft.)	1,260	1,954
Lot Size (Acres)	39.55	2.00
Style	One-story; frame (wood) 3 bedrooms, 1.1 bath	1.5-story; frame (vinyl) 4 bedrooms, 1.2 bath
Basement	N/A	Full, unfinished
Utilities	Central air Forced-air heat Well and Septic	Central air Forced-air heat Well and Septic
Other	2-car detached garage Porch and deck Machine shed	4-car detached garage Porch and deck Pole barn

3779 Golden Spike Road NE

14061 15th Avenue NE

Both properties are similar in vintage, location, and have similar utilities. The 14061 15th Avenue NE property is superior to the 3779 Golden Spike Road NE property in building size, building style, basement, and outbuildings, yet the 3779 Golden Spike Road NE property was sold in superior market conditions and has a superior lot size to the 14061 15th Avenue NE property.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	14061 15th Ave. NE Rice, MN 56367	+	o	-	+	o	-	-	o	-

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

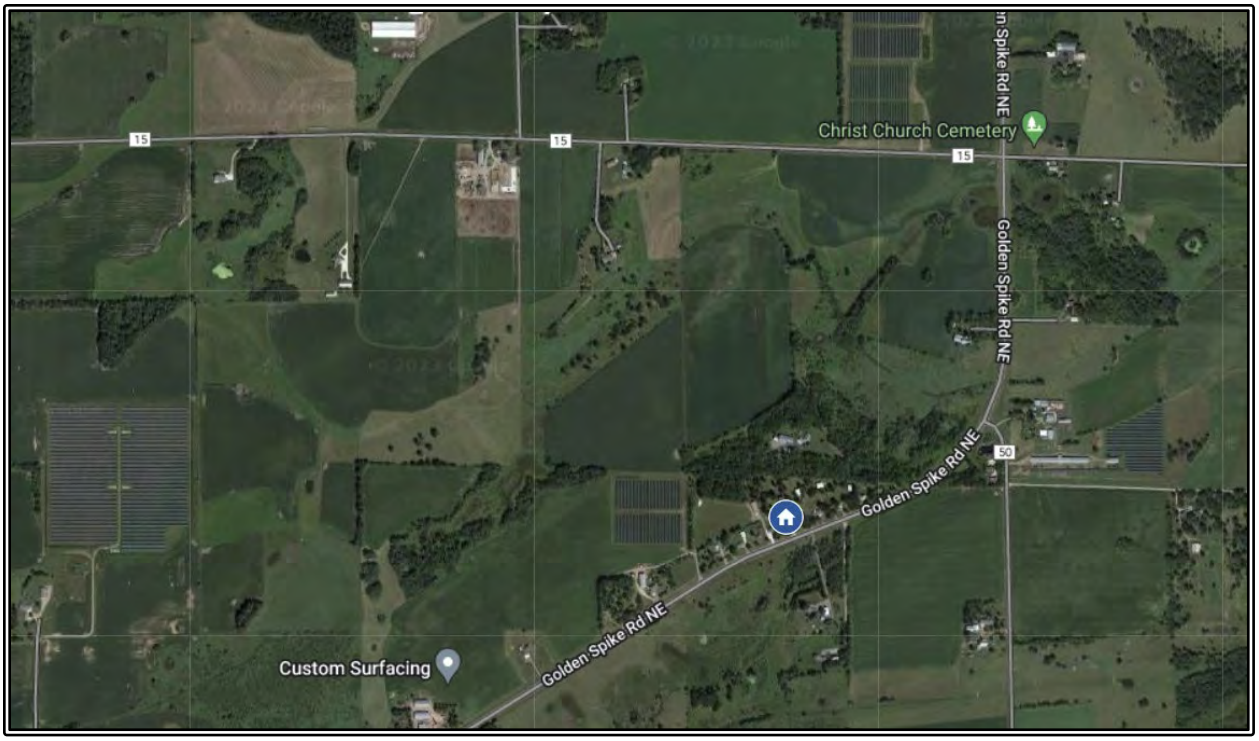
Upward adjustments are made to the 14061 15th Avenue NE property for superior market conditions and lot size of the 3779 Golden Spike Road NE property. Downward adjustments are made for the superior building size, building style, basement, and outbuildings of the 14061 15th Avenue NE property compared to those features of the 3779 Golden Spike Road NE property. The two properties are essentially similar in vintage, location, and utilities. Although the 14061 15th Avenue NE property gives the impression of being superior, the per square foot sale price for the 3779 Golden Spike Road NE property appears to be significantly higher than the per square foot sale of the 14061 15th Avenue NE property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 3779 Golden Spike Road NE property to a photovoltaic panel.

Minnesota Analysis - Benton County Matched Pair No. 2

Matched Pair #2 considers the sale of a property located at 5185 Golden Spike Road NE, Sauk Rapids, sold in August 2020. This house is approximately 880 feet from the nearest photovoltaic panel of USS Kasch Solar CSG.

This property is compared with a similar property located at 17311 Highway 23 NE, Oak Park, that was sold in July 2020, which is not located proximate to any photovoltaic panels. The salient details of these two properties are summarized in the following table.

The following aerial map illustrates the relationship of the 5185 Golden Spike Road NE property to the closest photovoltaic panels.



BENTON COUNTY MATCHED PAIR NO. 2

	2A - Proximate to a Photovoltaic Panel	2B - Not Proximate to a Photovoltaic Panel
Address	5185 Golden Spike Rd. NE Sauk Rapids, MN 56379	17311 Highway 23 NE Oak Park, MN 56357
Distance from P.V. Panel (Ft.)	880	N/A
Sale Date	August 20, 2020	July 24, 2020
Sale Price	$256,500	$240,000
Sale Price/Sq. Ft. (A.G.)	$229.02	$133.33
Year Built	1964	1952
Building Size (Sq. Ft.)	1,120	1,800
Lot Size (Acres)	1.49	5.23
Style	One-story; frame (stucco) 2 bedrooms, 1 bath	One-story; frame (vinyl) 3 bedrooms, 1.1 bath
Basement	Full, finished	Full, unfinished
Utilities	Central air Forced-air heat Well and Septic	Window unit cooling Forced-air heat Well and Septic
Other	2-car attached garage Machine shed	1-car detached garage Patio Shed

5185 Golden Spike Road NE

17311 Highway 23 NE

Both properties are similar in market conditions, vintage, and location. The 17311 Highway 23 NE property is superior to the 5185 Golden Spike Road NE property in building size, lot size, and building style, yet the 5185 Golden Spike Road NE property was sold in superior and has a superior basement, utilities, and outbuildings to the 17311 Highway 23 NE property.

ADJUSTMENT GRID MATCHED PAIR NO. 2

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
2B	17311 Highway 23 NE Oak Park, MN 56357	o	o	-	-	o	-	+	+	+

\+ Positive adjustment based on comparable being inferior in comparison to property #2A
\- Negative adjustment based on comparable being superior in comparison to property #2A
o No adjustment necessary

Upward adjustments are made to the 17311 Highway 23 NE property for superior basement, utilities, and outbuildings of the 5185 Golden Spike Road NE property. Downward adjustments are made for the superior building size, lot size, and building style of the 17311 Highway 23 NE property compared to those features of the 5185 Golden Spike Road NE property. The two properties are essentially similar in market conditions, vintage, and location. Although the two properties give the impression of being similar, the per square foot sale price for the 5185 Golden Spike Road NE property appears to be significantly higher than the per square foot sale of the 17311 Highway 23 NE property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 5185 Golden Spike Road NE property to a photovoltaic panel.

Minnesota Analysis - Wabasha County Matched Pair No. 1

Wabasha County is located in the southeast region of Minnesota. The county has one solar farm, the Wabasha Holdco Solar Farm.

Matched Pair No.1 considers the sale of a property in the footprint of the Wabasha Holdco Solar Farm in Wabasha County, which has been operational since 2017 and generates approximately 3 megawatts of power. A house located at 943 Freedom Avenue, Wabasha, Minnesota, sold in August 2017. This house is approximately 420 feet from the nearest photovoltaic panel.

This property is compared with a similar property located at 108 Skyline Drive, Wabasha, Minnesota, that sold in June 2015, which is not located proximate to any photovoltaic panels. The salient details of these two properties are summarized in the table below.

The following aerial map illustrates the relationship of the 943 Freedom Avenue property to the closest photovoltaic panels.

WABASHA COUNTY MATCHED PAIR NO. 1		
	1A - Proximate to a Photovoltaic Panel	**1B - Not Proximate to a Photovoltaic Panel**
Address	943 Freedom Ave. Wabasha, MN 55981	108 Skyline Dr. Wabasha, MN 55981
Distance from P.V. Panel (Ft.)	420	N/A
Sale Date	August 28, 2017	June 8, 2015
Sale Price	$193,000	$185,000
Sale Price/Sq. Ft. (A.G.)	$71.48	$80.43
Year Built	2008	1992
Building Size (Sq. Ft.)	2,700	2,300
Lot Size (Acres)	0.16	0.78
Style	One-story; frame (vinyl) 4 bedrooms, 3 bath	Two-story; frame (metal) 3 bedrooms, 3 bath
Basement	Full, finished	Full, finished
Utilities	Central air/fresh-air exchange forced-air heat public water & sewer	Central air forced-air heat public water & sewer
Other	2-car attached garage Porch	2-car attached garage deck and patio

943 Freedom Avenue

108 Skyline Drive

Both properties have similar basements and similar amenities. The 943 Freedom Avenue property is superior to the 108 Skyline Drive property in vintage, building size, utilities, and was sold during a superior market condition. The Skyline house offsets this by having a superior building style and a larger lot.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	108 Skyline Drive Wabasha, Minnesota	+	+	+	-	o	-	o	+	o

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

Upward adjustments are made to the 108 Skyline Drive property for the superior market conditions, vintage, building, and utilities of the 943 Freedom Avenue property. Downward adjustments were made for the superior lot size and building style of the 108 Skyline Drive property compared to the 943 Freedom Avenue property. The two properties have essentially the same location, basement, and outbuildings. Therefore, the comparison of the two properties the 943 Freedom Avenue property appears to support the conclusion that there is not any viable impact in value resulting from the proximity of the 943 Freedom Avenue property to a photovoltaic panel.

Matched Pair Analysis- Wisconsin, Iowa, Illinois, Indiana, Michigan, and Arizona

In addition to analyzing sales in the subject project area, we have researched sales in proximity to several existing solar farms in rural areas of Wisconsin, Iowa, Illinois, Indiana, Michigan, and Arizona in order to discover whether residential property values in these areas were impacted by their locations. The following are the results of the most recent of these studies.

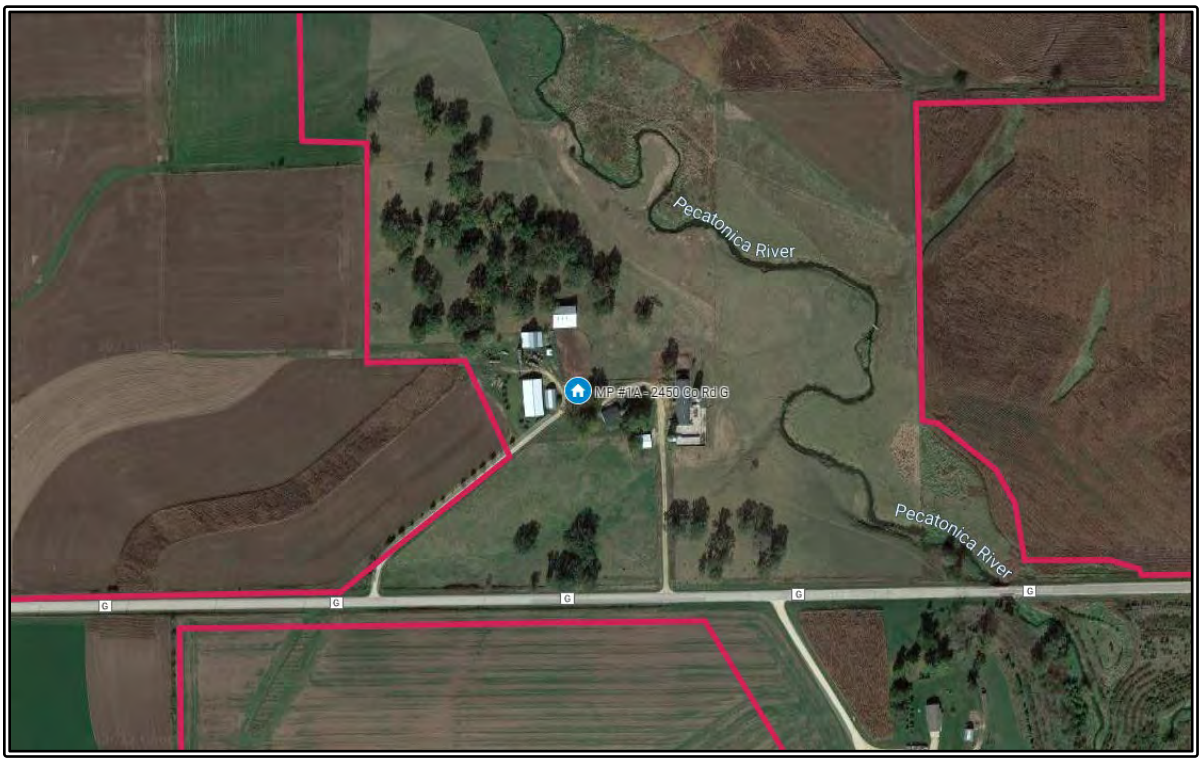
As with the research from Minnesota, details of these sales are retained in our office files; maps in the addenda to this report illustrate the location of these matched pairs. Unless otherwise indicated, none of the purchasers in these transactions appear to own any other property in proximity, and none of the transactions appear to have a solar panel lease associated with the property.

Wisconsin Analysis - Iowa County Matched Pair No. 1

Matched Pair #1 considers the sale of a property near the footprint of Badger Hollow Solar in Iowa County, which has been operational since 2021 and generates approximately 300 megawatts of power. A house located at 2450 County Road G, Montfort was sold in June 2021. This house is approximately 270 feet from the nearest photovoltaic panel.

This sale is compared to two prior sales of the property, which were sold in June 2018 and April 2010. The property was not located near photovoltaic panels at the time of either sales. The salient details of these three sales of the property are summarized in the table below.

The following aerial map illustrates the relationship of the 2450 County Road G property to the closest photovoltaic panels.



IOWA COUNTY MATCHED PAIR NO. 1			
	1A - Proximate to a Photovoltaic Panel	**1B – Prior Sale**	**1C – Prior Sale**
Address	2450 County Road G Montfort, WI 53569	2450 County Road G Montfort, WI 53569	2450 County Road G Montfort, WI 53569
Distance from P.V. Panel (Ft.)	270	N/A	N/A
Sale Date	June 11, 2021	June 6, 2018	April 8, 2010
Sale Price	$493,000	$400,000	$255,000
Sale Price/Sq. Ft. (A.G.)	$152.35	$123.61	$78.80
Year Built	1962	1962	1962
Building Size (Sq. Ft.)	3,236	3,236	3,236
Lot Size (Acres)	52.25	52.25	52.25
Style	One-story; frame (vinyl) 3 bedrooms, 2.1 bath	One-story; frame (vinyl) 3 bedrooms, 2.1 bath	One-story; frame (vinyl) 3 bedrooms, 2.1 bath
Basement	Partial, partially finished, walkout	Partial, partially finished, walkout	Partial, partially finished, walkout
Utilities	Forced-air heat Propane heat Well and Septic	Forced-air heat Propane heat Well and Septic	Forced-air heat Propane heat Well and Septic
Other	2-Car Attached Garage Barns, Machine Shed, Silo Riverfront and Horse Pasture	2-Car Attached Garage Barns, Machine Shed, Silo Riverfront and Horse Pasture	2-Car Attached Garage Barns, Machine Shed, Silo Riverfront and Horse Pasture

2450 County Road G

The property is similar throughout each sale year in vintage, building size, lot size, location, building style, basement, utilities, and outbuildings. The 2021 sale was performed in superior market conditions to the 2018 and 2010 sales.

ADJUSTMENT GRID MATCHED PAIR NO. 1										
Sale No.	**Address**	**Sale Date**	**Year Built**	**Building Size**	**Lot Size**	**Location**	**Style**	**Basement**	**Utilities**	**Out-Buildings**
1B/1C	2450 County Road G Montfort, WI 53569	+	o	o	o	o	o	o	o	o

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

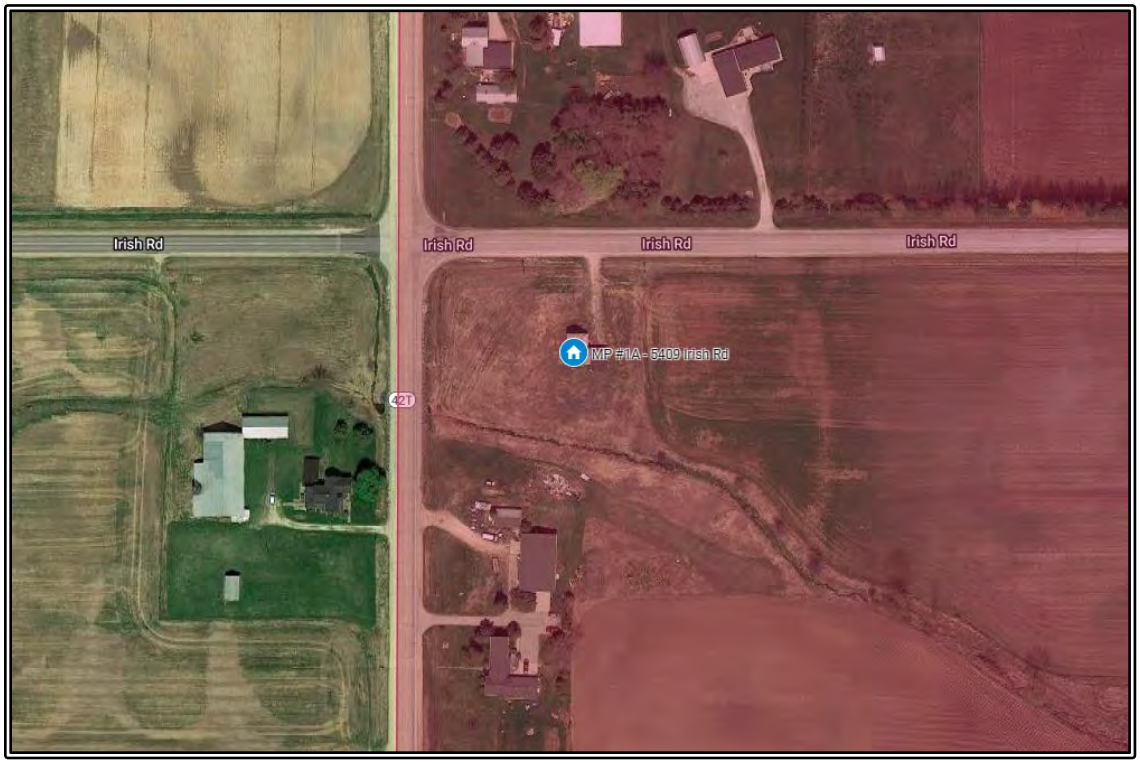
Upward adjustments are made to the 2018 and 2010 sales of the 2450 County Road G property for the slightly superior market conditions of the 2021 sale of the 2450 County Road G property. The three sales of the property have essentially the same building size, lot size, location, building style, basement, utilities, and outbuildings. The 2021 sale of the 2450 County Road G property gives the impression of being only slightly superior to the 2018 and 2010 sales of the 2450 County Road G property, however, the per square foot sale price for the 2021 sale of the 2450 County Road G property appears to be significantly higher than the per square foot sale price of the 2018 and 2010 sales of the 2450 County Road G property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 2450 County Road G property to a photovoltaic panel.

Wisconsin Analysis - Manitowoc County Matched Pair No. 1

Matched Pair #1 considers the sale of a property within the footprint of Two Creeks Solar in Manitowoc County, which has been operational since 2020 and generates approximately 150 megawatts of power. A house located at 5409 Irish Road, Mishicot, sold in January 2021. This house is approximately 575 feet from the nearest photovoltaic panel.

This property is compared with a similar property located at 311 Cherokee Court, Mishicot, which was sold in July 2019, which is not located proximate to any photovoltaic panels. The salient details of these two properties are summarized in the following table.

The following aerial map illustrates the relationship of the 5409 Irish Road property to the closest photovoltaic panels.



MANITOWOC COUNTY MATCHED PAIR NO. 1		
	1A - Proximate to a Photovoltaic Panel	**1B - Not Proximate to a Photovoltaic Panel**
Address	5409 Irish Rd. Mishicot, WI 54228	311 Cherokee Ct. Mishicot, WI 54228
Distance from P.V. Panel (Ft.)	575	N/A
Sale Date	January 29, 2021	July 8, 2019
Sale Price	$220,000	$210,000
Sale Price/Sq. Ft. (A.G.)	$110.00	$80.58
Year Built	1900	1999
Building Size (Sq. Ft.)	2,000	2,606
Lot Size (Acres)	1.30	0.34
Style	Two-story; frame (vinyl) 3 bedrooms, 2 bath	Two-story; frame (vinyl) 3 bedrooms, 3.1 bath
Basement	Full	Full, finished
Utilities	Central air Forced-air heat Well and Septic	Well and Septic
Other	4-car detached garage Porch, deck, and creek/stream Recently renovated	2-car attached garage Porch and Patio

5409 Irish Road

311 Cherokee Court

Both properties are similar in location and have similar basements. The 311 Cherokee Court property is superior to the 5409 Irish Road property in vintage, building size, and building style, yet the 5409 Irish Road property was sold in slightly superior market conditions, has a superior lot size, has central air making utilities superior, and superior outbuildings to the 311 Cherokee Court property.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	311 Cherokee Ct. Mishicot, WI 54228	+	-	-	+	o	-	o	+	+

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

Upward adjustments are made to the 311 Cherokee Court property for superior market conditions, lot size, utilities, and outbuildings of the 5409 Irish Road property. Downward adjustments are made for the superior vintage, building size, and building style of the 311 Cherokee Court property compared to those features of the 5409 Irish Road property. The two properties are essentially similar in location, and basement. Although the two properties give the impression of being similar, the per square foot sale price for the 5409 Irish Road property appears to be higher than the per square foot sale of the 311 Cherokee Court property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 5409 Irish Road property to a photovoltaic panel.

Wisconsin Analysis - Manitowoc County Matched Pair No. 2

Matched Pair #2 considers the sale of a property within the footprint of Two Creeks Solar in Manitowoc County, which has been operational since 2020 and generates approximately 150 megawatts of power. A house located at 11916 Meyer Road, Two Rivers, sold in July 2020. This house is approximately 325 feet from the nearest photovoltaic panel.

This property is compared with a similar property located at 311 Cherokee Court, Mishicot, that sold in July 2019, which is not located proximate to any photovoltaic panels. The salient details of these two properties are summarized in the following table.

The following aerial map illustrates the relationship of the 11916 Meyer Road property to the closest photovoltaic panels.

MANITOWOC COUNTY MATCHED PAIR NO. 2

	2A - Proximate to a Photovoltaic Panel	2B - Not Proximate to a Photovoltaic Panel
Address	11916 Meyer Rd. Two Rivers, WI 54241	311 Cherokee Ct. Mishicot, WI 54228
Distance from P.V. Panel (Ft.)	325	N/A
Sale Date	July 28, 2020	July 8, 2019
Sale Price	$215,000	$210,000
Sale Price/Sq. Ft. (A.G.)	$97.73	$80.58
Year Built	2000	1999
Building Size (Sq. Ft.)	2,200	2,606
Lot Size (Acres)	9.00	0.34
Style	Two-story; frame (vinyl) 4 bedrooms, 2 bath	Two-story; frame (vinyl) 3 bedrooms, 3.1 bath
Basement	Full, unfinished	Full, finished
Utilities	Forced-air heat Propane/Butane heat Well and Septic	Well and Septic
Other	Machine Shed Deck and Patio	2-car attached garage Porch and Patio

11916 Meyer Road

311 Cherokee Court

Both properties are of similar vintage, similar in location, have similar building style, and have similar outbuildings. The 311 Cherokee Court property is superior to the 11916 Meyer Road property in market conditions, superior in building size, and has a superior basement, yet the 11916 Meyer Road property has a superior lot size and superior utilities to the 311 Cherokee Court property.

ADJUSTMENT GRID MATCHED PAIR NO. 2

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
2B	311 Cherokee Ct. Mishicot, WI 54228	-	o	-	+	o	o	-	+	o

\+ Positive adjustment based on comparable being inferior in comparison to property #2A
\- Negative adjustment based on comparable being superior in comparison to property #2A
o No adjustment necessary

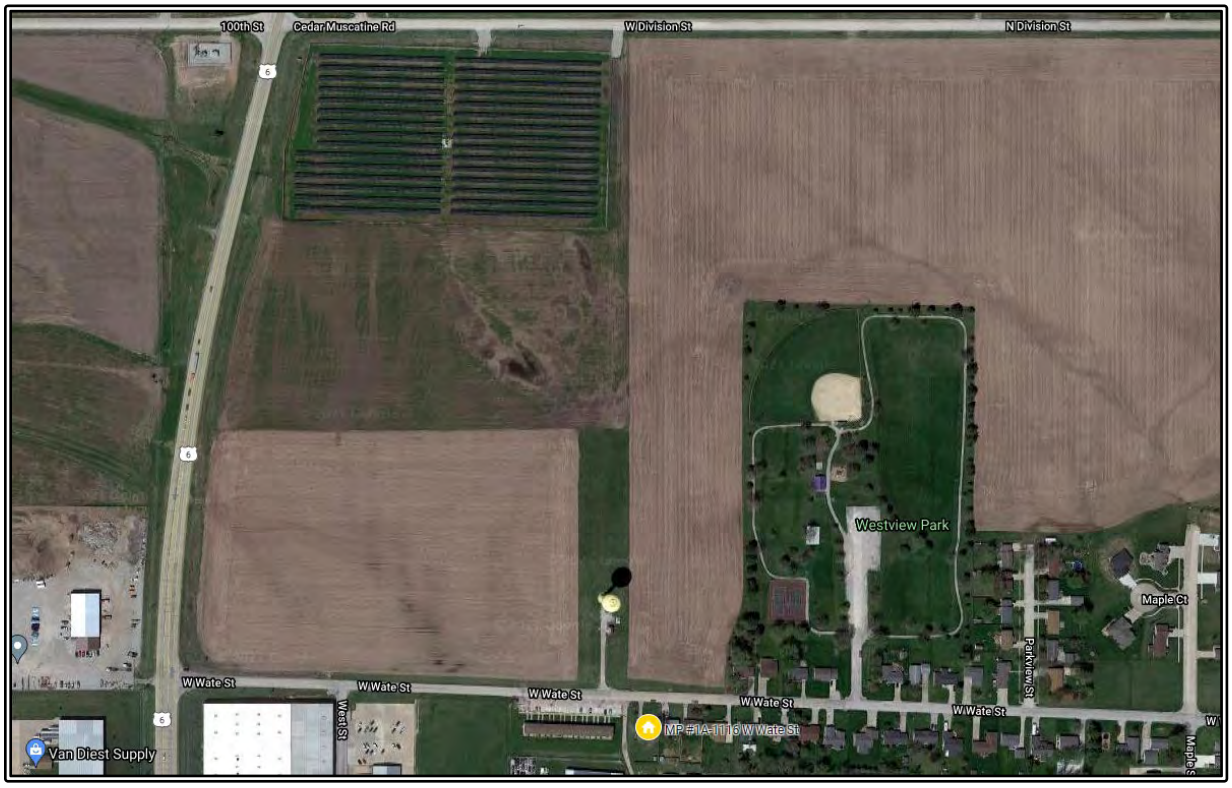
Upward adjustments are made to the 311 Cherokee Court property for the superior lot size and utilities of the 11916 Meyer Road property. Downward adjustments are made for the superior market conditions, building size, and basement of the 11916 Meyer Road property compared to those features of the 311 Cherokee Court property. The two properties are essentially similar vintage, location, building style, and similar outbuildings. Although the two properties give the impression of being somewhat similar, the per square foot sale price for the 11916 Meyer Road property appears to be higher than the per square foot sale of the 311 Cherokee Court property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 11916 Meyer Road property to a photovoltaic panel.

Iowa Analysis - Muscatine County Matched Pair No. 1

Matched Pair #1 considers the sale of a property near the footprint of Eastern Iowa Solar in Muscatine County, which has been operational since 2016 and generates approximately 1.8 megawatts of power. A house located at 1116 West Wate Street, Wilton, Iowa, sold in June 2020. This house is approximately 1,450 feet from the nearest photovoltaic panel.

This sale is compared with a similar property located at 1007 East Street, Wilton, Iowa, that sold in December 2020. It is not located near photovoltaic panels. The salient details of these two properties are summarized in the table below.

The following aerial map illustrates the relationship of the 1116 West Wate Street property to the closest photovoltaic panels.



MUSCATINE COUNTY MATCHED PAIR NO. 1		
	1A - Proximate to a Photovoltaic Panel	**1B - Not Proximate to a Photovoltaic Panel**
Address	1116 W Wate St. Wilton, IA 52778	1007 East St. Wilton, IA 52778
Distance from P.V. Panel (Ft.)	1,450	N/A
Sale Date	June 19, 2020	December 1, 2020
Sale Price	$170,000	$150,000
Sale Price/Sq. Ft. (A.G.)	$89.10	$80.39
Year Built	1982	1971
Building Size (Sq. Ft.)	1,908	1,866
Lot Size (Acres)	0.24	0.19
Style	One-story; frame (vinyl) 3 bedrooms, 1.1 bath	One-story; frame (vinyl) 3 bedrooms, 2.1 bath
Basement	Full, finished	Full, finished
Utilities	Central air Forced-air heat Public sewer & water	Central air Electric heat Public sewer & water
Other	2-car detached garage Porch and patio	1-car attached garage Patio

1116 West Wate Street

1007 East Street

Both properties are similar in market conditions, building size, lot size, location, building style basements, and utilities. The 1116 West Wate Street property has slightly superior outbuildings to the 1007 East Street property. The 1007 East Street property has slightly superior vintage to the 1116 West Wate Street property.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	1007 East St. Wilton, IA 52778	o	–	o	o	o	o	o	o	+

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

Upward adjustments are made to the 1007 East Street property for the slightly superior outbuildings of the 1116 West Wate Street property. Downward adjustments are made for the superior vintage of the 1007 East Street property compared to those features of the 1116 West Wate Street property. The two properties have essentially the same sale date, building size, lot size, location, building style, basements, and utilities. The 1116 West Wate Street property gives the impression of being only slightly superior to the 1007 East Street property, however, the per square foot sale price for the 1116 West Wate Street property appears to be significantly higher than the per square foot sale of the 1007 East Street property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 1116 West Wate Street property to a photovoltaic panel.

Iowa Analysis - Louisa County Matched Pair No. 1

Matched Pair #1 considers the sale of a property near the footprint of Wapello Solar LLC in Louisa County, which has been operational since 2021 and generates approximately 100 megawatts of power. A house located at 6975 J Avenue, Wapello, Iowa, sold in June 2021. This house is approximately 135 feet from the nearest photovoltaic panel.

This sale is compared with a similar property located at 21943 County Road G62, Winfield, Iowa, which sold in August 2022. It is not located near photovoltaic panels. The salient details of these two properties are summarized in the table below.

The following aerial map illustrates the relationship of the 6975 J Avenue property to the closest photovoltaic panels.

LOUISA COUNTY MATCHED PAIR NO. 1

	1A - Proximate to a Photovoltaic Panel	1B - Not Proximate to a Photovoltaic Panel
Address	6975 J Ave. Wapello, IA 52653	21943 County Road G62 Winfield, IA 52659
Distance from P.V. Panel (Ft.)	137	N/A
Sale Date	June 25, 2021	August 18, 2022
Sale Price	$215,500	$228,000
Sale Price/Sq. Ft. (A.G.)	$131.40	$105.56
Year Built	1963	1981
Building Size (Sq. Ft.)	1,640	2,160
Lot Size (Acres)	3.75	5.00
Style	One-story; frame (vinyl) 3 bedrooms, 1.2 bath	One-story; frame (vinyl) 3 bedrooms, 1.1 bath
Basement	Full, finished	Full, partially finished
Utilities	Central air Forced-air heat Private sewer & Public water	Central air Forced-air heat Well & Septic
Other	2-car attached garage Porch and patio	2-car attached garage Machine shed, workshop Deck

6975 J Avenue

21943 County Road G62

Both properties are similar in location, building style, and basements. The 6975 J Avenue property has superior utilities to the 21943 County Road G62 property. The 21943 County Road G62 property has slightly superior market conditions, vintage, building size, lot size, and outbuildings to the 6975 J Avenue property.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	21943 County Road G62 Winfield, IA 52659	–	–	–	–	o	o	o	+	–

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

Upward adjustments are made to the 21943 County Road G62 property for the superior utilities of the 6975 J Avenue property. Downward adjustments are made for the superior sale date, vintage, building size, lot size, and outbuildings of the 21943 County Road G62 property compared to those features of the 6975 J Avenue property. The two properties have essentially the same location, building style, and basements. The 21943 County Road G62 property gives the impression of being superior in many categories to the 6975 J Avenue property, however, the per square foot sale price for the 6975 J Avenue property appears to be significantly higher than the per square foot sale of the 21943 County Road G62 property. Therefore, the evidence does not support a finding that there is a negative impact on value resulting from the proximity of the 6975 J Avenue property to a photovoltaic panel.

Iowa Analysis - Dubuque County Matched Pair No. 1

Matched Pair #1 considers the sale of a property near the footprint of West Dubuque Solar in Dubuque County, which has been operational since 2017 and generates approximately 3.8 megawatts of power. A house located at 16032 Humke Road, Dubuque, Iowa, was sold in October 2020. This house is approximately 1,900 feet from the nearest photovoltaic panel.

This sale is compared with a similar property located at 16575 Asbury Road, Dubuque, Iowa, that sold in September 2018. It is not located near photovoltaic panels. The salient details of these two properties are summarized in the table below.

The following aerial map illustrates the relationship of the 16032 Humke Road property to the closest photovoltaic panels.

DUBUQUE COUNTY MATCHED PAIR NO. 1		
	1A - Proximate to a Photovoltaic Panel	**1B - Not Proximate to a Photovoltaic Panel**
Address	16032 Humke Rd. Dubuque, IA 52002	16575 Asbury Rd. Dubuque, IA 52002
Distance from P.V. Panel (Ft.)	1,900	N/A
Sale Date	September 15, 2020	September 6, 2018
Sale Price	$352,000	$354,000
Sale Price/Sq. Ft. (A.G.)	$89.98	$105.67
Year Built	2002	2006
Building Size (Sq. Ft.)	3,912	3,350
Lot Size (Acres)	1.33	1.02
Style	One-story; frame (brick) 4 bedrooms, 3 bath	One-story; frame (brick, vaulted ceilings) 4 bedrooms, 3.1 bath
Basement	Full, finished	Full, finished, walkout
Utilities	Central air Forced-air heat Public sewer & water	Central air Forced-air heat Public sewer & water
Other	3-car detached garage Deck and patio	3-car attached garage 2-car attached garage Patio, porch Wet bar, theater

16032 Humke Road

16575 Asbury Road

Both properties are similar in building size, lot size, location, and utilities. The 16032 Humke Road property has superior market conditions outbuildings to the 16575 Asbury Road property. The 16575 Asbury Road property has superior vintage, building style, basement, and outbuildings to the 16032 Humke Road property.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	16575 Asbury Rd. Dubuque, IA 52002	+	–	o	o	o	–	–	o	–

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

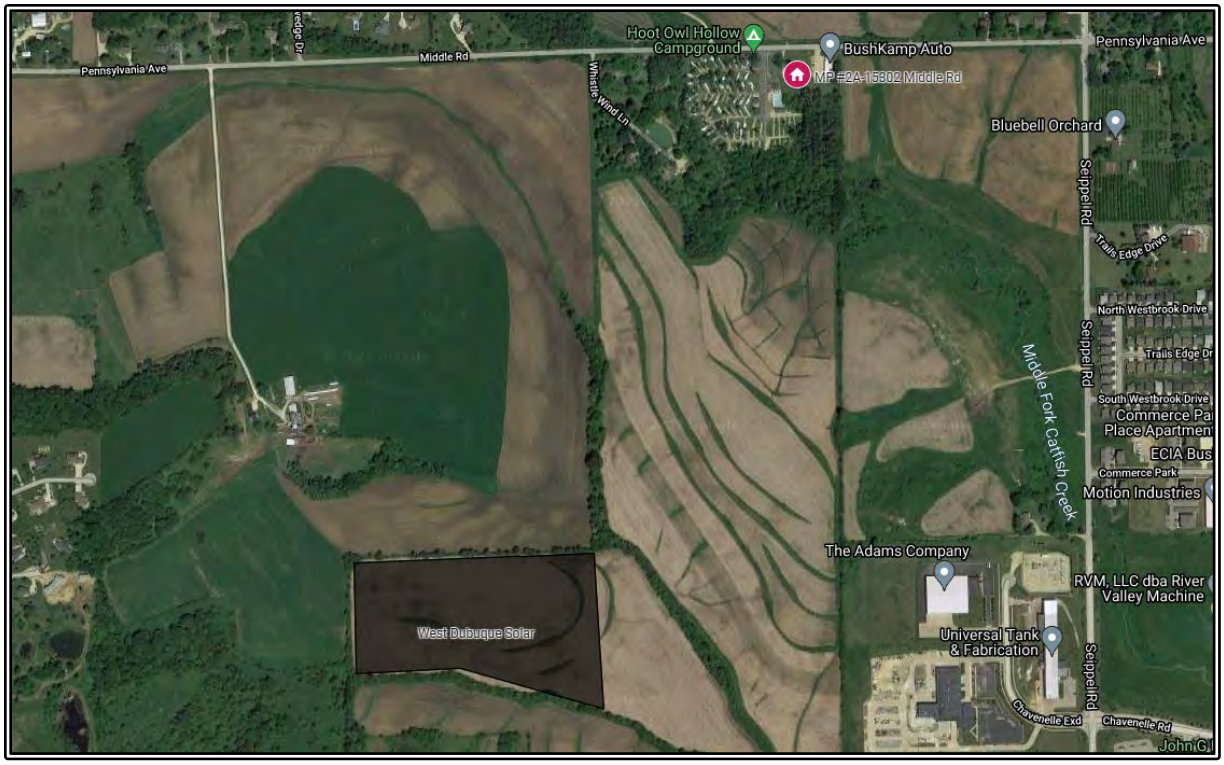
Upward adjustments are made to the 16575 Asbury Road property for the superior sale date of the 16032 Humke Road property. Downward adjustments are made for the superior vintage, building style, basement, and outbuildings of the 16575 Asbury Road property compared to those features of the 16032 Humke Road property. The two properties have essentially the same, building size, lot size, location, and utilities. The 16575 Asbury Road property gives the impression of being superior to the 16032 Humke Road property, therefore, the per square foot sale price for the 16575 Asbury Road property appears to be significantly higher than the per square foot sale of the 16032 Humke Road property, the result is that the adjusted sale does not support a finding that there is a negative impact on value resulting from the proximity of the 16032 Humke Road property to a photovoltaic panel.

Iowa Analysis - Dubuque County Matched Pair No. 2

Matched Pair #2 considers the sale of a property near the footprint of West Dubuque Solar in Dubuque County, which has been operational since 2017 and generates approximately 3.8 megawatts of power. A house located at 15302 Middle Road, Dubuque, Iowa, sold in June 2019. This house is approximately 2,750 feet from the nearest photovoltaic panel.

This sale is compared with a similar property located at 6066 Seven Springs Drive, Asbury, Iowa, that sold in December 2018. It is not located near photovoltaic panels. The salient details of these two properties are summarized in the table below.

The following aerial map illustrates the relationship of the 15302 Middle Road property to the closest photovoltaic panels.



DUBUQUE COUNTY MATCHED PAIR NO. 2		
	2A - Proximate to a Photovoltaic Panel	**2B - Not Proximate to a Photovoltaic Panel**
Address	15302 Middle Rd. Dubuque, IA 52002	6066 Seven Springs Dr. Asbury, IA 52002
Distance from P.V. Panel (Ft.)	2,750	N/A
Sale Date	June 6, 2019	December 1, 2018
Sale Price	$225,000	$228,000
Sale Price/Sq. Ft. (A.G.)	$121.75	$105.67
Year Built	1985	2018
Building Size (Sq. Ft.)	1,848	1,443
Lot Size (Acres)	0.84	1.02
Style	One-story; frame (vinyl) 3 bedrooms, 2 bath	One-story; frame (stone/vinyl, vaulted ceilings, new build) 4 bedrooms, 3.1 bath
Basement	Full, finished	Full, finished
Utilities	Central air Forced-air heat Public sewer & water	Central air Forced-air heat Public sewer & water
Other	2-car attached garage Deck	4-car attached garage Patio

15302 Middle Road

6066 Seven Springs Drive

Both properties are similar in building size, lot size, location, basements, and utilities. The 15302 Middle Road property has superior market conditions outbuildings to the 6066 Seven Springs Drive property. The 6066 Seven Springs Drive property has superior vintage, building style, and outbuildings to the 15302 Middle Road property.

