

JAMIE WHITEHOUSE, AICP
DIRECTOR OF PLANNING & ZONING
(302) 855-7878 T
(302) 854-5079 F
jamie.whitehouse@sussexcountyde.gov



Sussex County

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sussexcountyde.gov

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COUNTY ADMINISTRATIVE OFFICES
2 THE CIRCLE | PO BOX 417
GEORGETOWN, DELAWARE

Woodland Ferry Road Solar Presentation

Prepared for Sussex County Planning & Zoning
Public Hearing
By Community Power Group



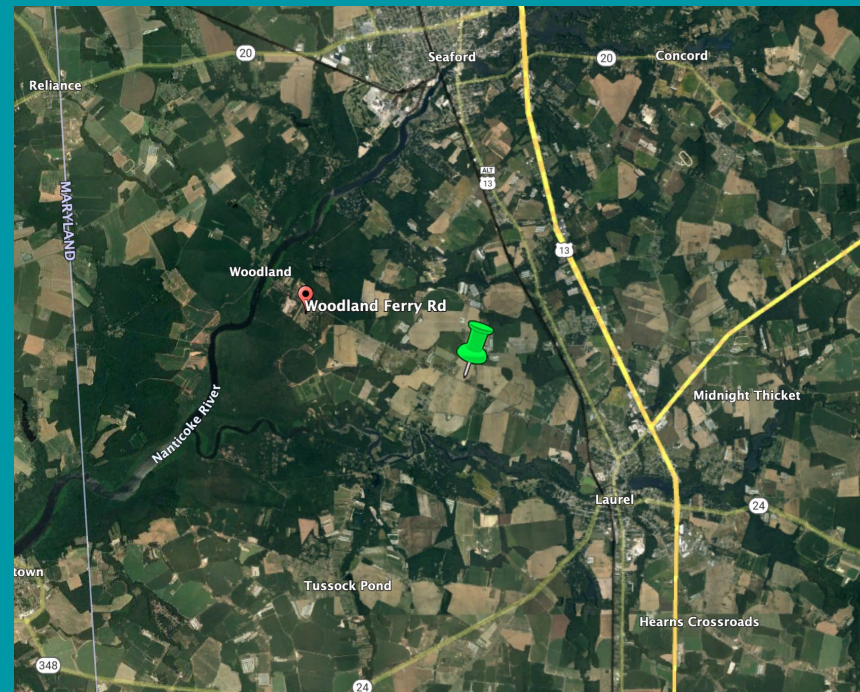
Community Power Group - About us

- Founded in 2010, CPG has been developing solar farms over the last 12 years
- We has more than 100 solar farms across the US with projects in MD, DE, VA, NY, IL, MA, CT, and CO
- CPG emphasizes using local labor on all projects
- CPG uses domestic equipment, pollinator friendly ground cover and game fences whenever possible



Woodland Ferry Road Solar - Project Summary

- Address: 38.579478, -75.610377 Near intersection of Bethel Rd and Woodland Ferry Road
- Tax PIN: 232-5.00-11.03
- Total parcel acreage: 39.45 acres
- Solar acreage: ~25 acres
- System Size: 3MWac
- Underlying Zoning District:
 - Agricultural-Residential 1 (AR-1)
- Delaware DOT review complete



