

# City of Aurora Vacant Land Use Analysis

## Conversion from Agricultural Farming to Solar Farming

### Maximizing Land Lease Revenue RFQ Bid Results and Financial Benefit Analysis

July 26<sup>th</sup>, 2023

*“The City of Lights....Powered by the Sun”*



# Guiding Principles



- Find Alternative Revenue for Vacant Land
  - Airport Sites 1+2 and Landfill at Sullivan+ Rt 25
  - Solar Land Lease \$1,600 to \$2,000 acre per year
- Return State Mandated Expense to the City of Aurora
  - Collected by ComEd and Distributed by State of Illinois
  - Paid By All ComEd Business and Residential Customers
- Lower ComEd Electric Costs
  - City Residents and Businesses
  - Low Income Qualified Families
  - City Owned Properties
- Be Good Stewards of the Land
- Support Illinois Clean Energy Initiative
- Return “City Owned” Vacant Land to the Tax Roles
- No City of Aurora Investment

# Solar Land Lease Concept

- Competitively Bid to Certified Solar Companies
  - Registered with State of Illinois Solar Program
  - Engineered, Owned and Operated by winning Bidder
  - Land Lease Paid to City of Aurora
- Winning Bidder gets “Option” to Develop Vacant Land
  - Perform “Due Diligence” on Proposed Site
    - **ComEd Infrastructure Requirements/Investment**
    - **Site Specific Soil and Terrain Survey**
    - **FAA Requirements and Mandates**
    - **Secure Illinois Solar Funds**
  - Lease Option from 3 to 5 years, Solar Company to Assume Tax Obligation Property
- Core Successful Bidder Criteria
  - Electric Infrastructure Investment by Bidder
  - Lease Paid Per Acre
  - Total Lease Revenue for Term
  - Type of Solar Field Proposed - Speed to Energizing Field - Experience

# RFQ Bid Requirements + Results

- 6 Qualified Bidders
  - US Solar, SunCode, NexAmp, Forefront, 548 Energy Solution, GRNE Energy
  - All Registered with State of Illinois Solar Program
- Core Bid Requirements
  - BASE CASE (Defined Lease Rental Due to Expected Utility Capacity)
    - Airport Site 1 – 30 Acres
    - Airport Site 2 – 30 Acres
    - Rt25+ Sullivan Landfill Site 3 – 18 Acres
  - BEST CASE (Size Defined by Bidder)
- Per Acre Lease Rates from \$1,700 to \$3,500
  - Annual Escalator from 0% to 3%
- ComEd Infrastructure Commitment from \$3 Million to \$13 Million
- City of Aurora Revenue (30 to 40 year minimum term)
  - Base Case-**Avg. Annual Revenue** from \$156k to \$441k **Term Revenue** from \$4M to \$17M
  - Best Case-**Avg. Annual Revenue** from \$370k to \$826k **Term Revenue** from \$13M to \$33M

