

**KENDALL COUNTY
REGIONAL PLANNING COMMISSION**

*Kendall County Office Building
Rooms 209 & 210
111 W. Fox Street, Yorkville, Illinois*

Meeting Minutes of May 23, 2018

Chairman Ashton called the meeting to order at 7:02 p.m.

ROLL CALL

Members Present: Bill Ashton, Roger Bledsoe, Larry Nelson, Ruben Rodriguez, Claire Wilson, Budd Wormley, and Angela Zubko

Members Absent: Tom Casey and John Shaw

Staff Present: Matthew H. Asselmeier, Senior Planner

In the Audience: Robert Davidson, Chris Childress, Michael Saar, Tom Bromeland, Mary Bromeland, Melissa Samaroo, Justin Hardt, Jim Coyle, Margaret Blum, and Cliff Fox

APPROVAL OF AGENDA

Mr. Wormley made a motion, seconded by Ms. Zubko, to amend the agenda by moving Petition 18-14 to before Petition 18-13 and to approve the agenda as amended. With a voice vote of all ayes, the motion carried.

APPROVAL OF MINUTES

Mr. Nelson made a motion, seconded by Ms. Zubko, to approve the April 25, 2018, Kendall County Regional Planning Commission meeting minutes as presented. With a voice vote of all ayes, the motion carried.

PETITIONS

Petition 18-14 Michael and Dayle Saar

Mr. Asselmeier summarized the request.

Michael and Dayle Saar are requesting a map amendment rezoning the majority of the subject property from A-1 to R-1 in order to have the ability to sell the property and market the property as a single-family home site. The subject property does not have an allocation for the construction of a home and does not possess forty (40) acres. Therefore, a map amendment is required in order to construct a home onsite. The Petitioners own one (1) of the houses northeast of the subject parcel. They would like to divide a portion of the northeast corner off of the subject property and merge it with their property in the Timber Creek Subdivision and rezone the northeast corner to R-3 at some point in the future.

The Petitioners do not believe that the property is large enough for farming.

The Land Resource Management Plan calls for this area to be rural residential in the future. Existing single-family homes are located to the north and east of the subject property.

The area surrounding the property is a mix of residential and agricultural zoning.

EcoCAT Report submitted and consultation was terminated.

The application for NRI was submitted on April 12, 2018 and the LESA score was 178 indicating a low level of protection.

Petition information was sent to Kendall Township on April 20, 2018.

Petition information was sent to the United City of Yorkville on April 20, 2018. Yorkville will conduct its meetings on this petition in June.

ZPAC met on this proposal on May 1, 2018 and unanimously recommended approval.

Any structures constructed on the property would have to meet applicable building and health related laws and secure the necessary permits.

No new odors or lighting issues are foreseen.

Mr. Saar stated that he did not have any additional information to provide the Commission.

Ms. Zubko wanted to make sure that a future property owner was notified that a trail could be installed in the future. A concrete ditch is located along Route 71.

The northeast portion of the property will remain A-1. The property owners' home is zoned R-3. The northeast corner of the property will not be landlocked because the Petitioners' adjoining property touches Timbercreek Drive.

Mr. Nelson made a motion to recommend approval of the map amendment as requested, seconded by Ms. Zubko.

Yes – Ashton, Bledsoe, Nelson, Rodriguez, Wilson, Wormley, and Zubko (7)

No – None (0)

Absent – Casey and Shaw (2)

The motion passed. This proposal will go to the Zoning Board of Appeals on June 4th.

Petition 18-13 Kendall County Planning, Building and Zoning Committee

Mr. Asselmeier summarized the request.

In recent months, the Kendall County Planning, Building and Zoning Department has received inquiries from solar energy consultants and property owners desiring to place solar panels on properties throughout the County. These solar panels would be used to generate power offsite from the location where the solar panels are placed. Kendall County adopted solar panel zoning regulations in 2010 and 2011, but these regulations focused on generating solar energy and using that energy onsite. The County also has zoning regulations for power plants, but many solar energy consultants were uncomfortable with a “power plant” classification.

At their meeting on March 12, 2018, the Planning, Building and Zoning Committee approved initiating text amendments to the Kendall County Zoning Ordinance incorporating DeKalb County's proposed regulations into the Kendall County Zoning Ordinance.

At the April Kendall County Regional Planning Commission meeting, Staff was asked to review the proposed solar panel regulations, contact the counties previously contacted regarding the number of solar panel projects they approved and any changes to their regulations they wish could be made in hindsight, obtain information from Fulton and Shelby Counties, and obtain Yorkville's solar panel regulations.

As of April 30th, DeKalb County had not approved any solar panel project. There were four (4) applications for projects. The only change they suggested was, as of April 3rd, the State of Illinois allows collocation. Prior to April 3rd, the State would not have allowed two (2) 2 MW systems to be located next to each other, but now they could be located adjacently.

As of April 30th, Will County had approved one (1) project and they have three (3) tabled for the past two (2) months. Discussion has occurred about whether or not to require a decommissioning bond; this was not required in the approved ordinance. Also, Will County is discussing a density limitation, i.e. how many solar panels should be allowed in a given area.

As of April 30th, Grundy County had approved one (1) project, a one hundred forty-three (143) acre solar farm. There are three (3) additional projects under consideration. The distance of the front yard setback has been an issue, some favor one hundred fifty feet (150') while others favor "farm ground". There are landscaping concerns (nature and type) and concerns that the roots of the landscaping could impact field tile. Discussion has occurred regarding requiring lighting at the gate entrance.

As of April 30th, Kankakee County had approved eleven (11) solar gardens and nine (9) more are at some stage of the adoption. In addition, there is one (1) solar farm that is under consideration. Their ordinance made no distinction between solar gardens and solar farms; that is the only change they would suggest.

As of April 30th, Tazewell County had one (1) approved project and two (2) projects at some form of the review process. They are considering changing the setback requirements from non-participating residences; it started at five hundred feet (500') and was reduced to one hundred feet (100').

As of May 6th, Boone County had not approved any solar projects and had four (4) projects at some form of the review process. The big issue of discussion is whether or not to allow solar projects on landfills and the impacts of the required setbacks for the landfills on the solar project.

Shelby County has not approved a separate solar panel project and they are in the process of writing an ordinance. They amended an existing special use permit for their electric co-operative to allow them to have solar panels on their existing site.

As of May 14th, Fulton County has not returned Staff's phone calls.

The regulations for the United City of Yorkville were provided.

Staff went through the proposal and offered the following amendments:

1. The definition of solar garden was clarified that energy generated from the panels would be used for offsite consumption.
2. The existing regulations for roof mounted and freestanding systems were clarified to apply for onsite consumption of energy only.
3. The existing regulations for roof mounted and freestanding systems were clarified that the systems had to follow applicable federal, state, and local laws and the regulations of the local electrical utility.
4. The building permit fee was clarified to apply to solar energy systems that consumed energy offsite or solar energy systems that consumed energy onsite for non-agricultural purposes.

5. The definition of solar gardens was clarified to include projects twenty (20) acres in size in Section 4.18.C.4.
6. The references to airports in Section 4.18.C.7, 4.18.D.9, and 4.18.F.4 were removed and replaced with a blanket statement in 4.18.Q.9 regarding all solar energy systems in relation to airports.
7. The reference to the State of Illinois Uniform Building Code in 4.18.C.8 was deleted because the Code does not exist.
8. The phrase “or vegetation” was added to Section 4.18.D.4 per the request of ZPAC.
9. Section 4.18.D.10 was deleted because it repeated the language found in 4.18.Q.3.
10. Solar energy systems must comply with State plumbing and energy codes (4.18.Q.8). Therefore, sections K and L are repetitive.

Mr. Holdiman previously suggested that 4.18.O.2 be removed from the proposal because the County currently does not require insurance for existing solar panels.

The Kendall County Farm Bureau was sent the proposal in March. They questioned why the bonding requirement was “may” and not “shall” (4.18.P.6).

The townships were mailed the proposal on March 22nd. To date, no townships have submitted comments.

ZPAC met on the proposal on April 3rd and unanimously recommended approval of the proposal with the following amendments:

1. Section 4.18.D.10 should be removed because the same language is found in 4.18.Q.3.
2. A more detailed contour map with existing vegetation, waterways, wetland boundaries, and FEMA FIRM information in a manner described in the Boone County ordinance should be added to the proposal.
3. The reference to the State of Illinois Uniform Building Code found in Section 4.18.C.8 should be removed.
4. Greater discussion should occur regarding the desire to have solar gardens in residential zoned districts.
5. The word “crops” found in line 7 of 4.18.C.4 should be replaced with the word “vegetation” because crops probably will not be the only plants growing around the solar panels and crops probably will not grow around the solar panels.

Ms. Wilson asked the difference between the solar energy system and the solar photovoltaic system. The photovoltaic system is the collectors and solar energy systems are all of the components.

The reference to county solar garden mentioned in the definition of solar garden was removed.

Onsite consumption of energy would be accessory to the existing use and would be allowed by right. Discussion occurred regarding the difference in regulations between onsite and offsite consumption of energy as applied to the regulations.

Ms. Zubko expressed her opposition to the waiver requirements listed in various sections. The consensus of the Commission was to have these references removed to protect neighbors.

The consensus of the Commission was also that solar gardens and solar farms had to follow the setback requirements of the zoning district in which they are located to avoid confusion and ensure consistency with the application of the Zoning Ordinance.

The reference to solar farms requiring a special use permit found in Section 4.18.D.1 was redundant because this language was in the definitions section.

Mr. Nelson asked if Greg Chismark commented on this proposal. Mr. Asselmeier said that Mr. Chismark reviewed the proposal and he was satisfied with the existing language because of the NPDES and Stormwater Ordinance requirement contained in the proposal. Discussion occurred about stormwater runoff, the importance of vegetation, and the method for controlling and maintaining the vegetation. Top soils will not be removed per 4.18.D.4.

