

Atlanta Farms Solar Project, LLC
Case No. 19-1880-EL-BGN

Application Part 1 of 11

Part 1 includes:

- Letter
- Affidavit of Scott Zeimetz, Vice President, Atlanta Farms Solar Project, LLC
- Application Narrative
- Figure 03-1 Project Two-Mile Radius Map
- Figure 03-2 Project Site Layout Map
- Figure 04-1 Project Constraints Map
- Figure 08-1 Sensitive Receptors
- Figure 08-2 Geological and Topographic Features
- Figure 08-3 Ecological Communities
- Figure 08-4 Field Survey
- Figure 08-5 Land Use

Date Filed: January 31, 2020

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January 31, 2020

Ms. Tanowa Troupe, Secretary
Ohio Power Siting Board
Docketing Division
180 East Broad Street, 11th Floor
Columbus, Ohio 43215-3797

Re: Application

Case No. 19-1880-EL-BGN

In the Matter of the Application of Atlanta Farms Solar Project, LLC for a
Certificate of Environmental Compatibility and Public Need to Construct a Solar-
Powered Electric Generation Facility in Pickaway County, Ohio.

Dear Ms. Troupe:

Accompanying this letter is an application by Atlanta Farms Solar Project, LLC
("Applicant") for a Certificate of Environmental Compatibility and Public Need to Construct a
Solar-Powered Electric Generation Facility in Pickaway County, Ohio ("Facility"). The original
application was electronically filed, and the required number of copies both in hard copy and
electronic have been provided to the Docketing Division.

Along with this filing, we also provided the Docketing Division copies of the redacted
portions of the application, and have filed a Motion for Protective Order and Memorandum in
Support requesting protective treatment of the confidential information contained therein.

The Applicant further notes that the information presented in the preapplication
notification letter has not been revised by the Applicant since the filing of the preapplication
letter.

In accordance with Ohio Administrative Code Rule 4906-2-04, we make the following
declarations:

Name of the Applicant:

Atlanta Farms Solar Project, LLC
422 Admiral Boulevard
Kansas City, Missouri 64106

Ms. Tanowa Troupe
Atlanta Farms Solar Project, LLC
Case No. 19-1880-EL-BGN
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Name and location of the facility:

Atlanta Farms Solar Project, LLC
Deer Creek and Perry Townships
Pickaway County, Ohio

Name of authorized representative:

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Notarized Statement:

See attached Affidavit of Scott Zeimetz,
Vice President of Atlanta Farms Solar Project, LLC

Respectfully submitted,

/s/ Christine M.T. Pirik
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CMTP:AP
Enclosures

COLUMBUS 88534-1 131543v2

**BEFORE THE
OHIO POWER SITING BOARD**

In the Matter of the Application of Atlanta Farms)
Solar Project, LLC for a Certificate of)
Environmental Compatibility and Public Need to) Case No: 19-1880-EL-BGN
Construct a Solar-Powered Electric Generation)
Facility in Pickaway County, Ohio.)

**AFFIDAVIT OF
ATLANTA FARMS SOLAR PROJECT, LLC**

STATE OF MISSOURI :
 : ss
COUNTY OF Jackson :

I, Scott Zeimet, being duly sworn and cautioned, state that I am over 18 years of age and competent to testify to the matters stated in this affidavit and further state the following based on my personal knowledge:

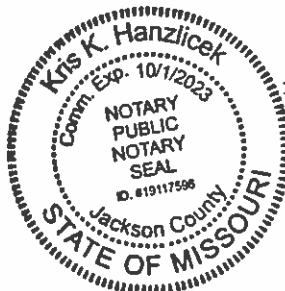
1. I am a Vice President of Atlanta Farms Solar Project, LLC, which is the applicant under this Application.
2. I have reviewed Atlanta Farms Solar Project, LLC's Application for a Certificate to Construct a Solar-Powered Electric Generation Facility in Pickaway County, Ohio.
3. To the best of my knowledge, information, and belief, the information and materials contained in the above-referenced Application are true and accurate.
4. To the best of my knowledge, information, and belief, the above-referenced Application is complete.



Scott Zeimet, Vice President of
Atlanta Farms Solar Project, LLC

Sworn to before and signed in my presence this 29th day of January 2020.

COLUMBUS 88534-3 131544v1





Notary Public

**Application to the Ohio Power Siting Board
for a Certificate of Environmental
Compatibility and Public Need for the
Atlanta Farms Solar Project, LLC**

Case No: 19-1880-EL-BGN

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Exhibit B	Manufacturer Specifications
Exhibit C	Project Schedule
Exhibit D	Phase I Archaeology Survey for the Atlanta Farms Solar Project
Exhibit E	Phase I History/Architecture Survey for the Atlanta Farms Solar Project
Exhibit F	Atlanta Farms Solar Project Construction Route Study
Exhibit G	Critical Issues Analysis for the Buckeye Plains and Pickaway County Solar Projects, Pickaway County, Ohio
Exhibit H	Desktop Cultural Resources Review for the Atlanta Farms Solar Project, Pickaway County, Ohio
Exhibit I	Geotechnical Engineering Report, Atlanta Farms Solar Project Pickaway County, Ohio
Exhibit J	Glint & Glare Analysis, Atlanta Farms Solar Project
Exhibit K	Atlanta Solar Farm Culvert Inventory Report & Hydrology Assessment
Exhibit L	Sound Level Assessment Report, Atlanta Farms Solar Project
Exhibit M	Threatened and Endangered Species Habitat Survey Report for the Atlanta Farms Solar Project, Pickaway County, Ohio
Exhibit N	Wetland and Waterbody Delineation Report for the Atlanta Farms Solar Project, Pickaway County, Ohio
Exhibit O	Visual Resources Assessment for the Atlanta Farms Solar Project, Pickaway County, Ohio
Exhibit P	Vegetation Management Plan for the Atlanta Farms Solar Project, Pickaway County, Ohio
Exhibit Q	Comment Cards, Atlanta Farms Solar Project
Exhibit R	Community Engagement, Atlanta Farms Solar Project
Exhibit S	Interconnection Filings
Exhibit T	Economic Impact of the Atlanta Farms Solar Project
Exhibit U	Atlanta Farms Complaint Resolution Plan
Exhibit V	Certificate of Liability Insurance