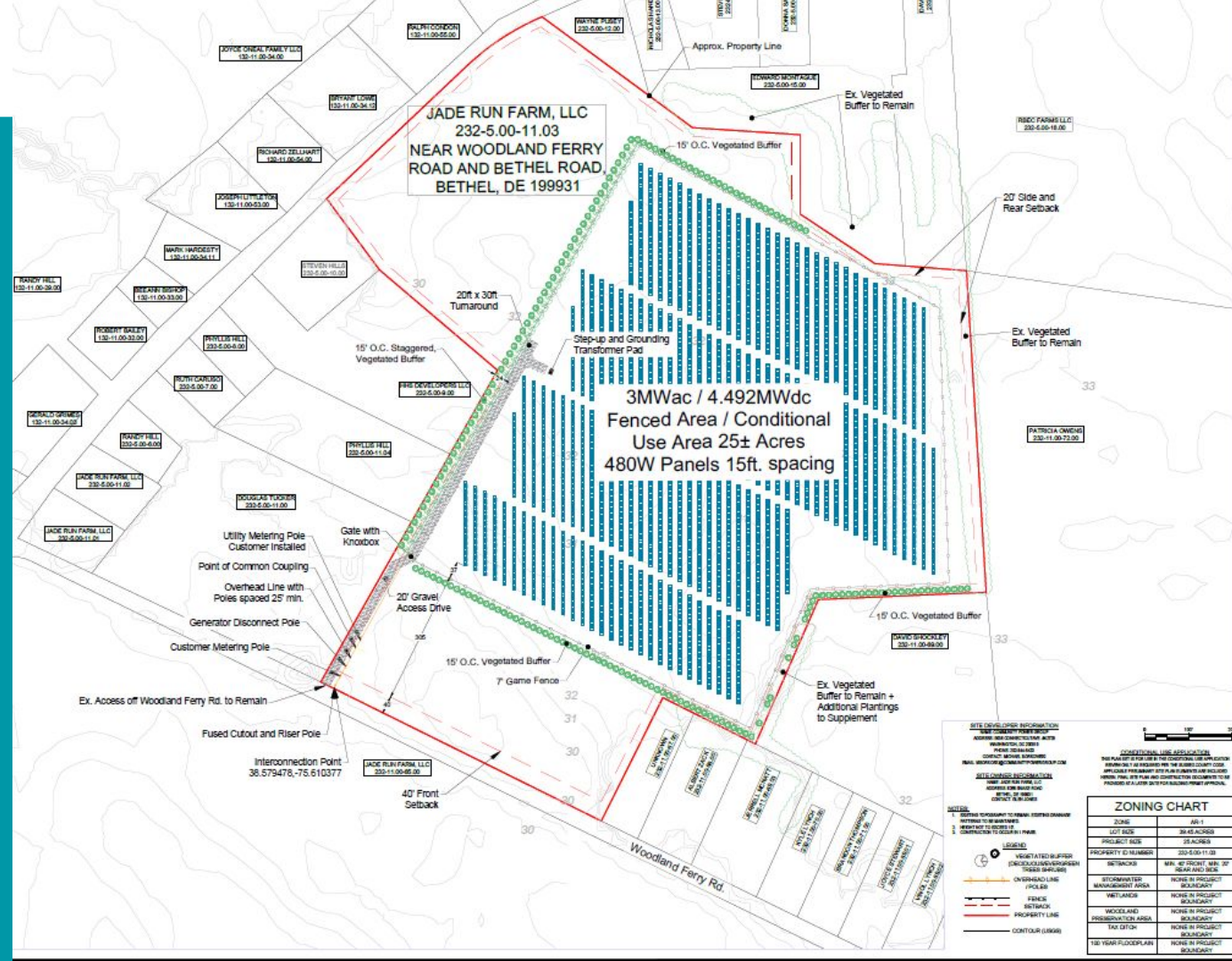
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Zoning Summary

Standards	Code Requirement	Woodland Ferry Road Solar Compliance
Local Zone / District	Agricultural-Residential 1 (AR-1) Zoning District	In compliance: Permitted as a Conditional Use in AR-1 districts
Parcel Size	<u>AR-1:</u> Min. lot width: 100 feet Min. area: 20,000 square feet Min. depth: 100 feet.	In compliance: total parcel size is 39.45 acres and exceeds all figures
Setbacks	<u>AR-1:</u> Front yard: 40 feet Width of side yard: 15 feet Depth of rear yard: 20 feet	In compliance: Front setback of 345 feet from property line to fence and a minimum of 20 feet side and rear yard setbacks as shown on the Site Plan.
Height Limit	Max Height: 42ft	In compliance: The proposed solar facility and associated fencing will not exceed 15 feet in height at any location.