Chris Childress, the County's consultant, discussed the importance of the distinction between onsite and offsite consumption of the energy generated. In the agreement for the County's proposed solar field, the developer is responsible for the maintenance and control of vegetation. The owner or developer should be responsible for maintaining the vegetation. Fixed panels could have stormwater drainage issues; these panels do not generate the same kilowatt hours.

The State has been collecting funds on electricity bills to fund the incentives for solar panel projects. Mr. Childress does not believe that many solar panel projects will occur in Kendall County because the funds for incentives will be gone within a year or year and a half. Most projects are in the advanced stage of approval. Once the incentives are used, solar panel projects will not occur because they are not economically beneficial.

Mr. Wormley asked the lifespan of the panels. Mr. Childress said that twenty-five (25) years is not an issue, but new technologies could arise to make the solar panels obsolete.

Mr. Childress said that holding a bond for twenty-five (25) years is expensive. Mr. Asselmeier noted that the bonding requirement says "may" in the current proposal. Mr. Davidson discussed the scrap value of the solar energy system.

Mr. Childress expressed concerns regarding damaging field tiles. He would like to see a provision for the repair of field tile.

Mr. Childress discussed the permit fees. He supported the fees so long as they were not required at the time of the special use permit application.

Mr. Nelson asked about the National Environmental Policy Act (NEPA) requirements. The Petitioners for Petition 18-15 will discuss this issue.

Discussion occurred regarding the exemption of building permits for agricultural related onsite consumption. A property owner would be required to get an agriculture-exempt permit, but not a building permit and no fees would be assessed.

Discussion occurred regarding the setbacks for the solar gardens and solar farms. The consensus of the Commission was to require solar gardens and solar farms to follow the setbacks and petitioners could request variances.

Discussion occurred regarding the relationship of solar panels to the County's Land Resource Management Plan. Renewable energy systems are mentioned in the Land Resource Management Plan.

Ms. Zubko requested that a provision for drain tile repair be placed in the proposal. The Commission requested that Staff ask the State's Attorney's Office for an opinion on this matter. If a provision could be added, the provision should be added in the Design Standards section. A drain tile replacement or repair restriction could be placed in each special use permit.

Ms. Zubko asked when the Department would know if the solar panels were not in use. Mr. Asselmeier responded that the Department would receive a complaint and ask for documentation of use per Section 4.18.P.1.

Ms. Wilson asked about the measures to minimize glare. Mr. Asselmeier responded that specific measures would be addressed in individual special use permits.

Chairman Ashton asked if knock boxes should be required. The consensus of the Commission was not to require knock boxes.

Ms. Wilson asked the impervious soil language in Section G. The issue of impervious surface calculations was addressed in the NPDES and Stormwater Ordinance requirements.

Ms. Zubko made a motion, seconded by Mr. Nelson, to recommend approval of the text amendment with the recommended changes from Staff and the following changes:

1. The reference to a county solar garden in the definition of "Solar Garden" should be deleted.
2. All references to waiving the special use permit requirements and setback requirements should be deleted.
3. Solar gardens and solar farms had to follow the setback requirements for the zoning district in which they are located. Accordingly, the reference to a one hundred foot (100') distance from the right-of-way or property line found in 4.18.D.2 should be deleted.
4. The statement that solar farms require a special use permit found in Section 4.18.D.1 should be removed.
5. If allowed by the State's Attorney's Office, a provision should be added to Section 4.18.F regarding repair of damaged drain tile.

Yes – Ashton, Bledsoe, Nelson, Rodriguez, Wilson, Wormley, and Zubko (7)

No – None (0)

Absent – Casey and Shaw (2)

The motion passed. This proposal will go to the Zoning Board of Appeals on July 2nd.

Petition 18-15 Nancy Harazin on Behalf of Nancy L. Harazin Trust Number 101

Mr. Asselmeier noted that this petition would not be required to follow the solar panel proposal because the proposal was not adopted at the time they submitted the application.

Mr. Asselmeier summarized the request.

Nancy Harazin, on behalf of Nancy L. Harazin Trust Number 101, submitted a petition for a special use permit to operate a public or private utility system – other on her property at 16400 Newark Road. Specifically, the Petitioner would like to contract with Borrego Solar Systems, Inc. for the installation and operation of a solar energy system. The energy generated from the system will be fed into Ameren’s system and consumed offsite.

The property is sixty (60) acres in size. The special use area is approximately twenty-two (22) acres in size and the solar panel area is approximately twelve (12) acres in size.

The subject property and all of the properties are zoned A-1.

The wetland buffer area was reduced from fifty feet (50’) to twenty-five feet (25’). There were two (2) wetlands and two (2) farmable wetlands identified.

The EcoCat report was submitted and consultation was terminated.

The LESA score was 205 indicating a medium area of protection.

Big Grove Township reviewed the proposal and expressed no concerns.

The Village of Newark expressed the following concerns:

1. They would like the solar panels be set back further to the south.
2. They would like larger landscaping or fencing that better blocks the view of the solar panels from adjoining properties other than a chain link fence.
3. They had concerns regarding the safety of the environment if the solar panels break and their contents spill onto the ground.
4. They had concerns about glare if the tracking system malfunctions.
5. They would like assurances that the equipment is removed in a timely manner at the end of the project or when the lease is terminated.

The Newark Fire Protection District reviewed the proposal and expressed no concerns.

ZPAC reviewed this proposal on May 1, 2018. The representatives from the Petitioner requested that the operator be included on conditions 8, 11, and 13 because the operator will be responsible for decommissioning and insurance. The County Highway Department requested a fifteen foot (15’) right-of-way dedication at the north side of the property along Newark Road to address an erosion issue. This request was added as condition 12 and the property owner agreed to this request.

According to the information provided by the Petitioner, the Petitioner would like to lease approximately twenty-three (23) acres to 312 Solar Development, LLC c/o Borrego Solar Systems, Inc. for an initial period of twenty (20) years. The lease could be renewed up to four (4) additional periods of five (5) years. If approved, Borrego Solar Systems, Inc. would install and maintain six thousand, nine hundred twelve (6,912) solar panels

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on the north side of the subject property. The solar panels would be seven feet (7') in height at maximum tilt and three to four feet (3'-4') off of the ground. The panels would rotate with the sun. The system would connect to Ameren's system at the northeast corner of the property at Newark Road. The system is planned to generate two mega-watts (2 MW) of energy. If approved, the system would be operational by approximately July 31, 2019.

Other than periodic mowing and maintenance, no personnel will be onsite and no parking is required.

The construction process is estimated to take between four and six (4-6) months.

The solar panels will be located at their closest point approximately one hundred seventy-five feet (175') from Newark Road and approximately one hundred forty-seven feet (147') from the nearest neighboring property line. The solar panels shall not be closer than twenty-five feet (25') from the identified wetlands.

The laydown area indicated on the site plan will be used for the placement of equipment during construction, decommissioning, and maintenance activities.

The Landscaping Plan calls for the planting of eighteen (18) Black Chokeberries, eighteen (18) Sea Green Junipers, twenty-nine (29) Spiraea, and thirty (30) Woodward Arborvitae. The shrubs would grow to approximately thirty inches (30") in height maximum. Several existing trees shall remain on the west side of the property.

A lawn seed mix will be planted under and around the solar panels. The growth would require mowing three (3) or four (4) times per year.

According to information provided to the County, the no mow is a blend of bunch-forming and creeping fescues derived from species that are native to the Northern Hemisphere. A combination of six (6) complementary varieties of fine fescues makes our no mow lawn seed mix a versatile and adaptable blend that is an excellent choice for a wide variety of planting situations and applications. The bunch grasses are exceptionally drought resistant, thrive in low nitrogen soils, and have moderate tolerance to heavy foot traffic. The creeping fescues spread gradually by underground rhizomes to help fill in between the bunch grasses to create a weed-resistant sod. The creeping fescues also help to fill in areas that may experience turf damage.

Some of the fine fescue grasses in the no mow lawn mix have been documented to possess allelopathic properties, in which the grasses produce compounds that prevent or retard the growth other plants and weeds. This "natural herbicide" makes the no mow particularly resistant to invasion by other herbaceous plants that often plague other types of turf.

- Hard Fescue (*Festuca brevipila*)
- Sheep Fescue (*Festuca ovina*)
- Chewings Fescue (*Festuca rubra* subs. *fallax*)
- Red Fescue (*Festuca rubra*)
- Creeping Red Fescue (*Festuca rubra* var. *rubra*)

The Kendall County Soil and Water Conservation District expressed no concerns regarding the ability of the proposed mix to handle erosion control provided that the property owner or operator conducted annual inspections.

Vegetation would be planted when the panels are in place.

The proposed solar panels should be located away from the wetlands. The Petitioner submitted a wetland study that verified these areas will not be negatively impacted by the placement of solar panels.

Several drain tiles were located on the property. Any drain tiles impacted by the placement of the solar panels shall be relocated.

The project will be required to meet Kendall County's Stormwater Management Ordinance. Greg Chismark submitted comments and questions on the proposal and the Petitioner addressed Mr. Chismark's concerns.

The proposed solar panels shall be required to meet all applicable building codes.

The supports would be buried approximately twelve to thirteen feet (12'-13') in the ground depending on soil conditions. The supports would not be encased in concrete.

Electric lines will be buried inside the fence. There is a utility pole east of the access drive. The electric lines will go above ground at that point and connect to the Ameren system at the point on connection on the northeast corner of the site.

A fourteen foot (14') wide gravel access from Newark Road will be installed. The property already possesses a field access at this location. The access is across the street from the driveway of 16295 Newark Road.

Per the Site Plan, a seven foot (7') high chained link fence shall surround the solar panels. The fence shall have a sixteen foot (16') wide vehicle access gate on the east side and a four foot (4') wide man gate on the south side. The fence will be installed approximately one (1) week after construction starts.