- Exhibit W Decommissioning Plan, Atlanta Farms Solar Project, Pickaway County, Ohio
- Exhibit X United States Fish and Wildlife Service Response Letter for Atlanta Farms Solar
Project

List of Abbreviations and Acronyms

AC	alternating current
ANSI	American National Standards Institute
Applicant	Atlanta Farms Solar Project, LLC
B&M	Burns & McDonnell
BMP	best management practice
DC	direct current
Certificate	Certificate of Environmental Compatibility and Public Need
Commonwealth	Commonwealth Heritage Group, Inc.
CIA	critical issues analysis
CWA	Clean Water Act
dBA	A-weighted decibels
DP&L	Dayton Power and Light Company
E & E	Ecology and Environment, Inc., member of WSP
EMFs	electromagnetic fields
EPC	engineering procurement and construction
Epsilon	Epsilon Associates, Inc.
gen-tie	generation tie-line
GIG	Green Investment Group
GW	gigawatt
HDD	horizontal directional drilling
IEEE	Institute of Electrical and Engineers
IPaC	Information for Planning and Construction
JEDI	Jobs and Economic Development Impact
kV	kilovolt
kWac/year	kilowatt alternating current per year
kW _{DC}	kilowatts DC
L _{eq}	equivalent sound level
Macquarie	Macquarie Group
MET	meteorological

module	solar panel
mph	miles per hour
MVA	mega volt amp
MW	megawatt
NAAQS	National Ambient Air Quality Standards
NEC	National Electrical Code
NESC	National Electrical Safety Code
NPDES	National Pollutant Discharge Elimination System
NPV	net present value
NRHP	National Register of Historic Places
O&M	operation and maintenance
OAC	Ohio Administrative Code
ODNR	Ohio Department of Natural Resources
ODOT	Ohio Department of Transportation
OEPA	Ohio Environmental Protection Agency
Olsson	Olsson & Associates
OPSB	Ohio Power Siting Board
ORAM	Ohio Rapid Assessment Method
P3	Pickaway Progress Partnership
PEM	palustrine emergent
PFO	palustrine forested
PJM	PJM Interconnection, LLC
PPA	power purchase agreement
Project	Atlanta Farms Solar Project
PV	photovoltaic
ROW	right-of-way
RPW	Relatively Permanent Water
RUMA	Road Use Maintenance Agreement
Savion	Savion, LLC
SHPO	State Historic Preservation Office
SPCC	Spill Prevention, Control, and Countermeasure

SR	State Route
SWPPP	Stormwater Pollution Prevention Plan
T/E	threatened and endangered
UL	Underwriters Laboratories
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
V	volt
VRI	visual resource inventory
WOTUS	waters of the United States

4906-4-01 PURPOSE AND SCOPE

(A) GENERAL

This application is intended to satisfy the requirements of the Ohio Administrative Code (OAC) Rule 4906-4 for issuance by the Ohio Power Siting Board (OPSB) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the Atlanta Farms Solar Project (Project) as submitted by Atlanta Farms Solar Project, LLC (Applicant).

(B) WAIVERS

The Applicant is not requesting any waivers at this time.

4906-4-02 PROJECT SUMMARY AND APPLICANT INFORMATION

(A) PROJECT SUMMARY AND APPLICANT INFORMATION

The Applicant, a wholly owned subsidiary of Savion, LLC (Savion), proposes to construct and operate the Project, a solar-powered electric generation facility in Pickaway County, Ohio, with a nameplate capacity of 199.6-megawatts (MW) alternating current (AC), (hereinafter referred to as MW). The Project will tie into an existing adjacent substation that connects to the regional transmission grid. The Project is anticipated to operate for up to 40 years.

(1) General Purpose of the Facility

The purpose of the Project is to provide 199.6 MW of clean, cost-effective, renewable energy to the transmission grid operated by PJM Interconnection, LLC (PJM). The Project will generate electricity using virtually no fuels or water and with effectively zero air emissions and waste generation. This Project is intended to fill the need for a more diverse national energy portfolio that will include a higher percentage of energy generated through use of renewable resources. In addition, the Project is in line with Ohio's desire for in-state carbon free resources as supported by House Bill 6, passed in 2019.

(2) General Location, Size, and Operating Characteristics of the Proposed Facility

The proposed Project will be located in Deer Creek and Perry townships, Pickaway County, Ohio, located near the community of Williamsport to the east. U.S. Route 22 generally divides the northern and southern portions of the Project, with a few Project parcels located west of State Route (SR) 207. The total Project Area encompasses 2,276 acres, with 35% (801 acres) located within Deer Creek Township and 65% (1,475 acres) located within Perry Township. The Applicant is proposing to permit the entirety of the Project Area. Based on current Project design, the Facility, which is comprised of all solar components and infrastructure, will occupy approximately 1,375 acres of the Project Area. The Applicant has made considerable effort to depict the Facility layout in its final form to the extent possible at this stage of development. However, the exact placement of the Facility components is subject to change prior to construction. The additional permitted area will allow for any adjustments to the Facility design that may be necessary in the future. The studies included in this application were completed for all 2,276 acres of the Project Area, and in some cases additional parcels were surveyed.

The Project will have a generating capacity of 199.6 MW and will include photovoltaic (PV) solar panels (modules) mounted on a racking system to maximize solar energy capture and electric generation of the array. Electricity generated by the modules is sent to inverters located throughout the array that would convert the electricity from direct current (DC) to AC. A series of underground and overhead electric collection lines will collect and transfer the electricity from the inverters to one of the four Project substations; and short overhead generation tie-lines (gen-tie) will deliver electricity to the existing substation that connects to the regional transmission grid. A detailed description of each Project component can be found in OAC Section 4096-4-03(B) in this application.

(3) Suitability of the Site for the Proposed Facility

The Applicant has determined the Project Area to be suitable for utility-scale solar facility development based on the following factors: proximity to available transmission capacity, landowner and community interest, economic analysis, and evaluation of site suitability. A

detailed description of Savion’s siting process and the Project Area’s suitability is included in OAC Section 4906-04-04 of this application.