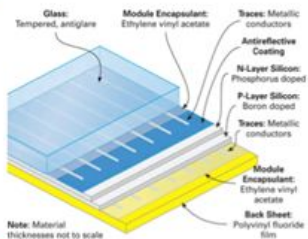
Landscape Plan

- Plantings shown in green
- Deciduous and evergreen trees and shrubs
- Double row of screening along the western boundary, and bolstered existing screening on southern and eastern boundaries

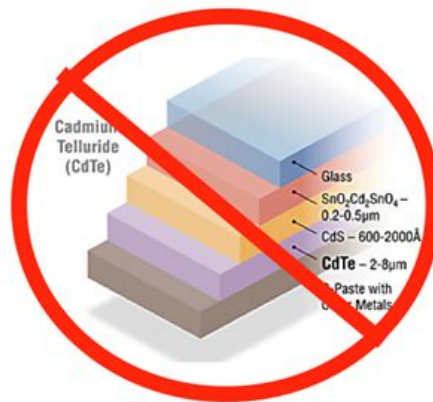


Panel Type & Racking

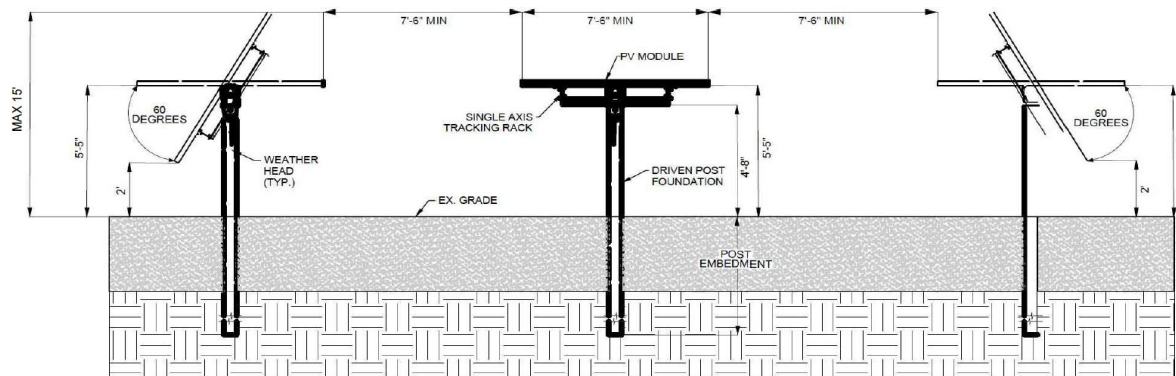
Anatomy of **Crystalline** Solar PV Panel



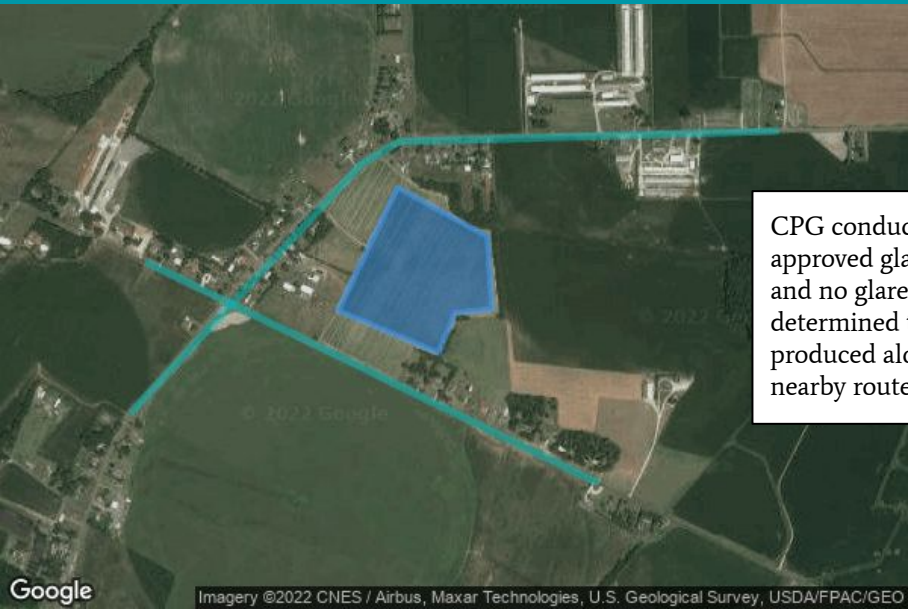
Anatomy of **Thin-Film** Solar PV Panel



- Neighbors will not be subject to chemicals. Crystalline Solar PV panels will be used, NOT Thin-Film.
- Single Axis Tracking (SAT) racking system shown below



Glare & Noise



CPG conducted a FAA approved glare study, and no glare was determined to be produced along the nearby routes.