A light will be installed for security reasons at the electrical equipment area.

Approximately eight (8) signs will be placed around the property along the fence and anywhere required by the NEC. A "Danger High Voltage" sign will be placed around the fence every two hundred feet (200'). A sign will also be placed on the vehicle gate entrance. There will be plaques stating emergency contact information and a site key.

No new odors are foreseen.

The Petitioner supplied a report outlining that solar panels do not cause damage to neighboring property value or harm the environment.

The solar panels have life expectancy of thirty (30) years. The anticipated decommissioning costs were provided to the Commission. Decommission is estimated to take between two and three (2-3) months.

Kendall County is currently in the process of adopting solar panel regulations for offsite usage of energy. Some of the proposed language is included in the proposed recommendations.

Staff recommended approval of the requested special use permit with the following conditions and restrictions:

1. The site will be developed in accordance with the Site Plan.
2. Lighting will be installed in accordance with the Site Plan.

3. The landscaping shall occur in accordance with the Landscaping Plan.
4. Replacement of dead and/or damaged vegetation shall occur on a timetable agreed to between the property owner and the Kendall County Planning, Building and Zoning Department.
5. Signage shall be installed as described in the Sheet Notes. In addition, at least one (1) sign shall be placed at the vehicle access gate stating emergency contact information.
6. The site shall be decommissioned in accordance with the Decommissioning Plan. In the event the Decommissioning Plan changes, the property owner shall supply the Kendall County Planning, Building and Zoning Department with revised plans as soon as they are available.
7. The Decommissioning Plan shall be initiated if the solar panels are not used for ninety (90) consecutive days. This condition shall not apply if maintenance on the impacted solar panel(s) is occurring.
8. The property owner or operator shall have six (6) months to complete the Decommissioning Plan and remove the solar panels and related equipment from the property (**Amended by ZPAC**).
9. In addition to other applicable fees, the following fees should be paid to the County prior to the installation of the solar panels:
 - Building Permit Fees
 - 0-10 KW \$150
 - 51-100 \$300
 - 101-500 \$600
 - 501-1000 \$1200
 - 1001-2000 \$2750
 - 1001-2000 \$6000
 - Over 2000 KW \$200 for Each Additional 0-100KW
 - Fees Double if Construction Commences before Obtaining Building Permit
10. The property owner or operator shall maintain current liability policy covering bodily injury and property damage at least Three Million Dollars per occurrence and Five Million Dollars in aggregate and must have policy for the duration of the special use permit, such insurance may be provided pursuant to a plan of self-insurance by a party with a net worth of Twenty Million Dollars or more and the County shall be named as additional insured to the extent that the County is entitled to indemnification.
11. The property owner or operator shall indemnify, and hold harmless the County and its officials, employees, and agents (collectively and individually, the "Indemnified Parties") from and against any and all claims, demands, losses, suits, causes of actions, damages, injuries, costs, expenses, and liabilities whatsoever, including reasonable attorney's fees, except to the extent arising in whole or part out of negligence or intentional acts of such Indemnified Parties (such liabilities together known as "liability") arising out of Applicant, Owner, or Operators selection, construction, operation, and removal of the solar energy system and affiliated equipment including, without limitation, liability for property damage or personal injury (including death), whether said liability is premised on contract or on tort (including without limitation strict liability or negligence). This general indemnification shall not be construed as limited or qualifying the County's other indemnification rights available under the law (**Amended by ZPAC**).
12. Within sixty (60) days of the approval of this special use permit ordinance, the owner shall dedicate

a fifteen foot (15') wide strip along the northern portion of the property to Kendall County to be used as Newark Road right-of-way (**Added by ZPAC**).

13. The property owner or operator shall be responsible for ensuring that the operations of the solar panels allowed by this special use permit comply with all applicable Federal, State, and Local laws (**Amended by ZPAC**).
14. Damaged or non-functioning solar panels shall be replaced or repaired on a timetable agreed to between the property owner and the Kendall County Planning, Building and Zoning Department (**Added after Village of Newark meeting**).
15. Failure to comply with above conditions or restrictions could result in the amendment or revocation of the special use permit.
16. If one or more of the above conditions is declared invalid by a court of competent jurisdiction, the remaining conditions shall remain valid (**Added after ZPAC**).

Ms. Zubko requested that a condition be added that drain tile should be repaired and/or rerouted. The consensus of the Commission was to add this condition.

Margaret Blum, Justin Hardt, Jim Coyle, and Melissa Samaroo presented a powerpoint presentation, see enclosure. Mr. Hardt provided a description of Borrego and the various types of solar energy systems. He also discussed the various studies involved in the permitting process. Ms. Blum explained the installation process of the solar panels and related equipment. She also discussed the maintenance of the panels and vegetation. A sample panel was passed around to the Commissioners. Federal NEPA regulations do not apply to this project. The mature height for the plants is approximately four to six feet (4'-6') for the vegetation planted along the northern portion of the property.

Mr. Nelson asked about the taxing of the property. The taxing for solar panel projects is currently under review in the General Assembly.

They will do weekly inspections to get the landscaping started.

The south portion of the property will be farmed. The area between the solar panels and the road may not be farmed.

The panels rotate east to west. The coating is anti-glare with the objection to absorb as much sunlight as possible.

The reasons that the project is its current size are because of the capacity of Ameren's system and State regulations.

Mr. Wormley asked why the panels were placed on the northern portion of the property. They wanted to avoid the wetlands and avoid extending the driveway and electricity lines.

Mr. Wormley disagreed with the statement that the project will not negatively impact property values. He argued that the southern part of the property cannot be used for anything but farming for the duration of the solar panel lease. Ms. Blum stated the studies examined the property values of adjacent parcels.

Ms. Wilson asked about guarantees for decommissioning and the incentive for Borrego to remove the solar panels and restore property to agricultural condition. Mr. Hardt stated that the lease requires removal of the solar panel related equipment. No bond or monetary holdbacks were included in the lease. Salvage value exists.

Ms. Wilson asked about the noise level in rain and general noise. A noise diagram was presented. The noise at one hundred feet (100') from the transformer is thirty-five (35) dBA. The noise level reduces the further away from the transformer. The transformer is fifty-five to sixty-five (55-65) dBA at the transformer. The transformer does not run at night.

No impact on birds exists.

Most of the provisions of the proposed solar panel ordinance were incorporated in the special use permit conditions.

Borrego will be involved in the maintenance of the solar panels.

The whole site will be weed eaten a few times a year.

The posts are rated for one hundred thirty-four (134) mile per hour winds.

Maintenance includes mowing and inspections.

Cliff Fox, Village Administrator of the Village of Newark, requested a copy of the landscaping plan. The Petitioner is not planning to move the solar panels further south at this time. The Village wanted the panels moved south to prevent an eyesore.

Tom Bromeland, Newark Road, expressed his opposition to the proposal. He was concerned about the environmental impact of broken panels. Runoff from the subject property drains onto his property. He expressed concerns about glare and he would like to see a different type of fencing other than chain-link. He would like to see the panels moved further south because of noise concerns and aesthetics. He argued that land values will be impacted and that the County will not benefit from the project.

The components of the solar panels do not have a hazardous substance inside them.

A solid fence would create a different wind load inside the solar panel project. The posts would almost certainly need concrete casings.

The suggestion was made to plant arborvitae every six to eight feet (6'-8').

Discussion of the LaSalle project in Streator occurred, focusing on the visibility of the project from roads and nearby property. This project is much larger than the one (1) proposed outside Newark.

Cell phone and television reception will not be impacted.

Mr. Nelson made a motion, seconded by Ms. Zubko, to recommend approval of the special use permit with the conditions proposed by Staff, the addition of a condition that damaged drain tile be repaired and/or rerouted, and the suggestion that arborvitae be planted on the north side of the property and/or the installation of taller shrubs during installation.

No – Ashton and Wormley (2)

Absent – Casey and Shaw (2)

The motion passed. This proposal will go to the Zoning Board of Appeals on June 4th.

Mr. Wormley voted no because he believed the property values of the subject property will be impacted.

Chairman Ashton voted no because he thought their plans to farm on the sides were unrealistic and taking into consideration the comments of the neighbor.

CITIZENS TO BE HEARD/ PUBLIC COMMENT

None

NEW BUSINESS

None

OLD BUSINESS

Consideration and Action on Amendments to Petition 18-04 Regarding Amending the Future Land Use Map for Property Near Route 47 in Lisbon Township-Commission Could Vote to Schedule a Public Hearing on the Petition

Mr. Asselmeier noted the change made to the proposal; references to the Prairie Parkway are in past tense.

Mr. Nelson made a motion, seconded by Mr. Bledsoe to schedule a public hearing on the proposed changes to the Land Resource Management Plan for June 27, 2018, at 7:00 p.m. in the County Board Room at 111 W. Fox Street in Yorkville.

Yes – Ashton, Bledsoe, Nelson, Rodriguez, Wilson, Wormley, and Zubko (7)

No – None (0)

Absent – Casey and Shaw (0)

The motion passed.

Update on Petition 17-28 Pertaining to text Amendments to Outdoor Target Practice or Shooting Ranges (Not Including Private Shooting in Your Own Yard)

Mr. Asselmeier stated that the Planning, Building and Zoning Committee is reviewing one (1) paragraph in the proposal. Upon completion of that review, the proposal will come back to the Planning Commission.

Update on Petition 18-03 Pertaining to Removing the Requirements for the Zoning, Platting and Advisory Committee and the Kendall County Regional Planning Commission to Meet and Issue Recommendations on Proposed Map Amendments, Special Use Permits, Major Amendments to Special Use Permits, and Text Amendments on Matters Not Involving the Powers and Duties of the Zoning, Platting and Advisory Committee or the Kendall County Regional Planning Commission and Related Zoning Text Citation Amendments

Mr. Asselmeier reported that the Planning, Building and Zoning Committee laid this proposal over until the September 2018 meeting.