ADJUSTMENT GRID MATCHED PAIR NO. 2

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
2B	6066 Seven Springs Dr. Asbury, IA 52002	+	–	o	o	o	–	o	o	–

\+ Positive adjustment based on comparable being inferior in comparison to property #2A
\- Negative adjustment based on comparable being superior in comparison to property #2A
o No adjustment necessary

Upward adjustments are made to the 6066 Seven Springs Drive property for the superior sale date of the 15302 Middle Road property. Downward adjustments are made for the superior vintage, building style, and outbuildings of the 6066 Seven Springs Drive property compared to those features of the 15302 Middle Road property. The two properties have essentially the same, building size, lot size, location, basements, and utilities. The 6066 Seven Springs Drive property gives the impression of being superior to the 15302 Middle Road property, however, the per square foot sale price for the 15302 Middle Road property appears to be significantly higher than the per square foot sale of the 6066 Seven Springs Drive property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 15302 Middle Road property to a photovoltaic panel.

Illinois Analysis - Perry County Matched Pair No. 1

Perry County, Illinois, is located in the southwest region of Illinois. Matched Pair #1 considers the sale of a property near the footprint of the Prairie State Solar Farm in Perry County, which has been operational since 2021 and generates approximately 99 megawatts of power. A house located at 955 Violet Road, Coulterville, Illinois, was sold in June 2020. This house is approximately 2,530 feet from the nearest photovoltaic panel of the Prairie State Solar Farm, and the existence of the project footprint was known at the time of the sale.

This sale is compared with a similar property located at 4632 Swanwick-Rice Road, Pinckneyville, Illinois, which was sold in July 2020. It is not located near photovoltaic panels. The salient details of these two properties are summarized in the table below.

The following aerial map illustrates the relationship of the 955 Violet Road property to the closest photovoltaic panels.

PERRY COUNTY MATCHED PAIR NO. 1		
	1A - Proximate to a Photovoltaic Panel	**1B - Not Proximate to a Photovoltaic Panel**
Address	955 Violet Rd. Coulterville, IL 62237	4632 Swanwick-Rice Rd. Pinckneyville, IL 62274
Distance from P.V. Panel (Ft.)	2,530	N/A
Sale Date	June 30, 2020	July 24, 2020
Sale Price	$240,000	$230,000
Sale Price/Sq. Ft. (A.G.)	$84.54	$59.90
Year Built	1980	2004
Building Size (Sq. Ft.)	2,839	3,840
Lot Size (Acres)	2.01	7.00
Style	1.5-story; frame (vinyl) 4 bedrooms, 2.1 bath	One-story; frame (vinyl) 4 bedrooms, 2.2 bath
Basement	N/A	Full, partially finished, walkout
Utilities	Central air Forced-air heat Public water & septic	Central air Forced-air heat Well & septic
Other	4-car attached garage Machine shed, shed In-ground pool, pool house Patio, porch	2-car detached garage Machine shed Pond frontage, above-ground pool Porch, deck, patio

955 Violet Road

4632 Swanwick-Rice Road

Both properties were sold in similar market conditions, similar in location, similar building styles, and have similar utilities. The 4632 Swanwick-Rice Road property is superior to the 955 Violet Road property in vintage, in building size, lot size, and basement, yet the 955 Violet Road property has slightly superior outbuildings to the 4632 Swanwick-Rice Road property.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	4632 Swanwick-Rice Rd. Pinckneyville, IL 62274	o	-	-	-	o	o	-	o	+

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

Upward adjustments are made to the 4632 Swanwick-Rice Road property for superior outbuildings of the 955 Violet Road property. Downward adjustments are made for the superior vintage, building size, lot size, and basement of the 4632 Swanwick-Rice Road property compared to those features of the 955 Violet Road property. The two properties are essentially similar in market conditions, location, building style, and utilities. Although the 4632 Swanwick-Rice Road property gives the impression of being superior, the per square foot sale price for the 955 Violet Road property appears to be higher than the per square foot sale of the 4632 Swanwick-Rice Road property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 955 Violet Road property to a photovoltaic panel.

Illinois Analysis - Perry County Matched Pair No. 2

Perry County, Illinois, is located in the southwest region of Illinois. Matched Pair #2 considers the sale of a property near the footprint of the Prairie State Solar Farm in Perry County, which has been operational since 2021 and generates approximately 99 megawatts of power. A house located at 7028 Aster Road, Coulterville, Illinois, was sold in January 2022. This house is approximately 2,200 feet from the nearest photovoltaic panel of the Prairie State Solar Farm, and the existence of the project footprint was known at the time of the sale.

This sale is compared with two similar properties located at 707 Old Duquoin Road, Du Quoin, Illinois, which was sold in April 2024, and 365 Snider Drive, Percy, Illinois, which was sold in May 2024. Neither of the properties are located near photovoltaic panels. The salient details of these properties are summarized in the table below.

The following aerial map illustrates the relationship of the 7028 Aster Road property to the closest photovoltaic panels.

PERRY COUNTY MATCHED PAIR NO. 2

	2A - Proximate to a Photovoltaic Panel	2B - Not Proximate to a Photovoltaic Panel	2C - Not Proximate to a Photovoltaic Panel
Address	7028 Aster Rd. Coulterville, IL 62237	707 Old Duquoin Rd. Du Quoin, IL 62832	365 Snider Dr. Percy, IL 62272
Distance from P.V. Panel (Ft.)	2,220	N/A	N/A
Sale Date	January 24, 2022	April 22, 2024	May 2, 2024
Sale Price	$146,502	$129,900	$131,000
Sale Price/Sq. Ft. (A.G.)	$55.75	$52.72	$57.58
Year Built	1915	1921	1916
Building Size (Sq. Ft.)	2,628	2,464	2,275
Lot Size (Acres)	9.00	1.00	5.00
Style	One-story; frame (vinyl) 3 bedrooms, 2 bath	One-story; frame (vinyl) 3 bedrooms, 1.1 bath	1.5-story; frame (vinyl) 4 bedrooms, 2.1 bath
Basement	Partial, unfinished	Full, unfinished, walkout	Full, partially finished
Utilities	Electric air Forced-air heat Well & septic	Central air Forced-air heat Well & septic	Central air Electric heat Well & septic
Other	4-car detached garage Pole barn RV Hook-up Pond	1-car attached garage 1-car detached garage shed Porch, patio	2-car attached garage Machine shed Lean-to shed Porch, deck, patio

7028 Aster Road

707 Old Duquoin Road

365 Snider Drive

All of the properties were of similar vintage, similar building size, similar in location, and have similar utilities. 7028 Aster Road is similar to the 707 Old Duquoin Road property in building style and has similar outbuildings to the 365 Snider Drive property. The 707 Old Duquoin Road property is superior to the 7028 Aster Road property in market conditions and basement, yet the 7028 Aster Road property has a superior lot size and superior outbuildings to the 707 Old Duquoin Road property. The 365 Snider Drive property is superior to the 7028 Aster Road property in market conditions, building style, and basement, yet the 7028 Aster Road property has a superior lot size to the 365 Snider Drive property.

ADJUSTMENT GRID MATCHED PAIR NO. 2

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
2B	707 Old Duquoin Rd. Du Quoin, IL 62832	-	o	o	+	o	o	-	o	+
2C	365 Snider Dr. Percy, IL 62272	-	o	o	+	o	-	-	o	o

\+ Positive adjustment based on comparable being inferior in comparison to property #2A
\- Negative adjustment based on comparable being superior in comparison to property #2A
o No adjustment necessary

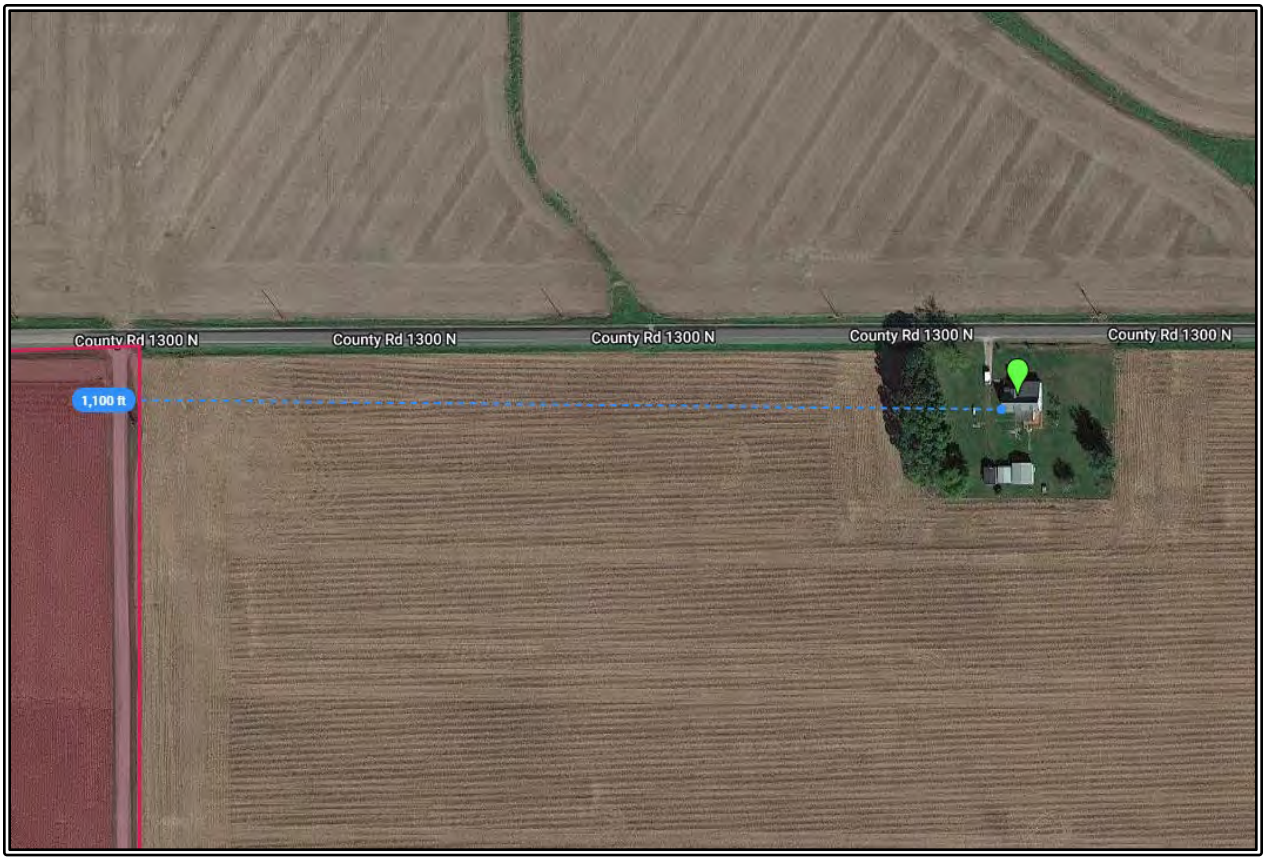
Upward adjustments are made to the 707 Old Duquoin Road property for superior lot size and outbuildings of the 7028 Aster Road property. Upward adjustments are made to the 365 Snider Drive property for superior lot size of the 7028 Aster Road property. Downward adjustments are made for the superior market conditions and basement of the 707 Old Duquoin Road property compared to those features of 7028 Aster Road property. Downward adjustments are made for the superior market conditions, building style, and basement of the 365 Snider Drive property compared to those features of the 7028 Aster Road property. The 707 Old Duquoin Road and 7028 Aster Road properties are essentially similar in vintage, building size, location, building style, and utilities. The 365 Snider Drive and 7028 Aster Road properties are essentially similar in vintage, building size, location, utilities, and outbuildings. The three properties give the impression of being similar in physical aspects and per square foot sale price. Therefore, the evidence does not support a finding that there is a negative impact on value resulting from the proximity of the 7028 Aster Road property to a photovoltaic panel.

Illinois Analysis - Logan County Matched Pair No. 1

Logan County, Illinois, is located in the central region of Illinois. Matched Pair #1 considers the sale of a property near the footprint of the Mulligan Solar in Logan County, which has been operational since 2022 and generates approximately 92 megawatts of power. A house located at 869 County Road 1300 N, Lincoln, Illinois, was sold in July 2020. This house is approximately 1,100 feet from the Mulligan Solar, and the existence of the project footprint was known at the time of the sale.

This sale is compared with a similar property located at 615 1200th Street, Middletown, Illinois, that sold in October 2021. It is not located near photovoltaic panels. The salient details of these two properties are summarized in the table below.

The following aerial map illustrates the relationship of the 869 County Road 1300 N property to the closest solar farm footprint.



LOGAN COUNTY MATCHED PAIR NO. 1

	1A - Proximate to a Solar Farm	1B - Not Proximate to a Solar Farm
Address	869 County Rd. 1300 N Lincoln, IL 62656	615 1200th St. Middletown, IL 62666
Distance from Solar Farm (Ft.)	1,100	N/A
Sale Date	July 21, 2020	October 4, 2021
Sale Price	$140,000	$138,500
Sale Price/Sq. Ft. (A.G.)	$65.18	$44.68
Year Built	1900	1969
Building Size (Sq. Ft.)	2,148	3,100
Lot Size (Acres)	1.00	1.46
Style	Two-story; frame (vinyl) 3 bedrooms, 2 bath	One-story; frame (stucco/metal/brick) 4 bedrooms, 3 bath
Basement	Partial, unfinished	N/A
Utilities	Central air Forced-air heat Well & septic	Central air, solar cooling Radiant, forced-air heat Well & septic
Other	2-car detached garage 1-car detached garage Carport Deck, 3-season porch	2-car attached garage Porch, patio

869 County Road 1300 N

615 1200th Street

Both properties have similar lot sizes, are similar in location, and have similar building styles. The 869 County Road 1300 N property is superior to the 615 1200th Street property in basement and outbuildings, yet the 615 1200th Street property has slightly superior market conditions, vintage, building size, and utilities to the 869 County Road 1300 N property.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	615 1200th St. Middletown, IL 62666	-	-	-	o	o	o	+	-	+

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

Upward adjustments are made to the 615 1200th Street property for superior basement and outbuildings of the 869 County Road 1300 N property. Downward adjustments are made for the superior market condition, vintage, building size, and utilities of the 615 1200th Street property compared to those features of the 869 County Road 1300 N property. The two properties are essentially similar lot sizes, are located in a similar area, and have similar building styles. Although the 615 1200th Street property gives the impression of being superior, the per square foot sale price for the 869 County Road 1300 N property appears to be higher than the per square foot sale of the 615 1200th Street property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 869 County Road 1300 N property to a solar farm.

Illinois Analysis - Logan County Matched Pair No. 2

Logan County, Illinois, is located in the central region of Illinois. Matched Pair #2 considers the sale of a property near the footprint of the Mulligan Solar in Logan County, which was announced on June 4, 2020, and has been operational since 2022 and generates approximately 92 megawatts of power. A house located at 1255 900th Avenue, Lincoln, Illinois, was sold in March 2021. This property sits within the Mulligan Solar footprint, 293 feet from the nearest photovoltaic panel. The existence of the project footprint was known at the time of the sale.

This sale is compared with a similar property located at 1351 1300th Street, Lincoln, Illinois, which sold in July 2021. It is not located near photovoltaic panels. The salient details of these two properties are summarized in the table below.

The following aerial map illustrates the relationship of the 1255 900th Avenue property to the closest solar farm footprint.

LOGAN COUNTY MATCHED PAIR NO. 2		
	2A - Proximate to a Solar Farm	**2B - Not Proximate to a Solar Farm**
Address	1255 900th Ave. Lincoln, IL 62656	1351 1300th St. Lincoln, IL 62656
Distance from Solar Farm (Ft.)	293	N/A
Sale Date	March 1, 2021	July 26, 2021
Sale Price	$288,000	$269,900
Sale Price/Sq. Ft. (A.G.)	$106.94	$87.43
Year Built	N/A	1935
Building Size (Sq. Ft.)	2,693	3,087
Lot Size (Acres)	4.24	4.60
Style	Two-story; frame (vinyl) 3 bedrooms, 2 bath	1.5 story; frame (vinyl) 4 bedrooms, 2 bath
Basement	Partial, unfinished	N/A
Utilities	Central air Forced-air heat Well & septic	Central air Forced-air heat Well & septic
Other	2-car detached garage Shed Pole barn Porch	2-car attached garage Machine shed Pole barn, grain bins Porch, deck

1255 900th Avenue

1351 1300th Street

Both properties are similar in market conditions, building size, lot size, location, building style, and utilities. The 1255 900th Avenue property is superior to the 1351 1300th Street property in its basement, yet the 1351 1300th Street property has superior outbuildings and to the 1255 900th Avenue property.

ADJUSTMENT GRID MATCHED PAIR NO. 2

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
2B	1351 1300th St. Lincoln, IL 62656	o	N/A	o	o	o	o	+	o	-

\+ Positive adjustment based on comparable being inferior in comparison to property #2A
\- Negative adjustment based on comparable being superior in comparison to property #2A
o No adjustment necessary

Upward adjustments are made to the 1351 1300th Street property for superior basement and of the 1255 900th Avenue property. Downward adjustments are made for the superior outbuildings of the 1351 1300th Street property compared to those features of the 1255 900th Avenue property. The two properties are of essentially similar market conditions, building size, lot size, are located in a similar area, have similar building styles, and utilities. Although the two properties give the impression of being similar, the per square foot sale price for the 1255 900th Avenue property appears to be significantly higher than the per square foot sale of the 1351 1300th Street property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 1255 900th Avenue property to a solar farm.

Illinois Analysis - LaSalle County Matched Pair No. 1

LaSalle County, Illinois, is located in the northeast region of Illinois. Matched Pair #1 considers the sale of a property in the footprint of the Grand Ridge Solar Farm in LaSalle County, which has been operational since 2012 and generates approximately 20 megawatts of power. A house located at 2098 North 15th Road, Streator, Illinois, sold in October 2016. This house is approximately 485 feet from the nearest photovoltaic panel.

This sale is compared with a similar property located at 1794 East 1391st Road, Streator, Illinois, which sold in October 2010. It is not located near photovoltaic panels. The salient details of these two properties are summarized in the table below.

The following aerial map illustrates the relationship of the 2098 North 15th Road property to the closest photovoltaic panels.

LaSALLE COUNTY MATCHED PAIR NO. 1		
	1A - Proximate to a Photovoltaic Panel	**1B - Not Proximate to a Photovoltaic Panel**
Address	2098 N. 15th Rd. Streator, IL 61364	1794 E. 1391st Rd. Streator, IL 61365
Distance from P.V. Panel (Ft.)	485	N/A
Sale Date	October 31, 2016	October 21, 2010
Sale Price	$186,000	$151,000
Sale Price/Sq. Ft. (A.G.)	$79.90	$85.31
Year Built	1997	1994
Building Size (Sq. Ft.)	2,328	1,770
Lot Size (Acres)	2.00	0.76
Style	One-story; frame (vinyl) 3 bedrooms, 4 bath	One-story; frame (vinyl/metal/brick) 3 bedrooms, 2.5 bath
Basement	Full, unfinished, walkout	Crawlspace
Utilities	Central air forced-air heat well & septic	Central air propane, forced-air heat well & septic
Other	3-car attached garage three-season room corner lot	2-car attached garage above-ground pool deck

2098 North 15th Road

1794 East 1391st Road

Both the 15th Road property and the 1391st Road property are one-story ranch style houses. However, the 15th Road property is superior to the 1391st Road property because it has a full, walkout basement. In the case of the outbuildings, the 15th Road property is superior with a three-car attached garage and a three-season room compared to the 1391st Road property with a two-car attached garage and an above-ground pool. The superiority of the 15th Road outbuildings requires an upward adjustment to the 1391st Road property. Both properties are considered to be of similar vintage, and both are considered to be in normal condition by the LaSalle County Assessor. An upward adjustment of 1391st Road is required for the superior market conditions of the 15th Road property. The 15th Road property is situated on a larger lot than that of the 1391st Road property requiring an upward adjustment; however, both lots are surrounded by agricultural and pastureland, which mitigates the size differential to some degree.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	1794 E. 1391st Road Streator, Illinois	+	o	+	+	o	o	+	o	+

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

Considering the adjustments noted in the above table for the inferior market conditions and outbuildings of the 1391st Road property, the difference in the sale price does not support the conclusion that proximity to the photovoltaic panels had a negative impact on the value of the 15th Road property.

Indiana Analysis – Stark County Matched Pair No. 1

Mammoth Solar is located in Stark and Pulaski County. The solar farm was approved by the Board of Zoning & Appeals in May 2022, is currently under construction, and will generate approximately 1,560 megawatts of power between three phases. A property located at 7420 South 450 East, Knox, Indiana, sold in June 2023, for $406,000, well after the initial announcement of the solar project. The nearest future photovoltaic panel will be approximately 375 feet to the south of this property.

This property is compared with a similar property located at 10740 East Division Road, Knox, Indiana, which sold in April 2023, which is not located proximate to any photovoltaic panels. The salient details of these two properties are summarized in the following table.

The following aerial map illustrates the relationship of the 7420 South 450 East property to the solar farm under development.

STARK COUNTY MATCHED PAIR NO. 1		
	1A - Proximate to a Future Photovoltaic Panel	**1B - Not Proximate to a Photovoltaic Panel**
Address	7420 S 450 E Knox, IN 46534	10740 E. Division Rd. Knox, IN 46534
Distance from P.V. Panel (Ft.)	375	N/A
Sale Date	June 14, 2023	May 10, 2023
Sale Price	$406,000	$385,000
Sale Price/Sq. Ft. (A.G.)	$131.82	$113.40
Year Built	1978	2005
Building Size (Sq. Ft.)	3,080	3,395
Lot Size (Acres)	6.00	5.00
Style	One-story; frame (vinyl) 4 bedrooms, 4.1 bath	Split-level; frame (brick) 3 bedrooms, 3 bath
Basement	Crawlspace	Full, finished
Utilities	Central air Forced-air heat Well & septic	Central air Forced-air heat Well & septic
Other	2-car attached garage Balcony Covered porch	2-car attached garage Deck

7420 South 450 East

10740 East Division Road

Both properties are similar in market conditions, building size, lot size, location, utilities, and outbuildings, crawlspace style. The 7420 South 450 East property is superior to the 10740 East Division Road property in building style. The 10740 East Division Road property is of superior vintage and basement to the 7420 South 450 East property.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	10740 E. Division Rd. Knox, IN 46534	o	-	o	o	o	+	-	o	o

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

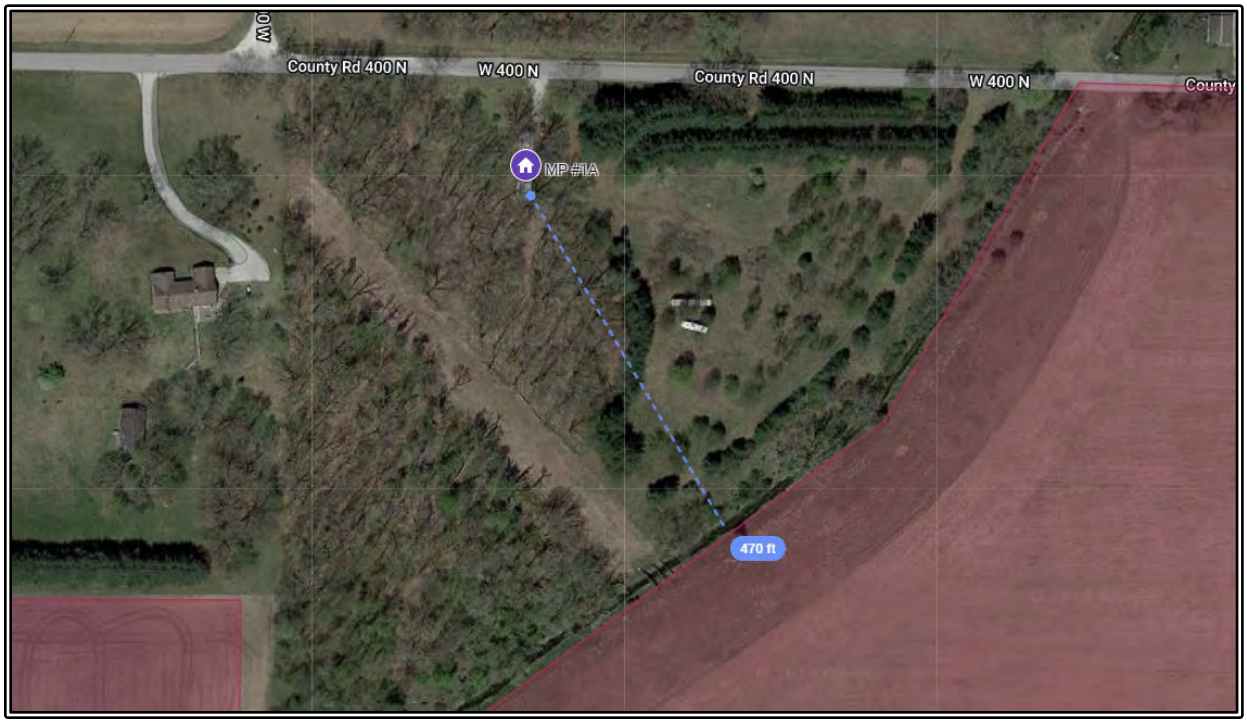
Upward adjustments are made to the 10740 East Division Road property for the superior building style of the 7420 South 450 East property. Downward adjustments are made for the superior vintage and basement of the 10740 East Division Road property compared to those features of the 7420 South 450 East property. The two properties have essentially the same sale date, building size, lot size, location, utilities, and outbuildings. The two properties give the impression of being overall similar, however, the per square foot sale price for the 7420 South 450 East property appears to be higher than the per square foot sale of the 10740 East Division Road property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 7420 South 450 East property to the development of a solar farm.

Indiana Analysis – Pulaski County Matched Pair No. 1

Mammoth Solar is located in Pulaski and Stark County. The solar farm was approved by the Board of Zoning & Appeals in May 2022, is currently under construction, and will generate approximately 1,560 megawatts of power between three phases. A property located at 4985 West 400 North, Winamac, Indiana, sold in July 2022, for $90,000, well after the initial announcement of the solar project. The nearest future photovoltaic panel will be approximately 470 feet to the southeast of this property.

This property is compared with a similar property located at 5269 South 250 East, Star City, Indiana, which sold in September 2022, which is not located proximate to any photovoltaic panels. The salient details of these two properties are summarized in the following table.

The following aerial map illustrates the relationship of the 4985 West 400 North property to the solar farm under development.



PULASKI COUNTY MATCHED PAIR NO. 1		
	1A - Proximate to a Future Photovoltaic Panel	**1B - Not Proximate to a Photovoltaic Panel**
Address	4985 W 400 N Winamac, IN 46996	5269 S 250 E Star City, IN 46985
Distance from P.V. Panel (Ft.)	470	N/A
Sale Date	July 16, 2022	September 29, 2022
Sale Price	$90,000	$95,000
Sale Price/Sq. Ft. (A.G.)	$82.42	$55.33
Year Built	1987	1910
Building Size (Sq. Ft.)	1,092	1,717
Lot Size (Acres)	10.00	0.50
Style	Manufactured; frame (aluminum) 3 bedrooms, 2 bath	1.5-story; frame (vinyl) 4 bedrooms, 1.1 bath
Basement	N/A	Crawlspace
Utilities	Window-unit cooling Forced-air heat Well & septic	Central air Forced-air heat Well & septic
Other	Shed	2-car attached garage

4985 West 400 North

5269 South 250 East

Both properties are similar in market conditions and location. The 4985 West 400 North property is superior to the 5269 South 250 East property in vintage and lot size. The 5269 South 250 East property is of superior building size, building style, basement, utilities, and outbuildings to the 4985 West 400 North property.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	5269 S 250 E Star City, IN 46985	o	+	-	+	o	-	-	-	-
+	Positive adjustment based on comparable being inferior in comparison to property #1A									
-	Negative adjustment based on comparable being superior in comparison to property #1A									
o	No adjustment necessary									

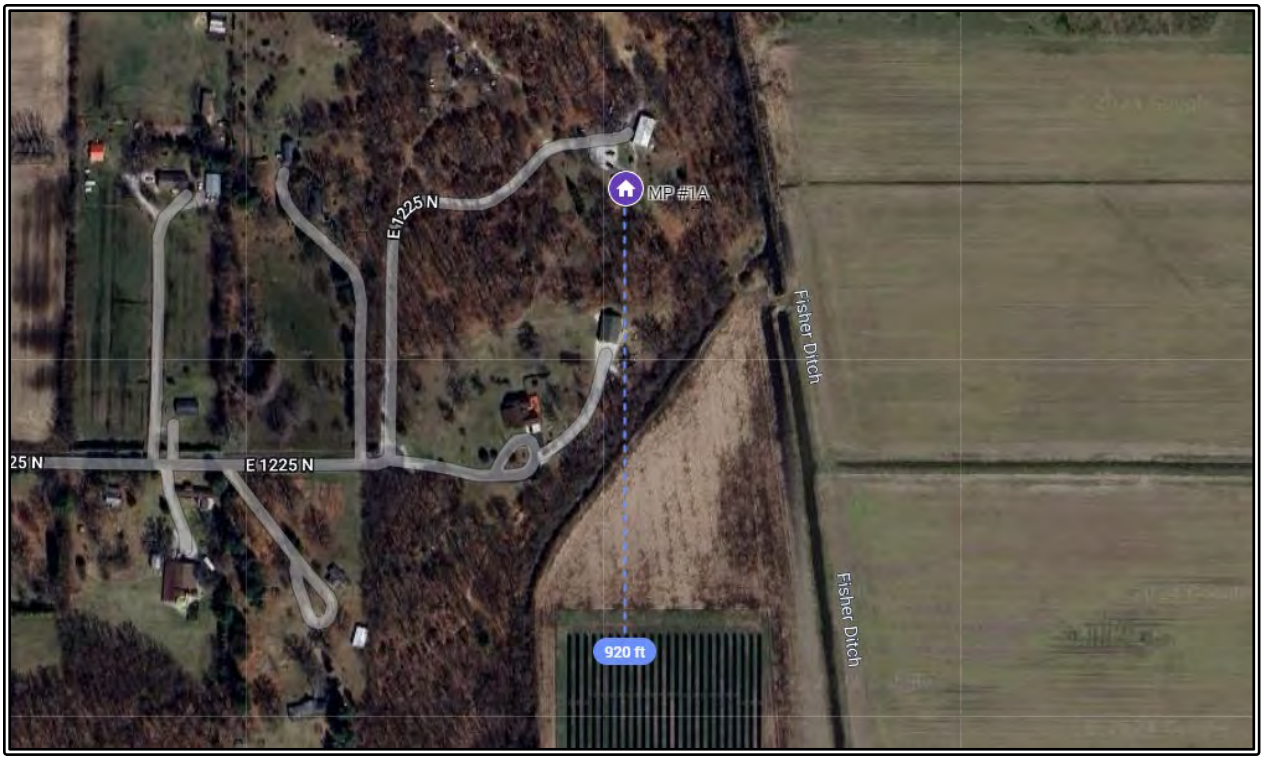
Upward adjustments are made to the 5269 South 250 East property for the superior vintage and lot size of the 4985 West 400 North property. Downward adjustments are made for the superior building size, building style, basement, utilities, and outbuildings of the 5269 South 250 East property compared to those features of the 4985 West 400 North property. The two properties have essentially the same market conditions and location. The 5269 South 250 East property gives the impression of being notably superior to the 4985 West 400 North property, however, the per square foot sale price for the 4985 West 400 North property appears to be significantly higher than the per square foot sale of the 5269 South 250 East property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 4985 West 400 North property to the development of a solar farm.

Indiana Analysis – Jasper County Matched Pair No. 1

Dunn's Bridge 1 Solar is located in Jasper County. The solar project came online in 2023 and generates approximately 265 megawatts of power. A property located at 1546 East 1225 North, Wheatfield, Indiana, sold in February 2022, for $499,900, well after the initial announcement of the solar project. The nearest future photovoltaic panel will be approximately 920 feet to the south of this property.

This property is compared with a similar property located at 10310 North 100 West, Wheatfield, Indiana, which sold in September 2022, which is not located proximate to any photovoltaic panels. The salient details of these two properties are summarized in the following table.

The following aerial map illustrates the relationship of the 1546 East 1225 North property to the solar farm under development.



JASPER COUNTY MATCHED PAIR NO. 1		
	1A - Proximate to a Future Photovoltaic Panel	**1B - Not Proximate to a Photovoltaic Panel**
Address	1546 E 1225 N Wheatfield, IN 46392	10310 N 100 W Wheatfield, IN 46392
Distance from P.V. Panel (Ft.)	920	N/A
Sale Date	February 11, 2022	September 16, 2022
Sale Price	$499,900	$585,000
Sale Price/Sq. Ft. (A.G.)	$159.71	$159.10
Year Built	2004	2003
Building Size (Sq. Ft.)	3,130	3,677
Lot Size (Acres)	15.90	10.00
Style	1.5-story; frame (vinyl) 2 bedrooms, 2.1 bath	1.5-story; frame (vinyl) 3 bedrooms, 2.1 bath
Basement	Full, finished, walkout	Full, unfinished with crawlspace
Utilities	Forced-air heat Well & septic	Forced-air heat Well & septic
Other	4-car detached garage Covered deck & porch	2-car detached garage 2-car attached garage Covered deck & porch

10310 North 100 West

1546 East 1225 North

Both properties are similar in vintage, location, utilities, and outbuildings. The 1546 East 1225 North property is superior to the 10310 North 100 West property in lot size, and basement. The 10310 North 100 West property is of superior market conditions, building size, and building style to the 1546 East 1225 North property.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	1546 E 1225 N Wheatfield, IN 46392	-	o	-	+	o	-	+	o	o

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

Upward adjustments are made to the 1546 East 1225 North property for the superior market conditions, building size, and building style of the 10310 North 100 West property. Downward adjustments are made for the superior lot size, and basement of the 10310 North 100 West property compared to those features of the 1546 East 1225 North property. The two properties have essentially the same vintage, location, utilities, and outbuildings. The two properties give the impression of being generally similar physically, in addition to having an effectively similar per square foot sale price. Therefore, the similarities of the sales do not support a finding that there is a negative impact on value resulting from the proximity of the 10310 North 100 West property to the development of a solar farm.

Indiana Analysis - Shelby County Matched Pair No. 1

Speedway Solar is located in Shelby County adjacent to Shelbyville, Indiana. The solar farm was approved by the Board of Zoning & Appeals in March 2019, was approved by the Shelby County Board in May 2019, is currently under development, and will generate approximately 199 megawatts of power. A property located at 7351 East 700 North, Morristown, Indiana, sold in February 2019, for $246,000. The nearest future photovoltaic panel will be approximately 685 feet to the south of this property.

This property is compared with a similar property located at 7179 East 550 South, Morristown, Indiana, which sold in May 2017, which is not located proximate to any photovoltaic panels. The salient details of these two properties are summarized in the following table.

The following aerial map illustrates the relationship of the 7351 East 700 North property to the solar farm under development.

SHELBY COUNTY MATCHED PAIR NO. 1		
	1A - Proximate to a Future Photovoltaic Panel	**1B - Not Proximate to a Photovoltaic Panel**
Address	7351 E 700 N Morristown, IN 46161	7179 E 550 S Morristown, IN 46161
Distance from P.V. Panel (Ft.)	685	N/A
Sale Date	February 28, 2019	May 16, 2017
Sale Price	$246,000	$265,000
Sale Price/Sq. Ft. (A.G.)	$131.48	$120.24
Year Built	1992	2005
Building Size (Sq. Ft.)	1,871	2,204
Lot Size (Acres)	9.25	4.87
Style	One-story; frame (vinyl) 3 bedrooms, 2 bath	One-story; frame (brick) 3 bedrooms, 2 bath
Basement	Crawlspace	Crawlspace
Utilities	Central air forced-air heat well & septic	Central air forced-air heat well & septic
Other	2-car attached garage	1-car attached garage porch covered deck

7351 East 700 North

7179 East 550 South

Both properties are similar in building style outbuildings, crawlspace style basements, utilities, and outbuildings. The 7351 East 700 North property is superior to the 7179 East 550 South property in lot size and market conditions. The 7179 East 550 South property is of superior vintage and building size to the 7351 East 700 North property.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	7179 E 550 S Morristown, IN 46161	+	-	-	+	o	o	o	o	o

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

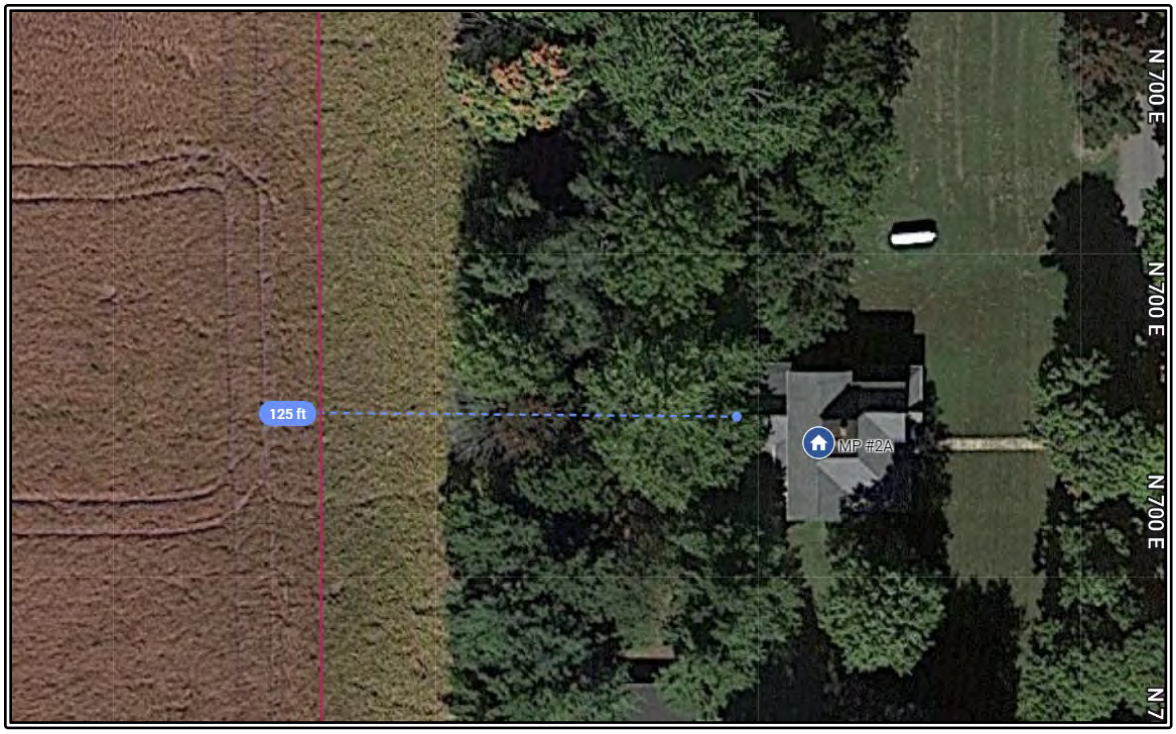
Upward adjustments are made to the 7179 East 550 South property for the superior sale date and lot size of the 7351 East 700 North property. Downward adjustments are made for the superior vintage and building size of the 7179 East 550 South property compared to those features of the 7351 East 700 North property. The two properties have essentially the same location, building style, basements, utilities, and outbuildings. The two properties give the impression of being overall similar, however, the per square foot sale price for the 7351 East 700 North property appears to be higher than the per square foot sale of the 7179 East 550 South property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 7351 East 700 North property to the development of a solar farm.

Indiana Analysis - Shelby County Matched Pair No. 2

Speedway Solar is located in Shelby County adjacent to Shelbyville, Indiana. The solar farm was approved by the Board of Zoning & Appeals in March 2019, was approved by the Shelby County Board in May 2019, is currently under development, and will generate approximately 199 megawatts of power. A property located at 6509 North 700 East, Morristown, Indiana, sold in July 2023, for $300,000. The nearest future photovoltaic panel will be approximately 125 feet to the west of this property.

This property is compared with a similar property located at 4122 North 500 East, Morristown, Indiana, that sold in September 2023, which is not located proximate to any photovoltaic panels. The salient details of these two properties are summarized in the following table.

The following aerial map illustrates the relationship of the 6509 North 700 East property to the solar farm under development.