Inverter Noise over Distance - 65dB Estimate		
Distance from Inverter	dB	Equivalent Sound
1 ft	65	Normal Speech at 3ft
2 ft	59	
4 ft	53	Dishwasher next room over
8 ft	47	
16 ft	41	Empty theater or library
32 ft	35	
64 ft	29	Same as quiet rural area at night
Point at which ambient background noise would be louder than the solar farm		
Note: These values assume an open, unobstructed field. Decibels would be lower due to obstructions like vegetation, fences, solar panels and topography.		
Source: Massachusetts Clean Energy Center "Study of Acoustic and EMF Levels from Solar Photovoltaic Projects"		

Glare Analysis Summary

PV Array Results

Summary of Results

No glare predicted!

PV Name	Tilt deg	Orientation deg	"Green" Glare min	"Yellow" Glare min	Energy Produced kWh
PV array 1	SA tracking	SA tracking	0	0	12,230,000.0

- Closest Building 520ft

Pollinator-Friendly Ground Cover & Game Fencing



Decommissioning

Solar farms are never truly abandoned:

- We have prepared a decommissioning plan which requires there to be a financial security to ensure funds are available for decommissioning and removal of a solar farm in its entirety throughout the life of the project
- Additional surety comes from the fact that the salvage value of the equipment is beyond what it would cost to dismantle the solar farm and that the farm is insured for any natural disaster damage
- Even in the event of a company bankruptcy, the most valuable asset of the bankruptcy proceedings is the solar farm which only requires sun for it to operate and generate revenue