Request from the Kendall County Planning, Building and Zoning Committee for Comments Pertaining to Petition 18-07 Regarding Text Amendments Establishing Procedures for Renewing Special Use Permits

Mr. Asselmeier reported that the Planning, Building and Zoning Committee instructed Staff to rewrite the proposal to allow the County Board to initiate amendments to and revocations of special use permits at any time
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and any reason.

REVIEW OF PETITIONS THAT WENT TO COUNTY BOARD

Mr. Asselmeier reported that Petition 18-05 rezoning the Warpinski property on Walker Road from A-1 to R-1 was approved by the County Board.

OTHER BUSINESS/ANNOUNCEMENTS

None

ADJOURNMENT

Mr. Wormley made a motion, seconded by Ms. Zubko, to adjourn. With a voice vote of all ayes, the motion passed unanimously. The Kendall County Regional Plan Commission meeting adjourned at 10:11 p.m.

Respectfully submitted by,
Matthew H. Asselmeier, AICP
Senior Planner

Encs.

**KENDALL COUNTY REGIONAL
PLANNING COMMISSION MEETING
MAY 23, 2018**

NAME	ADDRESS	EMAIL ADDRESS
Tom Bromeland Mary		
Melissa Samaras Justin Hardt	1 N. State St. #1500 Chicago, IL c/o Barrego Solar Systems	msamaras@barregosolar.com jhardt@barregosolar.com
JIM COYLE	21 S EVERGREEN	jcoyle@greenbergfarrow.com
MARGARET BLUM	ARLINGTON HTS 60005	mblum@ " " "
CLARA FOX	VILLAGE OF NEWARK	ADMIN@NEWARK-IL.ILUS



Kendall County Regional Plan Commission Meeting

Special Use Request

May 23, 2018

Agenda



- Team Introduction (GF)
- Borrego Solar Systems, Inc. (BSSI)
 - Company Background
 - IL - Community Solar
- Project Presentation (GF)
 - Petition# 18-15 Borrego Solar
- Additional Questions?
- Conclusion/Findings of Fact

Borrego Solar Systems, Inc.



WHAT WE DO ▾

ABOUT US ▾

LOCATIONS ▾

PROJECTS ▾

BLOG

Call 1 (888) 898-6273

Contact us



Why Borrego Solar?

- Over 35 Years Solar Experience
- Over 1,100 Completed Projects
- Over 500MW Under Management
- Over \$500M in Financed PPAs

We've been engineering, constructing and maintaining solar power projects since 1980

Borrego Solar Overview



- **Illinois:** Core Borrego market for the long term
- **#1 Massachusetts:** Over 225 MW installed, we have been the largest installer of commercial- and utility-scale solar in the state since 2007
- **#1 New York:** Over 70 MW installed
- **Local Office:** Chicago presence
- **Top 10 in California:** Almost 100 MW installed
- **Top 5 National:** Commercial and/or community scale installer since 2013
- **More than 400 MW:** Projects financed and constructed
- **200+ employee firm:** Partially family owned

Community Solar



Types of Solar

	Description	Probable MW of Development by 2025	Size Limit per Project, per the Future Energy Jobs Act
Residential Rooftop Solar	System is on the customer's roof (main building or accessory structure). In rare instances, a residential customer may want to put solar on the ground.	325	All behind-the-meter projects are limited to 2 MW in size, but each must be sized to appropriately meet the owner's electric need. A typical residential project is between 3-10 kW, whereas a commercial project could be 10 kW – 2 MW depending on the size of the business.
Commercial & Industrial Solar	System is on the customer's property, either on the roof (main building or accessory structure) or the ground.	325	
Community Solar	Generally, a larger system where a combination of several entities (residents, businesses, governments) have a partial interest (subscription) in the output of a system. Systems can be located on a roof or on the ground, but do not have to be located near the subscribers.	325	Developers may be allowed to locate more than one project at the same site (co-locate).
Brownfield Solar	System is located on blighted land that is not suitable for redevelopment, such as closed landfills or Superfund sites.	40-50	There is no minimum or maximum size for brownfield projects.
Utility Scale Solar	Large systems (2 MW-200 MW) that generally do not serve an individual customer and are located near electrical infrastructure.	750-1000	Systems must be larger than 2 MW, but have no upward limit. These projects could use anywhere from 10 acres to 100s of acres for a single project.



Location: 16400 Newark Road



Special Use Request:

- Existing Zoning: A-1 Agricultural
- Proposed: A-1 Agricultural
- Future Land Use: A-1 Agriculture

Community Outreach:

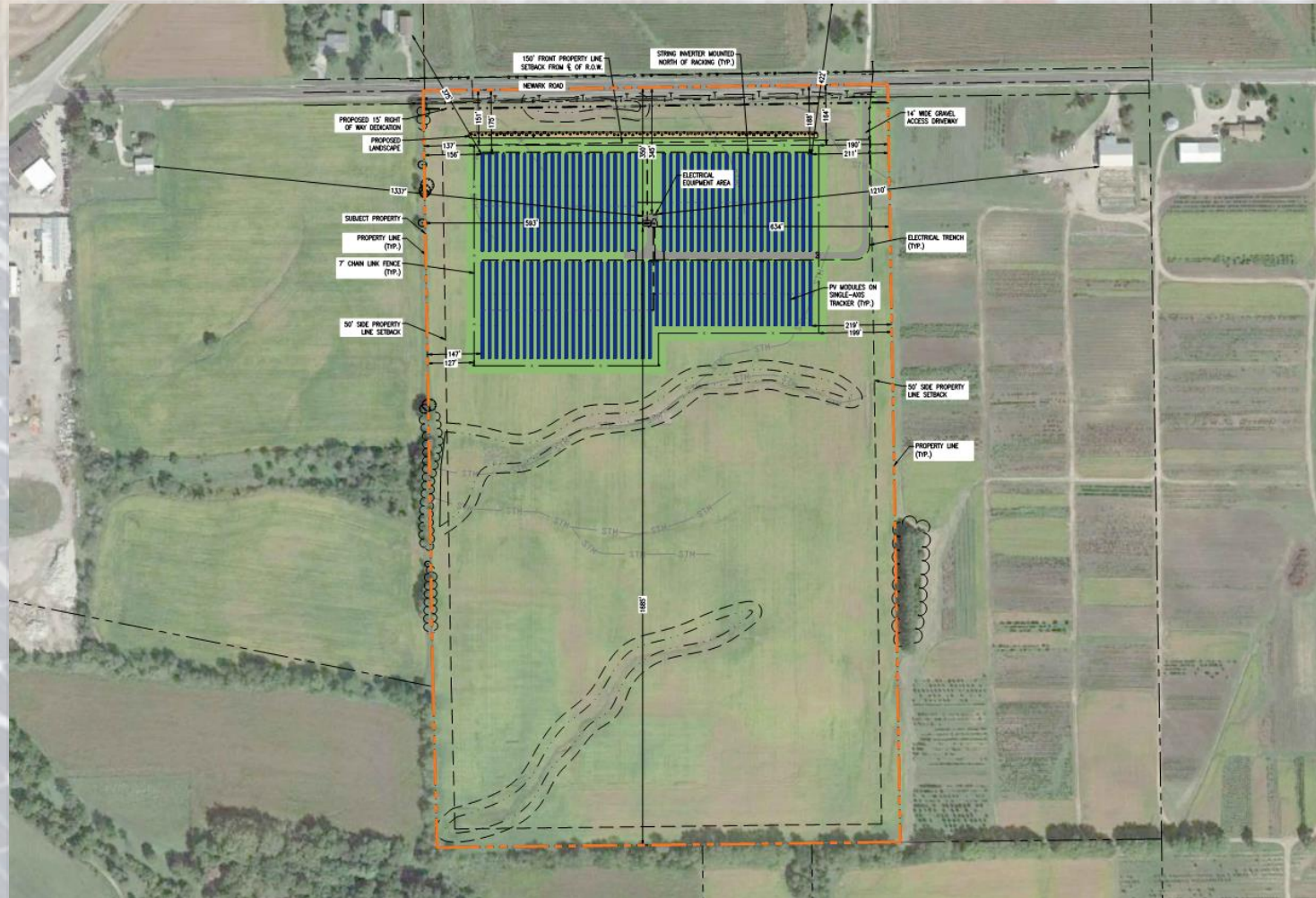
- Kendall County – Pre-app
- Big Grove Township
- Village of Newark
- Newark Fire Protection
- Abutting Neighbors
- Kendall Co Farm Bureau