SHELBY COUNTY MATCHED PAIR NO. 2

	2A - Proximate to a Future Photovoltaic Panel	2B - Not Proximate to a Photovoltaic Panel
Address	6509 N 700 E Morristown, IN 46161	4122 N 500 E Morristown, IN 46161
Distance from P.V. Panel (Ft.)	125	N/A
Sale Date	July 7, 2023	September 20, 2023
Sale Price	$300,000	$310,000
Sale Price/Sq. Ft. (A.G.)	$105.30	$67.33
Year Built	1880	1959
Building Size (Sq. Ft.)	2,849	4,604
Lot Size (Acres)	2.85	3.17
Style	Two-story; frame (vinyl) 4 bedrooms, 2 bath	1.5-story; frame (wood) 5 bedrooms, 3 bath
Basement	Full, unfinished	Partial finished, crawlspace
Utilities	Central air Forced-air heat Well & septic	Central air Forced-air heat Well & septic
Other	2-car detached garage Pole barn Wrap around porch	2-car detached garage Deck Covered porch

6509 North 700 East

4122 North 500 East

Both properties were sold in similar market conditions have similar lot sizes basements, and utilities. The 6509 North 700 East property has superior outbuildings to the 4122 North 500 East property. The 4122 North 500 East property is of superior vintage, building size, and building style to the 6509 North 700 East property.

ADJUSTMENT GRID MATCHED PAIR NO. 2

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
2B	4122 N 500 E Morristown, IN 46161	o	-	-	o	o	-	o	o	+

\+ Positive adjustment based on comparable being inferior in comparison to property #2A
\- Negative adjustment based on comparable being superior in comparison to property #2A
o No adjustment necessary

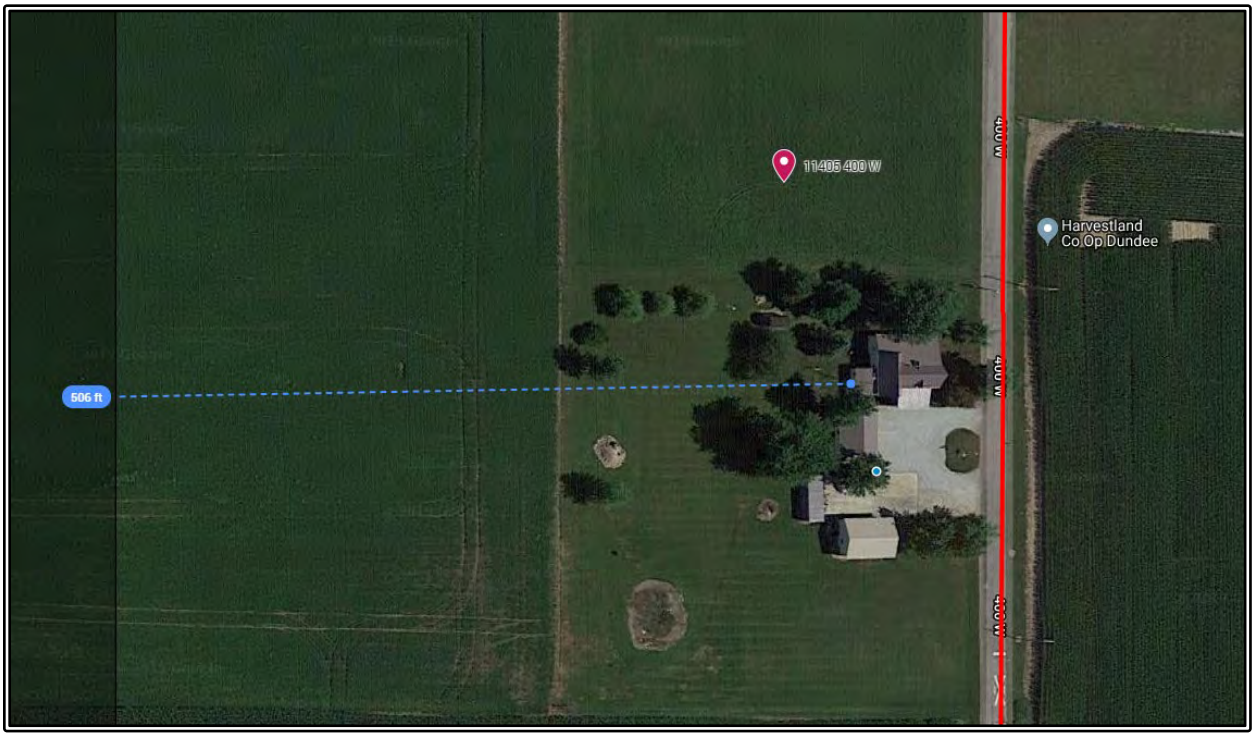
Upward adjustments are made to the 4122 North 500 East property for the superior outbuildings of the 6509 North 700 East property. Downward adjustments are made for the superior vintage, building size, and building style of the 4122 North 500 East property compared to those features of the 6509 North 700 East property. The two properties have essentially the same sale date, lot size, location, basements, and utilities. The 4122 North 500 East property gives the impression of being superior to the 6509 North 700 East property, however, the per square foot sale price for the 6509 North 700 East property appears to be significantly higher than the per square foot sale of the 4122 North 500 East property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 6509 North 700 East property to the development of a solar farm.

Indiana Analysis - Madison County Matched Pair No. 1

Lone Oak Solar is located in Madison County in Alexandria, Indiana. The solar farm is currently under development and will generate approximately 120 megawatts of power. A property located at 11405 North 400 West, Alexandria, Indiana, sold in February 2019, for $199,000. The property sits within the footprint of the solar project; however, the nearest photovoltaic panel is approximately 500 feet to the west of this property.

This property is compared with a similar property located at 4950 East 700 North, Alexandria, Indiana, which sold in February 2019, which is not located proximate to any photovoltaic panels. The salient details of these two properties are summarized in the following table.

The following aerial map illustrates the relationship of the 11405 North 400 West property to the closest photovoltaic panels.



MADISON COUNTY MATCHED PAIR NO. 1		
	1A - Proximate to a Photovoltaic Panel	**1B - Not Proximate to a Photovoltaic Panel**
Address	11405 N 400 W Alexandria, IN 46001	4950 E 700 N Alexandria, IN 46001
Distance from P.V. Panel (Ft.)	500	N/A
Sale Date	February 12, 2019	February 15, 2019
Sale Price	$199,000	$180,000
Sale Price/Sq. Ft. (A.G.)	$92.17	$60.89
Year Built	1915	1972
Building Size (Sq. Ft.)	2,159	2,956
Lot Size (Acres)	5.15	4.00
Style	1.5-story; frame (vinyl) 4 bedrooms, 2 bath	One-story; frame (brick) 3 bedrooms, 2 bath
Basement	Crawlspace	Crawlspace
Utilities	Central air baseboard heat well & septic	Central air forced-air heat well & septic
Other	2-car attached garage pole barn, utility shed porch	2-car attached garage utility shed, patio above ground pool

11405 North 400 West

4950 East 700 North

Both properties have similar sale dates, lot size, location, basements, and outbuildings. The 11405 North 400 West property is superior to the 4950 East 700 North property in building style. The 4950 East 700 North is superior in vintage, building size, and utilities to the 11405 North 400 West property.

ADJUSTMENT GRID MATCHED PAIR NO. 3

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	4950 E 700 N Alexandria, IN 46001	o	-	-	o	o	+	o	-	o

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

An Upward adjustment is made to the 4950 East 700 North property for the superior style of the 11405 North 400 West property. Downward adjustments are made for the superior vintage, building size, and utilities of the 4950 East 700 North property compared to those features of the 11405 North 400 West property. The two properties have essentially the same sale date, lot size, location, basements, and outbuildings. The 4950 East 700 North property gives the impression of being superior to the 11405 North 400 West property, however, the per square foot sale price for the 11405 North 400 West property appears to be significantly higher than the per square foot sale of the 4950 East 700 North property, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 11405 North 400 West property to the development of a solar farm.

Michigan Analysis – Calhoun County Matched Pair No. 1

A property located at 18021 12 Mile Road, Battle Creek, Michigan, sold in August 2021, for $225,000. The property sits between the operating 13 Mile Solar, LLC, and the under-construction Calhoun Solar. 13 Mile Solar, LLC was installed in 2020, generates approximately 2 megawatts of power and is located in Calhoun County. Calhoun Solar was announced to the public in 2019, is to be operational in 2022, will generate approximately 200 megawatts of power and is located in Calhoun County. The nearest photovoltaic panel is sited at approximately 185 feet to the east of this property.

This sale is compared with the sale of the same property that sold in January 2014 for $108,400 and is not located proximate to any photovoltaic panels. The salient details of these two sales are summarized in the following table.

The following aerial map illustrates the relationship of the 18021 12 Mile Road property to the closest photovoltaic panels.

CALHOUN COUNTY MATCHED PAIR NO. 1		
	1A - Proximate to a Photovoltaic Panel	**1B - Not Proximate to a Photovoltaic Panel**
Address	18021 12 Mile Rd. Battle Creek, MI 49014	18021 12 Mile Rd. Battle Creek, MI 49014
Distance from P.V. Panel (Ft.)	185	N/A
Sale Date	August 24, 2021	January 21, 2014
Sale Price	$225,000	$108,400
Sale Price/Sq. Ft. (A.G.)	$144.60	$69.67
Year Built	1901	1901
Building Size (Sq. Ft.)	1,556	1,556
Lot Size (Acres)	1.37	1.37
Style	Two-story; frame (vinyl) 3 bedrooms, 2 bath	Two-story; frame (vinyl) 3 bedrooms, 2 bath
Basement	N/A	N/A
Utilities	Well and Septic	Well and Septic
Other	Machine Shed Shed Porch	Machine Shed Shed Porch

18021 12 Mile Road

Both sales consider the same house in every physical aspect. The 2021 sale is slightly superior to the 2014 sale in market conditions.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	18021 12 Mile Rd. Battle Creek, MI 49014	-	o	o	o	o	o	o	o	o
+	Positive adjustment based on comparable being inferior in comparison to property #1A									
-	Negative adjustment based on comparable being superior in comparison to property #1A									
o	No adjustment necessary									

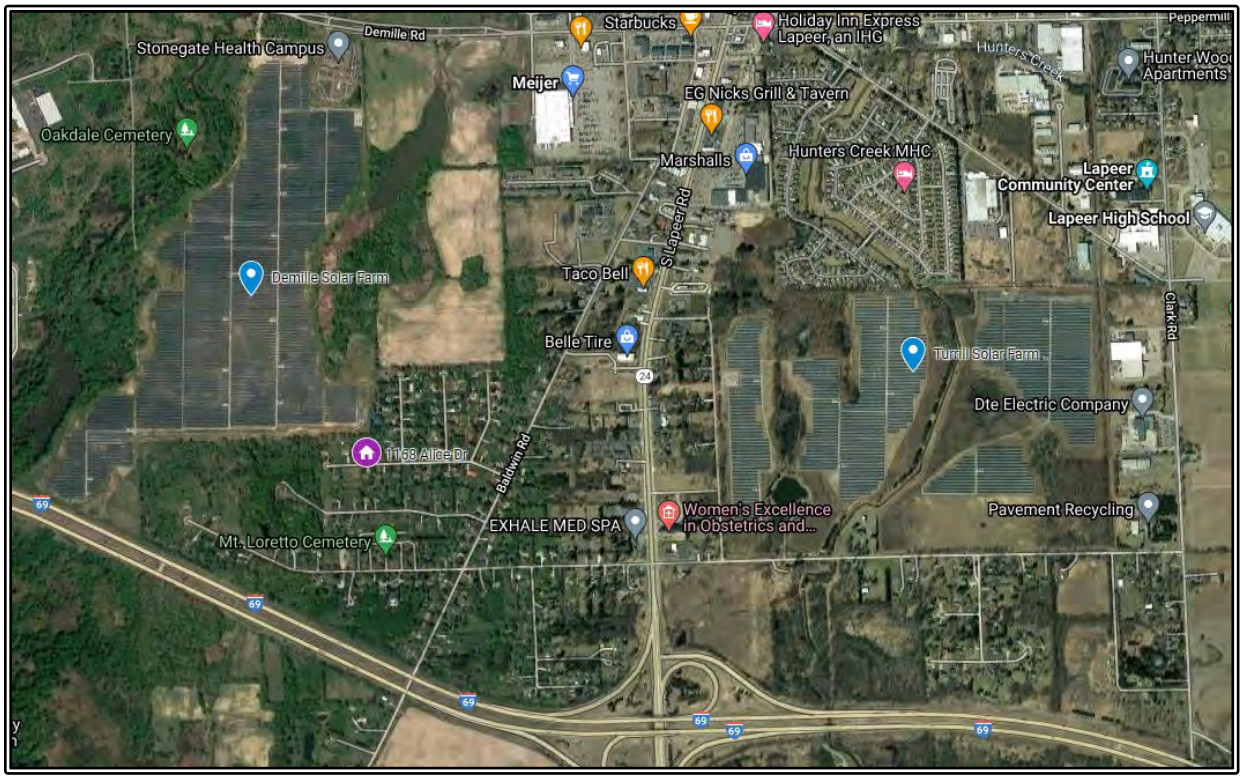
Downward adjustments are made for the superior market conditions of the 2021 sale of the 18021 12 Mile Road property compared to those features of the 2014 sale. The two properties have a similar vintage, the same building size, lot size, location, building style, basements, utilities, and outbuildings. Therefore, although the property was identical at the time of both sales except for the two solar farms in the area, the per square foot sale price for the 2021 sale appears to be significantly higher than the per square foot sale of the 2014 sale, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 18021 12 Mile Road property to a photovoltaic panel.

Michigan Analysis – Lapeer County Matched Pair No. 1

A property located at 1168 Alice Drive, Lapeer, Michigan, sold in October 2019, for $176,000. The property sits between the Demille Solar Farm, and the Turrill Solar Farm. The Demille Solar Farm came online in 2017, generates approximately 28.4 megawatts of power and is located in Lapeer County. The Turrill Solar Farm came online in 2017, generates approximately 19.6 megawatts of power and is located in Lapeer County. The nearest photovoltaic panel is approximately 275 feet to the west of this property.

This sale is compared with two sales of the same property. The first sold in December 2017 for $144,000 and is approximately 275 feet from the nearest panel. The second sold in August 2008 for $116,875 and is not located proximate to any photovoltaic panels. The salient details of these three sales are summarized in the following table.

The following aerial map illustrates the relationship of the 1168 Alice Drive property to the closest photovoltaic panels.



LAPEER COUNTY MATCHED PAIR NO. 1

	1A - Proximate to a Photovoltaic Panel	1B - Proximate to a Photovoltaic Panel	1C - Not Proximate to a Photovoltaic Panel
Address	1168 Alice Dr. Lapeer, MI 48446	1168 Alice Dr. Lapeer, MI 48446	1168 Alice Dr. Lapeer, MI 48446
Distance from P.V. Panel (Ft.)	275	275	275
Sale Date	October 9, 2021	December 19, 2017	January 21, 2014
Sale Price	$176,000	$144,000	$116,875
Sale Price/Sq. Ft. (A.G.)	$144.60	$86.12	$69.90
Year Built	1975	1975	1975
Building Size (Sq. Ft.)	1,672	1,672	1,672
Lot Size (Acres)	0.46	0.46	0.46
Style	Two-story; frame (vinyl/brick) 3 bedrooms, 1.1 bath	Two-story; frame (vinyl/brick) 3 bedrooms, 1.1 bath	Two-story; frame (vinyl/brick) 3 bedrooms, 1.1 bath
Basement	Full, unfinished	Full, unfinished	Full, unfinished
Utilities	Central air Forced-air heat Well and Septic	Central air Forced-air heat Well and Septic	Central air Forced-air heat Well and Septic
Other	Attached Garage Deck, Porch Remodeled in 2018	Attached Garage Deck, Porch	Attached Garage Deck, Porch

1168 Alice Drive

All three sales consider the house similar in every physical aspect. The 2019 sale is slightly superior to the 2017 and 2008 sales in market conditions.

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B/1C	1168 Alice Dr. Lapeer, MI 48446	-	o	o	o	o	o	o	o	o
+	Positive adjustment based on comparable being inferior in comparison to property #1A									
-	Negative adjustment based on comparable being superior in comparison to property #1A									
o	No adjustment necessary									

Downward adjustments are made for the superior market conditions of the 2019 sale of the 1168 Alice Drive property compared to that of the 2017 and 2008 sales. The three sales have a similar vintage, the same building size, lot size, location, building style, basements, utilities, and outbuildings. Therefore, although the property was similar at the time of each sales except for the two solar farms in the area, the per square foot sale price for the 2019 sale appears to be significantly higher than the per square foot sale of both, the 2017 and 2008, sales, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 1168 Alice Drive property to a photovoltaic panel.

Arizona Analysis - Matched Pair No. 1

Mesquite Solar 3, LLC, a subset of the overall Mesquite Solar Project, is located in Arlington, Arizona. The solar farm was installed in December 2016 and generates approximately 154 megawatts of power. A property located at 40610 West Elliot Road, Tonopah, Arizona, sold in October 2018 for $300,000. The nearest solar panel is approximately 915 feet to the south of this property. The residence appears to have a direct view of the solar panels at the time of the sale without any obstruction from buildings, landscape, or natural screening.

This property is compared with a similar property located at 4621 South 357th Avenue, Tonopah, Arizona, which sold in March 2019 for $278,000, and is not located proximate to any solar panels. The salient details of these two properties are summarized in the following table.

The following aerial map illustrates the relationship of the 40610 West Elliot Road property to the closest solar panels.

ARIZONA MATCHED PAIR NO. 1

	1A - Proximate to a Solar Panel	1B - Not Proximate to a Solar Panel
Address	40610 W. Elliot Rd. Tonopah, AZ 85354	4621 S. 357th Ave. Tonopah, AZ 85354
Distance from P.V. Panel (Ft.)	915	N/A
Sale Date	October 30, 2018	March 15, 2019
Sale Price	$300,000	$278,000
Sale Price/Sq. Ft. (A.G.)	$151.21	$148.82
Year Built	1996	2007
Building Size (Sq. Ft.)	1,984	1,868
Lot Size (Acres)	19.95	5.27
Style	One-story; manufactured (steel) 3 bedrooms, 2 bath	One-story; frame (stucco) 4 bedrooms, 2 bath
Basement	N/A	N/A
Utilities	Refrigeration cooling Electric heat Well & septic	Refrigeration cooling Electric heat Well & septic
Other	Patio Porch	2-car attached garage Patio

40610 West Elliot Road

4621 South 357th Avenue

The house at 40610 West Elliot Road, is located approximately 915 feet away from the nearest solar panel, in a rural area. Both houses are of similar building size, are located in a similar rural location with paved roads, have similar basements, and have similar utilities. The 40610 West Elliot Road property has a superior lot size. The 4621 South 357th Avenue property was sold in superior market conditions, is of a superior vintage, is superior in building style, and has superior outbuildings.

ADJUSTMENT GRID - ARIZONA MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
1B	4621 S. 357th Ave. Tonopah, AZ 85354	-	-	o	+	o	-	o	o	-

\+ Positive adjustment based on comparable being inferior in comparison to property #1A
\- Negative adjustment based on comparable being superior in comparison to property #1A
o No adjustment necessary

Upward adjustments are made to the 4621 South 357th Avenue property for the superior lot size of the 40610 West Elliot Road property. Downward adjustments are made for the superior market conditions, vintage, style, and outbuildings of the 4621 South 357th Avenue property compared to those features of the 40610 West Elliot Road property. The two properties have essentially the same building size, location, basement, and utilities. Therefore, although the 4621 South 357th Avenue property gives the impression of being superior in many categories, the per square foot sale price for the 40610 West Elliot Road property appears to be higher than the per square foot sale price of the 4621 South 357th Avenue property, thus does not support a finding that there is a negative impact on value resulting from the proximity of the 40610 West Elliot Road property to a solar panel.

Arizona Analysis - Matched Pair No. 2

Mesquite Solar 3, LLC, a subset of the overall Mesquite Solar Project, is located in Arlington, Arizona. The solar farm was installed in December 2016 and generates approximately 154 megawatts of power. A property located at 40512 West Elliot Road, Tonopah, Arizona, sold in March 2019 for $192,000. The property was previously sold in January 2012 for $198,000. The nearest solar panel is approximately 775 feet to the south of this property. The residence appears to have a direct view of the solar panels at the time of the sale without any obstruction from buildings, landscape, or natural screening.

This property is compared with a similar property located at 1309 South 393rd Avenue, Tonopah, Arizona, that sold in April 2019 for $215,000, and is not located proximate to any solar panels. The salient details of these two properties are summarized in the following table.

The following aerial map illustrates the relationship of the 40512 West Elliot Road property to the closest solar panels.

ARIZONA MATCHED PAIR NO. 2

	2A - Proximate to a Solar Panel	2A - Prior Sale	2B - Not Proximate to a Solar Panel
Address	40512 W. Elliot Rd. Tonopah, AZ 85354	40512 W. Elliot Rd. Tonopah, AZ 85354	1309 S. 393rd Ave. Tonopah, AZ 85354
Distance from P.V. Panel (Ft.)	775	N/A	N/A
Sale Date	March 8, 2019	January 31, 2012	April 23, 2019
Sale Price	$192,000	198,000	$215,000
Sale Price/Sq. Ft. (A.G.)	$122.45	$126.28	$126.47
Year Built	1999	1999	2001
Building Size (Sq. Ft.)	1,568	1,568	1,700
Lot Size (Acres)	5.00	5.00	4.00
Style	One-story; manufactured (steel) 3 bedrooms, 2 bath	One-story; manufactured (steel) 3 bedrooms, 2 bath	One-story; manufactured (steel) 4 bedrooms, 2 bath
Basement	N/A	N/A	N/A
Utilities	Refrigeration cooling Electric heat Well & septic	Refrigeration cooling Electric heat Well & septic	Refrigeration cooling Electric heat Well & septic
Other	Porch	Porch	Corral Tack room, barn, and stall Horse arena

40512 West Elliot Road

1309 South 393rd Avenue

The house at 40512 West Elliot Road, is located approximately 775 feet away from the nearest solar panel, in a rural area. Both houses sold during similar market conditions, are of similar vintage, have a similar lot size, are located in a similar rural location, have similar basements, and have similar utilities. The 1309 South 393rd Avenue property is of superior building size, has superior style, and has superior outbuildings.

ADJUSTMENT GRID - ARIZONA MATCHED PAIR NO. 2

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Style	Basement	Utilities	Out-Buildings
2B	1309 S. 393rd Ave. Tonopah, AZ 85354	o	o	-	o	o	-	o	o	-
+	Positive adjustment based on comparable being inferior in comparison to property #2A									
-	Negative adjustment based on comparable being superior in comparison to property #2A									
o	No adjustment necessary									

Downward adjustments are made for the superior building size, style, and outbuildings of the 1309 South 393rd Avenue property compared to those features of the 40512 West Elliot Road property. The two properties sold during essentially the same market conditions, and have similar vintage, lot size, location, basement, and utilities. Therefore, although the 1309 South 393rd Avenue property gives the impression of being superior in many categories, the per square foot sale price for the 40512 West Elliot Road property appears to have sold slightly lower than the per square foot sale price of the 1309 South 393rd Avenue property. An interview with the listing real estate broker stated that the adjacent solar farm was not a factor in the sale, therefore does not support a finding that there is a negative impact on value resulting from the proximity of the 40512 West Elliot Road property to a solar panel.

Matched Pair Analysis Conclusions

Studies in Minnesota counties, as well as studies in similar market areas of other states, comparing the sale of properties proximate to photovoltaic panels to similar properties selling under similar market conditions without proximity to photovoltaic panels have not discovered any sales in which proximity to photovoltaic panels appears to have had a negative impact on property values. Therefore, the conclusion is that there does not appear to have been any measurable negative impact on surrounding residential property values due to the proximity of a solar farm.

Property Value Analysis Near Large-Scale Solar Energy in Minnesota

SINGLE-FAMILY RESIDENTIAL SALES SUMMARY IN THE AREA NEAREST TO THE NORTH STAR SOLAR FARM IN NORTH BRANCH, MINNESOTA

ONLINE IN 2017

No.	Location	Sale Price	Sale Date	Distance from Solar Farm (Ft.)	Site Size (Acres)	Year Built	Building Size (Sq. Ft.)	Sale Price Per Sq. Ft. of Bldg. Area Incl. Land
1	10095 367th St. North Branch, Minnesota	$415,000	10/28/22	175	10.00	2010	2,677	$155.02
2a	10009 375th St. North Branch, Minnesota	$219,900	3/30/16	200	5.05	1980	1,548	$142.05
2b	10009 375th St. North Branch, Minnesota	$260,000	7/12/19	200	5.05	1980	1,548	$167.96
3	10270 380th St. North Branch, Minnesota	$163,800	11/29/18	230	3.00	2004	2,200	$74.45
4	37096 Little Oak Ln. North Branch, Minnesota	$289,000	4/17/17	230	2.07	2001	2,684	$107.68
5a	37056 Little Oak Ln. North Branch, Minnesota	$208,000	7/8/13	280	2.38	2001	2,121	$98.07
5b	37056 Little Oak Ln. North Branch, Minnesota	$435,000	8/20/21	280	2.38	2001	2,121	$205.09
6	10655 367th St. North Branch, Minnesota	$304,900	10/1/18	290	5.00	1998	1,560	$195.45
7	10505 367th St. North Branch, Minnesota	$260,500	9/8/16	360	5.00	1999	1,930	$134.97
8a	10132 367th St. North Branch, Minnesota	$371,800	9/23/16	320	9.31	2001	2,376	$156.48
8b	10132 367th St. North Branch, Minnesota	$333,000	10/20/17	320	9.31	2001	2,376	$140.15
8c	10132 367th St. North Branch, Minnesota	$415,000	12/23/20	320	9.31	2001	2,376	$174.66
9	10200 367th St. North Branch, Minnesota	$454,900	1/31/22	390	9.30	2003	2,350	$193.57
10a	11210 367th St. North Branch, Minnesota	$280,000	2/22/15	400	5.34	2004	3,756	$74.55
10b	11210 367th St. North Branch, Minnesota	$430,000	4/30/21	400	5.34	2004	3,756	$114.48
11	10865 367th St. North Branch, Minnesota	$500,000	9/26/23	480	4.90	1998	2,514	$198.89
12	37081 Little Oak Ln. North Branch, Minnesota	$310,000	5/24/17	540	2.71	2003	2,790	$111.11
13	36640 Kost Trl. North Branch, Minnesota	$310,000	12/16/19	770	8.10	1987	2,219	$139.70
14	36438 July Ave. North Branch, Minnesota	$225,000	10/1/15	910	10.00	1985	2,130	$105.63
15	9624 375th St. North Branch, Minnesota	$415,000	9/29/23	1,510	9.97	1992	2,984	$139.08
16a	35919 Jensen Rd. North Branch, Minnesota	$307,686	8/27/18	1,770	4.44	2005	2,938	$104.73
16b	35919 Jensen Rd. North Branch, Minnesota	$347,500	7/14/20	1,770	4.44	2005	2,938	$118.28
17	37101 Kost Trl. North Branch, Minnesota	$154,900	11/23/16	2,350	8.95	1970	1,044	$148.37
18a	10000 Saint Croix Trl. North Branch, Minnesota	$210,000	7/28/17	4,675	9.92	1988	1,272	$165.09
18b	10000 Saint Croix Trl. North Branch, Minnesota	$350,000	11/16/21	4,675	9.92	1988	1,428	$245.10
19a	10467 Saint Croix Trl. North Branch, Minnesota	$169,000	3/27/14	5,544	5.55	1980	2,132	$79.27
19b	10467 Saint Croix Trl. North Branch, Minnesota	$250,000	1/2/18	5,544	5.55	1980	2,132	$117.26

Based on the data shown in the above improved sales table, and the location to photovoltaic panels at 230 feet to 5,544 feet, there does not appear to have been any measurable negative impact on surrounding property values due to the proximity of a solar farm. The sales furthest from the photovoltaic panels do show a higher price per square foot, however, these superior prices can be attributed significantly to the larger land sizes of the properties.

Before and After Sales Comparison Analysis – North Branch, Minnesota

Along with research of sales near the footprint, a study was performed on some homes that were purchased within the footprint during the development of the North Star project. These sales were not purchased at arm's length, or in a way that the buyers and sellers act independently and do not have any relationship or influence with each other, but then were subsequently sold at market value. What follows is an analysis of those second sales. The sales information for the non-arm's length transactions is maintained in our files.

NORTH STAR SOLAR FARM SALE COMPARISON NO. 1

	Proximate to a Photovoltaic Panel	Prior Sale
Address	10090 367th St. North Branch, MN 55056	10090 367th St. North Branch, MN 55056
Distance from P.V. Panel (Ft.)	165	N/A
Sale Date	March 22, 2018	May 14, 2010
Sale Price	$302,500	$219,900
Sale Price/Sq. Ft. (A.G.)	$108.42	$78.82
Year Built	2000	2000
Building Size (Sq. Ft.)	2,790	2,790
Lot Size (Acres)	10.00	10.00
Style	Two-story; frame (vinyl) 4 bedrooms, 3 bath	Two-story; frame (vinyl) 4 bedrooms, 3 bath
Basement	Full, finished	Full, finished
Utilities	Central air other heat well & septic	Central air other heat well & septic
Other	2.5-car attached garage patio renovated in 2008	2.5-car attached garage patio renovated in 2008

Based on the data shown in the above comparison sales table, and the location to photovoltaic panels at 165 feet to the proximate property, there does not appear to have been any measurable negative impact on property values due to the proximity of a solar farm.

NORTH STAR SOLAR FARM SALE COMPARISON NO. 2

	Proximate to a Photovoltaic Panel	Proximate to a Photovoltaic Panel	Prior Sale
Address	10095 367th St. North Branch, MN 55056	10095 367th St. North Branch, MN 55056	10095 367th St. North Branch, MN 55056
Distance from P.V. Panel (Ft.)	175	175	N/A
Sale Date	October 28, 2022	June 16, 2017	July 9, 2010
Sale Price	$415,000	$336,667	$299,000
Sale Price/Sq. Ft. (A.G.)	$193.57	$137.42	$131.87
Year Built	2002	2002	2002
Building Size (Sq. Ft.)	2,677	2,677	2,677
Lot Size (Acres)	10.00	10.00	10.00
Style	Two-story; frame (vinyl) 4 bedrooms, 2.1 bath	Two-story; frame (vinyl) 4 bedrooms, 2.1 bath	Two-story; frame (vinyl) 4 bedrooms, 2.1 bath
Basement	Full, finished	Full, finished	Full, finished
Utilities	Central air other heat well & septic	Central air other heat well & septic	Central air other heat well & septic
Other	2-car attached & 2-car detached garage deck, patio renovated in 2010	2-car attached & 2-car detached garage deck, patio renovated in 2010	2-car attached & 2-car detached garage deck, patio renovated in 2010

Based on the data shown in the above comparison sales table, and the location to photovoltaic panels at 175 feet to the proximate property, there does not appear to have been any measurable negative impact on property values due to the proximity of a solar farm.

NORTH STAR SOLAR FARM SALE COMPARISON NO. 3

	Proximate to a Photovoltaic Panel	Prior Sale
Address	37083 Keystone Ave. North Branch, MN 55056	37083 Keystone Ave. North Branch, MN 55056
Distance from P.V. Panel (Ft.)	300	N/A
Sale Date	August 28, 2017	August 8, 2000
Sale Price	$252,290	$100,000
Sale Price/Sq. Ft. (A.G.)	$151.07	$59.88
Year Built	1964	1964
Building Size (Sq. Ft.)	1,670	1,670
Lot Size (Acres)	6.00	6.00
Style	One-story; frame (wood) 3 bedrooms, 2.0 bath	One-story; frame (wood) 3 bedrooms, 2.0 bath
Basement	N/A	N/A
Utilities	Central air forced-air heat well & septic	Central air forced-air heat well & septic
Other	2 pole barns, shed, and lean-to covered patio renovated in 1984	2 pole barns, shed, and lean-to covered patio renovated in 1984

Based on the data shown in the above comparison sales table, and the location to photovoltaic panels at 300 feet to the proximate property, there does not appear to have been any measurable negative impact on property values due to the proximity of a solar farm.

NORTH STAR SOLAR FARM SALE COMPARISON NO. 4		
	Proximate to a Photovoltaic Panel	**Prior Sale**
Address	10254 367th St. North Branch, MN 55056	10254 367th St. North Branch, MN 55056
Distance from P.V. Panel (Ft.)	330	N/A
Sale Date	October 27, 2017	December 16, 2005
Sale Price	$335,000	$373,000
Sale Price/Sq. Ft. (A.G.)	$144.02	$160.36
Year Built	2005	2005
Building Size (Sq. Ft.)	2,326	2,326
Lot Size (Acres)	9.28	9.28
Style	Two-story; frame (vinyl) 3 bedrooms, 3.0 bath	Two-story; frame (vinyl) 3 bedrooms, 3.0 bath
Basement	N/A	N/A
Utilities	Central air forced-air heat well & septic	Central air forced-air heat well & septic
Other	3-car attached garage 48x72 aluminum workshop renovated in 2009	3-car attached garage 48x72 aluminum workshop

Based on the data shown in the above comparison sales table, and the location to photovoltaic panels at 330 feet to the proximate property, there does not appear to have been any measurable negative impact on surrounding property values due to the proximity of a solar farm. The prior sale does show a higher price per square foot; however, these superior prices can be significantly attributed to the superior market conditions in which the year 2005 reflected prices at the top of the residential market. A downward market condition adjustment is necessary for the December 16, 2005, sale.

NORTH STAR SOLAR FARM SALE COMPARISON NO. 5			
	Proximate to a Photovoltaic Panel	**Prior Sale - Proximate to a Photovoltaic Panel**	**Prior Sale**
Address	10132 367th St. North Branch, MN 55056	10132 367th St. North Branch, MN 55056	10132 367th St. North Branch, MN 55056
Distance from P.V. Panel (Ft.)	340	340	N/A
Sale Date	December 23, 2020	October 20, 2017	July 3, 2001
Sale Price	$415,000	$333,000	$226,800
Sale Price/Sq. Ft. (A.G.)	$193.02	$154.88	$105.49
Year Built	2001	2001	2001
Building Size (Sq. Ft.)	2,150	2,150	2,150
Lot Size (Acres)	10.00	10.00	10.00
Style	Two-story; frame (vinyl) 4 bedrooms, 2.5 bath	Two-story; frame (vinyl) 4 bedrooms, 2.5 bath	Two-story; frame (vinyl) 4 bedrooms, 2.5 bath
Basement	Full, finished, walkout	Full, finished, walkout	Full, finished, walkout
Utilities	Central air forced-air heat well & septic	Central air forced-air heat well & septic	Central air forced-air heat well & septic
Other	3-car attached garage 48x28 pole barn renovated in 2008	3-car attached garage 48x28 pole barn renovated in 2008	3-car attached garage 48x28 pole barn

Based on the data shown in the above comparison sales table, and the location to photovoltaic panels at 340 feet to the proximate property, there does not appear to have been any measurable negative impact on property values due to the proximity of a solar farm.

NORTH STAR SOLAR FARM SALE COMPARISON NO. 6

	Proximate to a Photovoltaic Panel	Proximate to a Photovoltaic Panel	Prior Sale
Address	10200 367th St. North Branch, MN 55056	10200 367th St. North Branch, MN 55056	10200 367th St. North Branch, MN 55056
Distance from P.V. Panel (Ft.)	400	400	N/A
Sale Date	January 31, 2022	November 28, 2017	November 8, 2004
Sale Price	$454,900	$322,938	$309,900
Sale Price/Sq. Ft. (A.G.)	$193.57	$137.42	$131.87
Year Built	2003	2003	2003
Building Size (Sq. Ft.)	2,350	2,350	2,350
Lot Size (Acres)	9.30	9.30	9.30
Style	Two-story; frame (vinyl) 4 bedrooms, 2.5 bath	Two-story; frame (vinyl) 4 bedrooms, 2.5 bath	Two-story; frame (vinyl) 4 bedrooms, 2.5 bath
Basement	Full, finished, walkout	Full, finished, walkout	Full, finished, walkout
Utilities	Central air forced-air heat well & septic	Central air forced-air heat well & septic	Central air forced-air heat well & septic
Other	2.5-car attached garage 42x60 pole barn, porch, deck renovated in 2009	2.5-car attached garage 42x60 pole barn, porch, deck renovated in 2009	2.5-car attached garage porch, deck 42x60 pole barn

Based on the data shown in the above comparison sales table, and the location to photovoltaic panels at 400 feet to the proximate property, there does not appear to have been any measurable negative impact on property values due to the proximity of a solar farm.

Data based upon the sales information in the area of North Star Solar, the first large-scale solar farm in Minnesota with a total capacity of 100 megawatts, indicates that there has been no negative impact to proximate residential properties due to the development of North Star Solar in 2017. Furthermore, MaRous & Company has conducted two interviews with the Chisago County Assessor over the past three years. These interviews have confirmed that there is no evidence that property values have been negatively impacted based on sales data proximate to North Star Solar.

Property Value Analysis Near Solar Energy in other States

In addition to analyzing recent single-family residential sales in the area of the Benton Solar Project, other areas in Iowa, Illinois, Indiana, Minnesota, and Arizona, research has been conducted on improved residential sales in proximity to other separate solar projects in various states in order to discover whether residential property values in these areas were impacted by their location.

The solar projects being discussed start with the Badger Hollow Solar Farm in Iowa County, Wisconsin, which is proposed to have a total capacity of approximately 300 megawatts and was made known to the public in 2018. Phase one is planned to be completed and come online in 2021. Two Creeks Solar in Manitowoc County, Wisconsin which is proposed to have a total capacity of approximately 150 megawatts and came online in 2020. The North Star Solar Project in North Branch, Minnesota, which went online in 2017 with a capacity of 100 megawatts. Morgan's Corner Solar Farm in Elizabeth City, North Carolina, which went online in 2015 with a capacity of 20 megawatts. The AM Best Solar Farm in Goldsboro, North Carolina, which went online in 2013 with a capacity of 6.7 megawatts. The research performed around Goldsboro, North Carolina was based on the *Edgecombe Solar Impact Study* conducted by Richard C. Kirkland, Jr., MAI of Kirkland Appraisal, LLC. The recent single-family residential sales and the matched pairs that follow are recreations of Kirkland Appraisal, LLC's Matched Pair #1 with updated information provided by MaRous & Company. The following are the results of this research.[4]

[4] *As with the Illinois research, details of these sales are retained in my office files; maps in the addenda to this report illustrate the location of these matched pairs. Unless otherwise indicated, none of the purchasers in these transactions appear to own any other property in proximity, and none of the transactions appear to have a photovoltaic panel lease associated with the property.*

SINGLE-FAMILY RESIDENTIAL SALES SUMMARY
IN THE AREA NEAREST TO THE BADGER HOLLOW SOLAR FARM
IN IOWA COUNTY, WISCONSIN
ONLINE IN 2021

No.	Location	Sale Price	Sale Date	Proposed Distance from Solar Farm (Ft.)	Site Size (Acres)	Year Built	Building Size (Sq. Ft.)	Sale Price Per Sq. Ft. of Bldg. Area Incl. Land
1	891 County Road Ig Livingston, Wisconsin	$166,500	5/29/20	498	N/A	N/A	1,500	$111.00
2a	2450 County Road G Montfort, Wisconsin	$400,000	6/5/18	544	53.60	2015	3,236	$123.61
2b	2450 County Road G Montfort, Wisconsin	$493,000	6/11/21	544	53.60	2015	3,236	$152.35
3	514 Marilyn Drive Cobb, Wisconsin	$267,500	12/30/18	2,000	0.60	2015	2,258	$118.47
4a	12227 Laplatte Road Montfort, Wisconsin	$260,000	10/1/19	10,000	2.00	2000	2,434	$106.82
4b	12227 Laplatte Road Montfort, Wisconsin	$380,000	3/24/22	10,000	2.00	2000	2,434	$156.12
5a	11117 Hickory Grove Road Livingston, Wisconsin	$220,000	10/9/19	20,031	5.76	N/A	2,334	$94.26
5b	11117 Hickory Grove Road Livingston, Wisconsin	$250,000	6/1/20	20,031	5.76	N/A	2,334	$107.11

The table above illustrates the relationship between proximity to a solar panel and the sale price per square foot of building area including land for the properties nearest to the proposed Badger Hollow Solar Farm. The price per square foot appears to become larger as the properties grow closer to the project border, although, accounting for an adjustment made for the lot size, outbuildings, and other property factors the 2450 County Road G property possesses, the price per square foot can be assumed to be only slightly lower than the price per square foot of the 514 Marilyn Drive property. Therefore, the properties nearest to the proposed Badger Hollow Solar Farm provide evidence of no negative impact.