# Top 3 Detailed Bids

Solar Bidder Name:	US SOLAR		SUNCODE		NEXAMP	
	BASE CASE (Defined Area)	BEST CASE (Proposed Area)	BASE CASE (Defined Area)	BEST CASE (Proposed Area)	BASE CASE (Defined Area)	BEST CASE (Proposed Area)
<b>Assumption/Quote</b>						
Total Acreage Airport Site #1	30 Acre Lease	80 Acre Lease	30 Acre Lease	132 Acre Lease	30 Acre Lease	30 Acre Lease
Total Acreage Airport Site #2	30 Acre Lease	40 Acre Lease	30 Acre Lease	30 Acre Lease	30 Acre Lease	30 Acre Lease
Sullivan + Rt25 Site # 3 (Brownfield)	18 Acre Lease	18 Acre Lease	18 Acre Lease	18 Acre Lease	18 Acre Lease	18 Acre Lease
<b>Total Acreage</b>	78	138	78	180	78	78
Size of Solar Farm Airport Site #1 (MW)	4.60	10.00	5.00	21.60	5.00	5.00
Size of Solar Farm Airport Site #2 (MW)	4.60	5.00	5.00	5.00	5.00	5.00
Size of Solar Farm Sullivan+Rt25 (MW)	3.77	3.85	2.80	2.80	2.40	2.40
<b>Total Solar Farm Size - All Locations (MW)</b>	<b>12.97</b>	<b>18.85</b>	<b>12.80</b>	<b>29.40</b>	<b>12.40</b>	<b>12.40</b>
ComEd Interconnection Fees Site #1	\$3,100,000.00	\$7,000,000.00	\$1,500,000.00	\$6,500,000.00	\$1,000,000.00	\$1,000,000.00
ComEd Interconnection Fees Site #2	\$3,100,000.00	\$4,000,000.00	\$1,500,000.00	\$1,500,000.00	\$1,000,000.00	\$1,000,000.00
Sullivan + RT 25 Site #3	\$1,500,000.00	\$2,000,000.00	\$1,500,000.00	\$1,500,000.00	\$500,000.00	\$500,000.00
<b>Total ComEd Interconnection Fees</b>	<b>\$7,700,000.00</b>	<b>\$13,000,000.00</b>	<b>\$4,500,000.00</b>	<b>\$9,500,000.00</b>	<b>\$2,500,000.00</b>	<b>\$2,500,000.00</b>
ComEd Interconnection Investment per KW	\$593,677.72	\$689,655.17	\$351,562.50	\$323,129.25	\$201,612.90	\$201,612.90
<b>ComEd Interconnection Investment per Acre</b>	<b>\$98,717.95</b>	<b>\$94,202.90</b>	<b>\$57,692.31</b>	<b>\$52,777.78</b>	<b>\$32,051.28</b>	<b>\$32,051.28</b>
Due Dilligence Period	3 to 6 months	3 to 6 months	Airport Completed	Airport Completed	12 months	12 months
Have you Determined ComEd Line Capacity?	NO	NO	YES	YES	NO	NO
Have you Determined Sub Station Capacity?	NO	NO	YES	YES	NO	NO
Has ComEd Pre-App been Submitted?	YES	YES	YES	YES	YES	YES
Has ComEd Pre-App been Completed?	NO	NO	Aiport- No Sullivan	Aiport- No Sullivan	NO	NO
Option Years	1 year + 2 years	1 year + 2 years	3 year Option	3 Year Option	5 Years	5 Years