Project Components

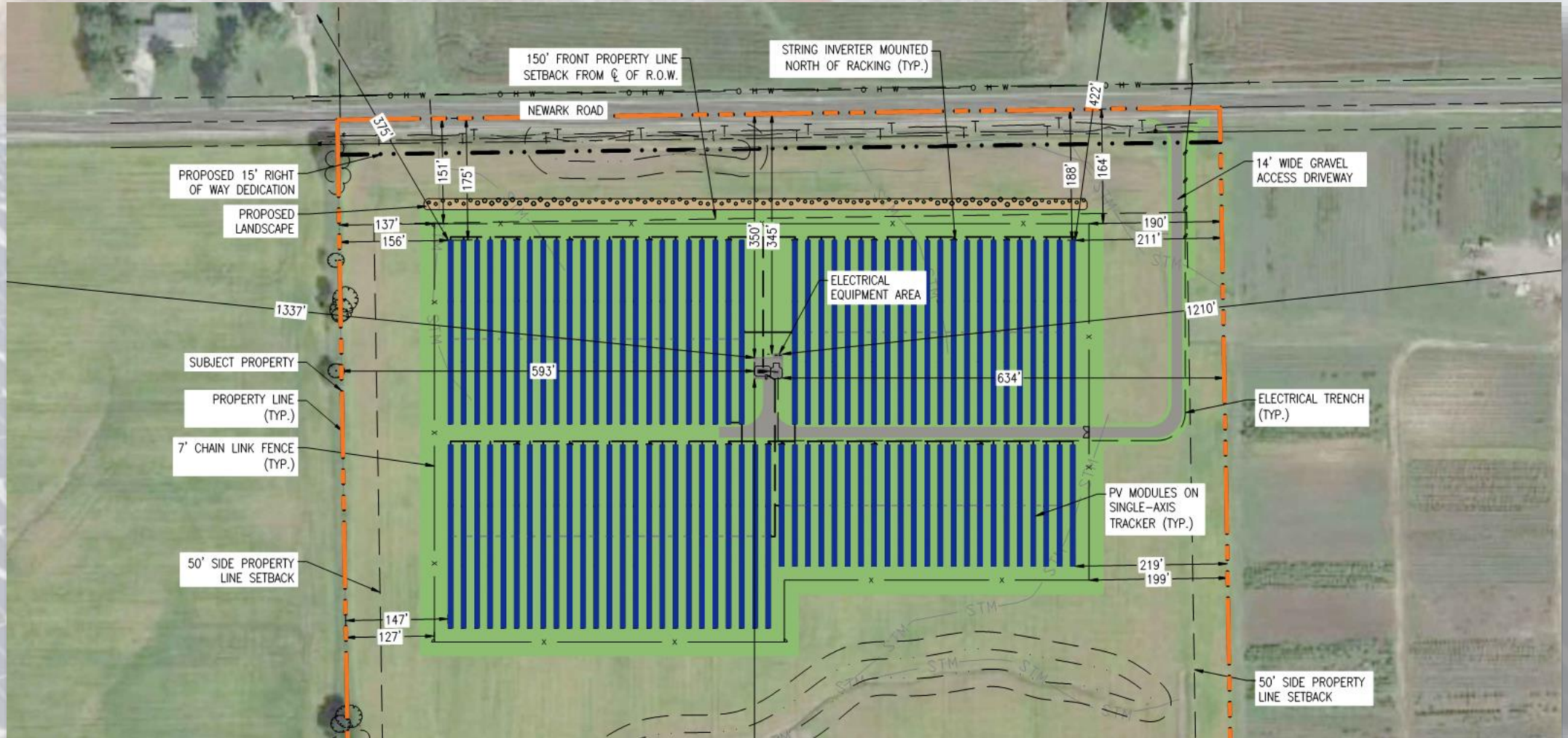
- Solar panel arrays with trackers/racking system/string inverters (< 8 ft.)
- Concrete pad-mounted transformers/switch gear (< 7ft.)
- Data Acquisition System (DAS) for remote monitoring (24/7)
- Riser poles with OH power lines for interconnection (4 to 6)
- Underground trenching/cabling
- Security fencing at 7 ft. height
- Limited area of gravel/paved drive for site access and maintenance
- Drainage flow through the property to be maintained
- Soil erosion control/drainage design vetted with KCSWCD and Engineering Consultant.
- Post-construction site area to be seeded with low-mow seed mix

Petition# 18-15 16400 Newark Road



- Parcel: +/- 66 acres
- BSSI Project: +/- 14 acres
- Size: One 2MW system
- Access: Newark Rd (County)
- Environmental Impacts: N/A
 - ✓ Wetland Determination
 - ✓ T & E Species
 - ✓ ESA Phase I
 - ✓ Archeological Survey
 - ✓ Drain Tile Survey
- Setbacks: Exceed required
- Variance Requests: N/A
- NRI/LESA:
 - ✓ KCSWCD – Report Pending

Petition# 18-15 16400 Newark Road



Petition# 18-15 16400 Newark Road



Construction Timeframe

- 4 to 6 months
- 2 to 3 trucks/day average
- Max. weight at 80k#s

Operations & Maintenance

- Remote monitoring
- 3 to 4 times/year for equipment
- 3 to 4 times per year for mowing
- No pesticides/herbicides/fertilizers

Decommissioning

- Removable system
- Decommissioning plan/estimate
- Addressed per lease agreement

Impacts

- Noise – only during construction
- Clean use, no traffic
- Little/no impact on County utilities or services
- Property Values – no effect

Petition# 18-15 16400 Newark Road



COHN REZNICK
ACCOUNTING • TAX • ADVISORY
cohnreznick.com

PROPERTY VALUE IMPACT STUDY

PROPOSED NEWARK ROAD SOLAR ENERGY USE
Big Grove Township, Unincorporated Kendall County, Illinois

PREPARED FOR:
Mr. Justin Hardt
Senior Project Developer
Borrego Solar Systems, Inc.
1 North State Street, Suite 1500
Chicago, IL 60602

SUBMITTED BY:
CohnReznick, LLP
Valuation Advisory Services
200 S Wacker Drive, Suite 2600
Chicago, IL 60606

Patricia L. McGarr, MAI, CRE, FRICS
patricia.mcgarra@cohnreznick.com
Direct: (312) 508-5802

May 2, 2018

A member of
Nexia
International CohnReznick is an independent
member of Nexia International.

Findings and Results:

- No measurable/consistent difference in adj. values
- No difference in price/marketing periods/demand
- Supported by research - confirmed by local brokers
- Little/no measurable and consistent difference in value attributable to solar farm adjacencies

Conclusion:

- Adjoining property sales not adversely affected by proximity to solar farms over short or long term

Petition# 18-15 16400 Newark Road



Solar Farm Materials and Safety

- ❑ Panels will be PV silicon (*NC State Paper/MSDS – JA Solar Panels*)
 - Tier I panels warrantied for 25 years
 - Internal components are completely sealed
- ❑ Panel materials
 - Frame: Tempered glass (130mph wind rating) and aluminum
 - PV cell: Primarily silicon, small amounts of phosphorus, boron
- ❑ Racking system is comprised of galvanized steel/aluminum, common and benign building materials
- ❑ EMF/RF Concerns (*MassCEC report/NC State Paper*)
 - No negative impacts, no heightened levels from these types of solar PV facilities to nearby homes

Petition# 18-15 16400 Newark Road



Solar Farms and Recycling

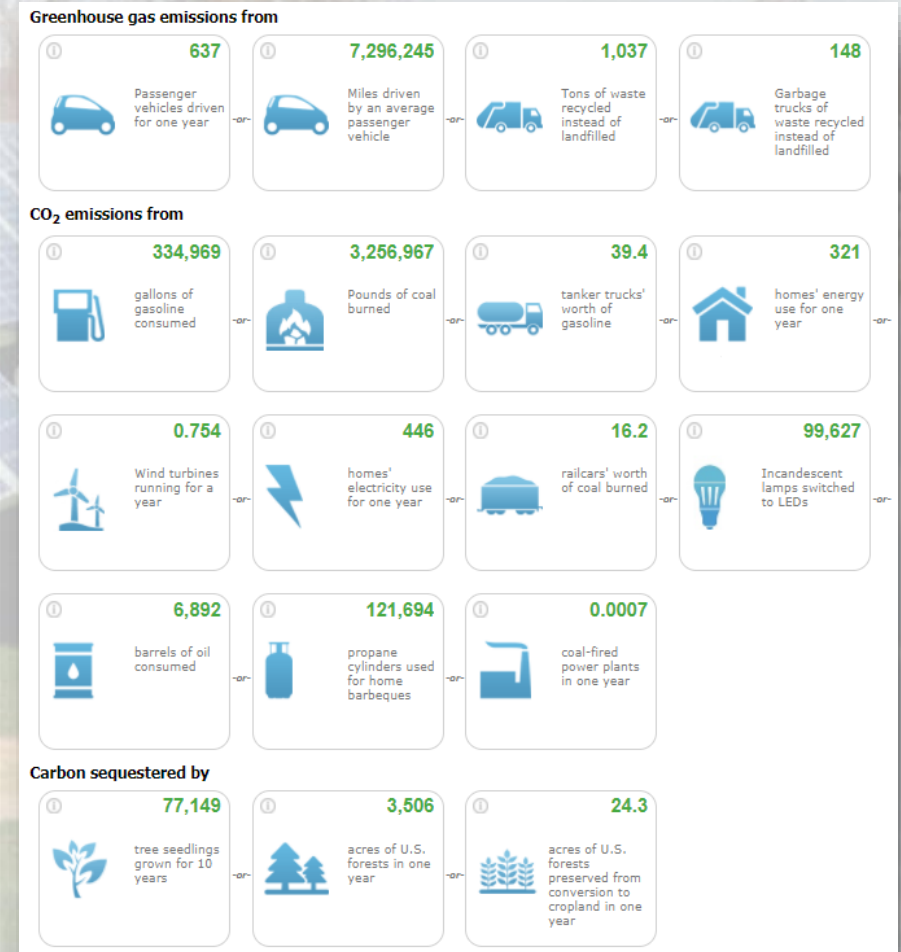
- ❑ Currently no demand for recycling in Illinois
 - Panels can be land-filled
 - Current waste volume not adequate to support PV-specific recycling infrastructure
 - Per 2016 NC survey, most NC developers return damaged panels to manufacturer or local recycler
- ❑ Future recycling centers are anticipated
 - SEIA is working with the IL Sustainable Technology Center to create requirements for recyclers/handlers...working to build recycling centers in IL
 - Recycling centers do exist nearby in Minnesota, Ohio and Michigan

Petition# 18-15 16400 Newark Road



Other Project Benefits

- Local Tax Revenue
- Stabilizes Electric Grid
- Renewable Energy Source
- Local Job Stimulation
 - ✓ IL Future Energy Jobs Act
- Environmental Benefits Equivalent to...
 - ✓ Power for over 300 homes
 - ✓ Offsetting of over 3.5 thousand acres of trees
 - ✓ Emissions from 6,892 barrels of oil consumed
 - ✓ Emissions from 3.3 million pounds of coal burned
 - ✓ Emissions from 335 thousand gallons of gasoline