SINGLE-FAMILY RESIDENTIAL SALES SUMMARY
IN THE AREA NEAREST TO
TWO CREEKS SOLAR
IN MANITOWOC COUNTY, WISCONSIN
ONLINE IN 2020

No.	Location	Sale Price	Sale Date	Proposed Distance from Solar Farm (Ft.)	Site Size (Acres)	Year Built	Building Size (Sq. Ft.)	Sale Price Per Sq. Ft. of Bldg. Area Incl. Land
1	11916 Meyer Road Two Rivers, Wisconsin	$215,000	7/28/20	350	9.00	2000	2,200	$97.73
2A*	6506 County Road V Two Rivers, Wisconsin	$145,000	4/30/19	370	5.00	2009	1,280	$113.28
2B*	6506 County Road V Two Rivers, Wisconsin	$33,000	6/9/17	Prior to Project Announcement	5.00	2009	1,280	$25.78
3	5409 Irish Road Mishicot, Wisconsin	$220,000	1/29/21	970	1.30	1900	2,000	$110.00
4	13504 Lakeshore Road Two Rivers, Wisconsin	$102,500	7/15/18	1,230	1.70	2007	1,821	$56.29
5	11719 Ravine Drive Two Rivers, Wisconsin	$260,000	10/11/22	1,430	16.26	1900	1,386	$187.59
6	12395 Sandy Bay Road Two Rivers, Wisconsin	$179,900	7/22/19	2,090	2.75	1967	1,352	$133.06
7	5701 Two Creeks Road Two Rivers, Wisconsin	$99,400	9/10/17	12,000	1.21	N/A	1,440	$69.03

*Manufactured Home

The table above illustrates the relationship between proximity to a solar panel and the sale price per square foot of building area including land for the properties nearest to the proposed Two Creeks Solar. The prices per square foot appear to have no pattern in relation to their proximation to the project border. However, when comparing the most recent sale and the prior sale of the 6506 County Road V property, it appears that the only differing factor upon the sale was the announcement of the Two Creeks Solar project, and the sale price of the property substantially grew in value. Therefore, the properties nearest to the proposed Two Creeks Solar provide evidence of no negative impact.

RECENT SINGLE-FAMILY RESIDENTIAL SALES SUMMARY
IN THE AREA NEAREST TO THE
MORGAN'S CORNER SOLAR FARM
IN ELIZABETH CITY, NORTH CAROLINA
ONLINE IN 2015

No.	Location	Sale Price	Sale Date	Distance from Solar Farm (Ft.)	Site Size (Acres)	Year Built	Building Size (Sq. Ft.)	Sale Price Per Sq. Ft. of Bldg. Area Incl. Land
1	1364 Blindman Rd. Elizabeth City, North Carolina	$175,000	2/28/17	640	1.00	2013	1,762	$99.32
2	1363 Blindman Rd. Elizabeth City, North Carolina	$160,900	5/4/18	830	10.01	2004	1,820	$88.41
3	1493 Millpond Rd. Elizabeth City, North Carolina	$204,000	10/19/21	1,720	2.20	2004	2,110	$96.68
4[A]	1461 Millpond Rd. Elizabeth City, North Carolina	$180,000	6/25/15	1,893	0.99	1994	2,517	$71.51
4[B]	1461 Millpond Rd. Elizabeth City, North Carolina	$216,900	9/1/20	1,893	0.99	1994	2,517	$86.17
5	974 U.S Hwy. 158 Elizabeth City, North Carolina	$162,000	9/28/16	1,955	0.96	2001	1,848	$87.66
6	740 Firetower Rd. Elizabeth City, North Carolina	$144,000	6/26/15	3,770	0.89	1976	1,701	$84.66
7	214 Linwood Dr. Elizabeth City, North Carolina	$197,250	4/9/18	4,400	0.69	2006	2,100	$93.93
8	773 U.S Hwy. 158 Elizabeth City, North Carolina	$290,000	2/26/16	4,645	4.41	2008	2,460	$117.89
9	1401 Brothers Ln. Elizabeth City, North Carolina	$100,000	12/4/15	5,597	0.30	2012	1,344	$74.40

Based on the data shown in the above improved sales table, and the location to photovoltaic panels at 640 feet to 5,597 feet, there does not appear to have been any measurable negative impact on surrounding property values due to the proximity of a solar farm. The sale of the 773 U.S. Highway 158 property does show a higher price per square foot; however, these superior prices can be significantly attributed to the larger land size of the property. Also, in comparison, the 1401 Brothers Lane sale is furthest from the solar farm and sold at the second lowest price per square foot.

SINGLE-FAMILY RESIDENTIAL SALES SUMMARY
IN THE AREA NEAREST TO THE
AM BEST SOLAR FARM
IN GOLDSBORO, NORTH CAROLINA
ONLINE IN 2013
(BASED ON MATCHED PAIR #1 FROM KIRKLAND APPRAISAL, LLC)

No.	Location	Sale Price	Sale Date	Distance from Solar Farm (Ft.)	Site Size (Acres)	Year Built	Building Size (Sq. Ft.)	Sale Price Per Sq. Ft. of Bldg. Area Incl. Land
1	103 Erin Pl. Goldsboro, North Carolina	$250,000	3/31/14	450	0.93	2014	3,492	$71.59
2	2400 Granville Dr. Goldsboro, North Carolina	$224,000	6/19/14	560	0.81	2014	2,464	$90.91
3	2311 Granville Dr. Goldsboro, North Carolina	$248,000	10/22/13	630	1.12	2013	3,400	$72.94
4	2309 Granville Dr. Goldsboro, North Carolina	$238,000	10/25/13	635	1.12	2013	3,194	$75.51
4[A]	2309 Granville Dr.* Goldsboro, North Carolina	$258,000	6/8/17	635	1.12	2013	3,194	$80.78
4[B]	2309 Granville Dr.* Goldsboro, North Carolina	$279,900	2/7/20	635	1.12	2013	3,194	$87.63
5	2401 Granville Dr. Goldsboro, North Carolina	$258,000	4/7/14	650	0.91	2013	3,511	$73.48
5[A]	2401 Granville Dr. Goldsboro, North Carolina	$292,000	12/17/20	650	0.91	2013	3,511	$83.17
6	2402 Granville Dr. Goldsboro, North Carolina	$253,000	12/3/13	715	0.95	2013	3,400	$74.41
7	2403 Granville Dr. Goldsboro, North Carolina	$242,000	6/3/14	845	0.67	2014	2,388	$101.34
7[A]	2403 Granville Dr.* Goldsboro, North Carolina	$265,000	4/24/19	845	0.67	2014	2,388	$110.97
8	2404 Granville Dr. Goldsboro, North Carolina	$255,000	4/17/14	875	0.73	2014	3,643	$70.00
	RECENT SINGLE-FAMILY RESIDENTIAL SALES *(NOT FROM REPORT BY KIRKLAND APPRAISAL, LLC)*							
9	2312 Granville Dr. Goldsboro, North Carolina	$357,000	9/24/21	400	0.75	2013	3,453	$103.39
10	2310 Granville Dr. Goldsboro, North Carolina	$280,000	5/15/19	410	0.76	2013	3,292	$85.05
11	2308 Granville Dr. Goldsboro, North Carolina	$345,000	4/1/21	420	1.49	2013	3,596	$95.94
12	2304 Granville Dr. Goldsboro, North Carolina	$277,000	5/5/21	465	1.61	2012	2,434	$113.80

** - Updated resale of the property found in Kirkland Appraisals, LLC's Matched Pair #1*

The data used is based on the Matched Pair #1 from the report *Edgecombe Solar Impact Study* performed by Richard C. Kirkland, Jr., MAI of Kirkland Appraisals, LLC. The data in the above improved sales table, and the location to photovoltaic panels at 450 feet to 875 feet, shows there does not appear to have been any measurable negative impact on surrounding property values due to the proximity of a solar farm. The table shows that the 2404 Granville Drive sale is furthest from the solar farm and sold at the lowest price per square foot.

Before and After Sales Comparison Analysis – Goldsboro, North Carolina

Along with research of sales near the footprint a before and after sales comparison analysis was performed on the homes that were most proximate and were originally analyzed by Richard C. Kirkland, Jr., MAI of Kirkland Appraisals, LLC. These sales comparisons include the sales research performed by Kirkland Appraisals, LLC, and the updated sales information of their research.

AM BEST SOLAR FARM SALE COMPARISON NO. 1

	Proximate to a Photovoltaic Panel	Prior Sale (Kirkland Appraisals, LLC)
Address	102 Erin Pl. Goldsboro, NC 27530	102 Erin Pl. Goldsboro, NC 27530
Distance from P.V. Panel (Ft.)	300	300
Sale Date	November 28, 2016	August 12, 2014
Sale Price	$270,000	$253,000
Sale Price/Sq. Ft. (A.G.)	$79.41	$74.41
Year Built	2014	2014
Building Size (Sq. Ft.)	3,400	3,400
Lot Size (Acres)	1.13	1.13
Style	Two-story; frame (vinyl) 4 bedrooms, 3 bath	Two-story; frame (vinyl) 4 bedrooms, 3 bath
Basement	N/A	N/A
Utilities	Central air electric/forced-air heat well & septic	Central air electric/forced-air heat well & septic
Other	2-car attached garage shed pool	2-car attached garage shed pool

The more current sale reflects a superior price per square foot than the previous sale. Based on the data shown in the above comparison sales table, and the location to photovoltaic panels at 300 feet to the proximate property, there does not appear to have been any measurable negative impact on property values due to the proximity of a solar farm.

AM BEST SOLAR FARM SALE COMPARISON NO. 2

	Proximate to a Photovoltaic Panel	Prior Sale (Kirkland Appraisals, LLC)
Address	104 Erin Pl. Goldsboro, NC 27530	104 Erin Pl. Goldsboro, NC 27530
Distance from P.V. Panel (Ft.)	300	300
Sale Date	June 19, 2017	July 30, 2014
Sale Price	$280,000	$250,000
Sale Price/Sq. Ft. (A.G.)	$82.35	$73.53
Year Built	2014	2014
Building Size (Sq. Ft.)	3,400	3,400
Lot Size (Acres)	2.24	2.24
Style	Two-story; frame (vinyl) 5 bedrooms, 3.5 bath	Two-story; frame (vinyl) 5 bedrooms, 3.5 bath
Basement	N/A	N/A
Utilities	Central air heat pump well & septic	Central air heat pump well & septic
Other	2-car attached garage	2-car attached garage

The more current sale reflects a superior price per square foot than the previous sale. Based on the data shown in the above comparison sales table, and the location to photovoltaic panels at 300 feet to the proximate property, there does not appear to have been any measurable negative impact on property values due to the proximity of a solar farm.

AM BEST SOLAR FARM SALE COMPARISON NO. 3

	Proximate to a Photovoltaic Panel	Prior Sale (Kirkland Appraisals, LLC)
Address	2312 Granville Dr. Goldsboro, NC 27530	2312 Granville Dr. Goldsboro, NC 27530
Distance from P.V. Panel (Ft.)	400	400
Sale Date	May 1, 2018	December 16, 2013
Sale Price	$285,000	$255,000
Sale Price/Sq. Ft. (A.G.)	$82.54	$73.85
Year Built	2013	2013
Building Size (Sq. Ft.)	3,453	3,453
Lot Size (Acres)	0.75	0.75
Style	Two-story; frame (vinyl) 5 bedrooms, 4 bath	Two-story; frame (vinyl) 5 bedrooms, 4 bath
Basement	N/A	N/A
Utilities	Central air heat pump well & septic	Central air heat pump well & septic
Other	2-car attached garage above-ground pool	2-car attached garage

The more current sale reflects a superior price per square foot than the previous sale. Based on the data shown in the above before and after sales table, and the location to photovoltaic panels at 400 feet to the proximate property, there does not appear to have been any measurable negative impact on property values due to the proximity of a solar farm.

AM BEST SOLAR FARM SALE COMPARISON NO. 4		
	Proximate to a Photovoltaic Panel	**Prior Sale (Kirkland Appraisals, LLC)**
Address	2308 Granville Dr. Goldsboro, NC 27530	2308 Granville Dr. Goldsboro, NC 27530
Distance from P.V. Panel (Ft.)	415	415
Sale Date	November 15, 2015	September 15, 2013
Sale Price	$267,500	$260,000
Sale Price/Sq. Ft. (A.G.)	$74.39	$72.30
Year Built	2013	2013
Building Size (Sq. Ft.)	3,596	3,596
Lot Size (Acres)	1.49	1.49
Style	Two-story; frame (vinyl) 6 bedrooms, 4 bath	Two-story; frame (vinyl) 6 bedrooms, 4 bath
Basement	N/A	N/A
Utilities	Central air heat pump well & septic	Central air heat pump well & septic
Other	2-car attached garage covered patio	2-car attached garage covered patio

The more current sale reflects a superior price per square foot than the previous sale. Based on the data shown in the above before and after sales table, and the location to photovoltaic panels at 415 feet to the proximate property, there does not appear to have been any measurable negative impact on property values due to the proximity of a solar farm.

Overall, the improved sales of properties, the before and after sales comparisons, and the proximation to photovoltaic panels at 165 feet to 5,597 feet from each property, shows that there does not appear to have been any measurable negative impact on surrounding property values due to the proximity of a solar farm. This conclusion is based on proximity to the photovoltaic panels, price per square foot, condition based on year built, and if the property was sold before or after the construction of the solar farm.

Solar Farm Assessor Surveys

Surveys and interviews with supervisors of assessments or staff members of counties that host solar farms that include a minimum total capacity of 1.0 megawatts. The surveys and interviews were intended to allow the assessment officials to share their experience regarding the solar farm(s) impact upon the market values and/or assessed values of surrounding properties. The surveys and interviews were intended to be conversational, however they thoroughly discussed residential and agricultural values and impacts. The following sections summarize each of the surveys and interviews performed.

Minnesota Assessors Solar Farm Survey - June 2023

In June 2023, MaRous & Company conducted a survey of the supervisor of assessments or a staff member in 36 counties in Minnesota in which solar farms with 3.0 megawatts of capacity or more are currently in operation. As of the date of this report, there are more than 131 solar farms with a total capacity of greater than 777.2 megawatts within these counties, with additional farms being added each year. A study performed by the Solar Energy Industries Association (SEIA) states that Minnesota has a total of 1,782 megawatts of solar energy installed, as of 2022. The total capacity reported in the study includes utility, residential, and nonresidential scale solar farms. The interviews were intended to allow the assessment officials to share their experience regarding the solar farm(s) impact upon the market values and/or assessed values of surrounding properties. The following is a summary of the results of that survey:

- Without exception, the interviewees reported that there was no market evidence to support a negative impact upon residential property values as a result of the development of, and the proximity to, a solar farm facility. In some counties, this results from the very rural nature of the area in which the projects are located.
- There have been no tax appeals in any county based upon solar farm-related concerns.
- In the past 18 months, the assessor’s offices have not experienced a real estate tax appeal based upon solar farm-related concerns. There have been no reductions in assessed valuations related to solar panels.
- Residential assessed values have fluctuated consistently countywide as influenced by market conditions, with no regard for proximity to a solar farm.
- Agricultural property assessed values have fluctuated consistently countywide as influenced by market conditions, with no regard for proximity to a solar farm.

Wisconsin Assessors Solar Farm Survey - April 2018

In April 2018, MaRous & Company conducted a survey of the supervisor of assessments or a staff member in 11 municipalities or appropriate assessing officials in unincorporated areas of Wisconsin in which solar farms with more than 0.9 megawatt of capacity are currently in operation. As of the date of this report, there are more than 13 solar farms with a total capacity of greater than 18 megawatts within these counties, with additional farms being added each year. An updated study performed by the Solar Energy Industries Association (SEIA) in March 2021 states that, in total, Wisconsin has 442.03 megawatts of solar energy installed. The total capacity reported in the study includes utility, residential, and nonresidential scale solar farms. The interviews were intended to allow the assessment officials to share their experience regarding the solar farm(s) impact upon the market values and/or assessed values of surrounding properties. The survey is currently being updated, and to the date of this report there is no contrary evidence to the original assessor survey. The following is a summary of the results of that survey:

- Without exception, the interviewees reported that there was no market evidence to support a negative impact upon residential property values as a result of the development of, and the proximity to, a solar farm facility. In some counties, this results from the very rural nature of the area in which the projects are located.
- There have been no tax appeals in any county based upon solar farm-related concerns.
- In the past 18 months, the assessor’s offices have not experienced a real estate tax appeal based upon solar farm-related concerns. There have been no reductions in assessed valuations related to solar panels.
- Residential assessed values have fluctuated consistently countywide as influenced by market conditions, with no regard for proximity to a solar farm.
- Agricultural property assessed values have fluctuated consistently countywide as influenced by market conditions, with no regard for proximity to a solar farm.
- The survey is currently being updated, and to the date of this report there is no contrary evidence to the original assessor survey.

Iowa Assessors Survey – July 2021

In July 2021, MaRous & Company conducted a survey of the supervisor of assessments or a staff member in 7 counties in Iowa in which solar farms with more than 1.0 megawatts of capacity are currently in operation. As of the date of this report, there are approximately 8 utility-scale solar farms with a total capacity of approximately 18.0 megawatts within these counties, with additional farms being added each year. A study performed by the Solar Energy Industries Association (SEIA) on June 15, 2021, states that, in total, Iowa has 423.71 megawatts of solar energy installed. The total capacity reported in the study includes utility, residential, and nonresidential scale solar farms. The interviews were intended to allow the assessment officials to share their experience regarding the solar farm(s) impact upon the market values and/or assessed values of surrounding properties. The following is a summary of the results of that survey:

- Without exception, the interviewees reported that there was no market evidence to support a negative impact upon residential property values as a result of the development of and the proximity to a solar farm facility. In some counties, this results from the very rural nature of the area in which the projects are located.
- In the past 18 months, the assessor's offices have not experienced a real estate tax appeal based upon solar farm-related concerns. There have been no reductions in assessed valuations related to photovoltaic panels.
- As the available market data does not support the claim of a negative impact upon residential values, residential assessed values have fluctuated consistently within counties as influenced by market conditions, with no regard for proximity to a solar farm.
- Agricultural properties are taxed based upon a productivity formula that is not impacted by market data and external influences.

Michigan Assessors Survey - December 2021

In December 2021, MaRous & Company conducted a survey of the township supervisor of assessments or a staff member in 20 counties in Michigan in which solar farms with more than 10 megawatts of capacity are currently in operation. As of the date of this report, there are more than 30 solar farms with a total capacity of greater than 173 megawatts within these counties, with additional farms being added each year. An updated study performed by the Solar Energy Industries Association (SEIA) in March 2021 states that, in total, Michigan has 599.4 megawatts of solar energy installed. The total capacity reported in the study includes utility, residential, and nonresidential scale solar farms. The interviews were intended to allow the assessment officials to share their experience regarding the solar farm(s) impact upon the market values and/or assessed values of surrounding properties. The following is a summary of the results of that survey:

- Without exception, the interviewees reported that there was no market evidence to support a negative impact upon residential property values as a result of the development of, and the proximity to, a solar farm facility. In some counties, this results from the very rural nature of the area in which the projects are located.
- There have been no tax appeals in any county based upon solar farm-related concerns.
- In the past 18 months, the assessor's offices have not experienced a real estate tax appeal based upon solar farm-related concerns. There have been no reductions in assessed valuations related to solar panels.
- Residential assessed values have fluctuated consistently countywide as influenced by market conditions, with no regard for proximity to a solar farm.
- Agricultural property assessed values have fluctuated consistently countywide as influenced by market conditions, with no regard for proximity to a solar farm.

Illinois Assessors Survey – July 2019

In July 2019, MaRous & Company conducted a survey of the supervisor of assessments or a staff member in 6 counties in Illinois in which solar farms with more than 1.0 megawatts of capacity are currently in operation. As of the date of this report, there are more than 10 utility-scale solar farms with a total capacity of greater than 50.7 megawatts within these counties, with additional farms being added each year. An updated study performed by the Solar Energy Industries Association (SEIA) in Q1 of 2019 states that, in total, Illinois has 119.7 megawatts of solar energy installed. The total capacity reported in the study includes utility, residential, and nonresidential scale solar farms. The interviews were intended to allow the assessment officials to share their experience regarding the solar farm(s) impact upon the market values and/or assessed values of surrounding properties. The following is a summary of the results of that survey:

- Without exception, the interviewees reported that there was no market evidence to support a negative impact upon residential property values as a result of the development of and the proximity to a solar farm facility. In some counties, this results from the very rural nature of the area in which the projects are located.
- In the past 18 months, the assessor's offices have not experienced a real estate tax appeal based upon solar farm-related concerns. There have been no reductions in assessed valuations related to photovoltaic panels.
- As the available market data does not support the claim of a negative impact upon residential values, residential assessed values have fluctuated consistently within counties as influenced by market conditions, with no regard for proximity to a solar farm.
- Agricultural properties are taxed based upon a productivity formula that is not impacted by market data and external influences.
- The survey is currently being updated, and to the date of this report there is no contrary evidence to the original assessor survey.

Indiana Assessors Survey – February & March 2019

In February & March 2019, MaRous & Company conducted a survey of the supervisor of assessments or a staff member in 9 counties in Indiana in which solar farms with more than 3 megawatts of capacity are currently in operation. As of the date of this report, there are more than 16 solar farms with a total capacity of greater than 111 megawatts within these counties, with additional farms being added each year. An updated study performed by the Solar Energy Industries Association (SEIA) in Q4 of 2018 states that, in total, Indiana has 331.19 megawatts of solar energy installed. The total capacity reported in the study includes utility, residential, and nonresidential scale solar farms. The interviews were intended to allow the assessment officials to share their experience regarding the solar farm(s) impact upon the market values and/or assessed values of surrounding properties. The following is a summary of the results of that survey:

- Without exception, the interviewees reported that there was no market evidence to support a negative impact upon residential property values as a result of the development of and the proximity to a solar farm facility. In some counties, this results from the very rural nature of the area in which the projects are located.
- In the past 18 months, the assessor's offices have not experienced a real estate tax appeal based upon solar farm-related concerns. There have been no reductions in assessed valuations related to photovoltaic panels.
- As the available market data does not support the claim of a negative impact upon residential values, residential assessed values have fluctuated consistently within counties as influenced by market conditions, with no regard for proximity to a solar farm.
- Agricultural properties are taxed based upon a productivity formula that is not impacted by market data and external influences.
- The survey is currently being updated, and to the date of this report there is no contrary evidence to the original assessor survey.

North Carolina Assessors Solar Farm Survey (Partial) - July 2018

In July 2018, MaRous & Company conducted a partial survey of the supervisor of assessments or a staff member in 5 counties in North Carolina that, as of the date of this report, have more than 44 solar farms with a total capacity of over 645 megawatts within those solar farms. A study performed by the Solar Energy Industries Association (SEIA) in June 2018 states that, in total, North Carolina has 4,411.65 megawatts of solar energy installed within 7,527 installations and is ranked second in the country for solar generation. The total capacity reported in the study includes utility, residential, and nonresidential scale solar farms. The interviews were intended to allow the assessment officials to share their experience regarding the solar farm(s) impact upon the market values and/or assessed values of surrounding properties. The following is a summary of the results of that survey:

- Without exception, the interviewees reported that there was no market evidence to support a negative impact upon residential property values as a result of the development of, and the proximity to, a solar farm facility. In some counties, this results from the very rural nature of the area in which the projects are located.
- There have been no tax appeals in any county based upon solar farm-related concerns.
- In the past 18 months, the assessor's offices have not experienced a real estate tax appeal based upon solar farm-related concerns. There have been no reductions in assessed valuations related to solar panels.
- Residential assessed values have fluctuated consistently countywide as influenced by market conditions, with no regard for proximity to a solar farm.
- Agricultural property assessed values have fluctuated consistently countywide as influenced by market conditions, with no regard for proximity to a solar farm.

Maryland Assessors Solar Farm Survey - October 2017

In October 2017, MaRous & Company conducted a survey of the supervisor of assessments or a staff member in 13 counties in Maryland in which solar farms with more than 0.9 megawatts currently in operation. As of the date of this report, there are more than 25 solar farms with a total capacity of greater than 60 megawatts within these counties, with additional farms being added each year. An updated study performed by the Solar Energy Industries Association (SEIA) in June 2018 states that, in total, Maryland has 932.7 megawatts of solar energy installed. The total capacity reported in the study includes utility, residential, and nonresidential scale solar farms. The interviews were intended to allow the assessment officials to share their experience regarding the solar farm(s) impact upon the market values and/or assessed values of surrounding properties. The following is a summary of the results of that survey:

- Without exception, the interviewees reported that there was no market evidence to support a negative impact upon residential property values as a result of the development of, and the proximity to, a solar farm facility. In some counties, this results from the very rural nature of the area in which the projects are located.
- There have been no tax appeals in any county based upon solar farm-related concerns.
- In the past 18 months, the assessor's offices have not experienced a real estate tax appeal based upon solar farm-related concerns. There have been no reductions in assessed valuations related to solar panels.
- Residential assessed values have fluctuated consistently countywide as influenced by market conditions, with no regard for proximity to a solar farm.
- Agricultural property assessed values have fluctuated consistently countywide as influenced by market conditions, with no regard for proximity to a solar farm.

Real Estate Professionals

Midwestern real estate professionals were contacted to discuss market conditions, specific market transactions, and to investigate whether they had experience with, or knowledge of any impact of solar farms on residential property values.

Some interviews have been conducted with market participants, real estate brokers, and real estate professionals in the Midwest that have had experience with residential properties proximate to solar farms, however, they wish to remain anonymous. The interviewees indicated that there have not been any negative impacts to residential property values due to the proximity to solar farms.

Andrew Kida, the City Administrator for the City of Comanche, Iowa stated that the proposed Rock Creek Solar is expected to be a very positive economic addition to their community, which has not had strong economic growth in the past decade.

Joy Boyd, a local Illinois licensed broker in Christian County, has observed rural residential property values near existing energy facilities, such as wind farms, have not been negatively impacted due to the proximity to a wind turbine. Ms. Boyd also states that during peak farming season, systems such as solar panels essentially disappear behind the crops on the land. Ms. Boyd also reported that rural residential properties in the general area are overall accepting of alternative uses for the land due to the proximity of existing intense agricultural uses, agricultural and industrial type buildings, gravel roads, and other intrusive uses of the land. It has been observed that the residents within Christian County and the general project area have consistently agree that the only negative land use possibly impacting property values and buyers' decisions are the existing hog containment facilities within the county.

Dustin Dolezalek of Scott Appraisal in Madison, Wisconsin, has observed positive feedback from residents proximate to other solar farms throughout southern Wisconsin. He also notes that the solar farms he has witnessed have a somewhat rolling topography in which the land acts as a natural view shield to any major road.

Jeff Thomas of Mineral Point Real Estate, the highest selling broker in Iowa County, Wisconsin. He states that he is very cognizant of all of the activity in the Iowa County market. He is aware that the Montfort housing market is stable, however, it is not in strong demand because the purchasing trend is typically between family members and parties looking to get housing from $100,000 up to $200,000. Mr. Thomas has observed patterns of no impact or no negative impact from alternative energy in the area, however, there is more of a concern from the nearby power lines developed by American Transmission Company.

Anne Larson of True-Blue Real Estate located near Barneveld, Wisconsin, states that in her opinion, minimal transactional activity is happening in or around Montfort, Wisconsin. Typical buyers are interested in properties that have values under $200,000. Basically, purchasing demand for the area is only driven by affordability. In her opinion, there is no negative impact based on the proposed solar farm.

Prior to the approval of the Badger Hollow Solar Farm in Iowa County, Wisconsin, interveners, Brenda and Casey Kite, requested appraisal services for their property at 2680 County Road G #80, from Kurt Kielisch of Forensic Appraisal Group. The residence is a 1,987-square-foot farmhouse with a 5,040-square-foot pole barn and grain bin that sits on 3.73 acres of land. The Kite property is located in an area that is surrounded by tall crops, such as corn, and Badger Hollow Solar Farm agreed to an appropriate 500-foot setback from the residence. Within the immediate view of the property is a small wind farm, the Montfort Wind that came online in 2001, in which the Kites were aware of at the time that they purchased the property in 2005.

The Kites purchased the property on December 5, 2005, for $179,999, which is understood to be near the top of the local residential real estate market up to the year 2015. There is limited information that indicate that significant improvements were made between 2005 and the eventual 2019 sale.

The Kites listed the property as “For Sale by Owner”, which implies that the sale was substantially under exposed to the market. Due to the Kites not using a broker for the listing, the sale price did not factor in the market broker commission. Also, throughout the marketing period the Kites had a large anti-solar sign posted on the front of their property which used tactical scare verbiage in an attempt to persuade their neighbors, however, the sign acted as a disservice to them by deterring potential buyers from their “property. The property sold on August 1, 2019, for $253,700. Therefore, by adding a market commission of 5.5%, the sale price of the property is adjusted to $267,600. Another adjustment of 5% should be added to the property’s selling price for the lack of market exposure and the anti-solar sign, to create a final adjusted sale price of $281,000.

Kurt Kielisch appraised the property with an effective date of November 14, 2019, with a *before solar development* value of $298,500 and an *after solar development* value of $179,000. The adjusted August 1, 2019, sale price of $281,000, which occurred with the knowledge of the solar development, which reflects a difference of $102,000 or a 57% increase compared to Kielisch’s *after solar development* value estimate of $179,000. Utilizing the unadjusted Kite sale price of $253,700 with the Kielisch after solar value of $179,000, reflects an overall price increase of $74,700 or 41.7% price increase.

Other interviews have been conducted with market participants, real estate brokers, and real estate professionals in Iowa, Illinois, Wisconsin, and Indiana that have had experience with residential properties proximate to solar farms.[5] The interviewees indicated that there have not been any negative impacts to residential property values due to the proximity to solar farms, however, feel that the information could be too sensitive and wish to remain anonymous.[6]

[5] *Certain areas were not contacted due to lack of experience with sales near solar farms.*
[6] *In areas of potential sensitive local issues due to solar farms, professionals were not contacted.*

Agricultural Land Values

The May 2023 edition of the *Agricultural Credit Conditions Survey*, published by the Federal Reserve Bank of Minneapolis from the Federal Reserve 9th District[7], which includes Benton County, stated that "Strong commodity prices continued to benefit agricultural producers in the opening months of 2023, but inflation has taken a bite, especially looking forward." "Farmland values increased on average from a year earlier across the district, and cash rents climbed as well. But the outlook for the growing season is less bullish, as respondents on balance expect declines in farm incomes and a mixed picture for spending."

"The growth in land values seen over the past several years continued but tapered off, and cash rents also grew. Ninth District non irrigated cropland values increased by more than 11 percent on average from the first quarter of 2022, though compared with the most recent quarter they actually fell slightly. Irrigated cropland values also rose, by 10 percent from a year ago, while ranchland and pastureland values edged up 3 percent."

Agricultural land values are typically tied to the productivity of the land and to the commodity prices of crops like corn and soybeans. Other factors include favorable interest rates, and the supply of land compared to the number of buyers. According to The Minnesota Land Economics dataset reports maintained by the Department of Applied Economics at the University of Minnesota,[8] agricultural land values in the state of Minnesota averaged $5,457 per acre in 2022 among 24,617,238 acres of sold land and $4,673 per acre in 2021 among 25,210,633 acres of sold land. Agricultural land values in Benton County averaged $3,774 per acre in 2022 among 174,609 acres of sold land and $3,215 per acre in 2021 among 176,238 acres of sold land. Agricultural land values in Minden Township averaged $4,350 per acre in 2022 among 13,644 acres of sold land and $4,300 per acre in 2021 among 13,796 acres of sold land. The following charts illustrate the datasets of the land values as of 2022 in the state of Minnesota, Benton County, and Minden Township.

[7] *https://www.minneapolisfed.org/article/2023/district-farmers-head-into-planting-in-solid-financial-condition-but-outlook-is-uncertain*
[8] *http://landeconomics.umn.edu/landdata/LandValue/RunReport.aspx?RI=1513019*

State	Year	Number of Jurisdictions Reporting	Total Acres	Total Estimated Value	Estimated Value per Acre
Minnesota	2009	2,829	25,180,451	75,988,185,532	$3,017
Minnesota	2010	2,827	25,126,601	78,166,491,068	$3,110
Minnesota	2011	2,827	25,037,515	81,556,193,545	$3,257
Minnesota	2012	2,825	24,974,729	93,643,845,324	$3,749
Minnesota	2013	2,823	24,871,045	119,582,379,126	$4,808
Minnesota	2014	2,823	24,818,366	134,340,252,387	$5,412
Minnesota	2015	2,822	24,758,839	129,225,483,536	$5,219
Minnesota	2016	2,822	24,755,457	123,047,327,963	$4,970
Minnesota	2017	2,741	24,875,851	119,281,701,437	$4,795
Minnesota	2018	2,817	24,847,445	118,468,671,900	$4,767
Minnesota	2019	2,817	24,785,787	119,083,893,262	$4,804
Minnesota	2020	2,816	24,729,025	118,173,853,500	$4,778
Minnesota	2021	2,812	25,210,633	117,813,219,273	$4,673
Minnesota	2022	2,818	24,617,238	134,345,822,200	$5,457

County	Year	Number of Jurisdictions Reporting	Total Acres	Total Estimated Value	Estimated Value per Acre
Benton	2009	19	167,681	531,113,097	$3,167
Benton	2010	19	166,506	529,033,840	$3,177
Benton	2011	19	166,487	479,024,516	$2,877
Benton	2012	19	165,997	479,192,231	$2,886
Benton	2013	19	180,165	520,193,862	$2,887
Benton	2014	19	179,905	550,764,671	$3,061
Benton	2015	19	179,529	548,928,958	$3,057
Benton	2016	19	179,426	547,851,253	$3,053
Benton	2017	16	178,958	547,692,479	$3,060
Benton	2018	19	178,396	547,244,300	$3,067
Benton	2019	19	177,886	550,539,603	$3,094
Benton	2020	19	177,375	551,766,000	$3,110
Benton	2021	19	176,238	566,737,333	$3,215
Benton	2022	19	174,609	659,039,300	$3,774

Township	Year	Number of Jurisdictions Reporting	Total Acres	Total Estimated Value	Estimated Value per Acre
Minden	2009	1	12,426	68,103,577	$5,480
Minden	2010	1	12,318	68,082,057	$5,527
Minden	2011	1	12,738	59,051,866	$4,635
Minden	2012	1	12,751	59,150,020	$4,638
Minden	2013	1	14,208	60,716,614	$4,273
Minden	2014	1	14,189	60,598,229	$4,270
Minden	2015	1	14,096	59,971,612	$4,254
Minden	2016	1	13,977	58,951,679	$4,217
Minden	2017	1	13,938	58,877,744	$4,224
Minden	2018	1	13,877	58,620,400	$4,224
Minden	2019	1	13,866	58,432,784	$4,214
Minden	2020	1	13,855	58,370,900	$4,212
Minden	2021	1	13,796	59,327,302	$4,300
Minden	2022	1	13,644	59,360,400	$4,350

The following table summarizes a sample of recent agricultural land sales nearest to the footprint of the proposed Benton Solar Project in Benton County.[9]

SUMMARY OF RECENT LAND SALES NEAREST TO BENTON SOLAR PROJECT

No.	Owner Mailing Address* & Parcel Location and Identification	Sale Price	Sale Date	Land Area (Acres)	CPI	Sale Price Per Acre
1**	5440 Mayhew Lake Rd. NE Sauk Rapids, MN 56379 Benton County, MN36N 30W–6, APN: 09.00077.01	SECT-06 TWP-036 RANGE-030 80.17 AC W 2401.95 FT OF N1/2 NW1/4 LESS W 325 FT ON 777 FT				
	Land Sale #1 – 1 Field	$125,050	11/26/23	80.11	41.8	$1,560.98
2**	1814 Golden Spike Rd. NE Sauk Rapids, MN 56379 Benton County, MN36N 30W–18 APN: 09.00252.00	SECT-18 TWP-036 RANGE-030 31.90 AC W1/2 SE1/4 LYING SLY OF C/L OF CO RD 3 LESS W 168.56 FT SUBJ TO BUILDING RESTRICTIONS				
	Land Sale #2 – 1 Field	$210,000	3/15/24	31.93	62.5	$6,576.89
3**	6997 7th St. SE Sauk Rapids, MN 56379 Benton County, MN36N 30W–36 APN: 09.00653.0	SECT-36 TWP-036 RANGE-030 40.00 AC PART OF NE1/4 SW1/4 COMM AT SW COR TH E ON S LINE 307.86 FT TH NELY 400 FT TH W 312.03 FT TO W LINE TH S TO POB & PART OF SE1/4 SW1/4 COMM AT NW COR TH E ON N LINE 877.86 FT TH SELY 163.13 FT TH SELY 28.21 FT TH SWLY 28.77 FT TH NELY 127.67 FT TH SELY 202.47 FT TH NELY 296.28 FT TO E LINE TH S ON E LINE TO SE COR TH W ON S LINE TO SW COR TH N ON W LINE TO POB SUBJ TO INGRESS-EGRESS EASMNT				
	Land Sale #3 – 2 Fields	$210,000	2/17/22	40.02	29.1	$5,247.38
4	5159 25th Ave, NE Sauk Rapids, MN 56379 Benton County, MN36N 30W–6 APN: 09.00076.00	SECT-06 TWP-036 RANGE-030 82.47 AC S1/2 NE1/4 ETAL ARE: THOMAS A GILL, DENNIS C GILL, KENNETH G GILL & SCOTT H GILL				
	Land Sale #4 – 1 Field	$262,500	10/25/22	82.41	50.6	$3,185.29
5	26939 83rd St. Pierz, MN 56379 Benton County, MN36N 30W–3 APN: 09.00044.00, 46.2	SECT-03 TWP-036 RANGE-030 40.00 AC SW1/4 SE1/4 SECT-03 TWP-036 RANGE-030 1.36 AC S 90 FT OF N 660 FT OF W 660 FT OF SE1/4 SW1/4				
	Land Sale #5 – 2 Fields	$300,000	2/28/24	41.46	81.2	$7,235.89
6	3630 115th St. NE Sauk Rapids, MN 56379 Benton County, MN37N 30W–3, 4 APN: 07.00054.01	SECT-04 TWP-037 RANGE-030 77.50 AC PART OF SE1/4 LYING N OF FOLL LINE: COMM AT S1/4 COR TH N ON W LINE 1345.85 FT TO POB TH E 1304.89 FT TH NE 576.49 FT TH NE 273.67 FT TH E 520 FT TO E LINE				
	Land Sale #6 – 1 Field	$300,000	7/19/24	78.68	82.3	$3,812.91
7**	518 1st St. W Northfield, MN 56379 Benton County, MN36N 30W–3, 4, 9; 37N 30W–28, 29, 32, 33 APN: 07.00395.01, 397.02, 414.02, 40.00, 50.00, 51.00, 54.00, 57.00, 58.00	SECT-33 TWP-037 RANGE-030 28.45 AC PART OF NW/14 NW1/4 COMM AT NW COR TH E 1147.78 FT TO C/L OF CO RD 58 TH SWLY ON C/L 1061.09 FT TH SWLY TO W LINE TH N ON W LINE TO POB LESS PART COMM AT THE INTERSEC OF SLY R/W LINE OF CO RD 4 & WLY R/W LINE OF CORD 58 TH W 210.18 FT TH SWLY 130 FT TH SELY 196.94 FT TO WLY R/W OF CO RD 58 TH NELY ON R/W 131.41 FT TO POB SECT-32 TWP-037 RANGE-030 34.24 AC SE1/4 NE1/4 LESS E 189.14 FT SECT-03 TWP-036 RANGE-030 40.00 AC SW1/4 NW1/4 SECT-04 TWP-036 RANGE-030 40.00 AC SE1/4 NW1/4 SECT-32 TWP-037 RANGE-030 38.90 AC NE1/4 NE1/4 LESS S 252.97 FT OF E 189.14 FT SECT-04 TWP-036 RANGE-030 80.00 AC N1/2 SE1/4 SECT-04 TWP-036 RANGE-030 40.00 AC SW1/4 NE1/4 SECT-04 TWP-036 RANGE-030 40.00 AC SE1/4 NE1/4 SECT-04 TWP-036 RANGE-030 40.00 AC SE1/4 SE1/4				
	Land Sale #7 – 9 Fields	$1,450,424	4/25/23	378.59	60.6	$3,831.12
		Summary of Recent Land Sales Averages:			**58.3**	**$4,492.92**
		Benton County Average:			**60.1**	**$5,104.00**

**Owner mailing address is not to be considered parcel address, in some cases.*
***Includes significant forestation*

[9] *https://www.acrevalue.com/*

The above sample of agricultural land sales reveal that the productivity of the majority of agricultural land nearest to the area of the proposed project footprint in Benton County appears to be slightly below average for the county with a Crop Productivity Index an average of 58.3, where the average Crop Productivity Index for Benton County is 60.1. The productivity potential in the area is mixed between below average and above average. The land value of the above summary of land sales is below average with an average value of $4,492.92per acre compared to the county's average value of $5,104.00 per acre. The plots of land with lower crop productivity nearest to the proposed solar farm should only benefit from the potential to counter-balance any farm revenue lost from the lower crop productivity of the land by adding photovoltaic panels and land leases to the overall revenue of the agricultural land, and the above average plots will benefit from adding a diversified income that is not productivity reliant.

Agricultural Land Sales: Solar Farms and Wind Farms

Over the past 10-20 years, wind energy has grown rapidly across the Midwest in agricultural communities similar to the project area. Solar energy is increasingly being installed in this region as well. This is driven by several factors, including steep cost declines primarily from decreases in inverter and module prices, and utility and other customers' interest in affordable, low-carbon energy. Although wind and solar energy projects have varying reasons for being placed in the Midwest and other similar locations, their sites have notable attributes in common, including access to an available energy resource, access to the electrical grid, and predominantly agricultural economies in which solar or wind can be located along with other productive uses of the land.