# Top 3 Detailed Bids

Solar Bidder Name:	US SOLAR		SUNCODE		NEXAMP	
	BASE CASE (Defined Area)	BEST CASE (Proposed Area)	BASE CASE (Defined Area)	BEST CASE (Proposed Area)	BASE CASE (Defined Area)	BEST CASE (Proposed Area)
<b>Assumption/Quote</b>						
Annual Lease Per Acre Site # 1	\$3,250.00	\$3,250.00	\$3,000	\$3,000/\$2,000	\$3,500.00	\$3,500.00
Annual Lease Per Acre Site # 2	\$3,250.00	\$3,250.00	\$3,000	\$3,000	\$3,500.00	\$3,500.00
Annual Lease Sullivan+Rt25 Site # 3	\$3,250.00	\$3,250.00	\$3,000	\$3,000	\$3,500.00	\$3,500.00
Lease Term	20 + 4 - 5Yr	20 + 4 - 5Yr	35 Year + 5 year	35 Year + 5 year	25 Year Base	25 Year Base
Annual Escalation/Increase %	2%	2%	3%	3%	1.50%	1.50%
Total 1st Year Revenue Site #1	\$97,500.00	\$260,000.00	\$90,000.00	\$294,000.00	\$105,000.00	\$105,000.00
Total 1st Year Revenue Site # 2	\$97,500.00	\$130,000.00	\$90,000.00	\$90,000.00	\$105,000.00	\$105,000.00
Total 1st Year Revenue Sullivan + Rt25 Site #3	\$58,500.00	\$58,500.00	\$54,000.00	\$54,000.00	\$63,000.00	\$63,000.00
<b>Total Annual 1st Revenue</b>	<b>\$253,500.00</b>	<b>\$448,500.00</b>	<b>\$234,000.00</b>	<b>\$438,000.00</b>	<b>\$273,000.00</b>	<b>\$273,000.00</b>
Total 30 Year Revenue Site #1	\$3,955,338.00	\$10,547,701.00	\$4,281,787.00	\$16,616,052.00	\$3,941,561.54	\$3,941,561.54
Total 30 Year Revenue Site #2	\$3,955,338.00	\$5,273,850.00	\$4,281,787.00	\$4,281,787.00	\$3,941,561.54	\$3,941,561.54
Total 30 Year Revenue Sullivan+Rt25 Site #3	\$2,373,233.00	\$2,373,233.00	\$2,569,072.00	\$2,569,072.00	\$2,364,936.93	\$2,364,936.93
<b>Total Annual 30 Year Revenue</b>	<b>\$10,283,909.00</b>	<b>\$18,194,784.00</b>	<b>\$11,132,646.00</b>	<b>\$23,466,911.00</b>	<b>\$10,248,060.01</b>	<b>\$10,248,060.01</b>
<b>Average Annual 30 Year Revenue</b>	<b>\$342,796.97</b>	<b>\$606,492.80</b>	<b>\$371,088.20</b>	<b>\$782,230.37</b>	<b>\$341,602.00</b>	<b>\$341,602.00</b>
<b>Total Infrastructure Investment + City Revenue</b>	<b>\$17,983,909.00</b>	<b>\$31,194,784.00</b>	<b>\$15,632,646.00</b>	<b>\$32,966,911.00</b>	<b>\$12,748,060.01</b>	<b>\$12,748,060.01</b>
Total 40 Year Revenue Site #1	\$5,889,193.00	\$15,704,516.00	\$6,786,113.00	\$22,167,970.00	\$5,698,128.86	\$5,698,128.86
Total 40 Year Revenue Site #2	\$5,889,193.00	\$7,852,258.00	\$6,786,113.00	\$6,786,113.00	\$5,698,128.86	\$5,698,128.86
Total 40 Year Revenue Sullivan+Rt25 Site #3	\$3,533,516.00	\$3,533,516.00	\$4,071,668.00	\$4,071,668.00	\$3,418,877.32	\$3,418,877.32
<b>Total Annual 40 Year Revenue</b>	<b>\$15,311,902.00</b>	<b>\$27,090,290.00</b>	<b>\$17,643,894.00</b>	<b>\$33,025,751.00</b>	<b>\$14,815,135.04</b>	<b>\$14,815,135.04</b>
<b>Average Annual 40 Year Revenue</b>	<b>\$382,797.55</b>	<b>\$677,257.25</b>	<b>\$441,097.35</b>	<b>\$825,643.78</b>	<b>\$370,378.37</b>	<b>\$370,378.37</b>
<b>Total Infrastructure Investment + City Revenue</b>	<b>\$23,011,902.00</b>	<b>\$40,090,290.00</b>	<b>\$22,143,894.00</b>	<b>\$42,525,751.00</b>	<b>\$17,315,135.04</b>	<b>\$17,315,135.04</b>