Petition# 18-15 16400 Newark Road

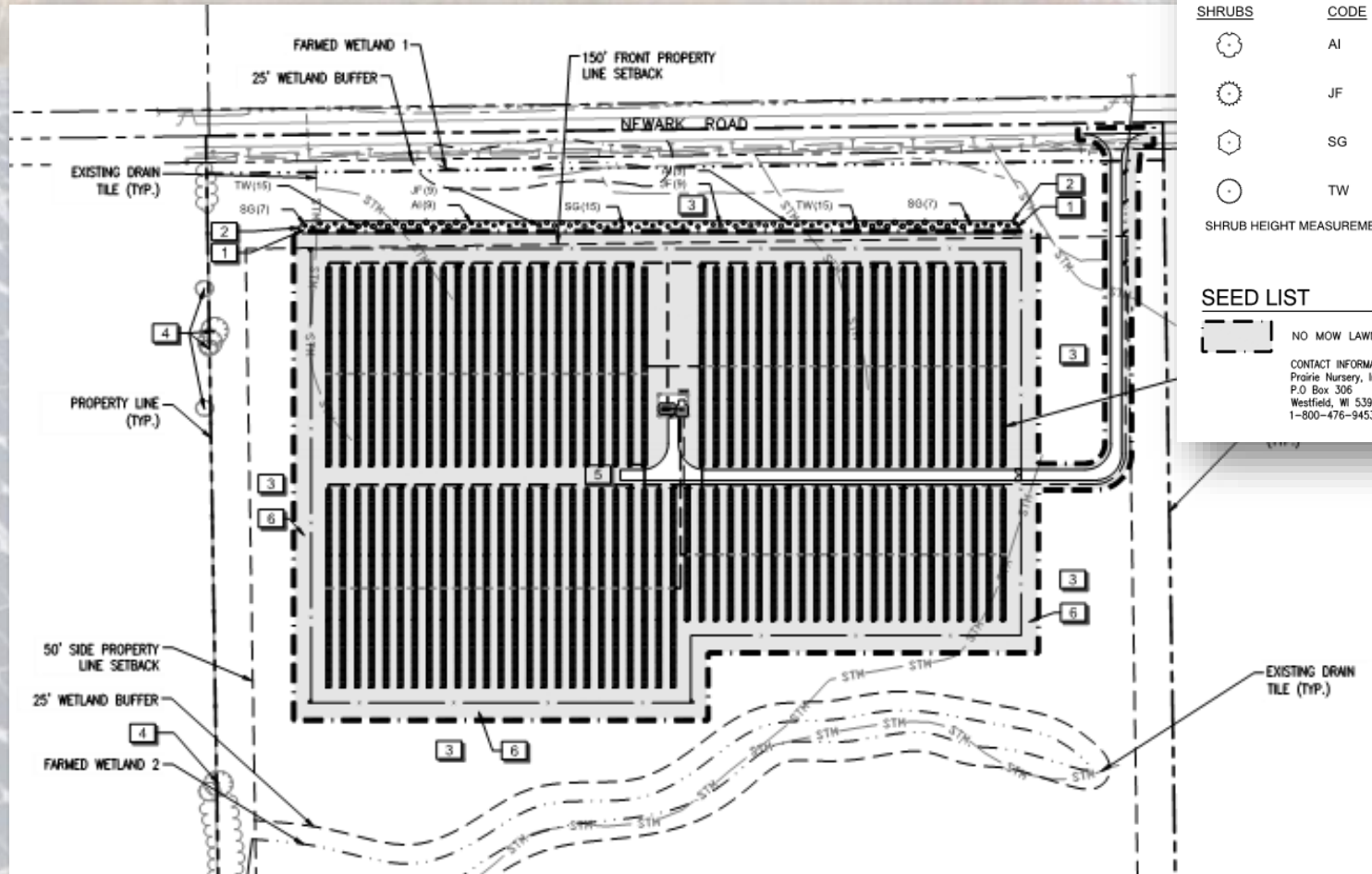
Specific County Concerns - National Environmental Policy Act (NEPA)

- The National Environmental Policy Act (NEPA) was signed into law on January 1, 1970. NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. The range of actions covered by NEPA is broad and includes:
 - Making decisions on permit applications
 - Adopting federal land management actions, and
 - Constructing highways and other publicly-owned facilities.
- Borrego project is not federal, no federal permits, no federal funding.
 - System owner will receive a federal tax break via the Investment Tax Credit (ITC) – no cash outlay.
 - Project is not federally regulated.
 - NEPA – not applicable.

Petition# 18-15 16400 Newark Road



Specific County Concerns – Landscaping



PLANT SCHEDULE

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	HEIGHT
	AI	18	Aronia melanocarpa 'Iroquois Beauty' TM	Black Chokeberry	#05/5 gal	30" Ht.
	JF	18	Juniperus chinensis 'Sea Green'	Sea Green Juniper	#05/5 gal	24"-30" Ht. Min.
	SG	29	Spiraea x cinerea 'Grefsheim'	Spiraea	#05/5 gal	24"-30" Ht. Min.
	TW	30	Thuja occidentalis 'Woodwardii'	Woodward Arborvitae	#05/5 gal	24"-30" Ht. Min.

SHRUB HEIGHT MEASUREMENTS ARE TO BE AS MEASURED FROM TOP OF ROOTBALL (TYP.)

SEED LIST

NO MOW LAWN SEED MIX WITH EROSION CONTROL BLANKET (±13.52 ac)

CONTACT INFORMATION FOR NO MOW LAWN SEED MIX ONLY:
 Prairie Nursery, Inc.
 P.O. Box 306
 Westfield, WI 53964
 1-800-476-9453

PERMANENT GRASS CHART

SPECIES	LBS./ACRE	LBS./1000 FT. ²
NO MOW LAWN SEED MIX	110	2.5
SEED MIX:		
HARD FESCUE	(FESTUCA BREVIPILO)	
SHEEP FESCUE	(FESTUCA OVINA)	
CHEWINGS FESCUE	(FESTUCA RUBRA SUBS. FALLAX)	
RED FESCUE	(FESTUCA RUBRA)	
CREEPING RED FESCUE	(FESTUCA RUBRA VAR. RUBRA)	

TEMPORARY SEEDING

SPECIES	LBS./ACRE	LBS./1000 FT. ²	SEEDING DATES
OATS	90	2	EARLY SPRING – JULY 1
CEREAL RYE	90	2	EARLY SPRING – SEPT. 30
WHEAT	90	2	EARLY SPRING – SEPT. 30
PERENNIAL RYEGRASS	25	0.6	EARLY SPRING – SEPT. 30



Petition# 18-15 16400 Newark Road

Land Resources Management Plan - Goals and Objectives

WATER

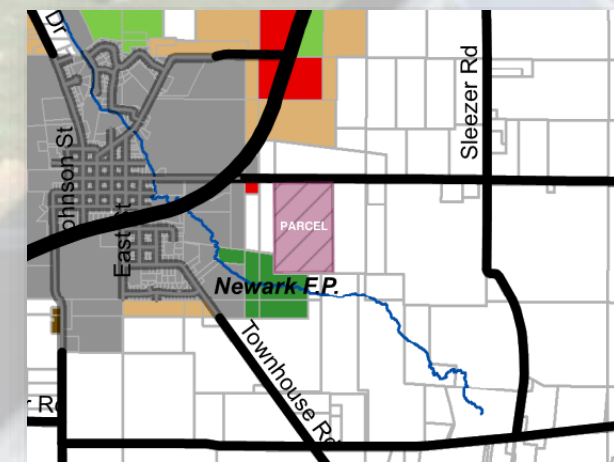
- Goal: Safe, ample and reliable sources of water available throughout the County, and the protection of all surface and ground water resources.
 - ✓ No negative impact

LAND

- Goal: Use of the County's land resources in a manner sensitive to inherent environmental limitations.
 - ✓ No negative impact

ENERGY CONSERVATION

- Goal: An energy-efficient and energy-wise county
 - ✓ Positive impact





Petition# 18-15 16400 Newark Road

Land Resources Management Plan - Goals and Objectives (cont'd.)

URBAN DEVELOPMENT

- Goal: A pattern of compact, contiguous urban development, countryside residential and agricultural environments in a natural equilibrium that enhances the quality of personal and community life.
 - ✓ No negative impact

AGRICULTURE

- Goal: A rural environment that provides for continuation of viable agricultural activities and a rural character and lifestyle.
 - ✓ No negative impact

HOUSING

- Goal: Management of the quality, quantity, location, and rate of housing development to insure the efficient use and conservation of the County's natural and public resources production and soil and water conservation.
 - ✓ No negative impact



Petition# 18-15 16400 Newark Road

Land Resources Management Plan - Goals and Objectives (cont'd.)

TRANSPORTATION

- Goal: A transportation plan that has the capacity to promote the safe, efficient, and speedy movement of persons and goods. This network must anticipate the demands of growth, promote energy conservation, reduce pollution, and be updated regularly
 - ✓ No negative impact

PUBLIC FACILITIES AND SERVICES

- Goal: The provision of public facilities and services in a healthful, economical manner.
 - ✓ Positive impact

Petition# 18-15 16400 Newark Road



Questions?

Borrego Solar Systems, Inc.