MaRous and Company has extensively researched the question of property value impacts by wind farms and our findings show that responsibly sited wind farms do not have any negative impacts on neighboring property values. Solar farms are significantly lower profile, thus have reduced if not eliminated, visual concerns with negligible, if any, sound emissions. Therefore, it is our observation that if wind farms do not negatively impact property values, solar farms will not either. This is confirmed by the market research presented earlier in this report. The following is a brief summary of a portion of our research into wind farm property values, along with the summaries of the county assessors' surveys conducted in 60 counties within the states of Indiana, South Dakota, Iowa, Minnesota, Kansas, and Illinois in which wind farms are located.

Research has been compiled for wind farms and the findings have been summarized. The research was not exhaustive, however, in Illinois there was one reported sale of agricultural land close to wind turbines located in McLean County, Illinois, in March 2013. The farm, comprised of two tracts, was considered "highly desirable" with a productivity rating of 135 and 132 respectively (the low end of the excellent range.) The report commented, "...the wind turbine lanes were not a nuisance as they ran the same direction as the farm is planted (north–south.)" In 2014, there were three sales of farms with wind turbines in region 4, which includes the counties of Marshall, Woodford, Mason, Putnam, Livingston, McLean, and Tazewell. The report stated, "In general, investors may have paid a premium for the wind turbine. High quality farmland with wind turbines is stable."

Another reported sale in November 2017 was to be associated with wind turbines within Jerauld County, South Dakota, which is home to the Wessington Springs Wind Farm and has similar demographics as the project area. The property is situated on pastureland of poor quality with significant topography issues, which would reflect a lower price per acre than the region's average price of $2,011 per acre. However, the sale included multiple wind turbine leases, and sold with an above average price per acre of $2,800, which signifies a direct correlation to the benefit associated with the turbines on the land.

An article titled *Solar and Wind Contracts Add to Land Value: Illinois Survey*[10], published in the *Illinois Farmer Today*, describes the benefits wind turbines had given to land prices in the area of two land sales in Macon County, Illinois with and without turbines on the land. The article used a report published in the *2019 Illinois Land Values and Lease Trends*[11]; the report stated "Both tracts brought a premium to farms in the market without wind towers. The estimated increase was roughly $750 per acre for each tract when factoring out all the other variables. Both properties were on highly productive Macon County land. The larger tract, with 97.6 percent tillable acres, sold for $11,000 per acre. The 114-acre tract, with 87.1 percent tillable acres and some CRP land, sold for $10,721."

Wind turbines typically are considered to be of significant benefit to farmers; Iowa farmers interviewed by the *Omaha World Herald*, were positive about the stable income as opposed to the vicissitudes of commodity prices.[12] Franklin County, Iowa, reported lowering real estate taxes for the county as a whole because of the taxes generated by the wind turbines in that county. Support for good prices comes from the lack of land for sale, stable commodity prices, and low interest rates. Marginal land in areas where wind turbines are located or proposed is popular with investors.[13]

A report in the *2016 Illinois Land Values and Lease Trends*, indicated that the impact of wind turbine leases is being felt in McLean, Livingston, and Woodford counties, where turbine leases have provided "income diversification, beyond agriculture, which makes these tracts more attractive to an outside investor."[14] Further, they noted that "investors are still paying a little more of a premium for the wind turbines just as they had in the past few years."[15] The report notes that the premium is related directly to the number of years left on the lease.

Overall, it appears that there is little or no relationship between agricultural land values and the location of wind farms, with productivity being the driving force behind land values. Wind farm lease revenue, however, does appear to add to the marketability and value.

[10] *Solar and Wind Contracts Add to Land Value: Illinois Survey.* https://www.agupdate.com/illinoisfarmertoday/news/state-and-regional/solar-and-wind-contracts-add-to-land-value-illinois-survey/article_61f2d45c-5643-11e9-a283-c78a49e3fa2e.html
[11] *Klein, David E., 2019 Illinois Land Values and Lease Trends, Illinois Society of Professional Farm Managers and Rural Appraisers*
12 *http://www.omaha.com/money/turning-to-turbines-as-commodity-prices-remain-low-wind-energy/article_2814e2cf-83a3-5 47d-a09e-f039e935f399.html Accessed September 18, 2107.*
[13] *http://www.agriculture.com/farm-management/farm-land/farmland-sales-hard-to-find-as-growers-hold-tight-keeping-land-value Accessed September 18, 2017.*
[14] *Klein, David E., and Schnitkey, Gary, 2016 Illinois Land Values and Lease Trends, Illinois Society of Professional Farm Managers and Rural Appraisers*
[15] *Ibid.*

Solar Energy Peer-Reviewed Literature Review

MaRous & Company is familiar with one academic and peer-reviewed study on the impact of solar energy facilities on residential property values. There are no peer-reviewed studies specific to the state of Minnesota. However, the following study is consistent with our findings in Minnesota. This study is summarized below:

The University of Texas at Austin, 2018[16]
An Exploration of Property-Value Impacts Near Utility-Scale Solar Installations

Nationwide

This study's purpose was to investigate any possible amenities, disadvantages, or potential impact a residential property may acquire from the presence of a proximate utility-scale solar facility. To analyze these factors, the study anticipated to determine the scope in which residential properties could potentially be impacted, the scale of the potential impact, and if the value of the potential impact were to be positive or negative by analyzing 956 unique solar sites completed in 2016 or prior across the United States. The conclusions of the study are based on surveys of residential home assessors and in-depth regression analysis. "Results from [the] survey of residential home assessors show that the majority of respondents believe that proximity to a solar installation has either no impact or a positive impact on home values." (Conclusion, Page 23). However, some of these results varied due to some assessors' previous experience with solar installations, the size of the solar facilities, and distances from residences. "Regression analyses suggest that closer proximity to an installation is associated with more negative estimates of property value impacts, as is larger installation size. Prior experience assessing near a solar installation, by contrast, was associated with more conservative estimates of impact. Meanwhile, the median and mode of all estimates of impact was zero, suggesting negative estimates from a few respondents were pulling down the [average]." (Conclusion, Page 23). The study goes on to suggest that in some markets solar developers could possibly benefit from incorporating ancillary items such as vegetation as a view shield, keeping panels lower to the ground, and, in limited cases, siting the facility on land with a use that was previously unappealing.

[16] *Al-Hamoodah, L., Koppa, K., Schieve, E., Reeves, D. C., Hoen, B., Seel, J., & Rai, V. (n.d.). An Exploration of Property-Value Impacts Near Utility-Scale Solar Installations. Retrieved from https://emp.lbl.gov/sites/default/files/lbnl-2001000.pdf*

University of Rhode Island, 2020[17]
Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island

Rhode Island and Massachusetts

While utility-scale solar energy is important for reducing dependence on fossil fuels, solar arrays use significant amounts of land (about 5 acres per MW of capacity) and may create local land use disamenities. This paper seeks to quantify the externalities from nearby solar arrays using the hedonic method. This paper studies the states of Massachusetts and Rhode Island, which have high population densities and ambitious renewable energy goals. Over 400,000 transactions within three miles of a solar site are observed. Using a difference-in-differences, repeat sales identification strategy, results suggest that houses within one mile depreciate 1.7% following construction of a solar array, which translates into an annual willingness to pay of $279. Additional results indicate that the negative externalities are primarily driven by solar developments on farm and forest lands in non-rural areas. For these states, our findings indicate that the global benefits of solar energy in terms of abated carbon emissions are outweighed by the local disamenities.

This study focuses primarily on residential properties within suburban areas. Therefore, these results are skewed negatively due to the populated nature of the areas. The focus was on populated areas with a density of over 850 persons per square mile, and states that no impact was studied for rural impacts similar to the subject. The subject density is far less than 100 persons per square mile, as a result it is the opinion of MaRous & Company that this study does not effectively show the benefits that solar energy provides the properties and municipalities in rural area and is not relevant to the proposed subject solar farm.

[17] *Gaur, V. and C. Lang. (2020). Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island. Submitted to University of Rhode Island Cooperative Extension on September 29, 2020. Accessed at https://web.uri.edu/coopext/valuing-siting-options-for-commercial-scale-solar-energy-in-rhode-island/.*

Lawrence Berkeley National Laboratory (LBNL) Study - 2023[18]
Shedding light on large-scale solar impacts: An analysis of property values and proximity to photovoltaics across six U.S. states
Nationwide

Report Abstract: [The LBNL] examine the impact of large-scale photovoltaic projects (LSPVPs) on residential home prices in six U.S. states that account for over 50% of the installed MW capacity of large-scale solar in the U.S. Our analysis of over 1,500 LSPVPs and over 1.8 million home transactions answers two questions: (1) what effect do LSPVPs have on home prices and (2) does the effect of LSPVP on home prices differ based on the prior land use on which LSPVPs are located, LSPVP size, or a home's urbanicity? We find that homes within 0.5 mi of a LSPVP experience an average home price reduction of 1.5% compared to homes 2–4 mi away; statistically significant effects are not measurable over 1 mi from a LSPVP. These effects are only measurable in certain states, for LSPVPs constructed on agricultural land, for larger LSPVPs, and for rural homes. Our results have two implications for policymakers: (1) measures that ameliorate possible negative impacts of LSPVP development, including compensation for neighbors, vegetative shading, and land use co-location are relevant especially to rural, large, or agricultural LSPVPs, and (2) place- and project-specific assessments of LSPVP development and policy practices are needed to understand the heterogeneous impacts of LSPVPs.

MaRous & Company Analysis: There are many factors that impact value of residential properties, but without specific study of individual residential properties, the 1.5% difference in value that was isolated by the authors of the report, is a percentage that is impossible to support based on extensive experience. Initial bullet points and input has been provided based on appraisals of over 12,000 properties, involvement with over 40 solar projects (community and large-scale), review of published data, direct interviews with assessors and brokers that have experience with value impact of proximate solar arrays on residential values, preparing qualitative and quantitative property adjustments, and my experience of participating in significant cross examinations validating my conclusions.

MaRous & Company has provided detailed comments, opinions, and conclusions in the addenda of this report based upon the study.

[18] *Salma Elmallah, Ben Hoen, K. Sydny Fujita, Dana Robson, Eric Brunner, Shedding light on large-scale solar impacts: An analysis of property values and proximity to photovoltaics across six U.S. states, Energy Policy,Volume 175, 2023, 113425, ISSN 0301-4215, https://doi.org/10.1016/j.enpol.2023.113425.*

Battery Energy Storage System (BESS) Peer-Reviewed Literature Review

At the date of this report, there appears to be no peer-reviewed literature found relative to battery energy storage systems concerning their impact on property values The research of the relevant databases was extensive, although not completely exhaustive.

While there is a lack of published data, MaRous & Company has appraised over 1,500 industrial-use properties, therefore can speak directly to value impacts associated with such uses. BESS facilities can be considered to be directly comparable to a light industrial-use property in which they have low wall heights, are typically screened in a certain manner (directly/indirectly), do not produce smoke emissions, have no truck traffic, have limited light vehicle traffic, and, based on generally agreed upon setbacks, do not emit any noise.

Based on the experience of MaRous & Company; a light-industrial facility, such as a BESS, with little activity, proper screening, and setbacks of 1,000 feet or greater to a residential structure has no negative impact on property value.

Wind Energy Peer-Reviewed Literature Review

Due to the lack of peer-reviewed literature regarding solar farms and battery energy storage systems. MaRous & Company is familiar with several academic and peer-reviewed studies on the impact of wind turbines on residential property values. There are no peer-reviewed studies specific to the state of Minnesota. However, the following studies are consistent with our findings in Minnesota. These are summarized below:

Municipal Property Assessment Corporation (MPAC) Study, 2008, 2012, and 2016[19]

Ontario, Canada

This study was originally conducted in 2008 and was updated in 2012 and 2016. The conclusions in all three studies are similar: "there is *no statistically significant impact on sale prices* of residential properties in these market areas resulting from proximity to an IWT [Industrial Wind Turbine] when analyzing sale prices." (2012 Study, Page 5; emphasis in original) Using 2,051 properties and generally accepted time adjustment techniques, MPAC "cannot conclude any loss in price due to the proximity of an IWT." (2012 Study, Page 29) Further, Appendix G of the 2012 MPAC report "Re-sale Analysis" states in the "Summary of Findings" "MPAC's own re-sale analysis using a generally accepted methodology for time adjustment factors indicates no loss in price based on proximity to the nearest IWT [Industrial Wind Turbine]."

Lawrence Berkeley National Laboratory (LBNL) Studies, 2009, 2010, 2013, 2014, 2017, 2018, and 2022[20]

Nationwide

The 2009 LBNL study included analysis of 7,489 sales within 10 miles of 11 wind farms and 125 post-construction sales within 1 mile of a wind turbine. The study used rural settings and wind farms of more than 50 turbines, and considered area stigma, scenic vista sigma, and nuisance stigma in varying distances from a wind turbine. The 2010 LBNL study included 7,500 single-family residential sales located in nine states and proximate to 24 wind farms, and 4,937 post-construction sales within 10 miles of a wind turbine. The 2013 LBNL study included 51,276 sales located in nine states and proximate to 67 wind farms, and 376 post-construction sales within 1 mile of a wind turbine. The 2014 LBNL study included over 50,000 sales located in nine states and proximate to 67 wind farms, and 1,198 post-construction sales within 1 mile of a wind turbine. All were located in rural settings and near wind farms of more than 0.5 megawatts. Theses study concentrated on nuisance stigma in varying distances from a wind turbine. The study found no statistically significant evidence that turbines affect sale prices. Neither study found statistical evidence that home values near turbines were affected.

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[19] ∴*Municipal Property Assessment Corporation. (2012). Impact of Industrial Wind Turbines on Residential Property Assessment In Ontario: 2012 Assessment Base Year Study. Retrieved from www.mpac.ca*
∴*Municipal Property Assessment Corporation. (2016). Impact of Industrial Wind Turbines on Residential Property Assessment in Ontario: 2016 Assessment Base Year Study.*

[20] ∴*Hoen, Ben, Ryan Wiser, Peter Cappers, Mark Thayer, and Gautam Sethi. "Wind Energy Facilities and Residential Properties: The Effect of Proximity and View on Sales Prices." Lawrence Berkeley National Laboratory, April 2010.*
∴*Hoen, B., Wiser, R., Cappers, P., Thayer, M., Sethi, G., & Darghouth, N. (2013). The impact of wind power projects on residential property values in the United States: A multi-site hedonic analysis. Lawrence Berkeley National Laboratory.*
∴*Rand, J., & Hoen, B. (2017). Thirty years of North American wind energy acceptance research: What have we learned? Energy Research & Social Science, 30, 1-22.*
∴*Hoen, B., Rand, J., Wiser, R., Firestone, J., Elliott, D., Hübner, G., Pohl, J., Haac, R., Kaliski, K., Landis, M., & Lantz, E. (January 2018). National Survey of Attitudes of Wind Power Project Neighbors: Summary of Results. Lawrence Berkeley National Laboratory. Retrieved from https://emp.lbl.gov/projects/wind-neighbor-survey*
∴*Brunner, E. J., Hoen, B., Rand, J., & Schwegman, D. (2022). The impact of wind turbines on property values: Evidence from a comprehensive dataset of wind projects and nearby home sales. Energy Policy, 161, 113-122.*

University of Rhode Island, 2013[21]
Effects of Wind Turbines on Property Values in Rhode Island
Rhode Island

Structured similarly to the LBNL studies, this study included 48,554 total sales proximate to 10 wind farms, and 412 post-construction sales within 1 mile of a turbine. These wind farms were mostly small facilities in urban settings. The study included nuisance and scenic vista stigmas. Page 421 of the report stated, "Both the whole sample analysis and the repeat sales analysis indicate that houses within a half mile had essentially no price change ..." after the turbines were erected.

The University of Guelph, Melancthon Township, 2013[22]
Property Value Impacts of Wind Turbines and the Influence of Attitudes toward Wind Energy
Ontario, Canada

This study analyzed two wind farms in the township, using 5,414 total sales and 18 post-construction sales within 1 kilometer of a wind turbine. The study included nuisance and scenic vista stigmas. Page 365 of the study stated that "These results do not corroborate the concerns regarding potential negative impacts of turbines on property values."

University of Connecticut/LBNL, 2014[23]
Relationship between Wind Turbines and Residential Property Values in Massachusetts
Massachusetts

This study included 312,677 total sales proximate to 26 wind farms, and 1,503 post-construction sales within 1 mile of a wind turbine. These wind farms were located in urban settings and primarily were proximate to small wind farms. The study included wind turbines and other environmental amenities/disamenities (including beaches and open spaces/landfills, prisons, highways, major road, and transmission lines) together, for nuisance stigma. "Although the study found the effects from a variety of negative features ... and positive features ... the study found no net effects due to the arrival of turbines."

Wichita State University, 2019[24]
Wind Project Effects on Kansas Counties' Property Values
Kansas

This study strived to decipher and develop a better understanding of wind projects and their effect on rural properties in Kansas. The study's data is based on 23 operational wind projects in Kansas which came online between 2005 to 2015. The properties and their values, which were appraised at the county level, have sale dates ranging from 2002 to 2018. The study and its results suggest that property values do not spike once the project is completed. Rather, it was noted that they have a more "modest" growth, and that the three-year average for property value growth was 0.3 % after a project had been completed and operational.

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[21] *Lang, C., & Opaluch, J. (2013). Effects of Wind Turbines on Property Values in Rhode Island. Environmental and Natural Resource Economics, University of Rhode Island.*

[22] *Vyn, R.J. (2018). Property value impacts of wind turbines and the influence of attitudes toward wind energy. Land Economics, 94(4), 496-516.*

[23] *Atkinson-Palombo, C., & Hoen, B. (2014). Relationship between Wind Turbines and Residential Property Values in Massachusetts https://www.masscec.com/resources/relationship-between-wind-turbines-and-residential-property-values-massachusetts. Massachusetts Clean Energy Center (MassCEC).*

[24] *Wichita State University, W. Frank Barton School of Business, Center for Economic Development and Business Research. (2019). Wind Project Effects on Kansas Counties' Property Values. Retrieved from www.greaterhutch.com › Wind Power Property Value Analysis*

University of Connecticut/American University- 2022[25]
Windfall revenues from windfarms: How do county governments respond to increases in the local tax base induced by wind energy installations?
Nationwide
Abstract: [This study] examine[d] how county governments respond to plausibly random increases in the local tax base generated by wind energy installations using data on the universe of U.S. installations from 1995 through 2017. Wind energy installation led to large increases in county revenue and expenditures, with county governments using this revenue to prioritize spending on highways and hospitals. We also find that wind energy installation led to increases in county property values, suggesting that residents value the enhancements to local public services, property tax reductions, or other changes to local amenities that accompany wind energy installation.

Lawrence Berkeley National Laboratory (LBNL) - 2022[26]
Commercial wind energy installations and local economic development: Evidence from U.S. counties
Nationwide
Abstract: [This study] examine[d] the impact of wind energy installation on the local economies of counties in the United States. Using data on the universe of commercial wind energy installations from 1995 to 2018, we find that wind energy installation led to economically meaningful increases in county GDP per-capita, income per-capita, median household income, and median home values. We also find evidence that while wind energy installation has little effect on total employment, the composition of local employment shifts away from farm towards non-farm employment, notably leading to an increase in construction and manufacturing employment. Finally, we show that the impact of wind energy installation on local economic development varies significantly by installed capacity and by county urban/rural status. For policymakers, our results have three important implications: (1) wind energy increases the size of the local economy and increases local incomes, but it does not stop population decline; (2) the size of these benefits increase at an increasing rate with the amount of installed generating capacity per-capita; and (3) rural communities with multiple installations and a greater amount of wind energy capacity benefit the most economically from these installations.

These studies had a combined number of over 3,700 transactions within 1 mile of operating turbines and found no evidence of value impact.

[25] *Eric J. Brunner, David J. Schwegman, Commercial wind energy installations and local economic development: Evidence from U.S. counties, Energy Policy, 10.1016/j.enpol.2022.112993, 165, (112993), (2022).*
[26] *Brunner, E. J., Schwegman, D. J., Slattery, M. C., Shoeib, E. A. H., Munday, M., Mauritzen, J., Lang, C., Kahn, M. E., Jensen, C. U., Hartley, P. R., Goodman-Bacon, A., Faturay, F., & Brown, J. P. (2022, April 28). Commercial wind energy installations and local economic development: Evidence from U.S. counties. Energy Policy. Retrieved November 18, 2022, from https://www.sciencedirect.com/science/article/abs/pii/S030142152200218X?via%3Dihub#preview-section-abstract*

Conclusions

As a result of the market impact analysis undertaken, MaRous & Company concluded that there is no market data indicating the project will have a negative impact on either rural residential or agricultural property values in the surrounding area. Further, market data from Minnesota, as well as from other states, supports the conclusion that the project will not have a negative impact on rural residential or agricultural property values in the surrounding area. Finally, for agricultural properties that host photovoltaic panels, the additional income from the solar lease may increase the value and marketability of those properties. These conclusions are based on the following:

- There are significant financial benefits to the local economy and to the local taxing bodies from the development of the solar farm.
- The solar farm will create well-paid jobs in the area which will benefit overall market demand.
- An analysis of recent residential sales proximate to existing solar farms did not support any finding that proximity to a photovoltaic panel had a negative impact on property values.
- An analysis of agricultural land values in Minnesota did not support any finding that agricultural land values are negatively impacted by the proximity to photovoltaic panels.
- Reports from Minnesota, Iowa, Illinois, Indiana, Wisconsin, and North Carolina indicate that photovoltaic panels leases add value to agricultural land.
- A survey of County Assessors in 36 Minnesota counties, 7 Iowa counties, 6 Illinois counties, 11 Wisconsin municipalities, 9 Indiana counties, 5 North Carolina counties, and 13 Maryland counties in which solar farms with more than 1.0 megawatt of nameplate capacity are located determined that there was no market evidence to support a negative impact upon residential property values as a result of the development of and the proximity to a solar farm, and that there were no reductions in assessed valuation.
- Based on the experience of MaRous & Company; a light-industrial facility, such as a BESS, with little activity, proper screening, and setbacks of 1,000 feet or greater to a residential structure has no negative impact on property value.

This report is based on market conditions existing as of September 4, 2024. This market impact study has been prepared specifically for the use of the client to gain information in relation to the development of the proposed Benton Solar Project, in Benton County, Minnesota. Any other use or user of this report is considered to be unintended.

Respectfully submitted,
MaRous & Company

Michael S. MaRous, MAI, CRE
Minnesota Certified General - #40330656 (8/26 expiration)
Illinois Certified General - #553.000141 (9/25 expiration)

CERTIFICATE OF REPORT

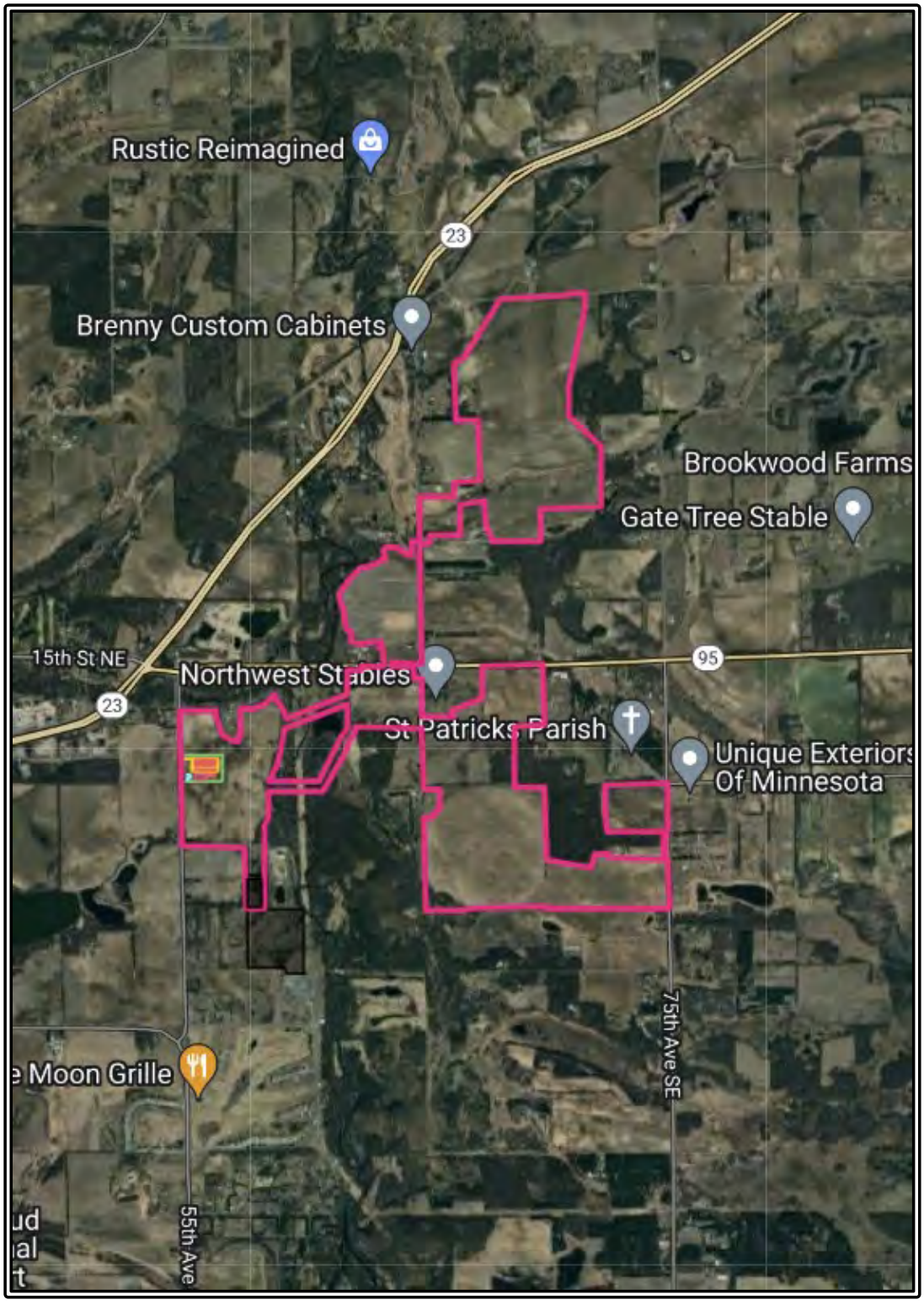
I do hereby certify that:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analyses, opinions, conclusions, and recommendations:
- I have no present or prospective personal interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
- I 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.
- I have no bias with respect to the property that is the subject of the work under review or to the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the development or reporting of 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 appraisal consulting assignment.
- My analyses, opinions, and conclusions were developed, and this report has been prepared in conformity with the *Uniform Standards of Professional Appraisal Practice.*
- I have made a personal inspection of the subject of the work under review.
- Joseph M. MaRous provided significant appraisal research assistance to the person signing this certification.
- The reported analysis, opinions, and conclusions were developed, and this report has been prepared in conformity with the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Foundation.
- The use of the report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- As of the date of this report, Michael S. MaRous, MAI, CRE, has completed the continuing education requirements for Designated Members of the Appraisal Institute.

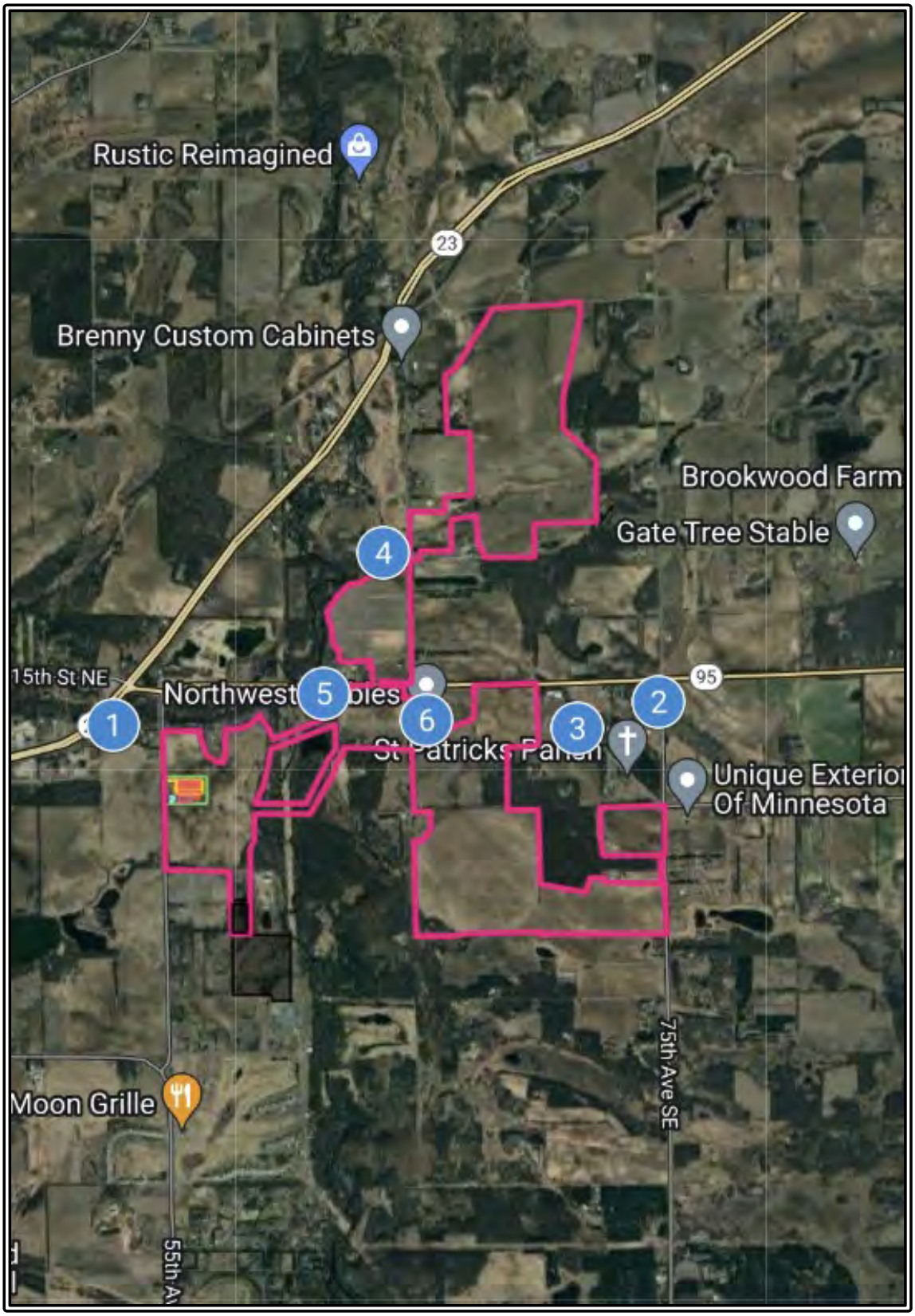
Respectfully submitted,
MaRous & Company

Michael S. MaRous, MAI, CRE
Minnesota Certified General - #40330656 (8/26 expiration)
Illinois Certified General - #553.000141 (9/25 expiration)