(4) Project Schedule

The Project has been under development since 2016 and, during that time, multiple transmission, environmental, engineering, and cultural studies have been completed. In addition, interconnection agreements with PJM were executed in January 2019. A public information meeting was held on November 4, 2019, in accordance with OAC Rule 4906-3-03. Project construction is expected to begin in the third quarter of 2021, with commercial operations beginning in the fourth quarter of 2022. Additional information regarding Project schedule can be found in OAC Section 4906-4-03(C) of this application.

(B) FUTURE PLANS FOR ADDITIONAL GENERATION UNITS OR FACILITIES IN THE REGION

(1) Description of any plans for future additions of electric power generation units

The Applicant is seeking an OPSB Certificate to construct a 199.6-MW project located on the secured land included within this application. Currently, there are no plans to add additional electric power generation units to the Project.

(2) Description of the Applicant's history, affiliate relationships and current operations

The Applicant is a wholly owned subsidiary of Savion and was formed specifically for the purpose of developing the Project. Founded in 2019, the Savion team is comprised of utility-scale solar and energy storage experts that have developed over 10 gigawatts (GW) of solar projects across 25 states that are either in operation, under construction, or in development. Savion has 75 employees and is headquartered in Kansas City, Missouri. Savion develops projects and secures power purchase agreements (PPA) that are ultimately transferred to other entities. The Project will be constructed, operated, and maintained by the Applicant.

4906-4-03 PROJECT DESCRIPTION IN DETAIL AND PROJECT SCHEDULE IN DETAIL

(A) DESCRIPTION OF THE PROJECT AREA'S GEOGRAPHY, TOPOGRAPHY, POPULATION CENTERS, MAJOR INDUSTRIES, AND LANDMARKS

(1) Project Area Map

Figure 3-1 shows the geographic and topographic features of the proposed Project Area, at a scale of 1:24,000, as well as those features within a 2-mile radius of the Project Area. The proposed features specifically include:

- (a) The proposed Facility;
- (b) Population centers and administrative boundaries;
- (c) Transportation routes and gas and electric transmission corridors;
- (d) Named rivers, streams, lakes, and reservoirs; and
- (e) Major institutions, parks, and recreational areas.

The Project layout depicted in Figure 3-1, and all subsequent figures, represents the current design of the Project. The Applicant has made considerable effort to depict the layout in its final form to the extent possible at this stage of development. However, the exact placement of the Project components is subject to change prior to construction. Final engineering will depend on various considerations including the exact make and model of the equipment procured for the Project.

However, the final layout will remain within the Project Area that has been studied for environmental, cultural, engineering, and visual impacts. Any final adjustments to the layout will not cause additional impacts beyond what is discussed in this application. The final layout will be provided to OPSB no later than 30 days prior to construction

(2) Project Area, in acres, of all Owned and Leased Properties

The Facility will occupy approximately 1,375 acres within the Project Area, which includes 2,276 acres of private and public land secured under agreements with landowners. Individual Project parcels are depicted in the preliminary site plan included as Exhibit A. While the Project Area encompasses 2,276 acres of land, not all the parcels and landowners will have Project infrastructure on their land, as extra land was secured to allow the Project design to be optimized.

(B) DESCRIPTION OF THE GENERATION FACILITY

The Project is a 199.6-MW solar facility capable of providing clean, renewable electricity. Solar modules convert sunlight into DC electricity which is then converted to AC electricity through inverters. Transformers step up the AC electricity to a higher voltage so that it can connect to the regional transmission grid.

Project components will include PV solar modules mounted on a racking system supported by steel piers, inverters, transformers, DC and AC electrical collection systems, Project substations, and gen-tie lines. In addition, the Project will include an operation and maintenance (O&M) building, meteorological (MET) towers, access roads, and fencing. During construction, the Project will include temporary laydown yards and stormwater management features. Project components are discussed in more detail in OAC Section 4906-4-03(B)(1) in this application and are depicted in the preliminary site plan included as Exhibit A.

Access roads will be private and constructed with all-weather gravel. Roads will not exceed 20 feet (6.1 meters) in width, with the exception of turning radii, which will not exceed 50 feet (15.2 meters) in width. The Project solar arrays will be secured with perimeter fencing, which will not exceed 7 feet (2.1 meters) in height.

PV solar modules will be oriented in rows running from north to south and angled at a degree that will maximize solar resource efficiency. PV solar modules will be mounted on a single-axis tracking system that will rotate approximately +/- 60-degrees east-west to track the sun as it moves through the sky each day. The tracking system will be supported by steel piles or racking

posts installed with a pile-driving machine. The center height of the tracker structures will be approximately 4 to 6 feet (1.2 to 1.8 meters) above the ground. When the modules are tilted at their maximum angle, the highest point of each module will not exceed 10 feet (3.0 meters) in height above the ground. Solar modules will be connected using DC cables that can either be buried in a trench or attached to the racking system. The DC cables gather at the end of racking systems to combiner boxes which are connected to home run cables to the inverter locations.

Inverters are installed throughout the Project and will convert the DC power from the 1,500-volt (V) DC collection system to AC power, which will then be transmitted to one of four Project substations via the 34.5-kilovolt (kV) AC collection system. The AC collection system will include underground and overhead segments. Underground segments of the AC collection system will be buried a minimum of 36 inches (0.6 meters) below grade; and overhead portions will not exceed a maximum height of 30 feet (9.1 meters) above grade. The AC collection system will be comprised of medium-voltage cable that will transfer electricity to the Project substations located near the existing Dayton Power and Light Company (DP&L) Atlanta Substation.

Each Project substation will include one 60-mega volt ampere (MVA) transformer and all necessary equipment to step up incoming electricity to the higher voltage necessary to interconnect into the existing DP&L Atlanta Substation via four separate gen-tie lines. The gen-tie lines will be approximately 1,000 feet (304.8 meters) in length and will be constructed by the Applicant to the existing DP&L Atlanta Substation. DP&L will be responsible for transmission equipment within the Atlanta Substation. It is anticipated that gen-tie line poles will not exceed 70 feet (21.3 meters) above grade.

(1) Description of the Generation Equipment

Project generation equipment includes PV solar modules that will convert sunlight directly to electricity. Bi-facial modules are planned for this Project which will take both direct sunlight and reflected sunlight to convert to electrical power. The remaining Project equipment either transmits, converts, or transforms electricity generated by the solar modules.