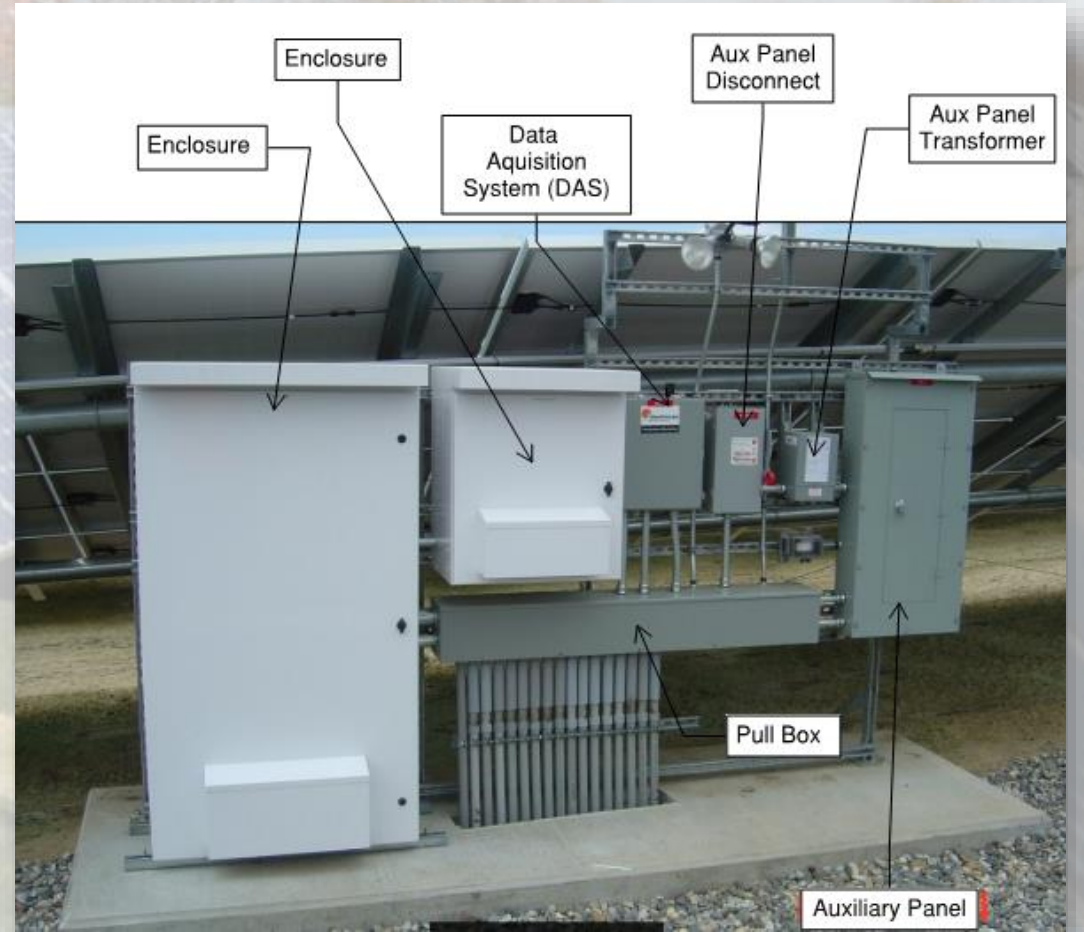


Thank you for your consideration.

System Photos



System Photos



System Photos



View Illustration



Grand Ridge Solar Farm:

- Streator, IL
- Utility Scale Solar
- +/- 126 acre array field
- 10x Borrego Project

➤ View at 250 ft. Distance



View Illustration



Grand Ridge Solar Farm:

- Streator, IL
- Utility Scale Solar
- +/- 126 acre array field
- 10x Borrego Project

➤ View at 500 ft. Distance



View Illustration



Grand Ridge Solar Farm:

- Streator, IL
- Utility Scale Solar
- +/- 126 acre array field
- 10x Borrego Project

➤ View at 750 ft. Distance



View Illustration



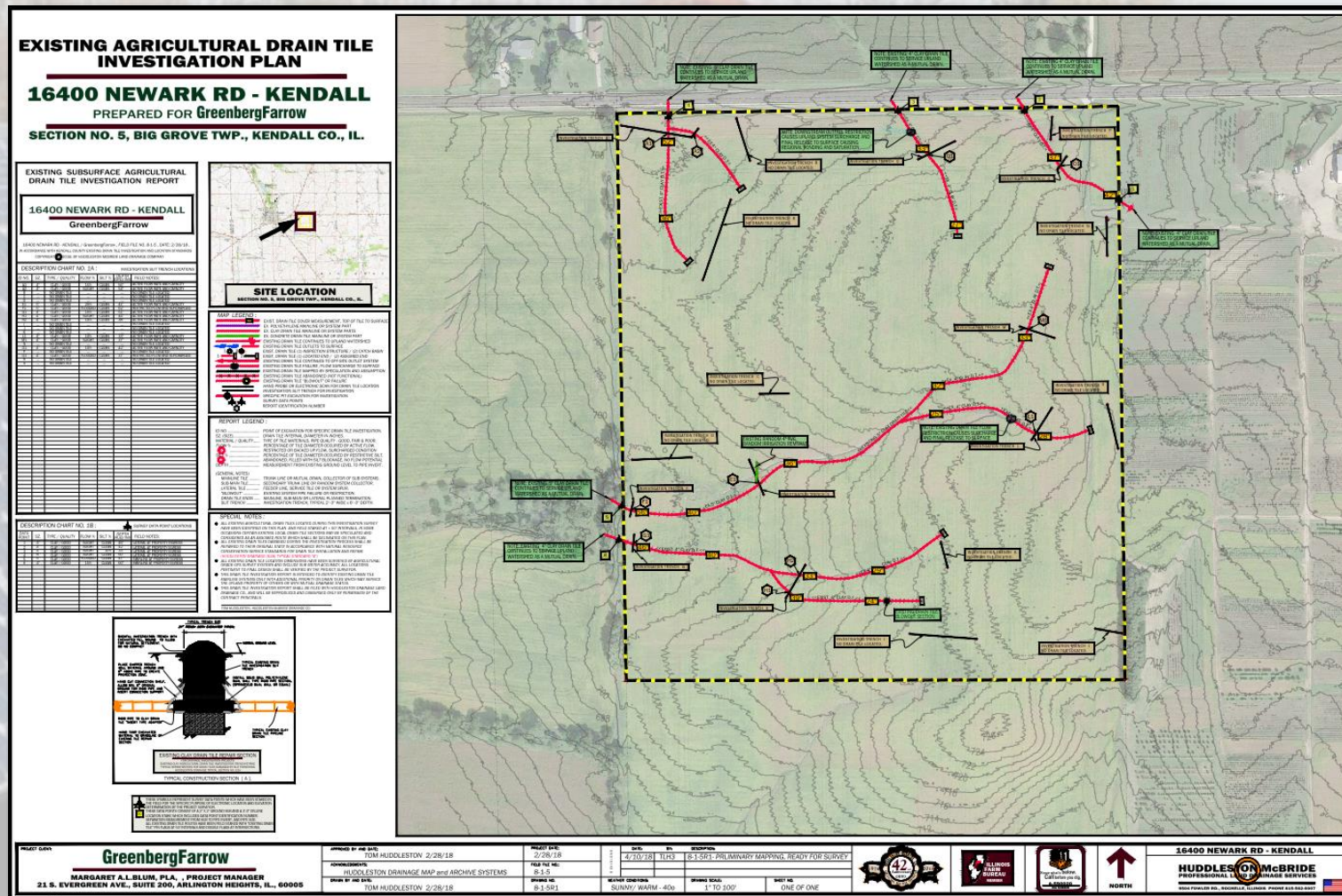
Grand Ridge Solar Farm:

- Streator, IL
- Utility Scale Solar
- +/- 126 acre array field
- 10x Borrego Project