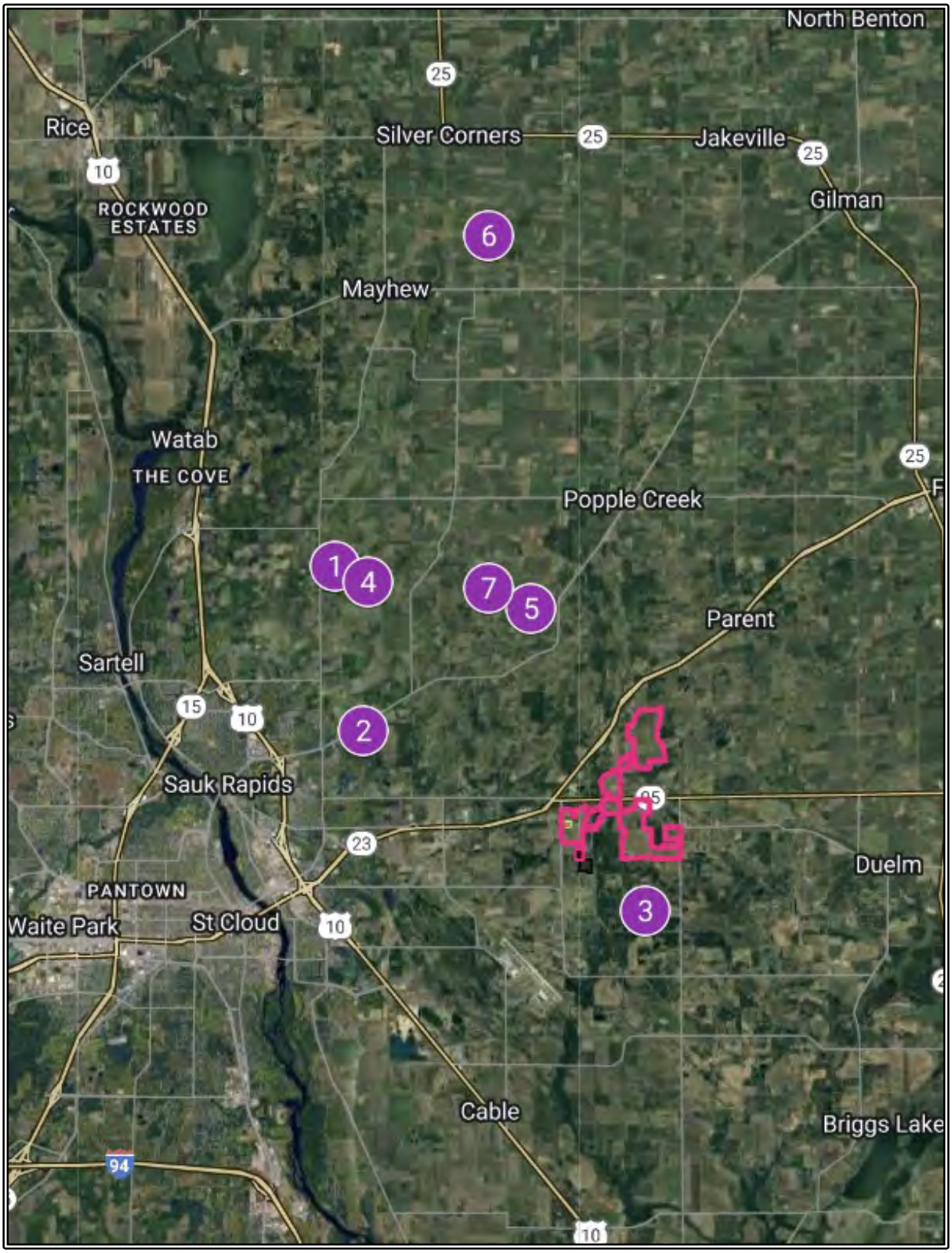
ADDENDA



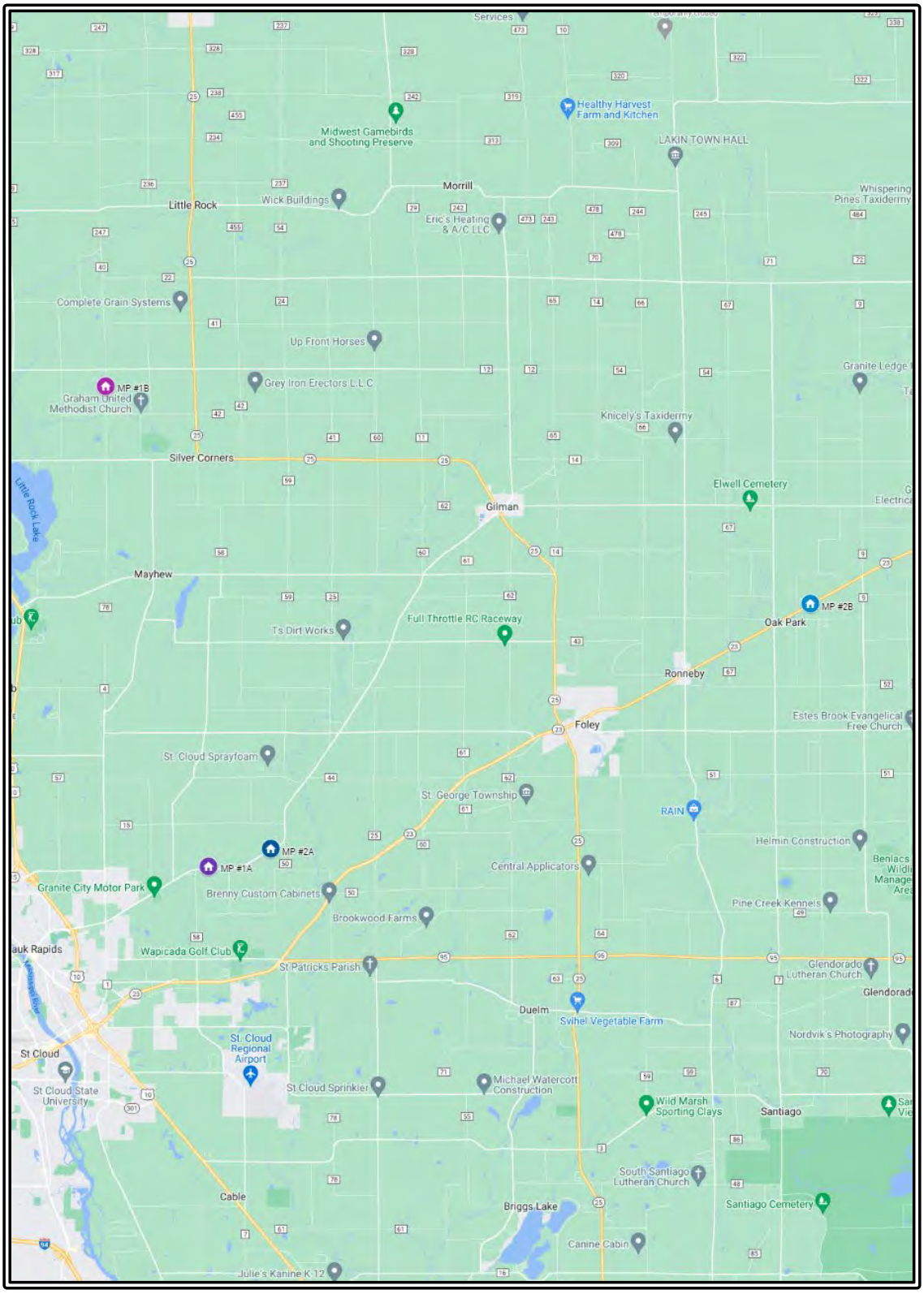
BENTON SOLAR PROJECT FOOTPRINT



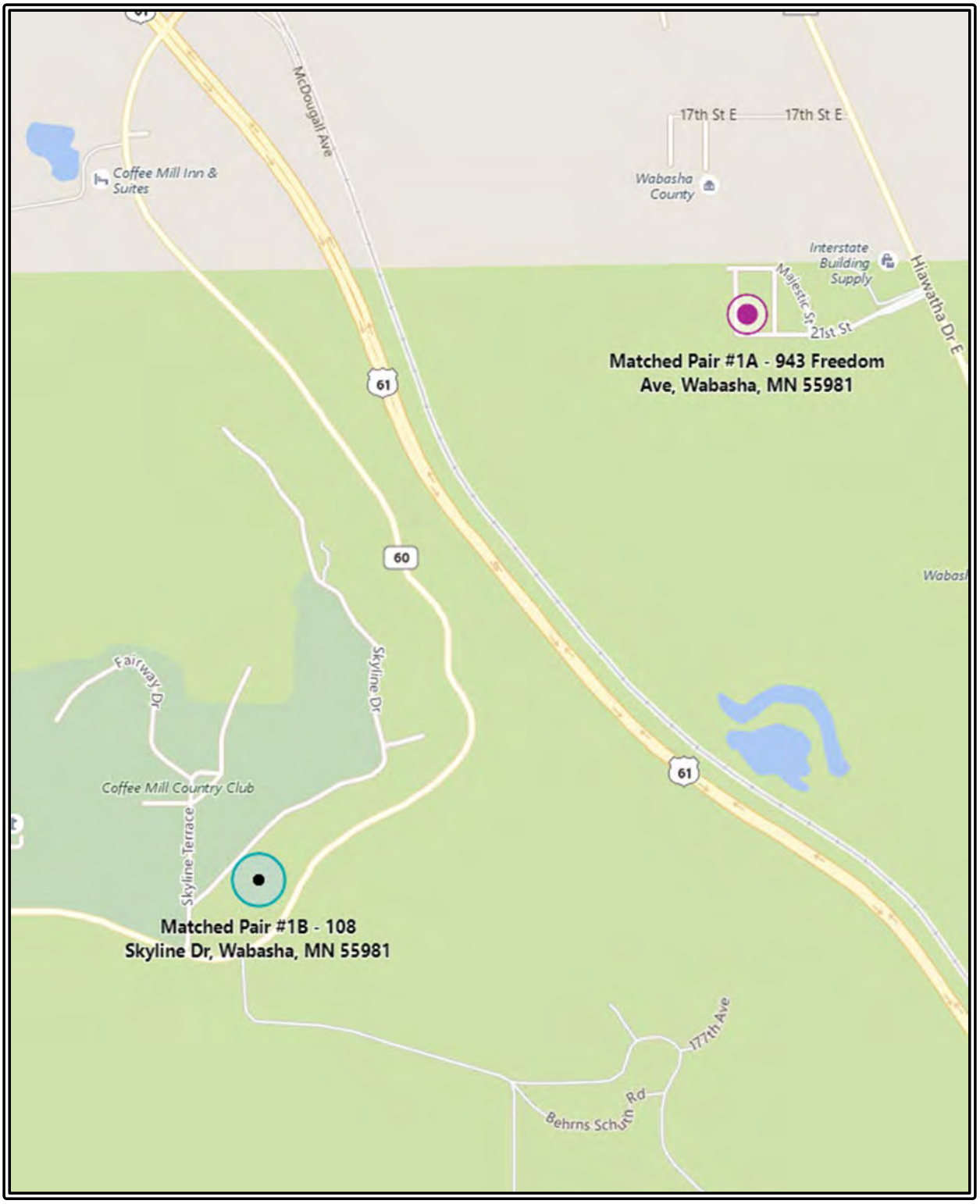
RECENT SINGLE-FAMILY HOUSE SALES LOCATION MAP



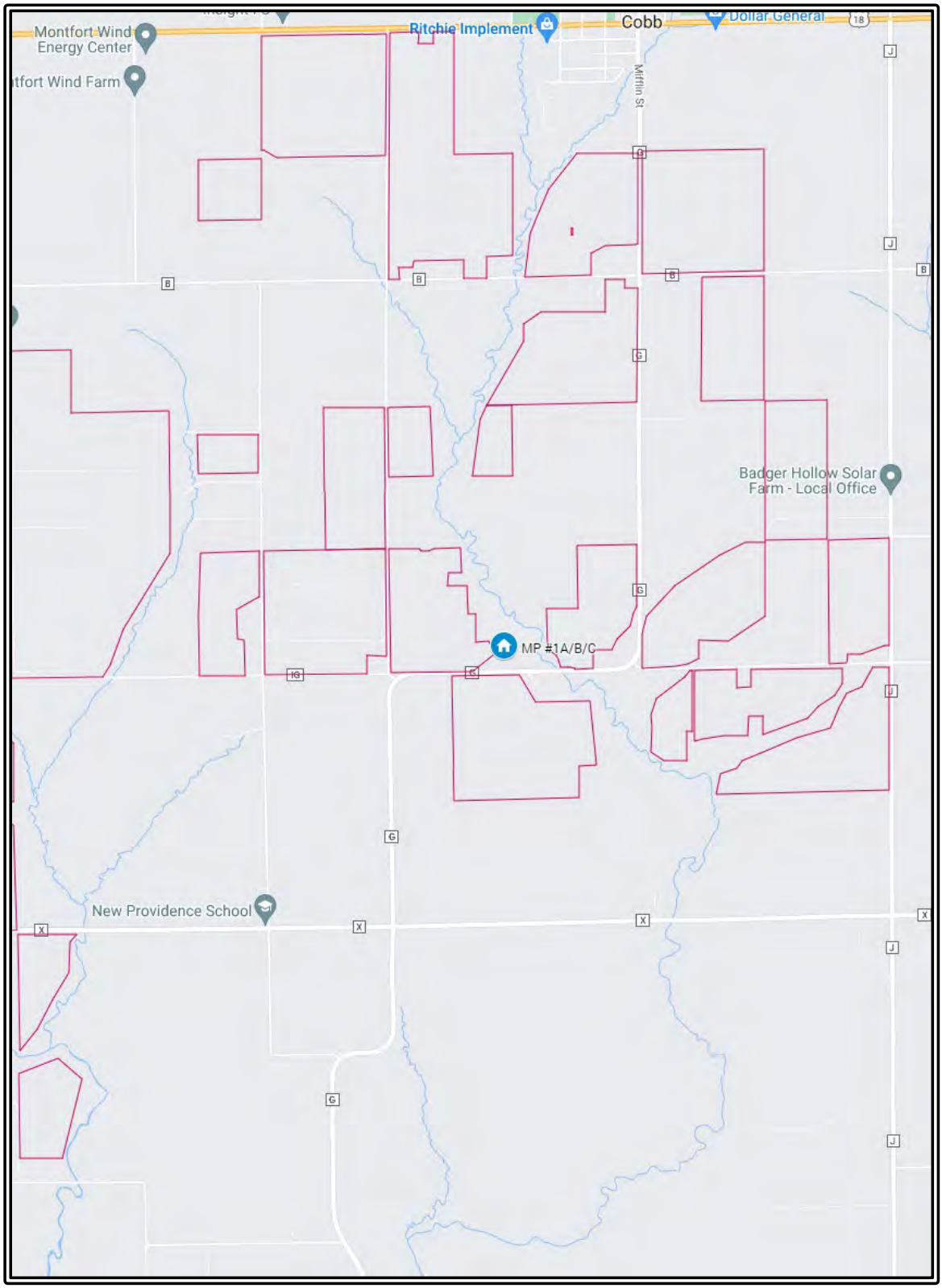
LAND SALES LOCATION MAP



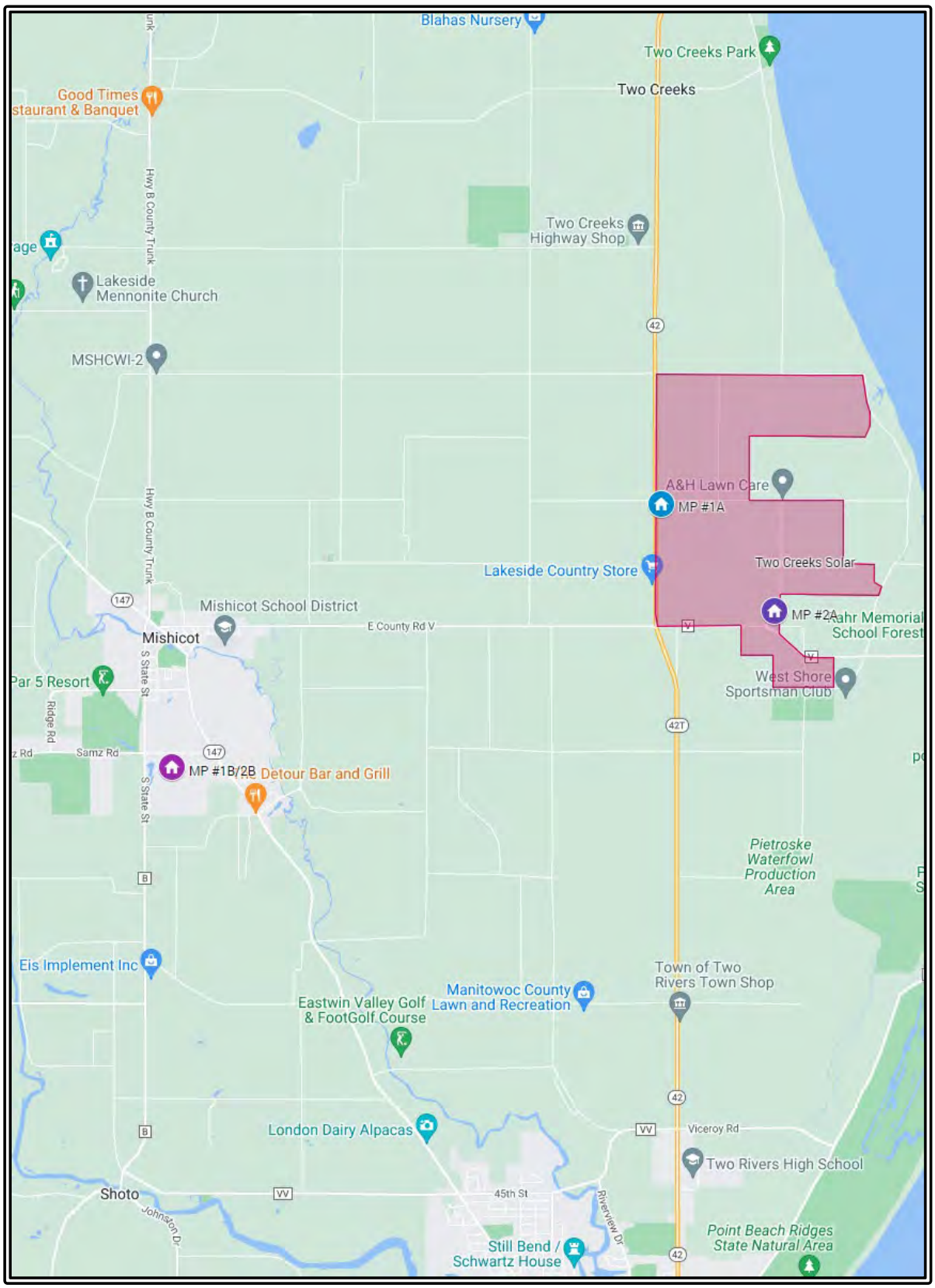
BENTON COUNTY, MINNESOTA MATCHED PAIR LOCATION MAP



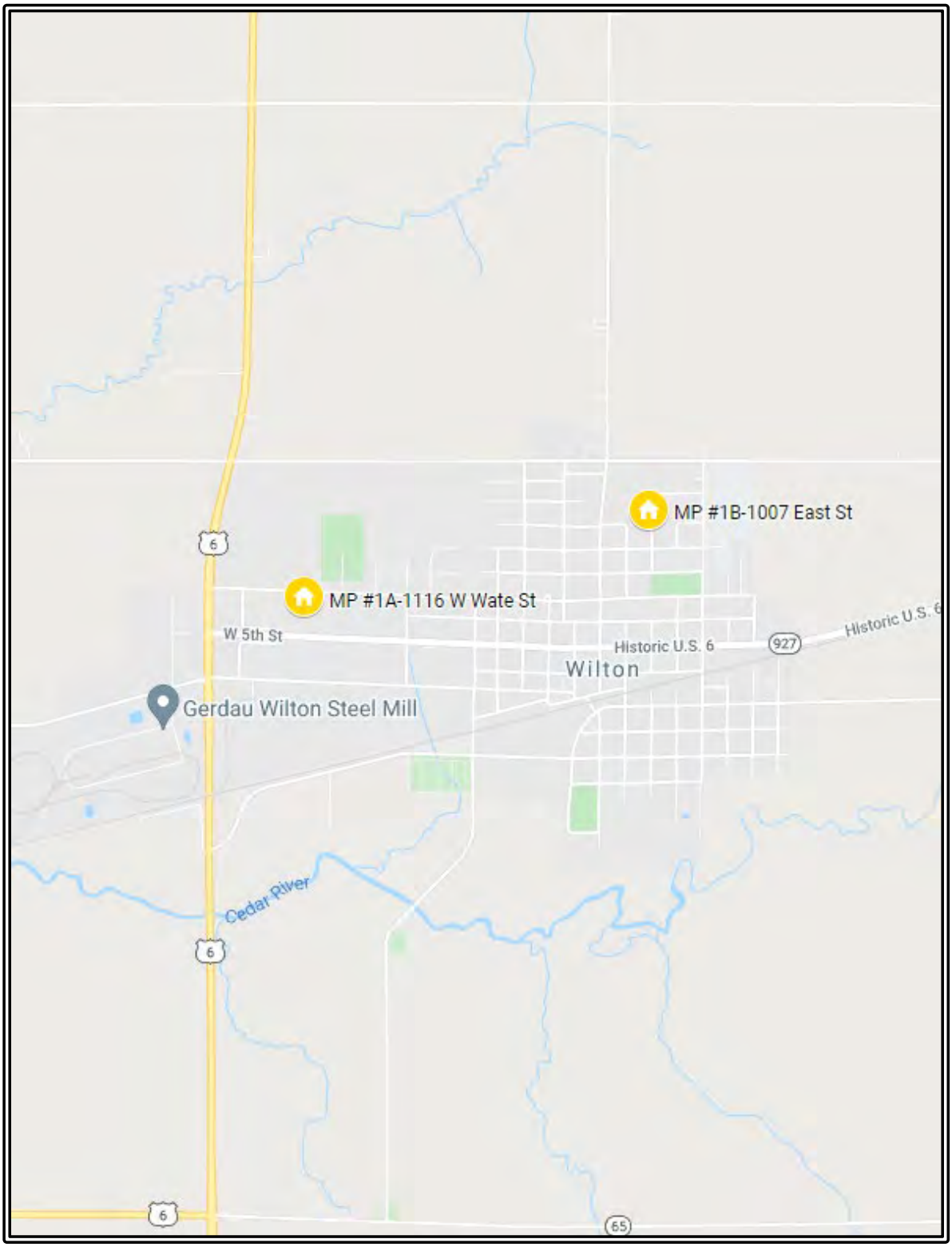
WABASHA COUNTY, MINNESOTA MATCHED PAIR LOCATION MAP



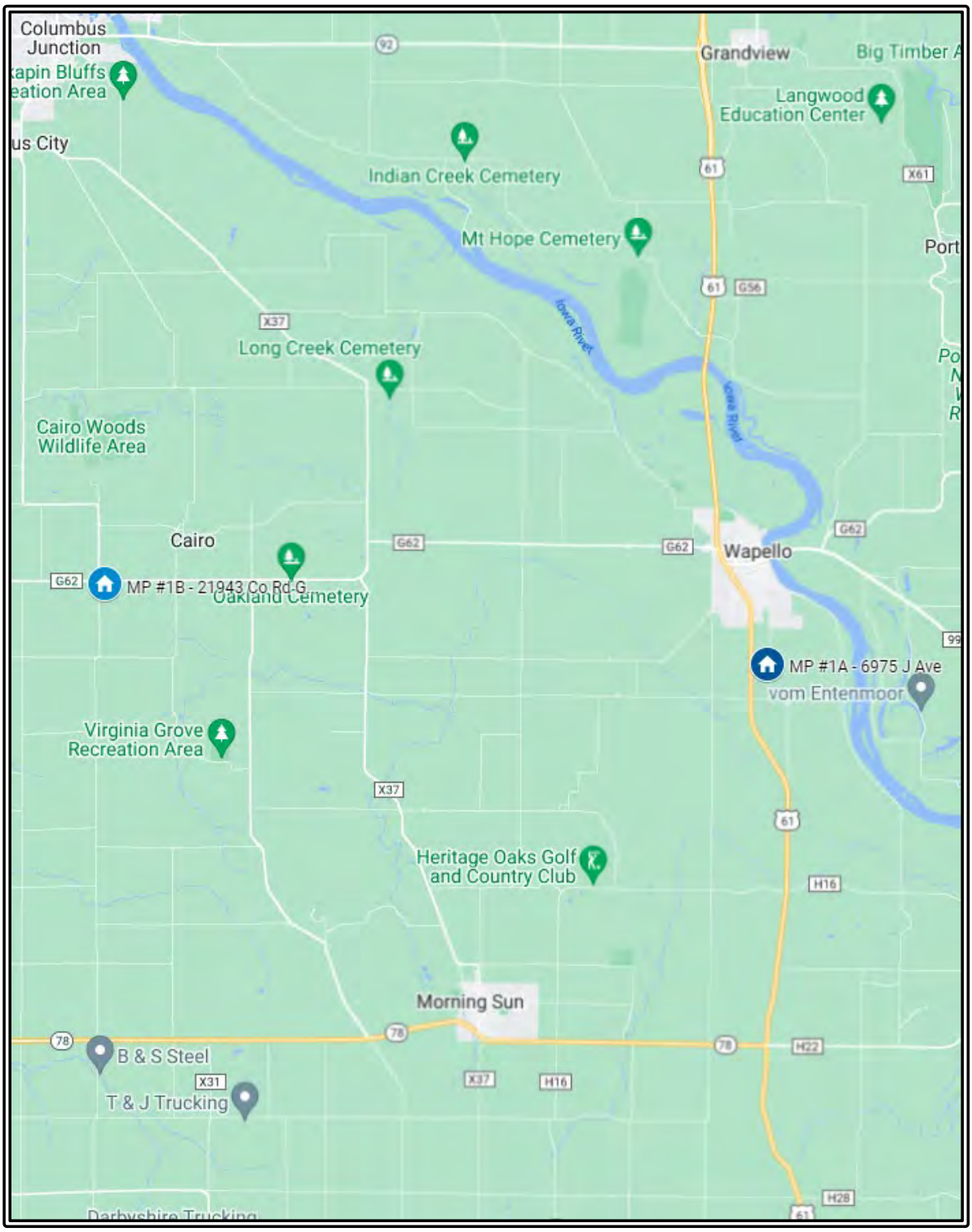
IOWA COUNTY, WISCONSIN MATCHED PAIR LOCATION MAP



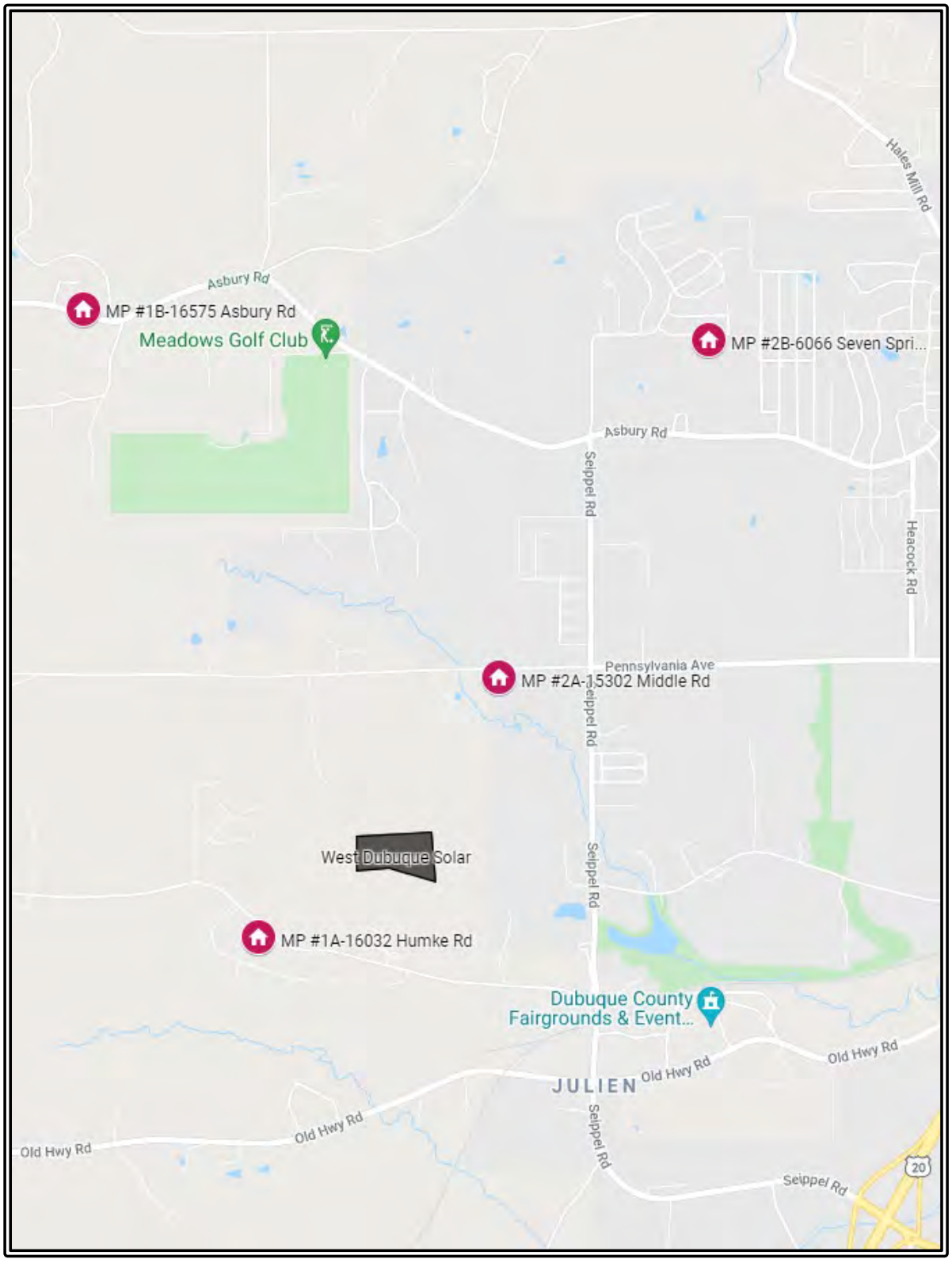
MANITOWOC COUNTY, WISCONSIN MATCHED PAIR LOCATION MAP



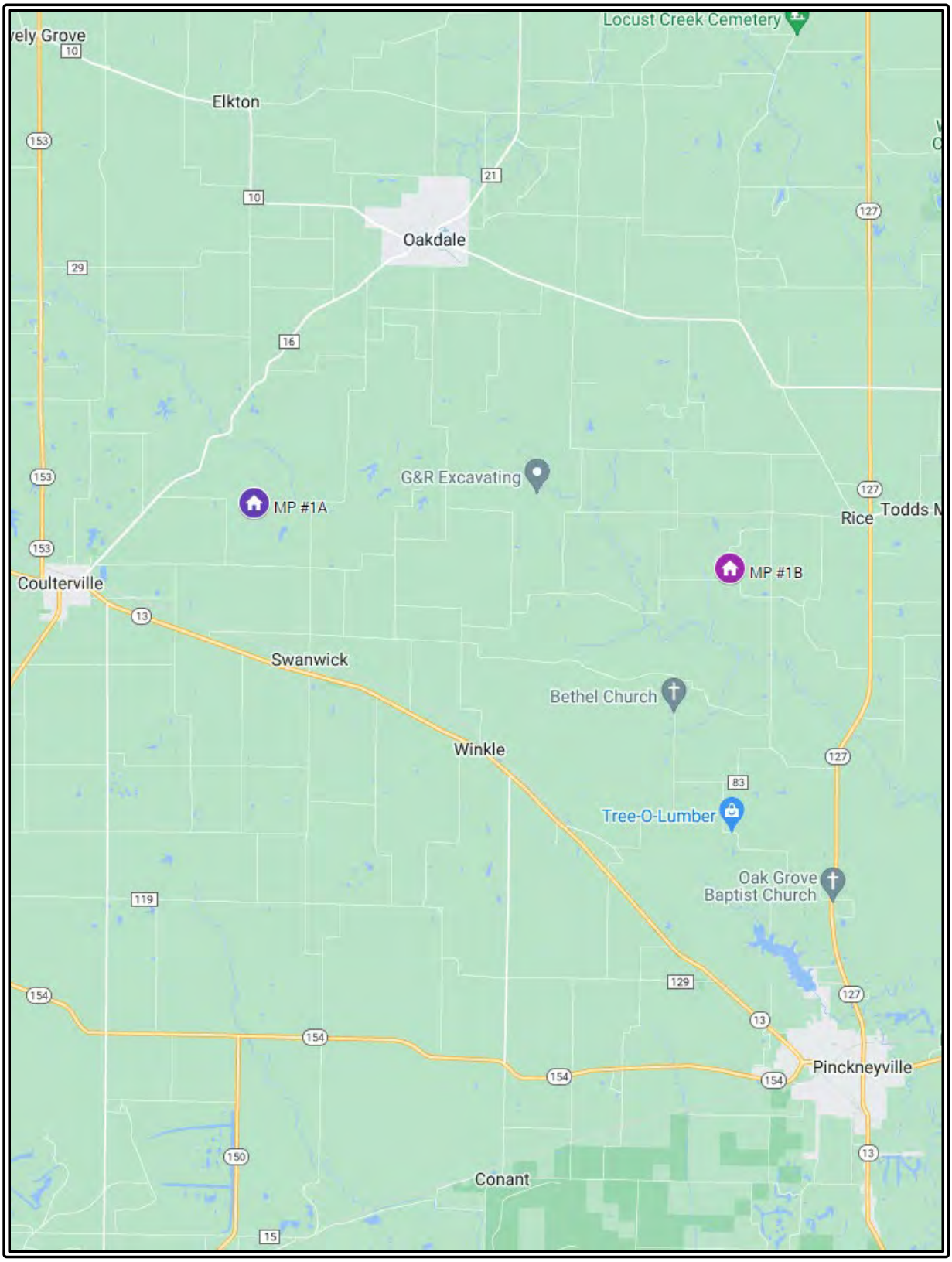
MUSCATINE COUNTY, IOWA MATCHED PAIR LOCATION MAP



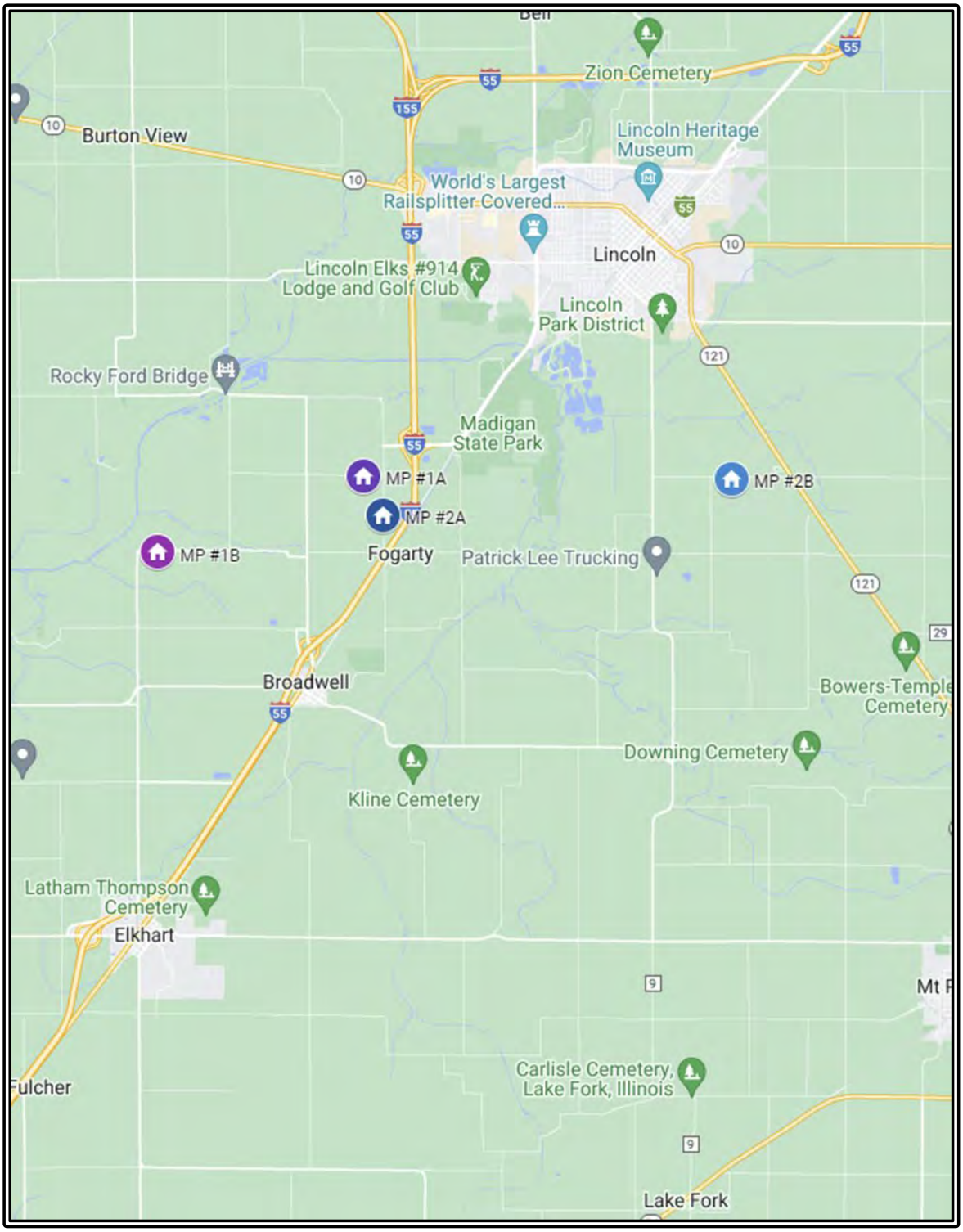
LOUISA COUNTY, IOWA MATCHED PAIR LOCATION



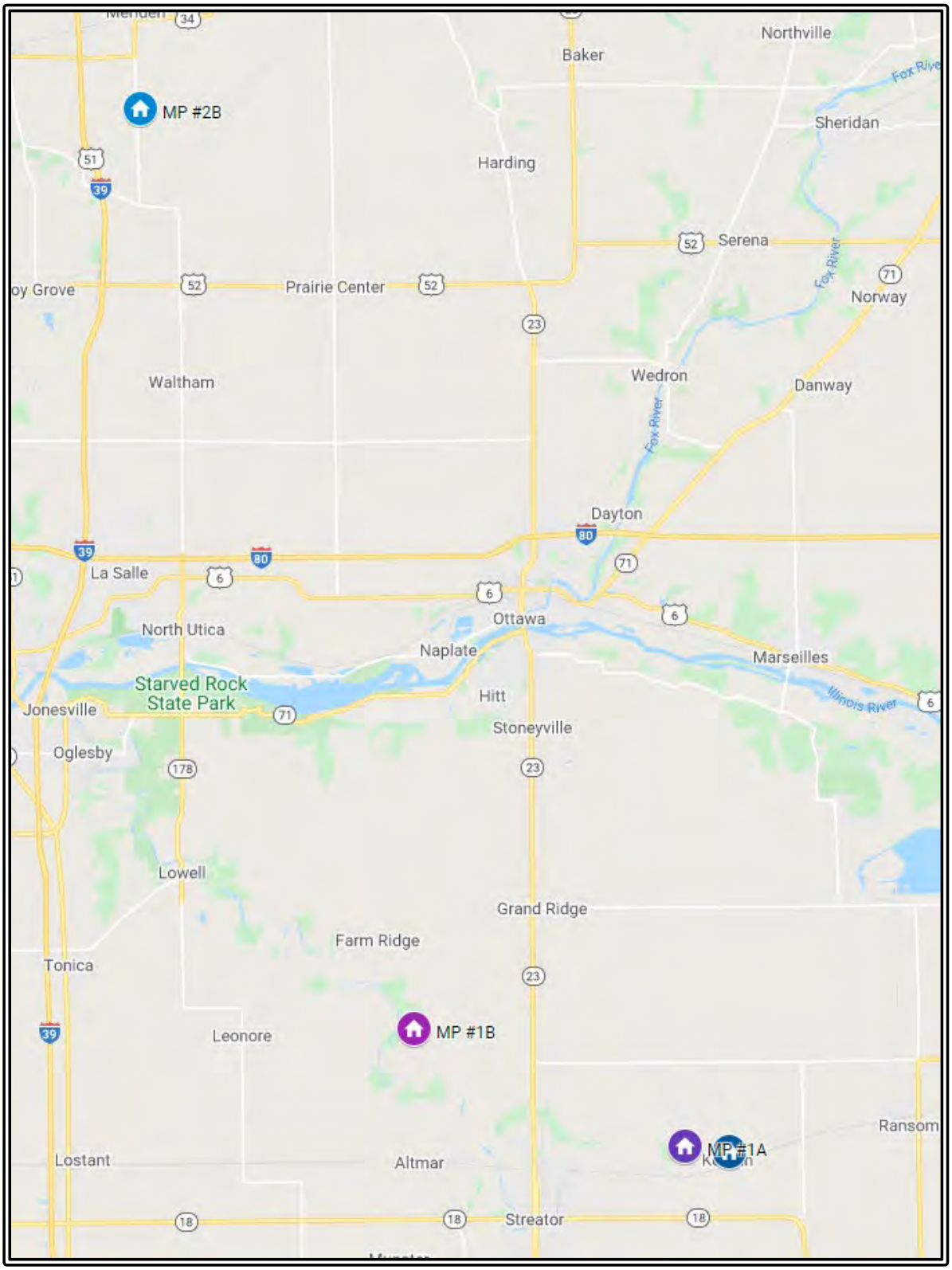
DUBUQUE COUNTY, IOWA MATCHED PAIR LOCATION MAP



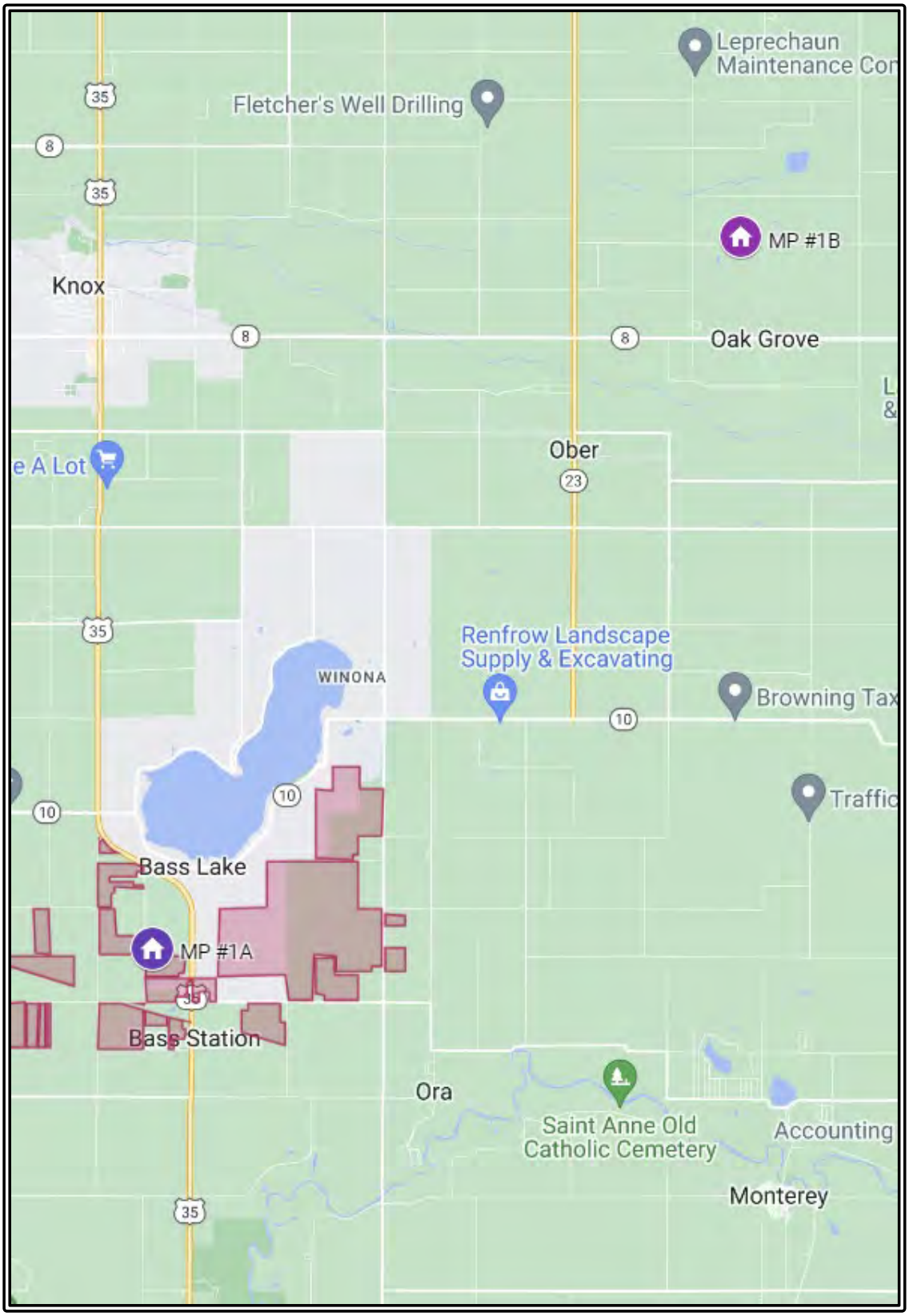
PERRY COUNTY, ILLINOIS MATCHED PAIR LOCATION MAP



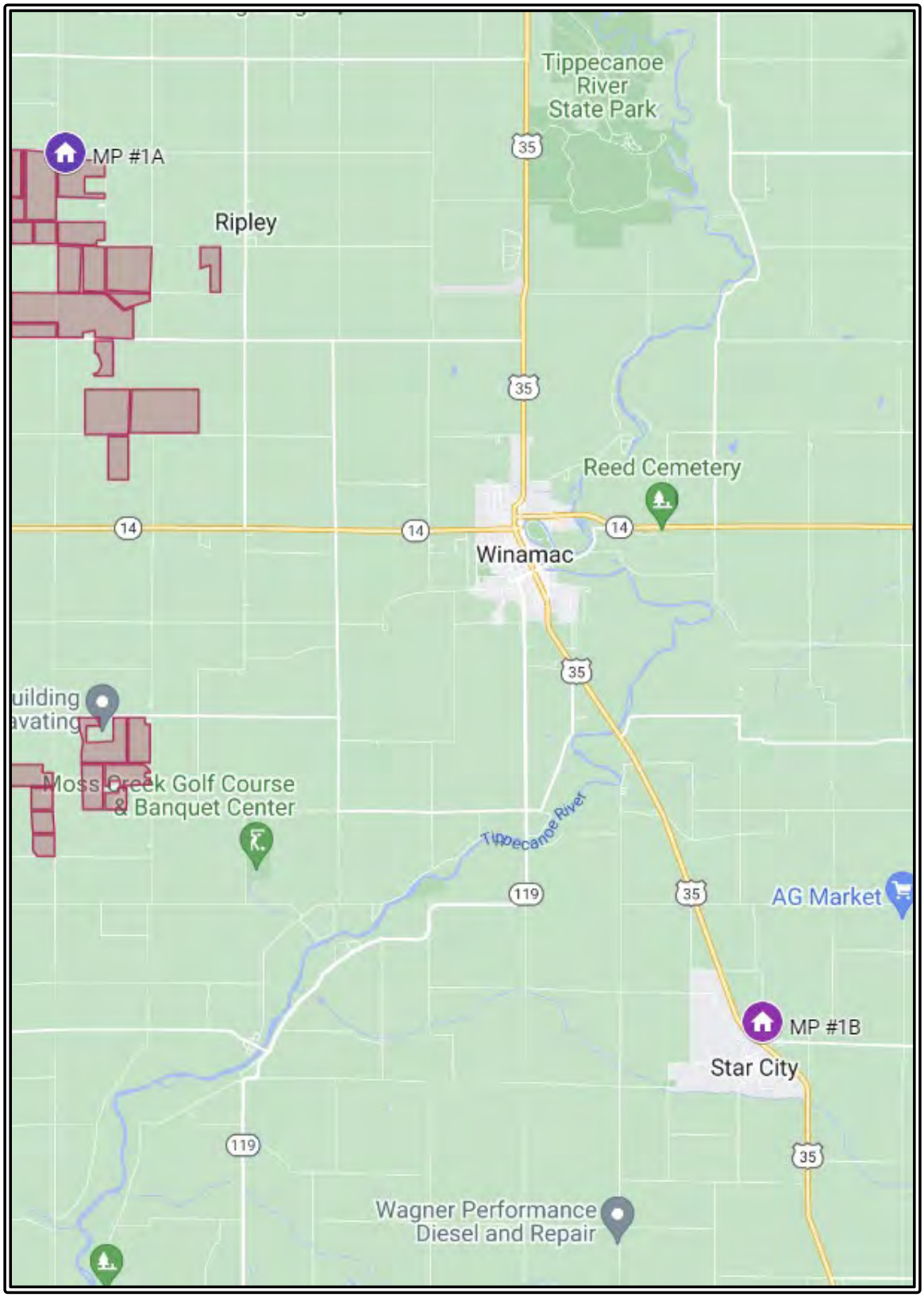
LOGAN COUNTY, ILLINOIS MATCHED PAIR LOCATION MAP



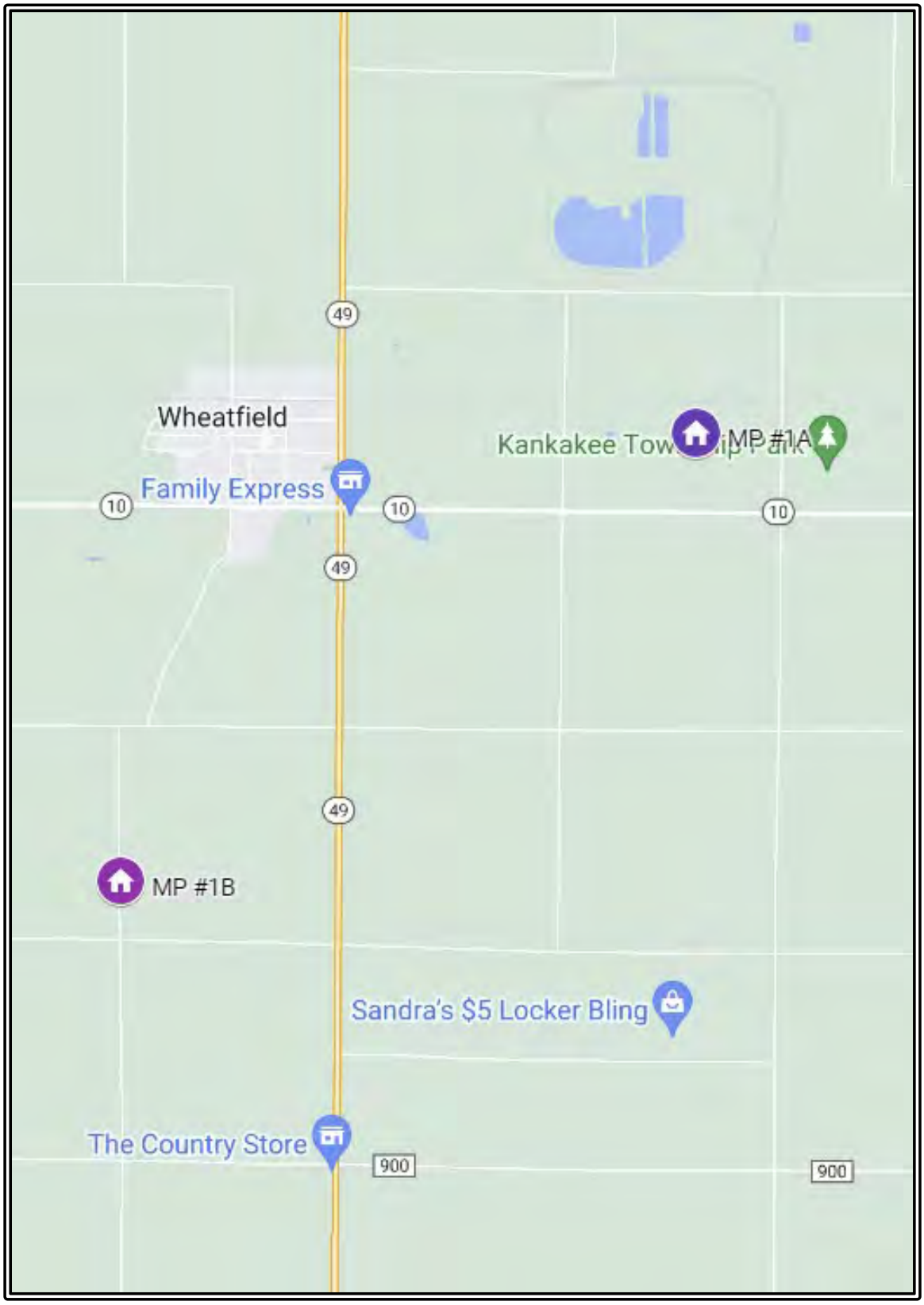
LASALLE COUNTY, ILLINOIS MATCHED PAIR LOCATION MAP



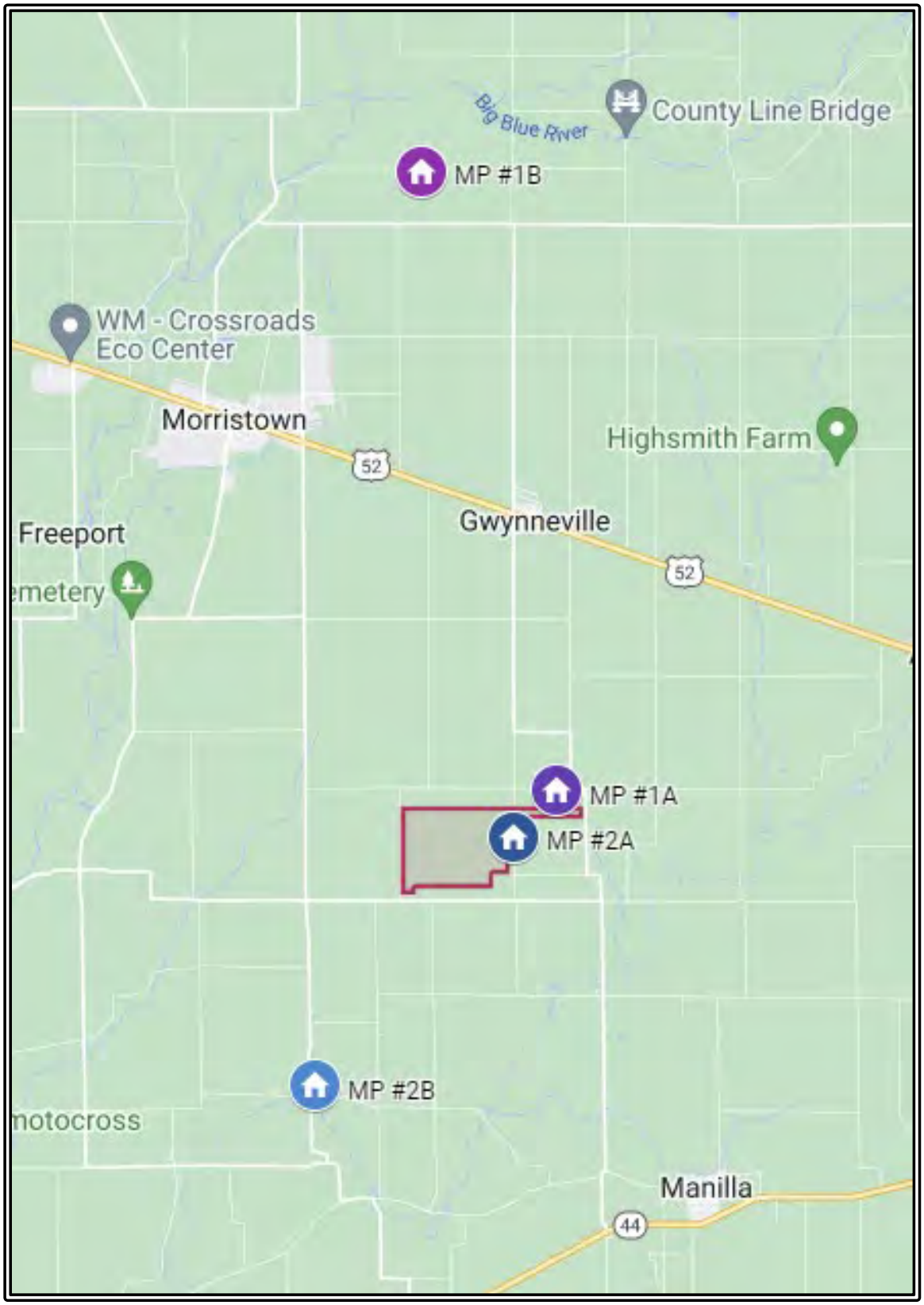
STARK COUNTY, INDIANA MATCHED PAIR LOCATION MAP



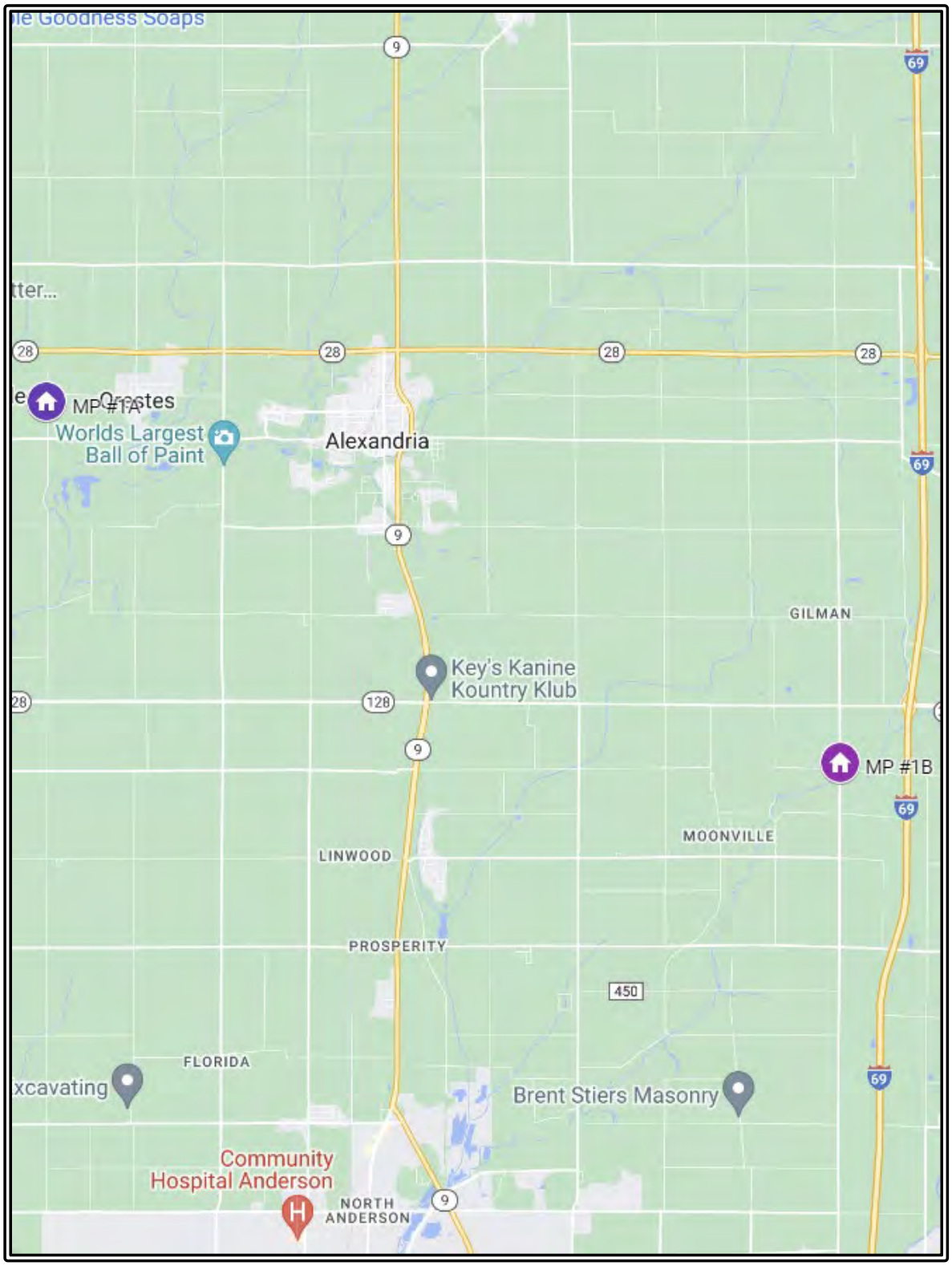
PULASKI COUNTY, INDIANA MATCHED PAIR LOCATION MAP



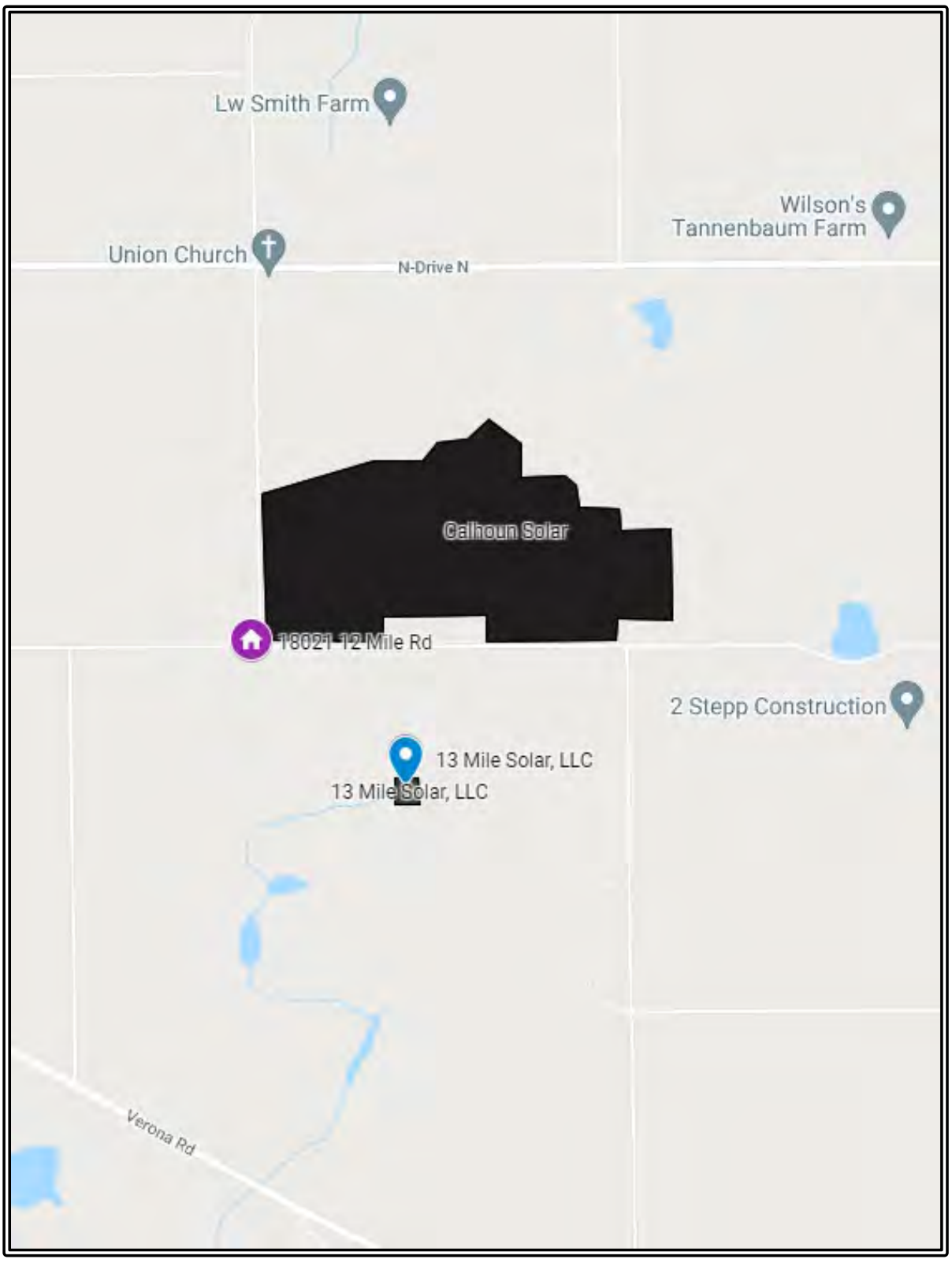
JASPER COUNTY, INDIANA MATCHED PAIR LOCATION MAP



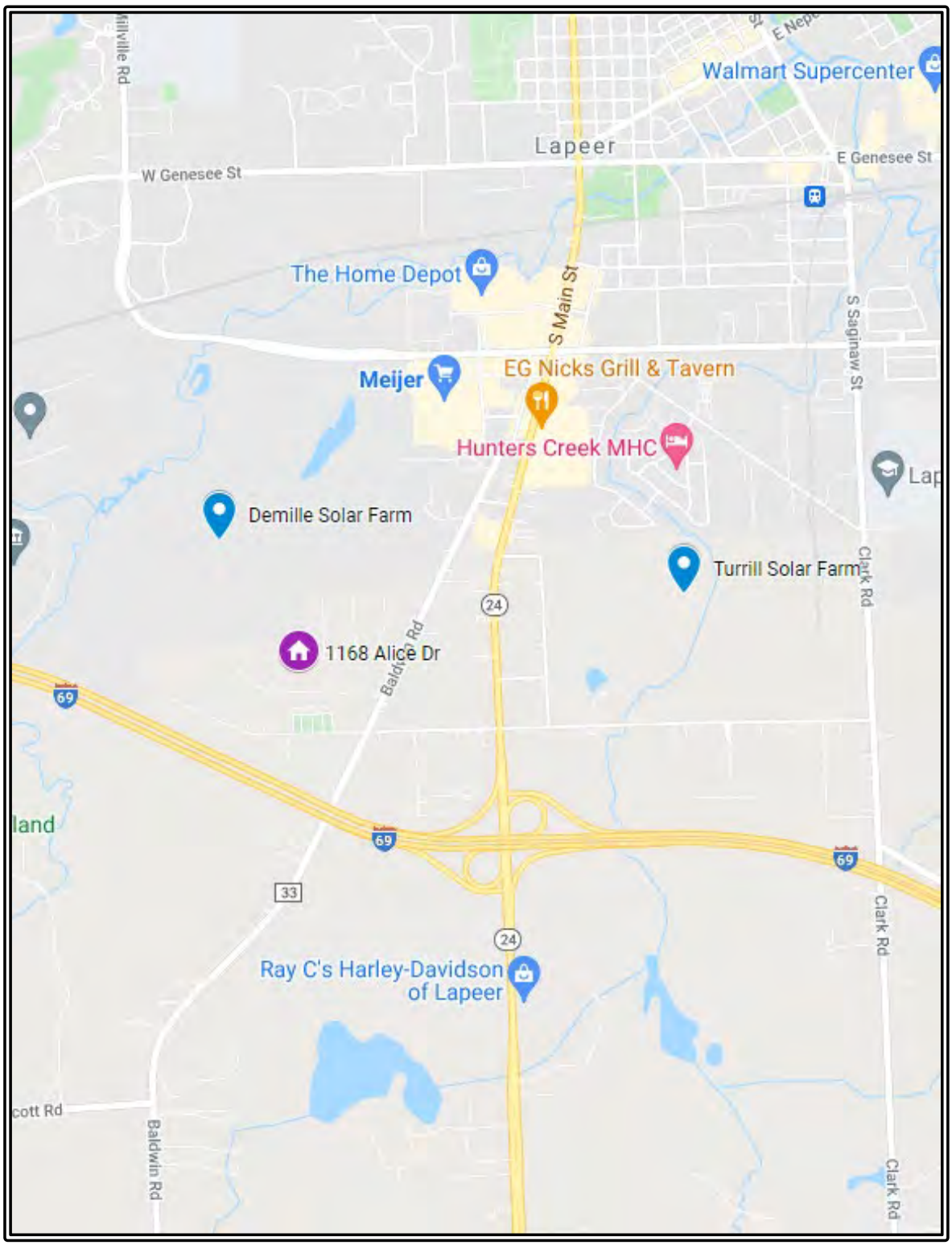
SHELBY COUNTY, INDIANA MATCHED PAIR LOCATION MAP



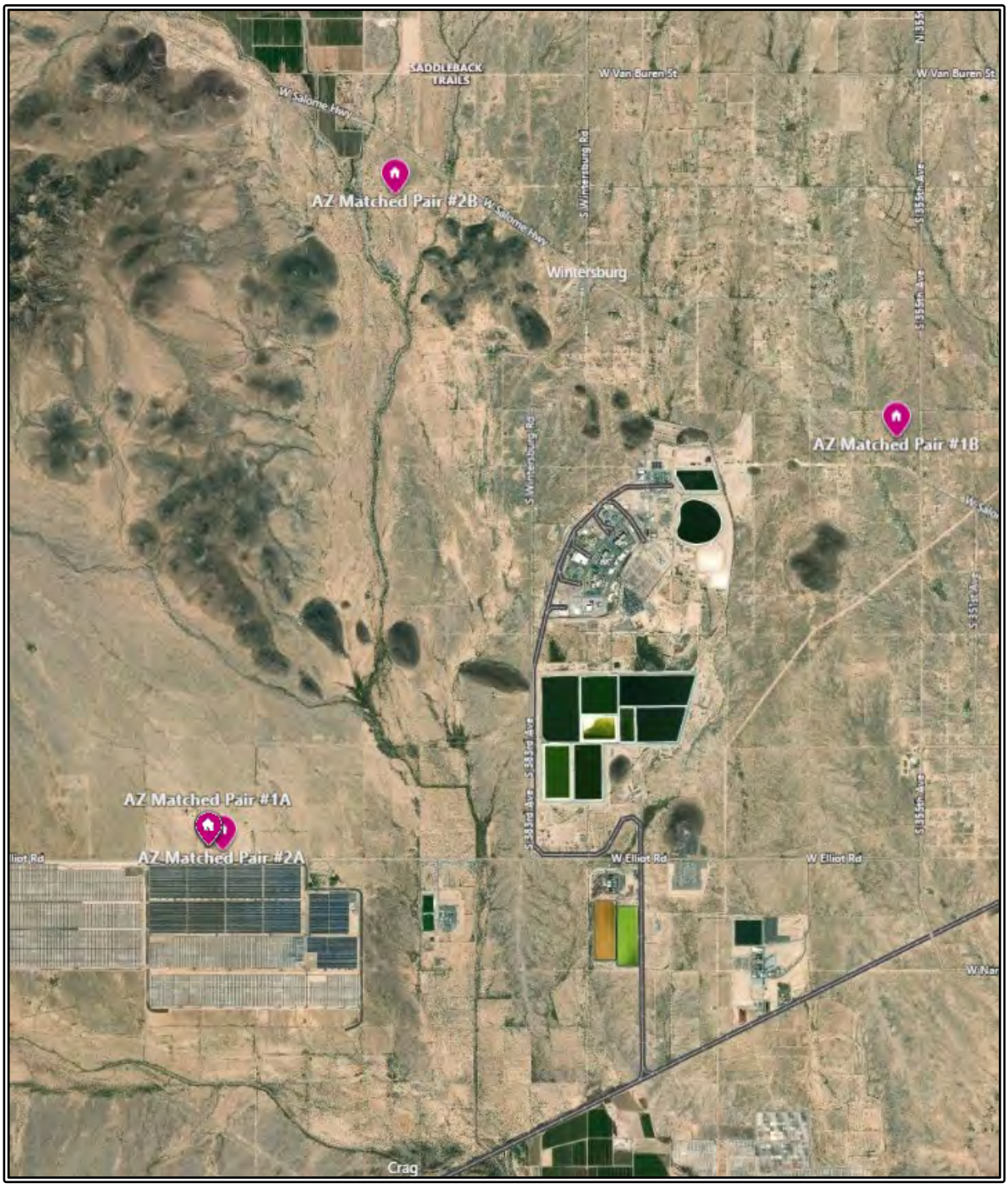
MADISON COUNTY, INDIANA MATCHED PAIR LOCATION MAP



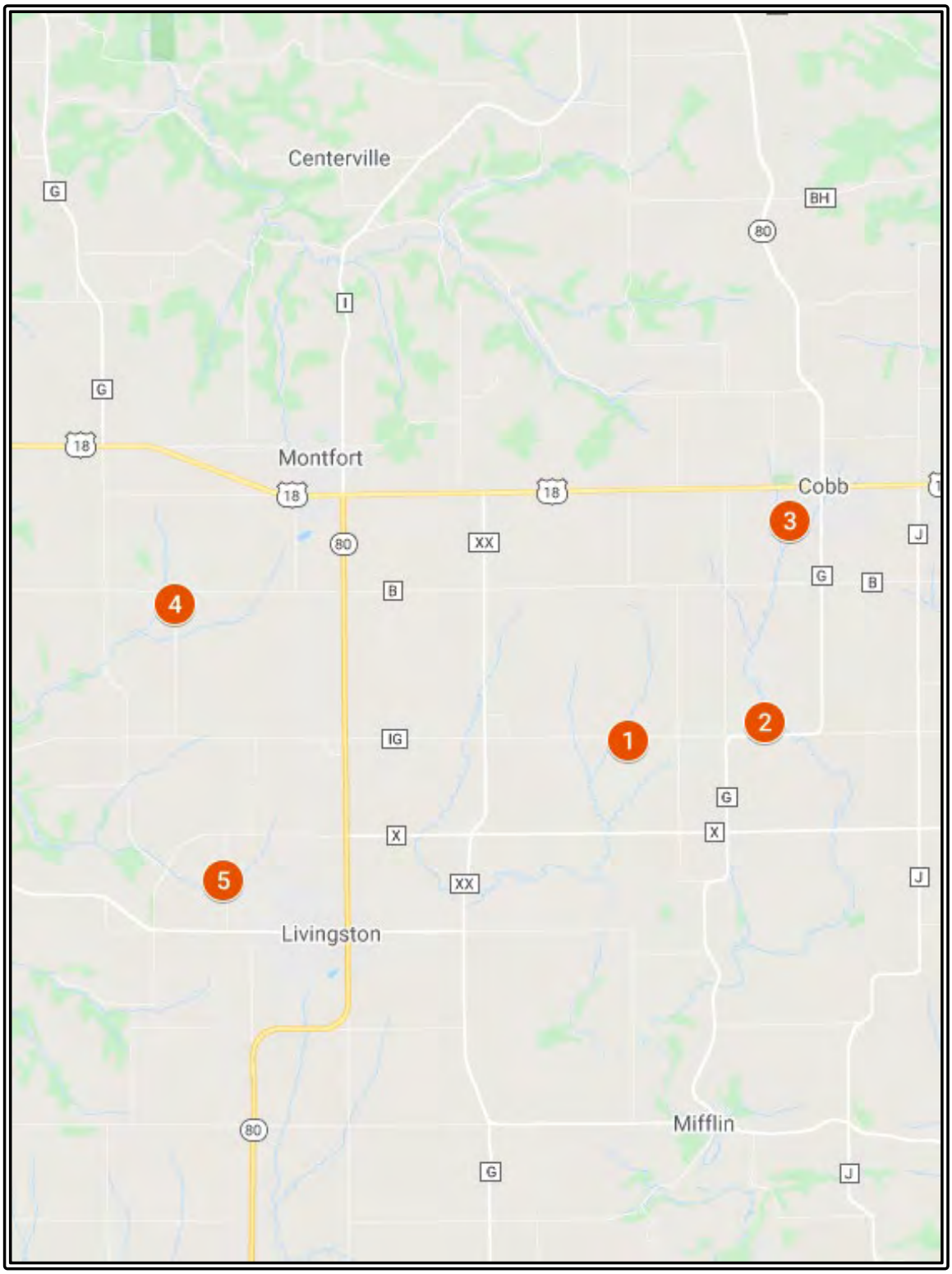
CALHOUN COUNTY, MICHIGAN MATCHED PAIR LOCATION MAP



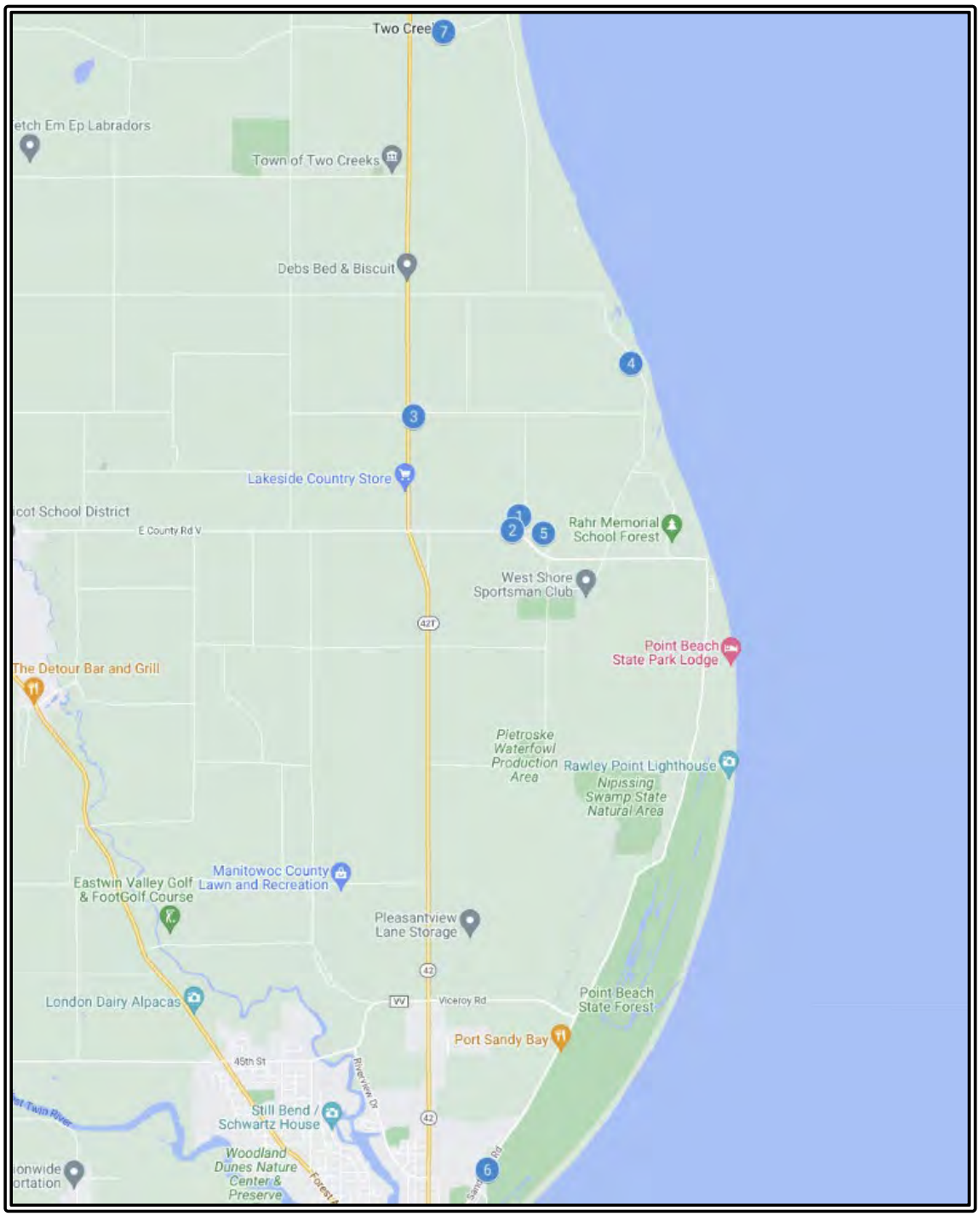
LAPEER COUNTY, MICHIGAN MATCHED PAIR LOCATION MAP



ARIZONA MATCHED PAIR LOCATION MAP



BADGER HOLLOW SOLAR FARM RECENT RESIDENTIAL SALES LOCATION MAP



TWO CREEKS SOLAR RECENT RESIDENTIAL SALES LOCATION MAP

NORTH BRANCH, MINNESOTA RECENT RESIDENTIAL SALES LOCATION MAP

NORTH BRANCH, MINNESOTA BEFORE AND AFTER SALES LOCATION MAP

ELIZABETH CITY, NORTH CAROLINA RECENT RESIDENTIAL SALES LOCATION MAP

GOLDSBORO, NORTH CAROLINA RECENT RESIDENTIAL SALES LOCATION MAP

GOLDSBORO, NORTH CAROLINA BEFORE AND AFTER SALES LOCATION MAP

IMPROVED SALE PHOTOGRAPHS

5317 13th Street NE

1399 75th Avenue NE

7165 Duelm Road NE

2015 65th Avenue NE

6130 Highway 95 NE

1362 65th Avenue NE

MINNESOTA COUNTY ASSESSOR SURVEY ANALYSIS

In June 2023, MaRous & Company conducted a survey of the supervisor of assessments or a staff member in 36 counties in Minnesota in which solar farms with 3.0 megawatts of capacity or more are currently in operation. As of the date of this report, there are more than 131 solar farms with a total capacity of greater than 777.2 megawatts within these counties, with additional farms being added each year. A study performed by the Solar Energy Industries Association (SEIA) states that Minnesota has a total of 1,782 megawatts of solar energy installed, as of 2022. The total capacity reported in the study includes utility, residential, and nonresidential scale solar farms. The interviews were intended to allow the assessment officials to share their experience regarding the solar farm(s) impact upon the market values and/or assessed values of surrounding properties.

Conclusions of the Study

Based on these interviews:

- Without exception, the interviewees reported that there was no market evidence to support a negative impact upon residential property values as a result of the development of, and the proximity to, a solar farm facility. In some counties, this results from the very rural nature of the area in which the projects are located.
- There have been no tax appeals in any county based upon solar farm-related concerns.
- In the past 18 months, the assessor's offices have not experienced a real estate tax appeal based upon solar farm-related concerns. As of the date of this report, there are more than 13 solar farms with more than 18 megawatts within these counties. There have been no reductions in assessed valuations related to photovoltaic panels.
- Residential assessed values have fluctuated consistently countywide as influenced by market conditions, with no regard for proximity to a solar farm.
- Agricultural properties are taxed based upon a productivity formula that is not impacted by market data and by external influences.

Scope of Project

The supervisors of assessments or a qualified staff member were interviewed. Each of the interviewees was familiar with the solar farm(s) located within each respective county. A map indicating the number of solar farms in each of these counties is included in this memorandum. A second map illustrates the location of the solar farms located in each of these counties. The following is the list of County Supervisors of Assessments contacted:

County	Number of Solar Farms in County	Population	County Assessor	CA Phone #	Solar Farm Project Name	Capacity (MW)	Year Online
Anoka	1	356,921	Diana Stellmach	(763) 323-5400	Anoka County MN CONX	3.4	2018
Benton	1	40,889	Brian Folden	(320) 968-5019	B.R. Sauk Rapids CSG	5.0	2017
Blue Earth	6	67,653	Ryan Short	(507) 304-4474	CF Novel Solar CSG Gardens Eleven, LLC	3.0	2017
					Corvus Community Solar	4.5	2018
					Eastwood Solar	5.5	2016
					Koppelman Sun CSG	5.0	2017
					Mapleton Community Solar	3.0	2017
					Novel - OYA of Mapleton	3.5	2018
Carver	6	105,089	Tony Rozek	(952) 361-1960	BentonSun CSG, LLC	5.0	2016
					Carver Gladden CSG	3.0	2018
					Lind Solar CSG	4.9	2017
					Nesvold Watertown Solar	5.0	2018
					West Waconia Solar	8.5	2016
					BentonSun Community Solar Garden	6.9	2017
Chippewa	2	11,953	Kerry Heim	(320) 269-7696	Crater Community Solar	3.0	2017