(a) Type, Number of Units, Estimated Net Demonstrated Capacity, Heat Rate, Annual Capacity Factor, and Hours of Annual Generation

PV solar modules have not been procured for the Project; however, it is anticipated that the Facility will be composed of 385- to 410-watt panels, presumably Talesun, Hanwha Q Cells, Risen, Trina, Jinko, or Canadian Solar modules, or other similar module. Table 3-1 below provides potential module type, technology, wattage, and the approximate number of panels needed for the Facility. Regardless of the specific model, the solar modules will be approximately 3 feet by 6 feet (0.9 meters by 1.8 meters) and approximately 1.38 inches (3.5 centimeters) deep. Manufacturer specifications for Talesun, Hanwha Q Cells, Risen, Trina, Jinko, and Canadian Solar modules are included in Table 3-1 are included in Exhibit B, which has been filed under seal. In addition, manufacturer specifications for potential tracking system and inverter models to be used by the Project are also included in Exhibit B. If the Applicant uses a technology other than those included in Exhibit B, the Applicant will provide the appropriate manufacturer specification to the OPSB no later than 30 days prior to construction.

Table 3-1 Solar Module Specifications

Solar Panel	Module Type	Module Technology	Module Wattage	Approximate Number of Panels
Talesun	Polycrystalline/Monocrystalline	Mono-Facial, Bi-Facial, PERC, Half Cut Cells	385W – 415W	676,000 – 635,000
Hanwha Q Cells	Polycrystalline/Monocrystalline	Mono-Facial, Bi-Facial, PERC, Half Cut Cells	385W – 415W	676,000 – 635,000
Risen	Polycrystalline/Monocrystalline	Mono-Facial, Bi-Facial, PERC, Half Cut Cells	385W – 415W	676,000 – 635,000
Trina	Polycrystalline/Monocrystalline	Mono-Facial, Bi-Facial, PERC, Half Cut Cells	385W – 415W	676,000 – 635,000
Jinko	Polycrystalline/Monocrystalline	Mono-Facial, Bi-Facial, PERC, Half Cut Cells	385W – 415W	676,000 – 635,000
Canadian Solar	Polycrystalline/Monocrystalline	Mono-Facial, Bi-Facial, PERC, Half Cut Cells	385W – 415W	676,000 – 635,000

Key:

W = watt

Racking system technology has not been procured for the Project; however, it is anticipated that the Facility will include a NEXTracker, Array Technologies, FTC Solar, Gamechange Solar, Soltec, or Sunfolding racking system, or similar system. Manufacturer specifications for

NEXTracker, Array Technologies, FTC Solar, Gamechange Solar, Soltec, and Sunfolding racking systems being considered are included in Exhibit B, which has been filed under seal. If the Applicant uses a racking technology other than those included in Exhibit B, the Applicant will provide the appropriate manufacturer specification to the OPSB no later than 30 days prior to construction.

Inverters have not been procured for the Project; however, it is anticipated that the Facility will include 80 TMEIC, SMA and Sungrow or similar inverters. Manufacturer specifications for TMEIC,, SMA, and Sungrow inverters being considered are included in Exhibit B, which has been filed under seal. If the Applicant uses an inverter technology other than those included in Exhibit B, the Applicant will provide the appropriate manufacturer specification to the OPSB no later than 30 days prior to construction.

The annual net capacity factor for the Facility is expected to be approximately 24.5% and the hours of annual generation is expected to be 429,621 megawatt hours. Net demonstrated capacity will be 199.6 MW delivered to PJM. Heat rate is not applicable to solar facilities.

(b) For Wind Farms, Turbine Size

This section is not applicable for solar facilities.

(c) Fuel Quantity and Quality

Fuel quantity and quality are not applicable for solar facilities.

(d) Pollutant Emissions and Estimated Quantities

The Project will generate electricity without producing pollutant emissions. Therefore, this section is not applicable to solar facilities.

(e) Water Volume Requirement, Source, Treatment, and Discharge

The Project will not require any cooling water during operation and, therefore, will not need to treat or discharge water. However, the Project will include an O&M building that will require a water and sanitary source. In addition, Project modules may require occasional cleaning. Water

can be obtained from an on-site well or brought in from off site. The Project will either connect to the sanitary sewer or install a septic system. The Applicant will coordinate with local authorities to obtain all necessary permits prior to construction.

(2) Construction Method, Site Preparation and Reclamation Method, Materials, Color and Texture of Surfaces, and Dimensions of Facility Components

In general, the Project construction will include securing the land, installation of stormwater detention basins and other erosion control plans, clearing vegetation (Project anticipates minimal clearing), grading (Project anticipates minimal grading), installation of temporary power, and construction of temporary laydown yards and access roads. Further detail on each component is as follows.

(a) Electric power generation plant or wind-powered electric generation turbines, including towers and foundations

Solar modules are installed on steel posts, and approximately 6 inches by 7 inches (15.2 by 17.8 centimeters). Posts are typically 10 to 15 feet (3.0 to 4.6 meters) long and extended 7 to 11 feet (2.1 to 3.4 meters) to below grade, depending on soil conditions. Posts are primarily installed by pile drivers. The Project anticipates installing approximately 90,500 posts. Modules are supported on posts with the help of a racking mechanism. Forklifts are used to deliver the steel frame required for the racking structures. Once the posts are driven in the ground, racking mechanisms are installed primarily by hand and modules are then bolted to the frame.

(b) Fuel, waste, water, and other storage facilities

There will be no fuel, waste, water, and other storage facilities on site during operations. Diesel fuel for construction vehicles and equipment will be stored in appropriate containment in the laydown yards.

(c) Fuel, waste, water, and other processing facilities

There will be no fuel, waste, water, or other processing facilities associated with the Project.

(d) Water supply, effluent, and sewage lines

The Project will include an O&M building that will require a water and sanitary source. Water can be obtained from an on-site well or brought in from off site. The Project will either connect to the sanitary sewer or install a septic system. The Applicant will coordinate with local authorities to obtain all necessary permits prior to construction.

(e) Associated electric transmission and distribution lines and gas pipelines.

No new gas pipelines will be needed for the Project. Four short 69-kV gen-tie lines will be constructed to deliver power to the point of interconnection at the existing DP&L Atlanta Substation.

(f) Electric collection lines

There are two types of collection system (also called collection circuits or collection lines) for a solar project: AC collection and DC collection.