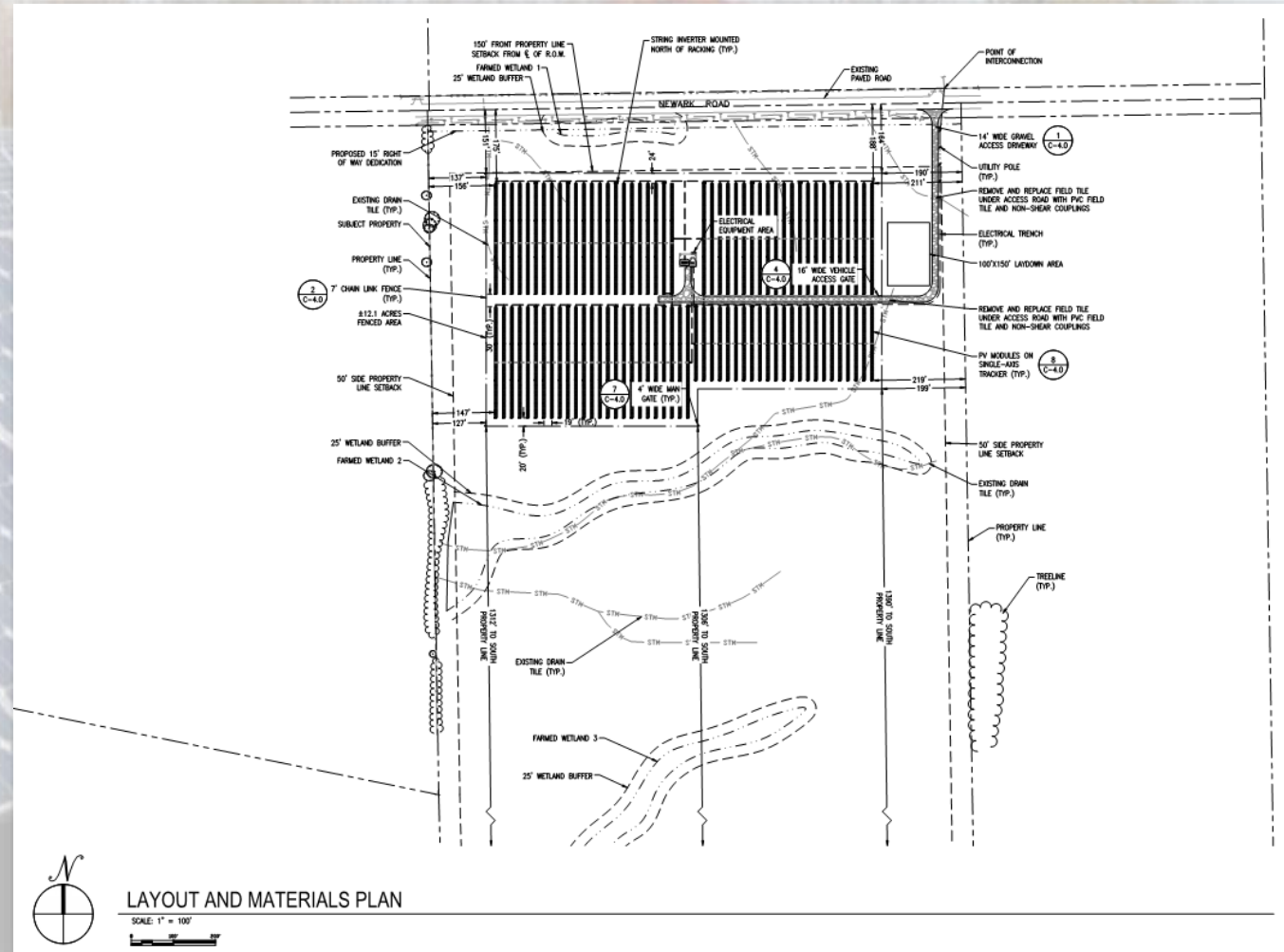
➤ View at 1,000 ft. distance



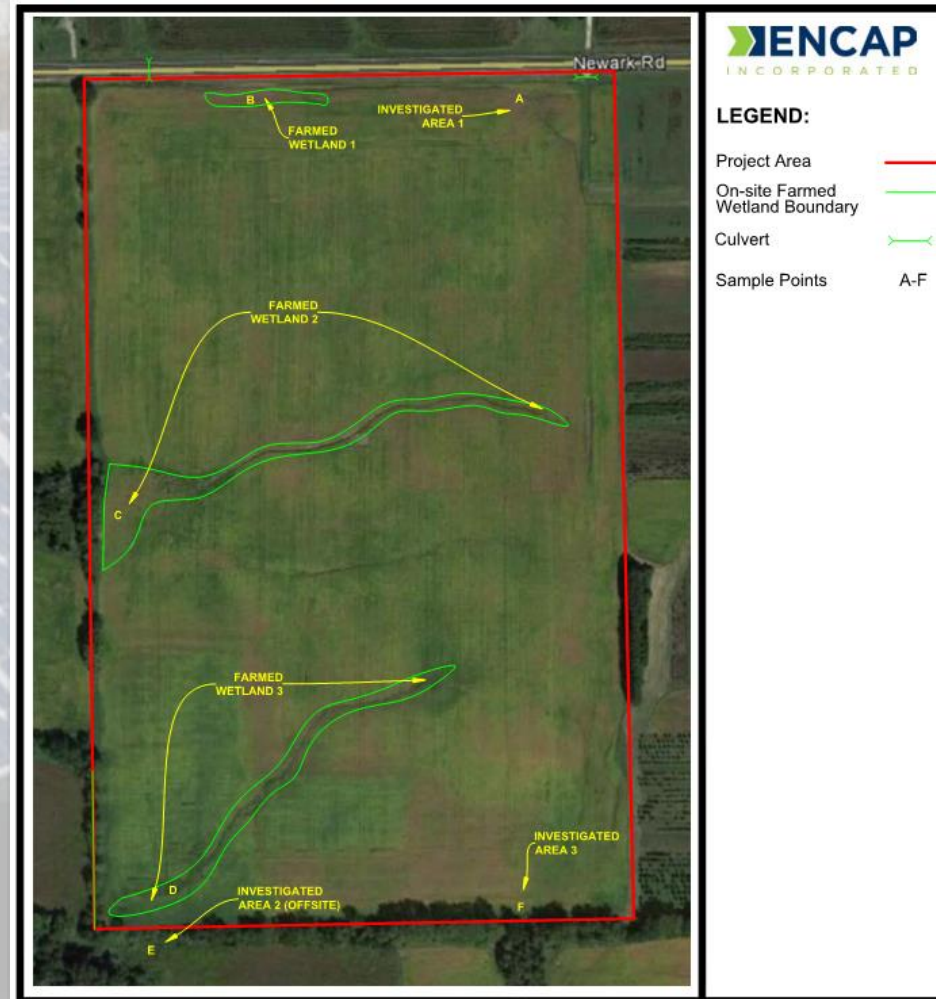
Drain Tile Survey



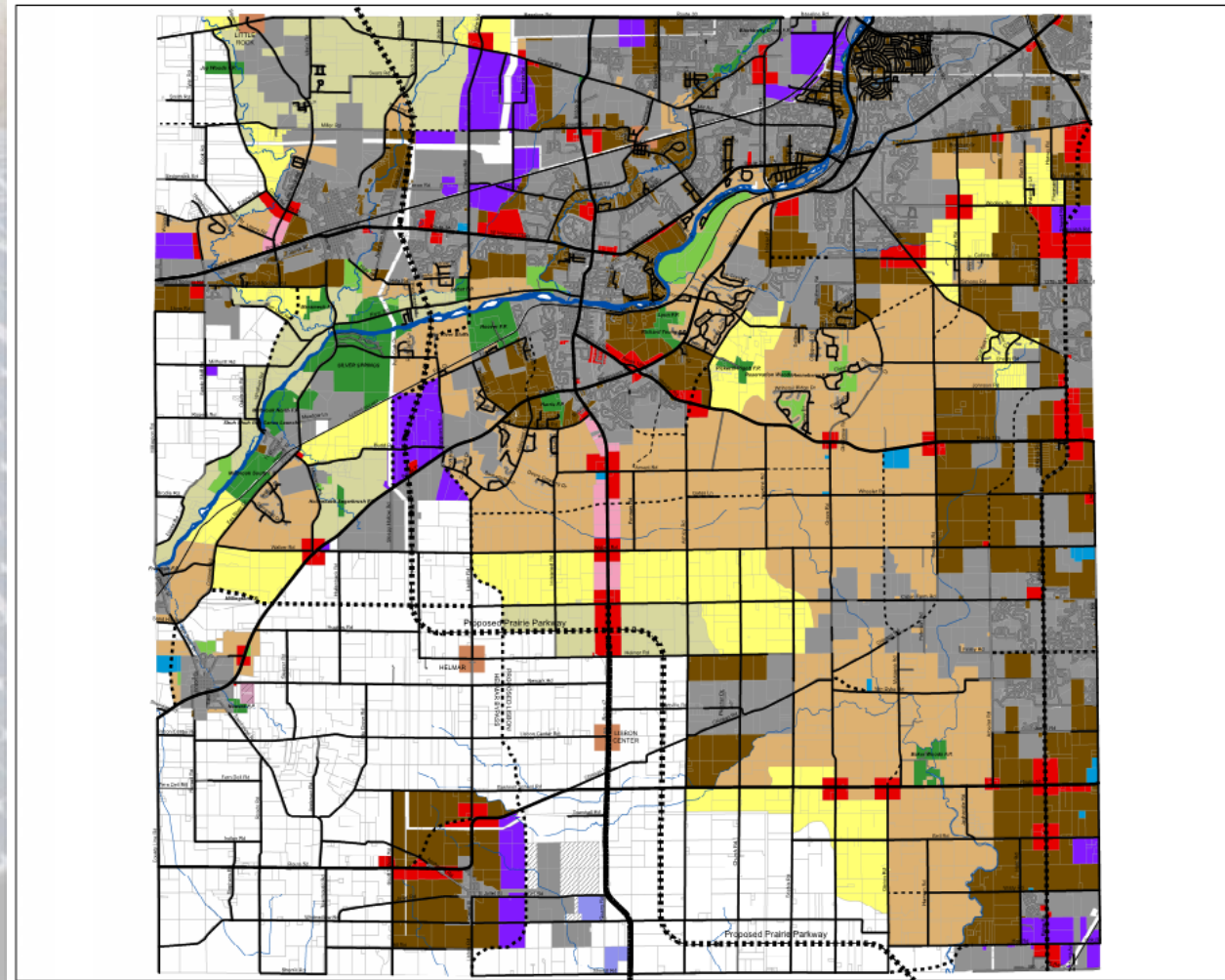
Layout Plan



Wetland Delineation



Future Land Use Plan



Future Land Use Plan
Kendall County, Illinois



LEGEND

- Urbanized Areas (Incorporated)
- Suburban Residential (Max Density = 1.00 DU/Acre)
- Rural Residential (Max Density = 0.65 DU/Acre)*
- Rural Estate Residential (Max Density = 0.45 DU/Acre)
- Countryside Residential (Max Density = 0.33 DU/Acre)
- Commercial
- Mixed Use Business
- Transportation Corridors
- Mining
- Potential Mining District
- Public/Institutional
- Hamlets
- Agricultural
- Open Space
- Forest Preserves/State Park
- Natural Resource Areas
- Utility

*Note: Additional Density Bonuses up to 0.85 DU/Acre may be applicable, refer to individual zoning ordinances for calculation of density bonuses.

Code	Description	Notes
U-1	Urbanized Areas (Incorporated)	
SR-1	Suburban Residential (Max Density = 1.00 DU/Acre)	
RR-1	Rural Residential (Max Density = 0.65 DU/Acre)*	
RE-1	Rural Estate Residential (Max Density = 0.45 DU/Acre)	
CR-1	Countryside Residential (Max Density = 0.33 DU/Acre)	
C-1	Commercial	
M-1	Mixed Use Business	
TC-1	Transportation Corridors	
M-2	Mining	
PM-1	Potential Mining District	
PI-1	Public/Institutional	
H-1	Hamlets	
A-1	Agricultural	
OS-1	Open Space	
FP-1	Forest Preserves/State Park	
NRA-1	Natural Resource Areas	
U-2	Utility	

ORDINANCE ADOPTION: MARCH 1994 LAST REVISED: OCTOBER 2005



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