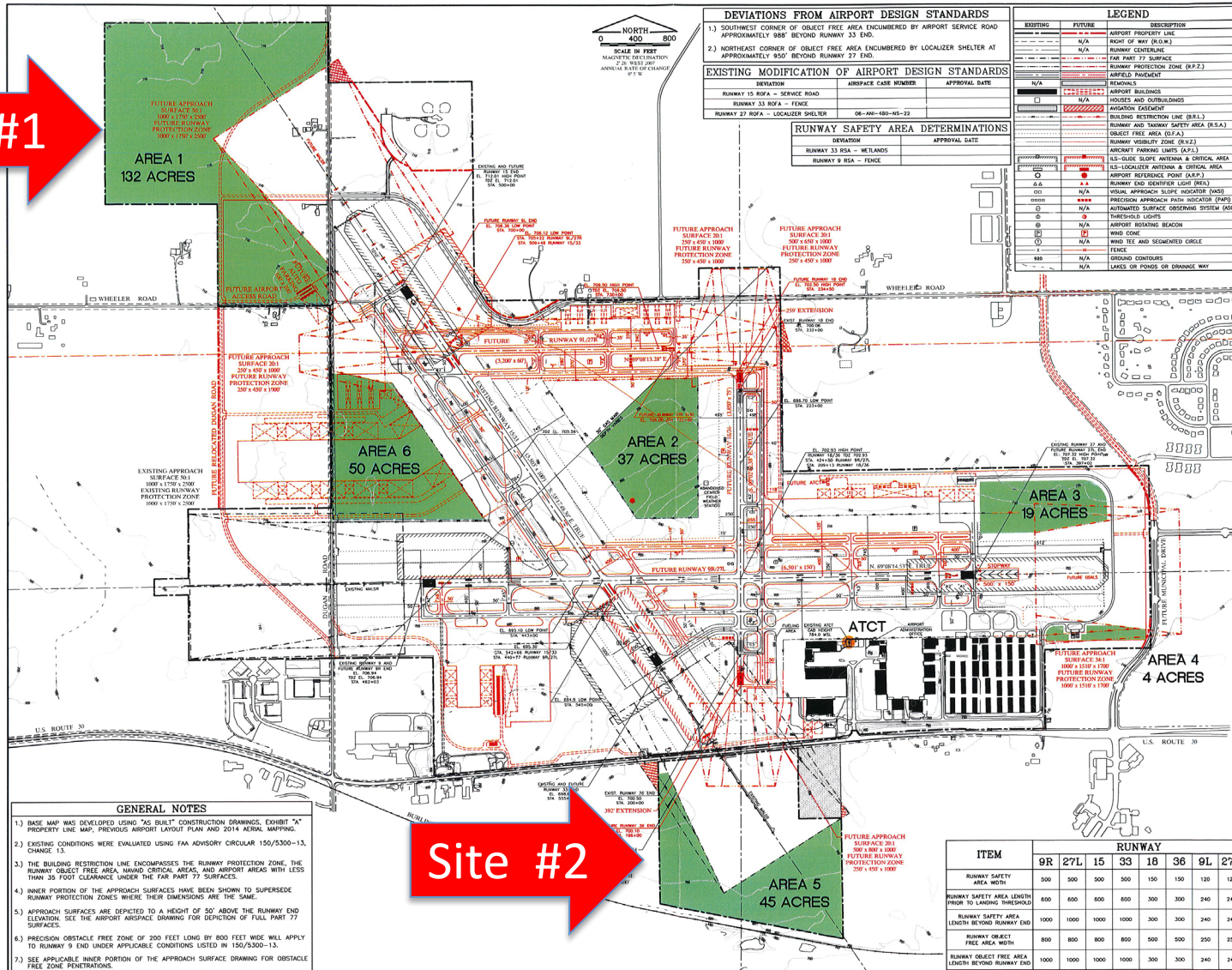


# Top 3 Detailed Bids

Solar Bidder Name:	US SOLAR		SUNCODE		NEXAMP	
Assumption/Quote	BASE CASE (Defined Area)	BEST CASE (Proposed Area)	BASE CASE (Defined Area)	BEST CASE (Proposed Area)	BASE CASE (Defined Area)	BEST CASE (Proposed Area)
Bidder Takes Responsibility for Property Tax Bill	YES	YES	YES	YES	YES	YES
ABP PROGRAM - Y/N	YES	YES	YES	YES	YES	YES
NON ABP PROGRAM - Y/N	YES	YES	YES	YES	NO	NO
Illinois Solar for All Community Solar - Y/N	YES	YES	YES	YES	NO	NO
Bee + Butterfly Pollinator Program - Y/N	YES	YES	YES	YES	YES	YES
Honey Harvest Program - Y/N	YES	YES	Potentially	Potentially	YES	YES
Solar System Type - Fixed/Tracker	Tracker/Fixed	Tracker/Fixed	Tracker/TBD	Tracker/TBD	Tracker/Fixed	Tracker/Fixed
Battery Program	YES - Grid Stability	YES: Grid Stability	Potentially	Potentially	TBD	TBD
City of Aurora Subscription (Savings %)	10%	10%	15%	15%	15%	15%
Aurora Resident Subscription (Savings %)	10%	10%	15%	15%	15%	15%
Low Income Subscription Plan (Savings %)	50%	50%	50%	50%	30%	30%
Fencing Requirement/Type Fence	Farm Style	Farm Style	We are flexible	We are flexible	Chain Link	Chain Link
Owner Y/N	YES	YES	YES	YES	YES	YES
Owner Built? Y/N	YES	YES	YES	YES	YES	YES
Financial Strength (D + B Rating)	See Notes	See Notes	Finance Letter	Finance Letter	N/A	N/A
Capital Partner	Self-Funded	Self-Funded	Crayhill Capital	Crayhill Capital	See Attached	See Attached
Equity Eligible Partner?	Equity Solar Illinois	Equity Solar Illinois	Work With City	Work With City	NO	NO