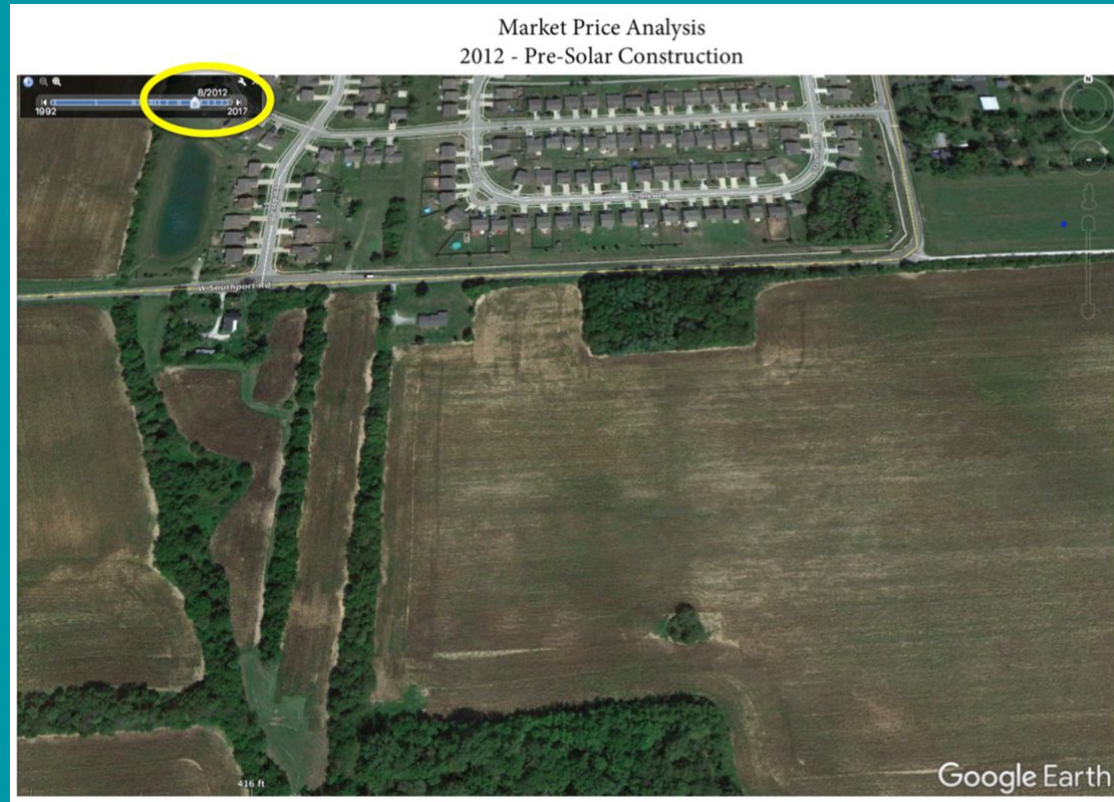
The Basics Of

COMMUNITY SOLAR

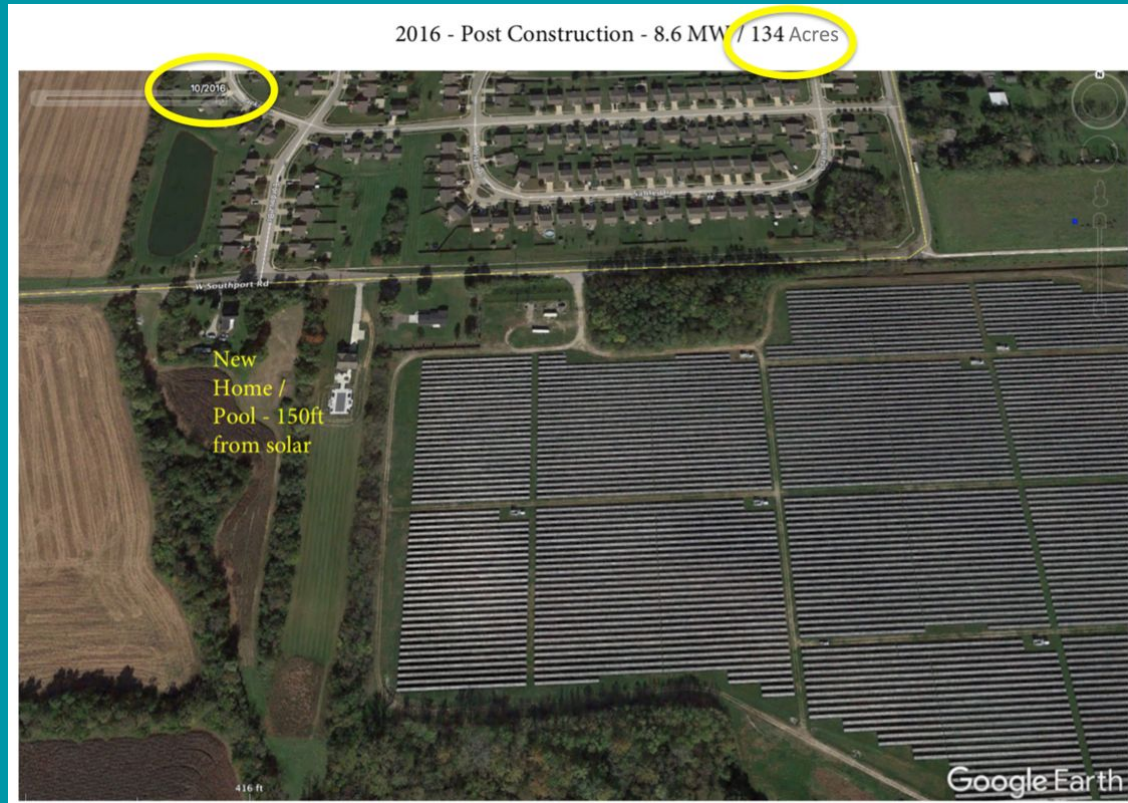


- The sunshines and the solar panels generate power that is sent to the grid
- The CSG receives a “credit” for the amount of energy it puts back to the grid
- Those “credits” are sold to subscribers at a discount to their value
- Credit shown as a separate line item on customers bill
- The end result is a lower electricity bill for subscribers