					Taurus Community Solar	3.6	2018
Chisago	11	56,579	Daryl Moeller	(651) 213-8550	Chisago Community Solar	4.0	2016
					North Star Solar	100.0	2016
					Eichtens Solar	3.9	2016
					Fox CSG, LLC	5.0	2018
					Gopher CSG	5.0	2018
					Lawrence Creek Solar	3.5	2016
					Lindstrom Solar CSG	3.0	2018
					Sunrise Community Solar	5.0	2016
					Taylors Falls CSG	5.0	2018
					Wyoming 2 CSG, LLC	5.0	2018
					Chisago Community Solar Gardens	4.0	2017
Dakota	10	429,021	Joel Miller	(651) 438-4200	Dakota Solar	3.0	N/A
					Empire Solar	7.0	2016
					Equuleus Community Solar Gardens	5.0	2017
					Farmington Holdco Solar	5.0	2017
					Hastings Solar	4.5	2016
					Northfield Community Solar	5.0	2016
					Rosemount Community Solar	5.0	2016
					SunE Feely 1 CSG, LLC	5.0	2018
					Ursa Community Solar	5.0	2017
					Rosemount Community Solar Gardens	5.0	2017

Dodge	5	20,934	Ryan DeCook	(507) 635-6245	Aries Community Solar	4.0	2017
					Dodge Center Solar	6.5	2016
					Dodge Holdco Solar	5.0	2017
					DodgeSun CSG	5.0	2017
					DodgeSun Community Solar Garden	5.0	2016
Douglas	1	38,141	Stacy Honkomp	(320) 762-3884	Novel OYA of Osakis	5.0	2018
Fillmore	1	21,067	Jason McCaslin	(507) 765-3868	Fountain Solar	3.0	N/A
Goodhue	4	46,340	Lavon Augustine	(651) 385-3040	Foreman's Hill Community Solar	5.0	2018
					Pine Island Solar	4.0	2016
					Red Wing Solar	4.9	2016
					Zumbro Solar	5.0	2016
Hennepin	2	1,266,000	No name given	(612) 348-3046	B.R. Corcoran CSG	5.0	2017
					Corcoran CSG	5.0	2019
Isanti	1	40,596	Elisha Long	(763) 689-2752	Athens MN CONX	6.6	2018
Kandiyohi	1	43,199	Val Svor	(320) 231-6200	Atwater Solar	4.0	2016
Le Sueur	6	28,887	Shayne Bender	(507) 357-8213	CF Novel Solar CSG Gardens Eleven, LLC	3.0	2017
					LeSun CSG, LLC	5.0	2018
					Red Maple Solar	3.0	2018
					Waterville Solar Holdings LLC	5.0	2018
					LeSun Community Solar Garden	5.0	2016
					Waterville Community Solar Garden	5.0	2016
Lyon	1	25,474	Mark Buysse	(507) 537-6731	Marshall Solar Energy Center	62.3	N/A
McLeod	2	35,893	Sue Schulz	(320) 864-1254	Andromeda Community Solar	4.5	2017
					Montgomery Winsted CSG	3.0	2017
Morrison	1	33,064	Nick Wetzel	(320) 632-0151	Camp Ripley Solar Farm	10.0	N/A
Nicollet	2	34,274	Lorna Sandvik	(507) 934-7062	Lake Emily Solar	4.5	2016
					Rengstorf Solar CSG	5.0	2017
Olmsted	2	158,293	No name given	(507) 328-7670	Hwy 14 Holdco Solar CSG	5.0	2017
					Pine Island Solar CSG	3.9	2017
Pipestone	2	9,191	Christine McChesney	(507) 825-1150	Capella Community Solar	4.5	2017
					Johnson Solar CSG	5.0	2018
Pope	3	11,048	Andrea Nadeau	(320) 634-7715	Armstrong Solar	3.0	2018
					PopeSun CSG, LLC	5.0	2017
					Vega Community Solar	5.0	2017
Redwood	2	15,261	Joel Mertens	(507) 637-4008	Morgan Community Solar	3.0	2017
					RWSun Community Solar Garden	4.0	2016
Renville	1	14,652	Doug Bruns	(320) 523-3645	Kramer Solar CSG	3.3	2017
Rice	6	66,972	Joshua Schoen	(507) 332-6102	Dundas Solar Holdings LLC CSG	5.0	2018
					Northfield Holdco CSG	5.0	2017
					SunE Stolee CSG, LLC	3.0	2018
					Webster Holdco Solar CSG	5.0	2017
					West Faribault Solar	5.5	2016
					Dundas Community Solar Garden	5.0	2016

Scott	1	97,238	Michael J. Thompson	(952) 496-8150	Blue Lake Solar	3.9	2016
Sherburne	8	97,238	Michelle Moen	(763) 765-4901	Big Lake Holdco Solar CSG	5.0	2017
					Big Lake Project	5.0	2018
					CF Novel Solar CSG Gardens Seven, LLC	3.3	2017
					Hammer CSG	4.8	2018
					Marmas Solar CSG	5.0	2018
					Sherburne Community Solar	5.0	2018
					Sherburne North Project	5.0	2018
					Tiller CSG	5.0	2018
Sibley	1	14,892	Laura Hacker	(507) 237-4078	Gibbon Solar	3.3	2018
Stearns	12	161,075	Jake Pidde	(320) 656-3680	Albany Solar	10.0	2016
					B.R. Sartell CSG	3.0	2017
					Lahr 1, LLC	5.0	2018
					Michael Solar	3.0	2017
					Orion Community Solar	3.0	2017
					Paynesville Community Solar	5.0	2017
					Paynesville Solar	10.0	2016
					Richmond CSG	5.0	2017
					St. Cloud Solar CSG	5.0	2018
					WakeSun CSG, LLC	3.0	2017
					Paynesville Community Solar Gardens	4.0	2017
					WakeSun Community Solar Garden	4.0	2017
Steele	2	36,649	Tom Reinke	(507) 444-7445	CF Novel Solar CSG Gardens Five, LLC	3.4	2017
					Lemond Solar	5.0	2017
Wabasha	3	21,627	Jeff Wagner	(651) 565-3669	Carina Community Solar	3.6	2018
			(Deputy)		Wabasha Holdco Solar CSG	3.0	2017
					ZumbroSun Community Solar Garden	5.0	2016
Waseca	3	18,740	Brock Nelson	(507) 835-0640	Waseca Solar	10.0	2016
					WasecaSun	3.4	2018
					WasecaSun Community Solar Garden	5.0	2016
Washington	6	262,440	Matt DeFlorin	(651) 275-7520	CGSun, LLC	4.0	2017
					Cottage Grove CSG, LLC	5.0	2018
					Cottage Grove Project CSG	4.9	2018
					Forest Lake Solar CSG	5.0	2017
					Gemini Community Solar	3.0	2017
					Scandia CSG	5.0	2018
Winona	1	50,484	Lindsey Brandt	(507) 457-6300	Rollingstone Holdco CSG	4.8	N/A

Wright	13	138,377	Keith Tryley	(763) 682-8957	Annandale Solar	6.0	2016
					Lake Pulaski Solar	7.5	2016
					Monticello Project CSG	5.0	2018
					Montrose Solar	3.5	2016
					MontSun	5.0	2017
					Tatanka Wi	7.1	2017
					WaveSun	5.0	2017
					Wright Cuddyer	4.0	2018
					WrightSun CSG, LLC	5.0	2018
					MontSun Community Solar Garden	7.1	2017
					SaintSun Community Solar Garden	5.0	2016
					WaveSun Community Solar Garden	7.4	2017
					WrightSun Community Solar Garden	5.0	2017
Yellow Medicine	1	9,814	Connie Erickson	(320) 564-3132	Montevideo Solar LLC, CSG	5.0	2018

Residential Market Values

Without exception, the interviewees reported that there was no market evidence to support a negative impact upon residential property values as a result of the development of, and the proximity to, a solar farm facility. Either as a request by a county board, in an attempt to appropriately assess newly constructed residences, or to support current assessed values, the supervisors of assessments have been particularly attentive to market activity in the area of the solar farms.