DC collection lines (operates at 1,500-V DC) connect the modules to the inverter electrically. Modules are connected electrically above ground on the rear side and at the end of each row. Collection lines are trenched underground or hung over the racking systems by using a cable system which feeds to the combiner box. The DC collection from the combiner boxes to the inverters is run underground.

AC collection lines (34.5-kV) connect inverters to substations. There are approximately eight AC collection circuits for this Project. Each circuit has 10 inverters accounting for 2.5 MW each for a total load of 25 MW on each circuit. The inverters are connected in series or a junction box. The AC collection system will be installed via open cut method and buried underground or overhead. Horizontal directional drilling (HDD) may also be used.

(g) Substations, switching substations, and transformers

Preliminary design includes four separate substations, each with a 60-MVA transformer that will transform voltage from the 34.5-kV collection system to the 69-kV interconnection system. Each

transformer will have its own 69-kV circuit breaker tied to a 69-kV bus before exiting the substation with an overhead 69-kV gen-tie line to the existing DP&L Atlanta Substation.

There will be two independent 34.5-kV collection system buses with individual 34.5-kV feeder breakers for each collection feeder. All breakers will be supplemented with disconnect switches according to industry practices. A common control enclosure for all four substations will be installed on site that will house the protection, communication, and supervisory control and data acquisition equipment necessary to safely operate the collection substations. The four substation groups are located together and will be approximately 3 acres total in size. The substation complex will be fenced in and protected according to the National Electric Safety Code (NESC).

The gen-tie lines will be approximately 1,000 feet (304.8 meters) in length and will be constructed by the Applicant to the existing DP&L Atlanta Substation. DP&L will be responsible for transmission equipment within the Atlanta Substation.

(h) Temporary and permanent meteorological towers

The Project will include one MET station for every 25 MW. MET towers will be approximately 14 feet (4.3 meters) tall and installed on a concrete base adjacent to inverters. MET stations consist of a pyranometer to measure the solar irradiance, an anemometer to measure the wind speed and direction, and a thermometer.

(i) Transportation facilities, access roads, and crane paths

New access roads will be constructed within the Project. These roads will be private, constructed of aggregate, and will not exceed 20 feet (6.1 meters) in width, with the exception of turning radii, which will not exceed 50 feet (15.2 meters) in width. Access roads will be constructed to support the site and weight of vehicle traffic on site.

The highest traffic volume will occur during peak construction periods, when racking posts are being installed and tracking systems and PV solar modules are being assembled concurrently. With the exception of the transformer deliveries, construction traffic is not expected to include oversize or overweight loads. There will be numerous truck trips during construction.

The Project will not utilize large cranes and, therefore, crane paths are not applicable.

(j) Construction laydown areas

The Project will include several laydown yards throughout construction. Laydown yards will be installed and removed as needed and will be no more than 65 acres in size. The main laydown yard will include construction contractor trailers, equipment storage containers, diesel fuel storage for construction equipment, a laydown area for materials and supplies, and an employee parking area. Smaller laydown areas will also be utilized to stage modules and racking equipment. Laydown yard areas will be restored, provided they are not used for other Project components.

(k) Security, operations, and maintenance facilities or buildings

The Project will include an O&M building located south of SR 207. The O&M building will house administrative, operation, and maintenance equipment and an office space for Project personnel. The Project will include a 7-foot (2.1-meter) perimeter fence.

(l) Other pertinent installations

After construction, temporarily disturbed areas will be restored. The Facility will be graded to natural contours where possible and prepared for final seeding. Once construction is complete, the permanent access roads will be dressed as necessary to ensure their long-term function. Erosion control methods during and after construction will depend on the contours of the land, as well as requirements of relevant permits.

(3) New Electric Transmission Line

The only new transmission lines associated with the Project will be the four 69-kV gen-tie lines delivering power to the existing DP&L Atlanta Substation.

(4) Project Area Aerial Map

Figure 3-2 depicts the proposed Facility and its nearby roads and property lines at a scale of at least 1:12,000 and includes the following features:

- (a) An aerial photograph;
- (b) The proposed Facility, including all components listed in paragraph (B)(2) of this rule;
- (c) Road names; and
- (d) Property lines.

(C) PROJECT SCHEDULE

(1) Project schedule in Gantt Format

The Project schedule is provided in Exhibit C and includes the following milestones:

(a) Acquisition of land and land rights

The Project will be built on private and public land under purchase option, lease, and easement to the Applicant. OAC Section 4906-4-06(A) in this application details the acquisition of land and land rights for the Project.

(b) Wildlife, environmental, and cultural surveys/studies

Wildlife, environmental, and cultural surveys/studies were completed between December 2017 and December 2019, and included the following:

- Archaeological field survey (Exhibit D);
- Architectural history survey (Exhibit E);
- Construction route study (Exhibit F);
- Critical issues analysis (CIA; Exhibit G);
- Desktop cultural resources review (Exhibit H);
- Geotechnical engineering report (Exhibit I);

- Glint and glare analysis (Exhibit J);
- Hydrology Assessment (Exhibit K)
- Sound level assessment (Exhibit L);
- Threatened and endangered (T/E) species habitat field survey (Exhibit M);
- Wetland and waterbody delineation field survey (Exhibit N); and
- Visual resources assessment (Exhibit O).

The results of these surveys are summarized in OAC Section 4906-4-08 in this application.

(c) Receipt of grid interconnection studies and other critical path milestones for project construction

Interconnection studies were commenced in the fourth quarter of 2016 and were completed in the fourth quarter of 2018. An interconnection agreement was executed in the first quarter of 2019.

(d) Preparation of the application

Development of the application commenced in spring 2019 and has been ongoing since then.

(e) Submittal of the application for certificate

This application will be submitted on or before February 1, 2020.

(f) Issuance of the certificate

The Applicant anticipates that OPSB will issue a Certificate by the end of October 2020.

(g) Preparation of the final design

The Applicant anticipates that preparation of the final design will commence in the first quarter of 2021 and be completed by the third quarter 2021.

(h) Construction of the facility

Construction of the Project is planned to commence in the third quarter of 2021 and be completed by the end of 2022.

(i) Placement of the facility in service

The Project is expected to be in service by the end of the fourth quarter of 2022.