# Aurora Airport Sites 1 + 2

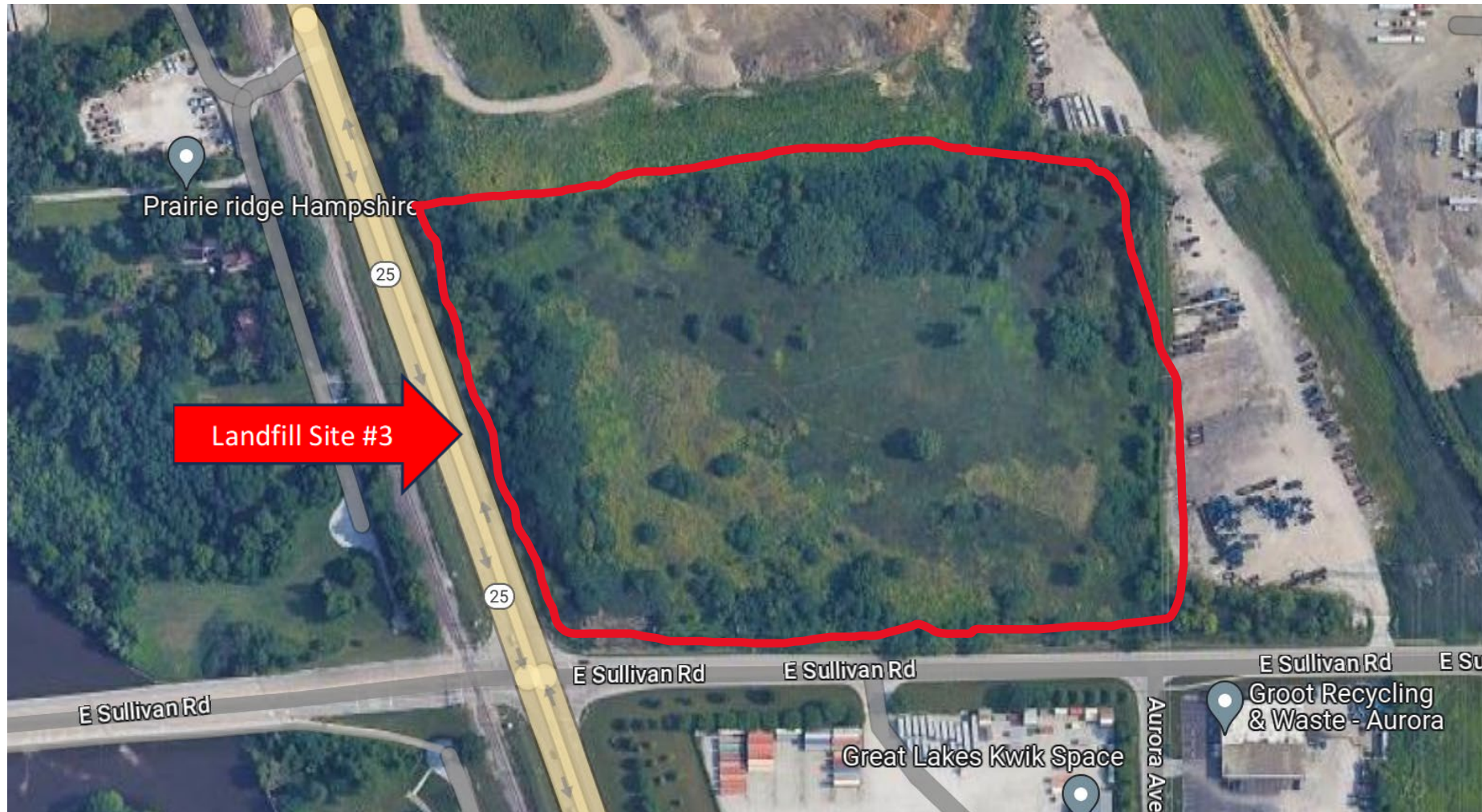
Site #1



Site #2



# Rt 25 + Sullivan Road (Landfill) Site 3



# Summary Community Benefits

## SunCode Energy

	<b>BASE CASE</b> (Defined Lease Area)	<b>BEST CASE</b> (Proposed Lease Area)
Total Acreage Airport Site #1	30 Acre Lease	132 Acre Lease
Total Acreage Airport Site #2	30 Acre Lease	30 Acre Lease
Sullivan + Rt25 Site # 3 (Landfill)	18 Acre Lease	18 Acre Lease
<b>Total Acreage</b>	<b>78</b>	<b>180</b>
Size of Solar Farm Airport Site #1 (MW)	5.0 MW	21.6 MW
Size of Solar Farm Airport Site #2 (MW)	5.0 MW	5.0 MW
Size of Solar Farm Sullivan+Rt25 Site #3 (MW)	2.8 MW	2.8 MW
<b>Total Solar Farm Size All Locations (MW)</b>	<b>12.8 MW</b>	<b>29.4 MW</b>
ComEd Interconnection Fees Airport Site #1	\$1,500,000.00	\$6,500,000.00
ComEd Interconnection Fees Airport Site #2	\$1,500,000.00	\$1,500,000.00
Sullivan + RT 25 Site #3	\$1,500,000.00	\$1,500,000.00
<b>Total ComEd Interconnection Fees</b>	<b>\$4,500,000.00</b>	<b>\$9,500,000.00</b>
Total 40 Year Revenue Airport Site #1	\$6,786,113.00	\$22,167,970.00
Total 40 Year Revenue Airport Site #2	\$6,786,113.00	\$6,786,113.00
Total 40 Year Revenue Sullivan+Rt25 Site #3	\$4,071,668.00	\$4,071,668.00
<b>Total Annual 40 Year Revenue</b>	<b>\$17,643,894.00</b>	<b>\$33,025,751.00</b>