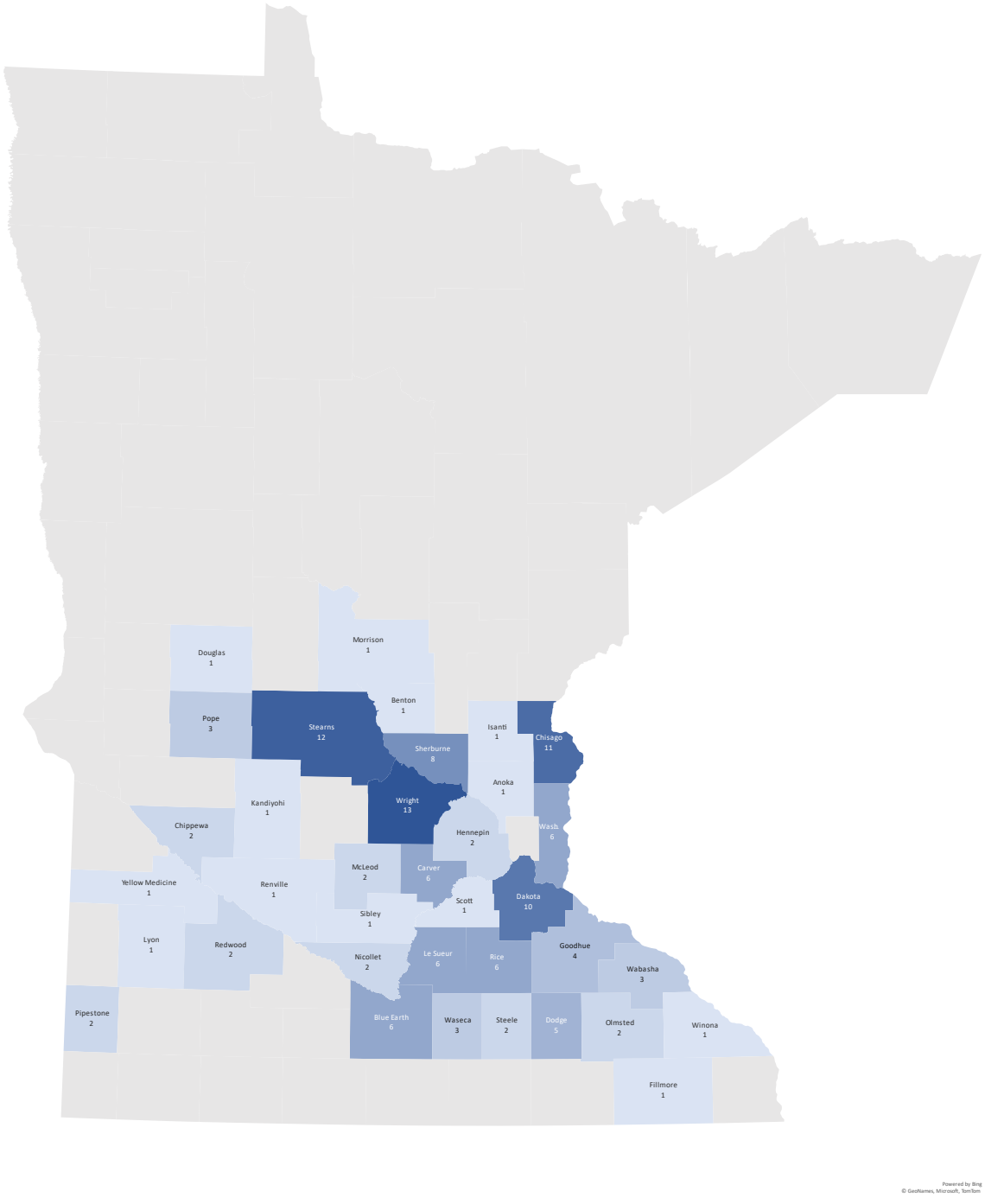
Residential Assessed Values, Complaints/Tax Appeal Filings

The assessors reported that there have been no tax appeal filings based upon solar farm issues. Consistently, the assessors reported that whatever initial concern there may have been regarding property values during the planning and approval stages of the various solar farms had dissipated once the solar farm was constructed. Repeatedly, the assessors would state that the revenue that would come into the county and to each individual farmer would outweigh any initial concern that the residents would have about the solar farms joining their communities.

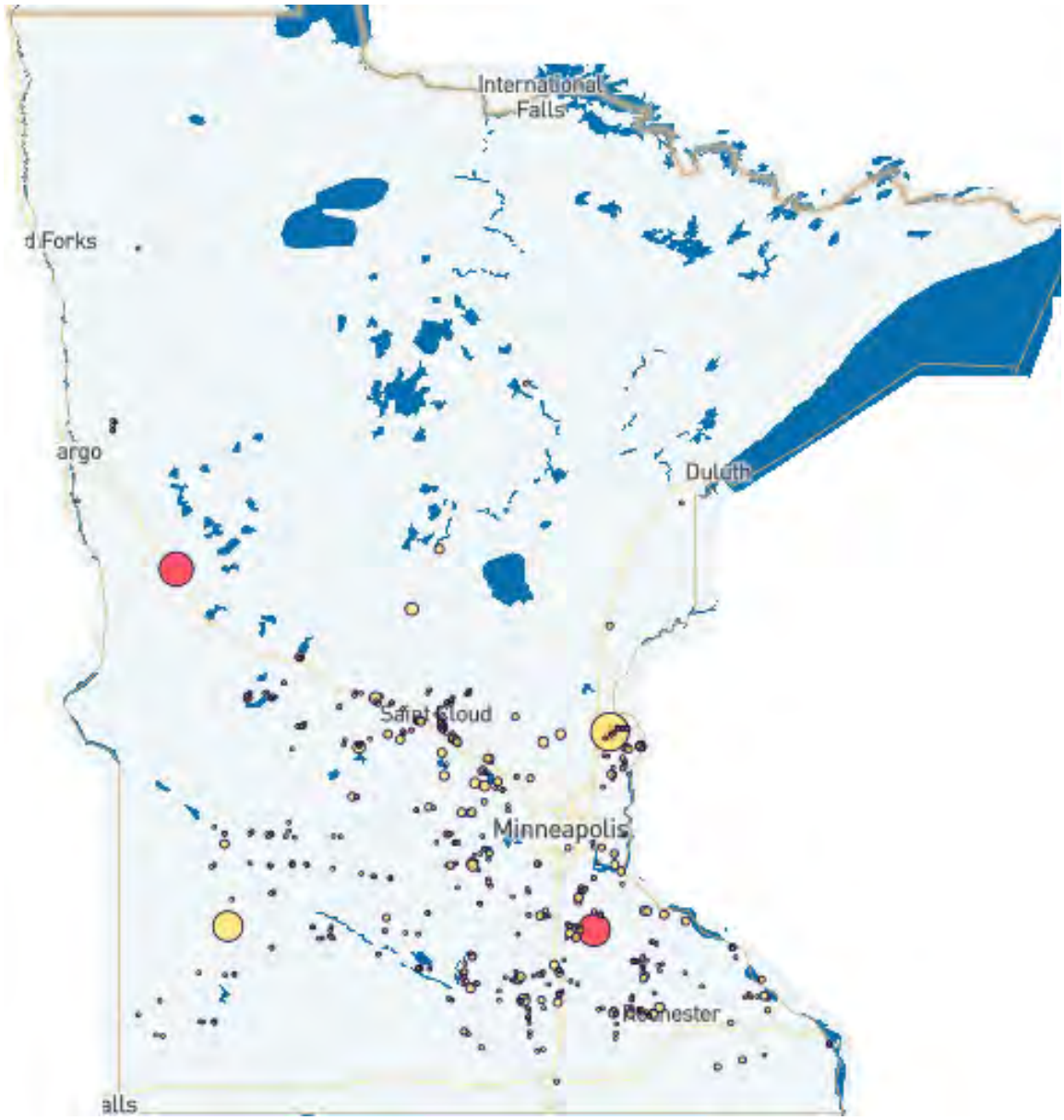
Agricultural Values/Assessed Values

The assessed values of agricultural properties are established based upon a productivity formula and are not driven by market data. Reportedly, assessed values of agricultural properties have been steady or increasing in recent years and are projected to continue increasing for the near future. The assessors reported that no major complaints have been received and/or no tax appeal filings have been filed for agricultural properties within a solar farm footprint.

Based on this survey, it does not appear that the supervisors of assessments in the surveyed counties in Minnesota have reason to believe that the location of photovoltaic panels in their county has had a negative impact on property values.



MAP OF MINNESOTA COUNTIES SURVEYED
SOLAR FARM COUNT BY COUNTY
SOLAR FARMS WITH 3.00-MEGAWATT CAPACITY OR HIGHER



Note: As depicted on this map, the locations of certain solar farms are approximations. In some instances, the solar farms are incorrectly shown to be located in adjacent counties. This map, as of the date of this survey, also shows the locations of smaller solar farms, but for the accuracy of this study the focused on the farms with a capacity of 3.00 megawatt or higher.

Lawrence Berkeley National Lab Study - *Shedding light on large-scale solar impacts: An analysis of property values and proximity to photovoltaics across six U.S. states*

MaRous & Company has reviewed the study, *Shedding light on large-scale solar impacts: An analysis of property values and proximity to photovoltaics across six U.S. states*[27], and has watched the Webinar presented by the authors. While great respect is given to Ben Hoen, and Lawrence Berkely National Lab, several significant issues were apparent after investigation of the article. Michael S. MaRous has consulted on over 40 solar projects throughout the US, most with preparing full value impact studies. He is a Licensed Certified Appraiser in 6 states and holds the MAI designation. Michael has testified as an expert witness over 100 times in Circuit and Federal Courts, and appeared before plan commissions, county boards, state public utility commissions, and other venues.

Simple conclusion, there are many factors that impact value of residential properties, but without specific study of individual residential properties, the 1.5% difference in value that was isolated by the authors of the report, is a percentage that is impossible to support based on extensive experience. Initial bullet points and input has been provide based on appraisals of over 12,000 properties, involvement with over 40 solar projects (community and large-scale), review of published data, direct interviews with assessors and brokers that have experience with value impact of proximate solar arrays on residential values, preparing qualitative and quantitative property adjustments, and my experience of participating in significant cross examinations validating my conclusions. Therefore, without performing individually specific studies, a 1.5% adjustment is too small of a percentage to support and quantify significance.

The main author appears to be Salma Elmallah, not an appraiser but rather a Grad Student. None of the authors appear to be licensed appraisers.

Key Areas to Consider

- A solar farm is generally based on 6-9 acres of land needed per megawatt achieved. This is somewhat consistent in both large-scale and community solar. It is influenced by the shape of the solar footprint, road setbacks, residential setbacks, etc. A fair average is 7.5 acres needed per megawatt. Ben Hoen states in the LBNL study that for an average size of a 36-acre site. Therefore, this would be equivalent to a 4.8-megawatt solar farm, which is only comparable to a typical community solar project.

[27] *Salma Elmallah, Ben Hoen, K. Sydny Fujita, Dana Robson, Eric Brunner, Shedding light on large-scale solar impacts: An analysis of property values and proximity to photovoltaics across six U.S. states, Energy Policy,Volume 175, 2023, 113425, ISSN 0301-4215, https://doi.org/10.1016/j.enpol.2023.113425.*

- Market Conditions constitute a need for the biggest adjustment. The study covered sales from January 2004 to September 2020. Early 2008 through 2010 is considered The Great Real Estate Recession, where many markets reflected a 20-30% drop in value. And then, due to the economic volatility of COVID-19, the market was flat from March 2020 to July 2020, then went up as much as 10% from August 2020-September in many of the stronger markets. These time adjustments are almost impossible to do on a mass basis and were not reflected in the study. As an example, a contract (or meeting of the minds) might have been negotiated in July 2020, but did not close until September 2020. If the only data used in the study was the closing date of September 2020, the value may have gone up 3-5% between the two periods, and the data would be extremely skewed and tainted.

Summary of the Variables That Would Need to be Considered

- Screening, setbacks, and fencing. Was there differentiation between road setbacks of 20 feet or 100 feet between projects? Were there adjustments for 75- or 500-foot setbacks from residences? What was the adjustment for screening (berms, evergreens, etc.) These factors were not considered in either the report or the webinar.
- Paved roads vs gravel roads? This is a big adjustment in rural residential areas and can be a 5-10% adjustment. This factor was not considered.
- Lot size differences? The value of the land or size of the land can have significant impacts on value. Adjustments were not made for lot sizes.
- Adjacent amenities adjustments (rivers, woods, parks, golf courses, etc.)? These factors were mentioned, but adjustments were not made for amenities, as explained in the webinar.
- Quality of modernization of houses? This can be a 10-30% adjustment by the market. Adjustments were not made for modernization.
- Differences in school district adjustments? Again, even though locations of schools can be close to one another, the school districts can be different and adjustments for superior school districts can easily exceed 5%. Adjustments were not made for school districts.
- Physical condition of improvements adjustments? Adjustments were not made for physical condition of improvements.
- Adjustments for a high-priced neighborhood to a lower-price neighborhood? Adjustments were not made for neighborhood prices.
- Age of house adjustment? This appears to be considered but adjustments are not made for renovations and remodeling.
- Were non-arm’s length sales eliminated? How was this issue vetted? CoreLogic is the data source used, which is not typically used by Appraisers, who generally use MLS data. Based on comments made by the authors in the webinar, arm’s length issues were not considered.
- Was the proximity to amenities (shopping, schools, parks, medical services) adjusted? Adjustments were not made for proximity to amenities.
- How were the employment issues adjusted? Adjustments were not made for employment issues.

- Was the data verified with brokers, market participants, assessors, etc.? The property/sales data was not verified.

Minnesota, New Jersey, and North Carolina were the only states where the authors found a negative impact on value. However, one of the largest solar farms in Minnesota with significant sales history is located in North Branch, Minnesota. This 100-megawatt solar farm was opened in 2018. The past and current Chisago County Assessors have studied the project and have found no negative impact on value for proximate residential properties from sale transaction data before and after opening of the project, at least through 2022. MaRous & Company has verified this information and reviewed Matched Pair Sales to support the Assessors opinion that the North Star Solar Farm had no negative impact on value. This type of research was not done in the LBNL study.

As reflected by the authors in the Webinar; there needs to be more research, more analysis, more valuation input in order to support any negative impact on value for solar farms. The large amount of data was suitable, and it was focused on small community type solar farms in typically suburban locations. Furthermore, a 1.5% reduction is too small of a percentage to be accurately supported with market data evidence.

MICHAEL S. MAROUS
STATEMENT OF QUALIFICATIONS

Michael S. MaRous, MAI, CRE, is president and owner of MaRous and Company. He has appraised more than $15 billion worth of primarily investment-grade real estate in more than 25 states. In addition to providing documented appraisals, he has served as an expert witness in litigation proceedings for many law firms; financial institutions; corporations; builders and developers; architects; local, state, county, and federal governments, and agencies; and school districts in the Chicago metropolitan area. His experience in partial interest, condemnation, damage impact, easement (including aerial and subsurface), marital dissolutions, bankruptcy proceedings, and other valuation issues is extensive. He has provided highest and best use, marketability, and feasibility studies for a variety of properties. Many of the largest redevelopment areas and public projects, including Interstate 355, the Chicago O'Hare International Airport expansion, the Chicago Midway International Airport expansion, and the McCormick Place expansion, are part of Mr. MaRous' experience. Mr. MaRous also has experience in regard to mediation and arbitration proceedings. Also, he has purchased and developed real estate for his own account.

APPRAISAL AND CONSULTATION EXPERIENCE

Industrial Properties

Business Parks	Manufacturing Facilities	Self-storage Facilities
Distribution Centers	Research Facilities	Warehouses

Commercial Properties

Auto Sales/Service Facilities	Gasoline Stations	Restaurants
Banquet Halls	Hotels and Motels	Shopping Centers
Big Box Stores	Office Buildings	Theaters

Special-Purpose Properties

Bowling Alleys	Nurseries	Tank Farms
Cemeteries	Riverboat Gambling Facilities	Underground Gas Aquifers
Farms	Schools	Utility Corridors
Golf Courses	Stadium Expansion Issues	Waste Transfer Facilities
Lumber Yards	Solar Farms	Wind Farms

Residential Properties

Apartment Complexes	Condominium Developments	Subdivision Developments
Condominium Conversions	Single-family Residences	Townhouse Developments

Vacant Land

Agricultural	Easements	Rights of Way
Alleys	Industrial	Streets
Commercial	Residential	Vacations

Clients

Corporations	Law Firms	Private Parties
Financial Institutions	Not-for-profit Associations	Public Entities

EDUCATION

B.S., Urban Land Economics, University of Illinois, Urbana-Champaign
Continuing education seminars and programs through the Appraisal Institute
and the American Society of Real Estate Counselors, and real estate brokerage classes

PUBLIC SERVICE

Mayor, City of Park Ridge, Illinois (2003-2005)
Alderman, City of Park Ridge, including Liaison to the Zoning Board of Appeals and Planning and Zoning and Chairman of the Finance and Public Safety Committees (1997-2005)

PROFESSIONAL AFFILIATIONS AND LICENSES

Appraisal Institute, MAI designation, Number 6159
Counselors of Real Estate, CRE designation
Illinois Certified General Real Estate Appraiser, License Number 553.000141 (9/25)
Indiana Certified General Real Estate Appraiser, License Number CG41600008 (6/26)
Wisconsin Certified General Real Estate Appraiser, License Number 1874-10 (12/25)
Minnesota Certified General Real Estate Appraiser, License Number 40330656 (8/26)
Iowa Certified General Real Estate Appraiser, License Number CG03468 (6/25)
South Dakota Certified General Real Estate Appraiser, License Number 1467CG (9/24)
Michigan Certified General Real Estate Appraiser, License Number 1205004587 (6/25)
Licensed Real Estate Broker (Illinois)

PROFESSIONAL ACTIVITIES

Mr. MaRous is past president of the Chicago Chapter of the Appraisal Institute. He is former chair and vice chair of the National Publications Committee and has sat on the board of The Appraisal Journal. In addition, he has served on and/or chaired more than 15 other committees of the Appraisal Institute, the Society of Real Estate Appraisers, and the American Institute of Real Estate Appraisers.

Mr. MaRous served as chair of the Midwest Chapter of the Counselors of Real Estate in 2006 and 2007 and has served on the National CRE Board since 2011. He sat on the Midwest Chapter Board of Directors, the Editorial Board of Real Estate Issues, and on various other committees.

Mr. MaRous also is past president of the Illinois Coalition of Appraisal Professionals. He also has been involved with many other professional associations, including the Real Estate Counseling Group of America, the Northwest Suburban Real Estate Board, the National Association of Real Estate Boards, and the Northern Illinois Commercial Association of Realtors.

PUBLICATIONS AND PROFESSIONAL RECOGNITION

Mr. MaRous has spoken at more than 20 programs and seminars related to real estate appraisal and valuation.

Author

"Low-income Housing in Our Backyards," *The Appraisal Journal*, January 1996
"The Appraisal Institute Moves Forward," *Illinois Real Estate Magazine*, December 1993
"Chicago Chapter, Appraisal Institute," *Northern Illinois Real Estate Magazine*, February 1993
"Independent Appraisals Can Help Protect Your Financial Base," *Illinois School Board Journal*, November-December 1990
"What Real Estate Appraisals Can Do for School Districts,"
School Business Affairs, October 1990

Awards

Appraisal Institute - George L. Schmutz Memorial Award, 2001
Chicago Chapter of the Appraisal Institute – Heritage Award,
2000
Chicago Chapter of the Appraisal Institute - Herman O. Walther, 1987 (Distinguished Chapter Member)

Reviewer or Citation in the Following Books

Rural Property Valuation, 2017
Real Estate Damages, 1999, 2008, and 2016
Golf Property Analysis and Valuation, 2016
Dictionary of Real Estate Appraisal, Fourth Edition, 2002 and Sixth Edition, 2015
Market Analysis for Real Estate, 2005 and 2014
Appraisal of Real Estate, Twelfth Edition, 2001, Thirteenth Edition, 2008, Fourteenth Edition, 2013
Shopping Center Appraisal and Analysis, 2009
Subdivision Valuation, 2008
Valuation of Apartment Properties, 2007
Valuation of Billboards, 2006
Appraising Industrial Properties, 2005
Valuation of Market Studies for Affordable Housing, 2005
Valuing Undivided Interest in Real Property: Partnerships and Cotenancies, 2004
Analysis and Valuation of Golf Courses and Country Clubs, 2003
Valuing Contaminated Properties: An Appraisal Institute Anthology, 2002
Hotels and Motels: Valuation and Market Studies, 2001
Land Valuation: Adjustment Procedures and Assignments, 2001
Appraisal of Rural Property, Second Edition, 2000
Capitalization Theory and Techniques, Study Guide, Second Edition, 2000
Guide to Appraisal Valuation Modeling Land, 2000
Appraising Residential Properties, Third Edition, 1999
Business of Show Business: The Valuation of Movie Theaters, 1999
GIS in Real Estate: Integrating, Analyzing and Presenting Locational Information, 1998
Market Analysis for Valuation Appraisals, 1995

REPRESENTATIVE WORK OF MICHAEL S. MAROUS

Headquarters/Corporate Office Facilities in Illinois
Fortune 500 corporation facility, 200,000 sq. ft., Libertyville
Corporate headquarters, 300,000 sq. ft. and 500,000 sq. ft., Chicago
Fortune 500 corporation facility, 450,000 sq. ft., Northfield
Major airline headquarters, 1,100,000 million sq. ft. on 47 acres, Elk Grove Village
Former communications facility, 1,400,000 million sq. ft. on 62 acres, Skokie and Niles
Corporate Headquarters, 1,500,000+ sq. ft., Lake County
Former Sears Headquarters Redevelopment Project, Chicago

Office Buildings in Chicago
401 South LaSalle Street, 140,000 sq. ft.
134 North LaSalle Street, 260,000 sq. ft.
333 North Michigan Avenue, 260,000 sq. ft.
171 West Randolph Street, 360,000 sq. ft.
20 West Kinzie Street, 405,000 sq. ft.
55 East Washington Street, 500,000 sq. ft.
10 South LaSalle Street, 870,000 sq. ft.
222 West Adams Street, 1,000,000 sq. ft.
141 West Jackson Boulevard, 1,065,000 sq. ft.
333 South Wabash Avenue, 1,125,000 sq. ft.
155 North Wacker Drive, 1,406,000 sq. ft.
70 West Madison Street, 1,430,000 sq. ft.
111 South Wacker Drive, 1,454,000 sq. ft.
175 West Jackson Boulevard, 1,450,000 sq. ft.
227 West Monroe Street, 1,800,000 sq. ft.
10 South Dearborn Street, 1,900,000 sq. ft.

Hotels in Chicago
One West Wacker Drive (Renaissance Chicago Hotel)
10 East Grand Avenue (Hilton Garden Inn)
106 East Superior Street (Peninsula Hotel)
120 East Delaware Place (Four Seasons)
140 East Walton Place (The Drake Hotel)
160 East Pearson Street (Ritz Carlton)
301 East North Water Street (Sheraton Hotel)
320 North Dearborn Street (Westin Chicago River North)
401 North Wabash Avenue (Trump Tower)
505 North Michigan Avenue (Hotel InterContinental)
676 North Michigan Avenue (Omni Chicago Hotel)
800 North Michigan Avenue (The Park Hyatt)

Large Industrial Properties in Illinois
Large industrial complexes, 400,000 sq. ft., 87th Street and Greenwood Avenue, Chicago
Distribution warehouse, 580,000 sq. ft. on 62 acres, Champaign
Publishing house, 700,000 sq. ft. on 195 acres, U.S. Route 45, Mattoon
AM Chicago International, 700,000± sq. ft. on 41 acres, 1800 West Central Road, Mount Prospect
Nestlé distribution center, 860,000 sq. ft. on 153 acres, DeKalb
U.S. Government Services Administration distribution facility, 860,000 sq. ft., 76th Street and Kostner Avenue, Chicago Fortune 500 company distribution center, 1,000,000 sq. ft., Elk Grove Village
Caterpillar Distribution Facility, 2,231,000 sq. ft., Morton
Self-storage facilities, various Chicago metropolitan locations

Airport Related Properties
Mr. MaRous has performed valuations on more than 100 parcels in and around Chicago O'Hare International Airport, Chicago Midway International Airport, Palwaukee Municipal Airport, Chicago Aurora Airport, DuPage Airport, and Lambert-St. Louis International Airport

Vacant Land in Illinois

15 acres, office, Northbrook
20 acres, residential, Glenview
25 acres, Hinsdale
55 acres, mixed-use, Darien
68 acres, Roosevelt Road and the Chicago River
75 acres, I-88 at I-355, Downers Grove
100± acres, various uses, Lake County
100 acres, Western Springs
140 acres, Flossmoor
142 acres, residential, Lake County
160 acres, residential, Cary
200 acres, mixed-use, Bartlett
250 acres, Island Lake
450 acres, residential, Wauconda
475± acres, various uses, Lake County
650 acres, Hawthorne Woods
650 acres, Waukegan/Libertyville
800 acres, Woodridge
900 acres, Matteson
1,000± acres, Batavia area
2,000± acres, Northern Lake County
5,000 acres, southwest suburban Chicago area
Landfill expansion, Lake County

Retail Facilities

20 Community shopping centers, various Chicago metropolitan locations
Big box uses, various Chicago metropolitan locations and the Midwest
Gasoline Stations, various Chicago metropolitan locations
More than 50 single-tenant retail facilities larger than 80,000 sq. ft., various Midwest metropolitan locations

Residential Projects

Federal Square townhouse development project, 118 units, $15,000,000+ sq. ft. project, Dearborn Place, Chicago
Marketability and feasibility study, 219 East Lake Shore Drive, Chicago
Riverview II, Chicago; Old Town East and West, Chicago; Museum Park Lofts II, Museum Park Tower 4, University Commons, Two River Place, River Place on the Park, Chicago,
Timber Trails, Western Springs, Illinois

Market Impact Studies

Land-fill projects in various locations
Quarry expansions in Boone and Kendall counties
Commercial development and/or parking lots in various communities
Zoning changes in various communities
Waste transfer stations in various communities

Business and Industrial Parks

Chevy Chase Business Park, 30 acres, Buffalo Grove
Carol Point Business Center, 300-acre industrial park, Carol Stream, $125,000,000+ project
Internationale Centre, approximately 1,000 acre-multiuse business park, Woodridge

Properties in Other States

330,000 sq. ft., Newport Beach, California
Former government depot/warehouse and distribution center, 2,500,000 sq. ft. on 100+ acres, Ohio
Shopping Center, St. Louis, Missouri, Office Building, Clayton, Missouri
Condominium Development, South Dakota, South Dakota
Hormel Foods, various Midwest locations
Wisconsin Properties including Lowes, Menards, Milwaukee Zoo, CVS Pharmacy's in Milwaukee, Dairyland Racetrack, Major Industrial Property in Manawa, Class A Office Buildings and Vacant Land

Energy Related Projects

Oakwood Hills Energy Center, McHenry County, Illinois
Lackawanna Power Plant, Lackawanna County, Pennsylvania
Commonwealth Edison, high tension lines

Wind Projects

Illinois
Alta Farms Wind Project II, Dewitt County
Bennington Wind Project, Marshall County
Goose Creek Wind, Piatt County
Harvest Ridge Wind Farm, Douglas County
Lincoln Land Wind Farm, Morgan County
Midland Wind Farm, Henry County
McLean County Wind Farm, McLean County
Otter Creek Wind Farm, LaSalle County
Pleasant Ridge Wind Farm, Livingston County
Radford's Run Wind Farm, Macon County
Shady Oaks II, Lee County
Twin Groves Wind Farm, McLean County
Walnut Ridge Wind Farm, Bureau County

Indiana
Roaming Bison Wind Farm, Montgomery County
Tippecanoe County Wind Farm, Tippecanoe County

Iowa
Great Pathfinder Wind Project, *Boone & Hamilton County*
Ida Grove II Wind Farm, *Ida County*

Kansas
Neosho Ridge Wind Farm, Neosho County
Jayhawk Wind, Bourbon County & Crawford County

New York
Alle-Catt Wind, Allegany County, Cattaraugus County, & Wyoming County
Orangeville Wind Farm, Wyoming County

Ohio
Seneca Wind, Seneca County
Republic Wind, Seneca County & Sandusky County

South Dakota
Deuel Harvest Wind Farm, Deuel County
Dakota Range Wind Project I-III, Codington County, Grant County, & Roberts County
Crocker Wind Farm, Clark County
Crowned Ridge Wind II, Deuel County
Prevailing Wind Park, Bon Homme County, Charles Mix County, & Hutchinson County
Sweet Land Wind Farm, Hand County
Triple H Wind Farm, Hyde County
Tatanka Ridge Wind Project, Deuel County

Solar Projects

Illinois
Hickory Point Solar Energy Center, Christian County
Mulligan Solar, Logan County

Indiana
Lone Oak Solar Farm, Madison County

Maryland
Dorchester County Solar Farm, Dorchester County

Wisconsin
Badger Hollow Solar Farm, Iowa County
Darien Solar Energy Center, Rock County & Walworth County
Grant County Solar, Grant County
Paris Solar Energy Center, Kenosha County

South Dakota
Brookhaven Solar Energy Production Facility, Brookings County

Western Regions of the United States of America
Southwest Region – Arizona, Colorado, Nevada, New Mexico, & Utah
Northwest Region – Idaho and Oregon
Southern Great Plains Region – Texas
Northern Great Plains Region – General Research

REPRESENTATIVE CLIENT LISTING OF MICHAEL S. MAROUS

Law Firms

Alschuler, Simantz & Hem LLC Ancel, Glink, Diamond, Bush, DiClanni & Krafthefer
Arnstein & Lehr LLP
Berger, Newmark & Fenchel P.C.
Berger Schatz
Botti Law Firm, P.C.
Carmody MacDonald P.C.
Carr Law Firm
Crane, Heyman, Simon, Welch & Clar
Daley & Georges, Ltd.
Day, Robert & Morrison, P.C. Dentons US LLP
DiMonte & Lizak LLC
DLA Piper
Dreyer, Foote, Streit, Furgason & Slocum, P.A.
Drinker, Biddle & Reath LLP Figliulo & Silverman, P.C.
Foran, O'Toole & Burke LLC Franczek Radelet P.C.
Fredrikson & Byron, P.A.
Freeborn & Peters LLP
Gould & Ratner LLP
Greenberg Traurig LLP
Helm & Wagner
Robert Hill Law, Ltd.
Hinshaw & Culbertson LLP
Holland & Knight LLP
Ice Miller LLP
Jenner & Block
Katz & Stefani, LLC
Kinnally, Flaherty, Krentz, Loran, Hodge & Mazur PC
Kirkland & Ellis LLP
Klein, Thorpe & Jenkins, Ltd.
McDermott, Will & Emery
Mayer Brown
Michael Best & Friedrich LLP
Morrison & Morrison, Ltd.
Bryan E. Mraz & Associates
Neal, Gerber & Eisenberg, LLP
Neal & Leroy LLC
O'Donnell Haddad LLC
Prendergast & DelPrincipe
Rathje & Woodward, LLC
Righeimer, Martin & Cinquino, P.C.
Robbins, Salomon & Patt, Ltd.
Rosenfeld Hafron Shapiro & Farmer
Rosenthal, Murphey, Coblentz & Donahue Rubin & Associates, P.C.
Ryan and Ryan, P.C.
Reed Smith LLP
Sarnoff & Baccash
Scariano, Himes & Petrarca, Chtd.
Schiff Hardin LLP
Schiller, DuCanto & Fleck LLP
Schirott, Luetkehans & Garner, LLC
Schuyler, Roche & Crisham, P.C.
Sidley Austin LLP
Storino, Ramello & Durkin
Thomas M. Tully & Associates
Thompson Coburn, LLP
Tuttle, Vedral & Collins, P.C.
Vedder Price
von Briesen & Roper, SC
Winston & Strawn LLP
Worsek & Vihon LLP

Financial Institutions

AmericaUnited Bank Trust
BMO Harris Bank
Charter One
Citibank
Cole Taylor Bank
First Bank of Highland Park
First Financial Northwest Bank
First Midwest Bank
First State Financial
Glenview State Bank
Itasca Bank & Trust Co.
Lake Forest Bank & Trust Co.
MB Financial Bank
Midwest Bank
Northern Trust
Northview Bank & Trust
The Private Bank
Wintrust

Corporations

Advocate Health Care System
Alliance Property Consultants
American Stores Company
Archdiocese of Chicago
Arthur J. Rogers and Company
Avangrid Renewables, LLC
BHE Renewables
BP Amoco Oil Company
Christopher B. Burke Engineering, Ltd. Cambridge Homes
Canadian National Railroad
Capital Realty Services, Inc.
Chicago Cubs
Children's Memorial Hospital
Chrysler Realty Corporation
Citgo Petroleum Corporation
CorLands
CVS
Edward R. James Partners, LLC
Enterprise Development Corporation
Enterprise Leasing Company
Exxon Mobil Corporation
Hamilton Partners
Hollister Corporation
Imperial Realty Company
Invenergy LLC
Kimco Realty Corporation
Kinder Morgan, Inc.
Lakewood Homes
Lowe's Companies, Inc.
Loyola University Health System
Marathon Oil Corporation
Meijer, Inc.
Menards
Mesirow Stein Real Estate, Inc.
Paradigm Tax Group
Prime Group Realty Trust
Public Storage Corporation
RREEF Corporation
Shell Oil Company
Union Pacific Railroad Company
United Airlines, Inc.

Public Entities

Illinois Local Governments and Agencies

Village of Arlington Heights
Village of Barrington
Village of Bartlett
Village of Bellwood
Village of Brookfield
Village of Burr Ridge
City of Canton
Village of Cary
City of Chicago
Village of Deer Park
City of Des Plaines
Des Plaines Park District
Downers Grove Park District
City of Elgin
Elk Grove Village
City of Elmhurst
Village of Elmwood Park
City of Evanston
Village of Forest Park
Village of Franklin Park
Village of Glenview
Glenview Park District
Village of Harwood Heights
City of Highland Park
Village of Hinsdale
Village of Inverness
Village of Kenilworth
Village of Kildeer
Village of Lake Zurich
Leyden Township
Village of Lincolnshire
Village of Lincolnwood
Village of Morton Grove
Village of Mount Prospect
Village of North Aurora
Village of Northbrook
City of North Chicago
Village of Northfield
Northfield Township
Village of Oak Brook
Village of Orland Park
City of Palos Hills
City of Peoria
City of Prospect Heights
City of Rolling Meadows
Village of Rosemont
City of St. Charles
Village of Schaumburg
Village of Schiller Park
Village of Skokie
Village of South Barrington
Village of Streamwood
Metropolitan Water Reclamation District of Greater Chicago
City of Waukegan
Village of Wheeling
Village of Wilmette
Village of Willowbrook
Village of Winnetka
Village of Woodridge

County Governments and Agencies

Boone County State's Attorney's Office
Forest Preserve of Cook County
Cook County State's Attorney's Office
DuPage County Board of Review
Forest Preserve District of DuPage County
Kane County
Kendall County Board of Review
Lake County
Lake County Forest Preserve District
Lake County State's Attorney's Office
Morton Township
Peoria County

State and Federal Government Agencies

Federal Deposit Insurance Corporation
U.S. General Services Administration
Illinois Housing Development Authority
Illinois State Toll Highway Authority
Internal Revenue Service
The U.S. Postal Service

Schools

Argo Community High School District No. 217
Arlington Heights District No. 25 Township High School District No. 214, Arlington Heights
Barrington Community Unit District No. 220
Chicago Board of Education
Chicago Ridge District No. 127½
College of Lake County
Community Consolidated School District No. 15
Community Consolidated School District No. 146
Community School District No. 200
Consolidated High School District No. 230
Darien District No. 61
DePaul University
Elk Grove Community Consolidated District No. 59
Elmhurst Community Unit School District No. 205
Glen Ellyn School District No. 41
Glenbard High School District No. 87
Indian Springs School District No. 109
LaGrange School District No. 105
Lake Forest Academy
Leyden Community High School District No. 212
Loyola University
Lyons Township High School District No. 204
Maine Township High School District No. 207
Niles Elementary District No. 71
North Shore District No. 112, Highland Park
Northwestern University
Orland Park School District No. 135
Palatine High School District #211
Rhodes School District No. 84-1/2
Riverside-Brookfield High School District No. 208
Rosalind Franklin University
Roselle School District No. 12
Schaumburg Community Consolidated District No. 54
Sunset Ridge School District No. 29
Township High School District No. 211
Township High School District No. 214
Triton College
University of Illinois
Wheeling Community Consolidated District No. 21
Wilmette District No. 39

JOSEPH M. MaROUS
STATEMENT OF QUALIFICATIONS

Joseph M. MaRous is an Energy Consultant with MaRous and Company, with a focus on the renewable and alternative energy industry.
For more details visit: linkedin.com/in/joemarous

EDUCATION

Purdue University - West Lafayette, Indiana
Bachelor of Science – Building Construction Management
Focus in residential and green build construction

CERTIFICATIONS

OSHA Safety Certified
Certified Green Build Professional
USPAP Qualified

CONSTRUCTION

Professional in the construction industry for 10 years

- Residential
- Commercial
- Industrial
- Municipal
- Tenant Improvement
- Schools
- Media Studios
- Automobile Dealerships

MaROUS & COMPANY

Appraisal Assistance

- Vacant Land
- Industrial
- Commercial
- Office
- Retail
- Residential
- Auto Dealerships
- Religious Facilities
- Hotel/Motel

Wind Projects

- Illinois
  - Alta Farms Wind Project II, *Dewitt County*
  - Bennington Wind Project, *Marshall County*
  - Crescent Ridge Wind Farm, McLean County
  - Goose Creek Wind, *Piatt County*
  - Harvest Ridge Wind Farm, *Douglas County*
  - Lincoln Land Wind Farm, *Morgan County*
  - Midland Wind Farm, *Henry County*
  - McLean County Wind Farm, *McLean County*
  - Osagrove Flats Wind Project, *LaSalle County*
  - Radford's Run Wind Farm, *Macon County*
  - Shady Oaks II, *Lee County*
- Indiana
  - Roaming Bison Wind Farm, *Montgomery County*
  - Tippecanoe County Wind Farm, *Tippecanoe County*
- Iowa
  - Great Pathfinder Wind Project, *Boone & Hamilton County*
  - Ida Grove II Wind Farm, *Ida County*
  - Three Waters Wind, *Dickinson County*
  - Worthwhile Wind, *Worth County*
- Kansas
  - Jayhawk Wind, *Bourbon & Crawford County*
  - Neosho Ridge Wind Farm, *Neosho County*
- Minnesota
  - Dodge County Wind, *Dodge & Steele County*
  - Three Waters Wind, Jackson County
- New York
  - Alle-Catt Wind, *Allegany, Cattaraugus, & Wyoming County*
  - Orangeville Wind Farm, *Wyoming County*
- Ohio
  - Emerson Creek Wind Farm, Erie, Huron &Seneca County
  - Republic Wind, *Seneca & Sandusky County*
  - Seneca Wind, *Seneca County*
- South Dakota
  - Crocker Wind Farm, *Clark County*
  - Crowned Ridge Wind II, *Codington, Deuel, & Grant County*
  - Dakota Range Wind Project I-III, *Codington, Grant, & Roberts County*
  - Deuel Harvest Wind Farm, *Deuel County*
  - Prevailing Wind Park, *Bon Homme, Charles Mix, & Hutchinson County*
  - Sweet Land Wind Farm, *Hand County*
  - Triple H Wind Farm, *Hyde County*
  - Tatanka Ridge Wind Project, *Deuel County*

Solar Projects

- Illinois
  - Black Diamond Solar, *Christian County*
  - Double Black Diamond Solar, *Sangamon & Morgan County*
  - Hickory Point Solar Energy Center, *Christian County*
  - Mulligan Solar, *Logan County*
  - Osagrove Flats Solar, *LaSalle County*
  - Pleasant Grove Solar, *Boone & McHenry County*
  - South Dixon Solar, *Lee County*
- Indiana
  - Hardy Hills Solar, *Clinton County*
  - Lone Oak Solar Farm, *Madison County*
  - Mammoth Solar, Pulaski & Starke County
- Maryland
  - Dorchester County Solar Farm, *Dorchester County*
- Wisconsin
  - Badger Hollow Solar Farm, *Iowa County*
  - Darien Solar Energy Center, *Rock & Walworth County*
  - Grant County Solar, *Grant County*
  - Koshkonong Solar, *Dane County*
  - Paris Solar Energy Center, *Kenosha County*
  - St. Croix Solar, *St. Croix County*
- Western Regions of the United States of America
  - Southwest Region – *Arizona, Colorado, Nevada, New Mexico, & Utah*
  - Northwest Region – *Idaho and Oregon*
  - Southern Great Plains Region – *Texas*
  - Northern Great Plains Region – *General Research*

Transmission Lines

- Iowa
  - Heartland Divide, *Adair, Audubon & County*

Data Centers

- Illinois
  - Itasca Country Club Data Center, *Itasca*
  - United Airlines Data Center – CloudHQ O'Hare Campus, *Mount Prospect*