(2) Proposed construction sequence

An engineering procurement and construction (EPC) contractor will be selected prior to construction. Construction will begin after the necessary permits are received and the electrical interconnection process is finalized. Project construction will begin with workforce mobilization and the initial site preparation work including grading, placement of erosion control measures, and any necessary vegetation and tree removal. Localized site grading is expected to be required over smooth areas of rolling terrain within the array to accommodate the single-axis trackers. Some grading will be required for the Project substations and O&M building, but access roads will be constructed at grade when possible.

Next, general site improvements will be made such as access improvements and preparation of laydown areas. Each temporary laydown area will be no more than 65 acres and will be located throughout the Project Area. The Facility components (racking poles, trackers, PV solar modules, collection system, and inverters) will be installed next along with access roads. The Project will be constructed in blocks, and multiple blocks will be constructed simultaneously. Commissioning of electrical equipment will be conducted prior to placement of the Facility in service. As portions of the Project near completion, temporary laydown areas will be vacated and disturbed areas will be reseeded and re-vegetated consistent with the vegetation management plan, Exhibit P. Once installation is complete, the primary laydown area will be reduced in size and the O&M building and associated permanent infrastructure (storage, lighting, etc.) will be completed. All temporary restroom facilities will be removed.

After construction, temporarily disturbed areas will be restored. The Facility will be graded to natural contours where possible and prepared for final seeding. Once construction is complete, the permanent access roads will be dressed as necessary to ensure their long-term function. Erosion control methods during and after construction will depend on the contours of the land, as well as requirements of relevant permits.

(3) Impact of Critical Delays on the In-Service Date

Due to the complexity of preparing a utility-scale solar facility for permitting, construction, financing, off-takes, etc., impacts of any delays can vary widely. Critical delays may have material impacts and adverse effects on Project financing, including the Applicant's ability to procure PV solar modules and other Facility components. Such delays may push the in-service date back, which would cause significant financial burden to the Applicant, as discussed in OAC Section 4906-4-06(D) of this application.

4906-4-04 PROJECT AREA SELECTION AND SITE DESIGN

(A) SELECTION OF THE PROJECT AREA

(1) Description of the Study Area or Geographic Boundaries of the Area Considered for Development and Rationale for Selection

The Project is located in the southwest portion of Pickaway County, near the community of Williamsport. The Applicant chose to develop in this area because it is situated at the convergence of multiple transmission lines that distribute power to the greater Columbus and Cincinnati metropolitan areas. In addition, this portion of the state has a relative strong solar resource.

(2) Map of the Study Area and General Sites Evaluated

A map of the Project Area (Study Area) is provided in Figure 3-2. The Applicant evaluated land within Pickaway County to determine whether or not it was suitable for solar development.

(3) Qualitative and Quantitative Siting Criteria Utilized

From a qualitative perspective, open, flat ground, access to transmission, and interested landowners were key to identifying the site. Quantitative siting criteria is based upon estimates of solar resource from data collected on site, required transmission upgrade and interconnection costs, and project size.

(4) Description of the Process and how the Siting Criteria were Utilized

Savion's solar site selection process is comprised of four primary components: transmission proximity, geophysical and environmental review, landowner and community interest, and competition research.

The process begins with identifying areas with access to nearby transmission facilities. Once a point of interconnection onto the grid is identified, large areas of open ground are analyzed to determine suitability based on land use and environmental concerns. Areas with large concentrations of wetlands, sloped terrain, or undisturbed treed areas are generally avoided, narrowing the number of potential project areas considerably. Research into county parcel data is then completed in order to identify land ownership. Several potential landowners are contacted in order to determine interest and to refine the initial site boundary. Research into the community and competitor's actions may then be completed in order to determine if a site is likely to be successful. A project only moves into advanced development if there is landowner support, lack of nearby competition, and positive results from initial environmental and transmission studies.

(5) Description of the Project Area(s) Selected for Evaluation

The Applicant selected the subject site for further development because of interest and positive feedback from landowners and local officials, and positive results from initial transmission studies. In addition, due to the nature of the site (i.e., previously disturbed cultivated cropland), solar development construction and operations will not have a significant impact on natural resources.

(B) DESIGNING THE FACILITY LAYOUT

(1) Constraint Map

Figure 4-1 presents a map of the Project Area with the setbacks and other constraints.

(2) Criteria Used to Determine the Facility Layout and Site Design

The Project layout has been optimized to utilize available land and still provide environmental and visual setbacks to achieve a minimal impact to natural resources and adjacent residents' viewshed. The ground coverage ratio was selected to obtain the most efficient energy production. The Project has been designed such that the solar modules are setback a minimum of 300 feet (91.4 meters) from the adjacent residences, 50 feet (15.2 meters) from non-participating property lines, 50 feet (15.2 meters) from public road centerlines, and 75 feet (22.9 meters) from existing transmission line right-of-way (ROW) centerlines. Additionally, the Project has been designed such that all streams and wetlands have been avoided. If it becomes necessary to impact a stream to accommodate a fence or road crossing in the final design, the crossing(s) will be coordinated with U.S. Army Corps of Engineers (USACE) and the Ohio Environmental Protections Agency (OEPA).

(3) Description of Number and Type of Comments Received

The public information meeting was held on November 4, 2019, at the Crown Hill Golf Club located at 9500 U.S. Route 22, Williamsport, Ohio, 43164. The meeting was held from 5:30 p.m. to 7:30 p.m. In addition to providing stations where Project personnel explained the proposed Project and answered questions from the community members present, the Applicant provided comment sheets for meeting attendees to make comments. OPSB staff were present at the meeting.

An estimated 75 local residents attended the public information meeting. Community feedback was generally positive. Nine comments were left at the public information meeting, all of which are included in Exhibit Q. Many residents were excited about the opportunity and the idea of renewable energy in Pickaway County. Three individuals expressed concern for their viewshed, with two of those individuals submitting written comments. The Applicant discussed the concern with the individuals and it was discovered no infrastructure is currently planned for the land adjacent to their property lines and, therefore, is outside of their visual range. One individual expressed concern in written comments about the use of farmland for the Project.

A summary of some of the questions posed during the public information meeting include:

- Where exactly will everything be?
- What will the project look like?
- How soon will the project be constructed?
- How does the project benefit me personally?
- Will my electric bills go down?
- Why would you take prime farmland out of production?
- Can you make the school use the money to purchase air conditioning?
- Do you want to sign my land?
- Can I use the solar energy from this project?
- Are you hiring?