Before Solar



After Solar



Home Valuations

Dominion INDY III Solar Farm: Adjacent Property 9



Sept 2014



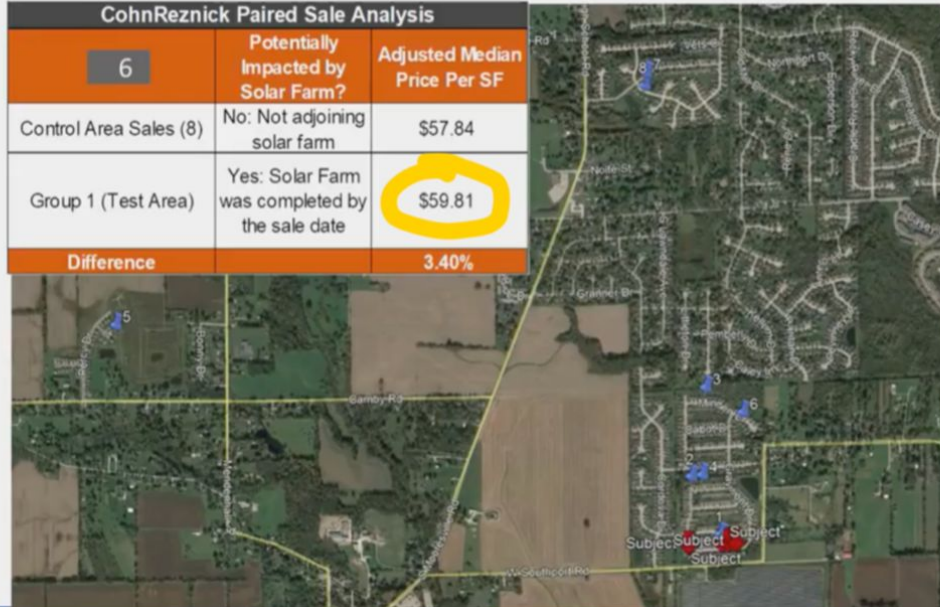
Oct 2016

Cohenreznick Results - Home Valuations

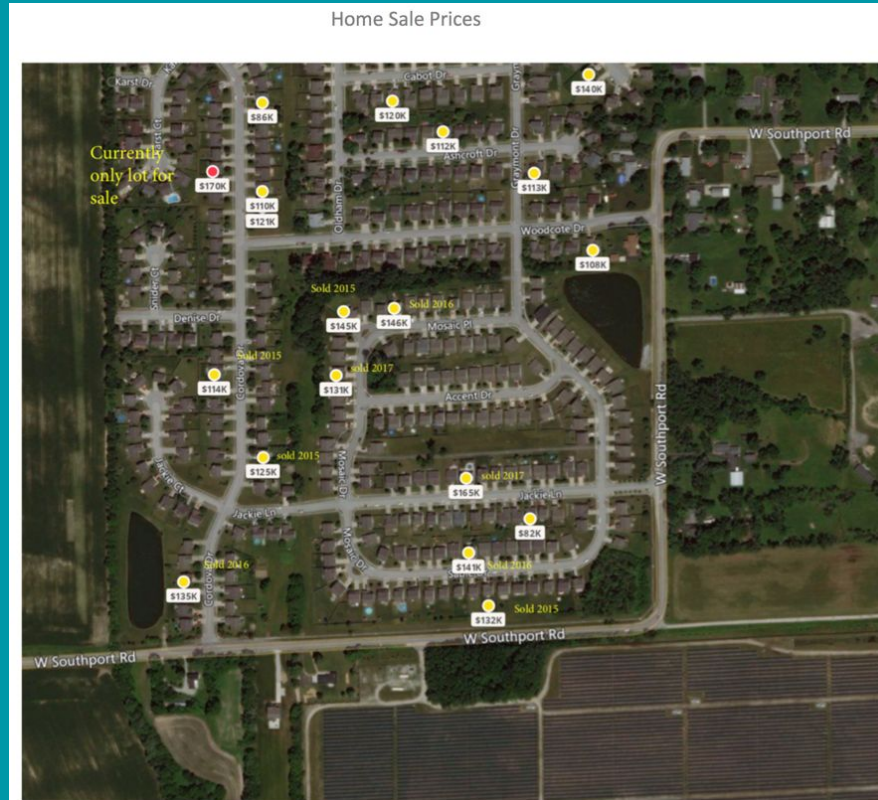
Solar Farm 4: Dominion Indy Solar III-Indianapolis, IN

Group 1 Comparable Sales

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



Zillow Results - Home Valuations



Questions?

Community Power Group

- Whitney Hughes - 202-844-6429
- Whitney@communitypowergroup.com