<b>Average Annual 40 Year Revenue</b>	<b>\$441,097.35</b>	<b>\$825,643.78</b>
New Annual Tax Revenue Airport Site #1	\$39,453.87	\$170,495.39
New Annual Tax Revenue Airport Site #2	\$39,453.87	\$39,453.87
New Annual Tax Revenue Sullivan+Rt25 Site #3	\$22,885.15	\$22,885.15
<b>Total New Annual Tax Revenue (Estimate)</b>	<b>\$101,792.89</b>	<b>\$232,834.41</b>

# Summary Community Benefits



## SunCode Energy

### Assumption/Quote

City of Aurora Subscription (Savings %)  
Aurora Resident Subscription (Savings %)  
Low Income Subscription Plan (Savings %)

BASE CASE (Defined Lease Area)	BEST CASE (Proposed Lease Area)
-----------------------------------	------------------------------------

15%	15%
15%	15%
50%	50%

<b>Estimated Annual Savings for Residents</b>	<b>\$102.00</b>	<b>\$102.00</b>
<b>Estimated Annual Savings for Low Income Residen</b>	<b>\$360.00</b>	<b>\$360.00</b>

### Enviromental Benefits

Bee + Butterfly Polinator Program - Y/N	YES	YES
Annual Green Energy Produced (kWh)	19,450,000	39,550,000
Program Green Energy Produced (kWh)	778,000,000	1,582,000,000
Carbon Reduction - Pounds	741,948,191	1,387,930,068
Pounds of Coal Not Burned	376,997,012	705,197,625
Annual Homes Powered By Solar	2,431	4,944
Program Homes Powered By Solar	97,240	197,760