The Applicant's responses to the inquiries are consistent with the information provided in this application. In addition, the Applicant launched a Facebook page (<https://www.facebook.com/AtlantaFarmsSolar/>) and website (<https://www.atlantafarmssolarproject.com/>) to provide interested individuals a way to seek Project related information and to connect with Project representatives. The Applicant's social media campaign has proven to be an effective communication tool. Facebook page messaging has resulted in 2,322 interactions with the page, of which 96% were indicative of support for the Project, as indicated in the third-party Facebook Metrics report included in Exhibit R. Since launching the social media campaign, over two-dozen local residents have reached out to Project representatives to inquire about the Project. These inquiries have resulted in several phone calls and in-person meetings to further engage the community and garner local support for the Project.

4906-4-05 ELECTRIC GRID INTERCONNECTION

(A) CONNECTION TO THE REGIONAL ELECTRIC GRID

PJM is the Regional Transmission Operator that coordinates the movement of wholesale electricity throughout 13 states and the District of Columbia in the Midwest and Mid-Atlantic,

including Ohio. The Applicant will be connecting the Project to the Atlanta Substation, which is part of the PJM grid. The Atlanta Substation is a 345/69-kV substation owned by DP&L.

The four 50-MW Project substations will collect the energy generated by the solar modules and transfer it through four overhead 69-kV gen-tie lines to the 69-kV portion of the existing DP&L Atlanta Substation. The Atlanta substation will be converted by DP&L into a ring bus configuration to accommodate the Project.

(B) INFORMATION ON INTERCONNECTION OF THE FACILITY TO THE REGIONAL ELECTRIC POWER GRID

(1) Generation Interconnection Request Information

At the time the Applicant submitted transmission filings with PJM, the final Project size was undetermined. For the sake of optionality, four 49.9-MW transmission filings were submitted to PJM under separate entities. They include Buckeye Plains Solar Project, LLC; Buckeye Plains II Solar Project, LLC; Pickaway County Solar Project, LLC; and Pickaway County II Solar Project, LLC, all of which are wholly owned subsidiaries of Atlanta Farms Solar Project, LLC (the Applicant).

The Project will utilize four 49.9 MW queue positions for a total of 199.6 MW. The system studies and executed Interconnection Service Agreements for the four queue positions are attached in Exhibit S to the application. The four queue positions are as follows:

- The Applicant has a total capability of 49.9 MW with PJM assigned queue number of AC1-166. The Project has completed all system studies and executed its Interconnection Service Agreement on May 16, 2019. AC1-166 was filed by Buckeye Plains Solar Project, LLC, which is a wholly owned subsidiary of Atlanta Farms Solar Project, LLC (the Applicant).
- The Applicant has a total capability of 49.9 MW with PJM assigned queue number of AC1-165. The Project has completed all system studies and executed its Interconnection Service Agreement on January 28, 2019. AC1-165 was filed by Buckeye Plains II Solar

Project, LLC, which is a wholly owned subsidiary of Atlanta Farms Solar Project, LLC (the Applicant).

- The Applicant has a total capability of 49.9 MW with PJM assigned queue number of AC1-068. The Project has completed all system studies and executed its Interconnection Service Agreement on January 28, 2019. AC1-068 was filed by Pickaway County Solar Project, LLC, which is a wholly owned subsidiary of Atlanta Farms Solar Project, LLC (the Applicant).
- The Applicant has a total capability of 49.9 MW with PJM assigned queue number of AC1-069. The Project has completed all system studies and executed its Interconnection Service Agreement on January 28, 2019. AC1-069 was filed by Pickaway County II Solar Project, LLC, which is a wholly owned subsidiary of Atlanta Farms Solar Project, LLC (the Applicant).

(2) System Studies on Generation Interconnection Request

The Project queue positions have completed the following studies (all studies are contained in Exhibit S to the application):

- AC1-166 received its Feasibility Study on February 23, 2017; final System Impact Study on October 23, 2018; and Facilities Study on January 18, 2019.
- AC1-165 received its Feasibility Study on February 23, 2017; final System Impact Study on October 23, 2018; and Facilities Study on November 30, 2018.
- AC1-068 received its Feasibility Study on February 23, 2017; final System Impact Study on October 15, 2018; and Facilities Study on December 03, 2018.
- AC1-069 received its Feasibility Study on February 23, 2017; final System Impact Study on October 15, 2018; and Facilities Study on December 03, 2018.

4906-4-06 ECONOMIC IMPACT AND PUBLIC INTERACTION

(A) CURRENT AND PROPOSED OWNERSHIP OF THE PROPOSED FACILITY

The Applicant is a wholly owned subsidiary of Savion. Savion develops projects and secures PPA that are ultimately transferred to other entities. The Project will be constructed, operated, and maintained by the Applicant.

The Applicant holds all landowner agreements. These agreements will not change the ownership status of the private lands with the exception of purchase options within the Project Area. All landowner agreements are summarized in Table 6-1 below.

Table 6-1 Participating Landowners

Parcel Number	Owner	Status	Approximate Size (Acres)
C0900010000300	DAVIS KENNETH E & DEBORAH S	Access Agreement ¹	71
C0900010001300	PALMER, MARC A	Easement	68
C0900010001400	PALMER, MARC A	Purchase Option	60
C0900010002900	PALMER, MARC A	Purchase Option	61
C0900010008700	MT CURWOOD FARMS LLC	Leased	359
C0900010010300	CARPENTER BENJAMIN E & TONYA N	Access Agreement	171
I2000010020602	GE-MJ FARMS LLC	Purchase Option	60
I2000010020800	GE-MJ FARMS LLC	Purchase Option	118
I2000010021900	MT CURWOOD FARMS LLC	Leased	454
I2000010022100	DAVIS KENNETH E & DEBORAH S	Access Agreement	46
I2000010026100	SKINNER FAMILY FARMS LIMITED PARTNERSHIP	Easement	109
I2000010026600	SKINNER FAMILY FARMS LIMITED PARTNERSHIP	Easement	47
I2000010029100	DAYTON POWER AND LIGHT COMPANY	Access Agreement	32
I2000010029300	DAYTON POWER AND LIGHT COMPANY	Access Agreement	47
I2000010029400	DAYTON POWER AND LIGHT COMPANY	Access Agreement	18
I2000010043400	KATE'S PLACE AT PICKAWAY LLC	Leased	537
I2000010060500	PICKAWAY COUNTY PARK DISTRICT	Easement	13

Notes:

¹Access agreements allow the Applicant to study and include the land in the Certificate of Environmental Compatibility and Public Need application while the Applicant and landowner negotiate a lease or easement.

(B) CAPITAL AND INTANGIBLE COSTS

(1) Estimates of Capital and Intangible Costs for the Various Alternatives

The Applicant will invest more than \$[REDACTED] million to develop the Project with capital costs totaling approximately \$[REDACTED] million and intangible costs including permitting, other development costs, and business overhead totaling approximately \$[REDACTED] million. Alternative project areas were ruled out prior to conducting detailed cost analyses.

(2) Cost Comparison with Similar Facilities

Based on the current estimated cost per kilowatt of \$[REDACTED]/kilowatts DC (kW_{DC}), the Project's costs are consistent with costs for other solar facilities in the Midwest and with others developed by Savion. Lazard's Levelized Cost of Energy Analysis provides a means of quantifying and comparing the cost of different energy generation technologies in the U.S., reporting that utility-scale solar PV projects using thin-film technology across the U.S. range from \$950 to \$1,250 per kW_{DC}, so the anticipated cost for this Project is actually lower than the national range (Lazard 2018).

(3) Present value and Annualized Cost for Capital Costs

Capital costs include development costs, engineering, site investigation and preparation, equipment costs, and labor/construction costs. The costs will be incurred over a 12 to 18 month period, culminating with the Project's commercial operation date in the fourth quarter of 2022. Because of the short construction period, the present value and annualized capital costs will be similar to the costs presented above.

As no other Project location alternatives were considered, no additional present value or annualized cost estimates for capital costs are provided.

(C) OPERATION AND MAINTENANCE EXPENSES

(1) Estimated Annual Operation and Maintenance Expenses

The estimated O&M costs for the Project during the first two years of commercial operation are estimated to be approximately \$[REDACTED] million annually (excluding costs associated with tax and lease payments, or increases due to inflation).

(2) Operation and Maintenance Cost Comparison

The Applicant expects the annual O&M cost of the Project, including labor, to be approximately \$[REDACTED] million, excluding taxes, land leases, and inflation or \$[REDACTED] per kilowatt alternating current per year (kWac/year). The U.S. Department of Energy, National Renewable Energy Laboratory, issued a report benchmarking the cost of installed solar energy in the first quarter of 2018 across the U.S. and found that annual O&M costs for utility-scale, fixed-tilt PV solar was approximately \$9.10 per kWac/year and \$10.40 per kWac/year when using tracking systems (NREL 2018). These costs exclude inverter replacements. Based on this national average, the Project is below the national average cost for annual O&M costs.

(3) Present value and Annualized Expenditures for Operating and Maintenance Costs

The present value of the total annual O&M cost, excluding taxes, land leases, and inflation, can be calculated using a nominal 8% discount rate and 2% escalation over the 30-year lifespan of the Project. Based on these assumptions, the net present value (NPV) of the O&M costs over the life of the Project is approximately \$[REDACTED] million.

(D) ESTIMATED COST FOR A DELAY

Due to the complexity of preparing a modern solar energy facility for permitting, construction, financing, off-takes, etc., impacts of any delays can vary widely. Critical delays may have material, adverse effects on Project financing, including the Applicant's ability to procure PV solar modules and other Project components. Such delays may push the in-service date back. A

monthly delay in the in-service date is estimated to have a NPV loss of a minimum of [REDACTED]

(E) ECONOMIC IMPACT OF THE PROJECT

The Project will have a positive impact on the local economy primarily through construction spending and jobs, and related tax revenue benefits for the local governments and school districts as described below. Strategic Economic Research conducted a thorough economic impact assessment of the Project and the resulting report is provided in Exhibit T. To quantify the potential impact on the local economy, the Jobs and Economic Development Impact (JEDI)-PV Model (PV12.23.16) was utilized in the economic assessment. JEDI-PV is an input-output model that uses state-specific data to predict employment, income, and economic output of solar facilities based on the anticipated wattage of a project.

(1) ANNUAL TOTAL AND PRESENT VALUE OF CONSTRUCTION AND OPERATION PAYROLL

Per the JEDI-PV model, the Project will create employment opportunities primarily during the 14 to 16 month construction period and it is estimated that the annual total and present value of payroll will total approximately \$56.4 million. Should the short construction period apply, the present value of payroll costs may differ slightly.

Annual onsite O&M labor is expected to total approximately \$1.35 million annually over the 30-year life of the Project. Assuming an 8% discount rate and 2% escalation, the present value of the annual O&M payroll is approximately \$18.4 million.

(2) Construction and Operation Employment and Estimates

As a result of the construction and operation of the Project, jobs will be created in both the short- and long-term. According to the JEDI-PV model and the Applicant's experience constructing solar energy projects, it is estimated that 880 jobs will be created in the state of Ohio, including 573 in Pickaway County overall during construction of the Project, including direct, indirect, and

induced. Of those jobs, there will be approximately 648 on-site laborers from the state of Ohio during construction and operation, including 498 jobs in Pickaway County.

Estimating the portion of projected employment that would come directly from the region is difficult. While many positions can be filled utilizing local labor, such as equipment operators, truck drivers, laborers, and electricians, there will also be some specialized skilled positions required for construction of the Project. It is anticipated that these specialized positions will need to be filled using non-regional workers, due to the specialized training required for each position.

The local housing market would not be impacted during construction of the Project for two reasons: 1) most of the construction positions will be filled by laborers from the local community, and 2) construction workers not from the local community would only temporarily relocate to the area and it is anticipated that they would return home after construction is complete. Thus, there is no anticipated impact on supply in the local housing market.

The JEDI model predicted that new, local long-term jobs from the Project will total approximately 23 individuals in Pickaway County and 40 in the state of Ohio overall, including direct, indirect, and induced jobs. This includes a full-time operation and maintenance crew of 3 to 4 people.

(3) Estimated County, Township, and Municipal Tax Revenue

The Applicant anticipates entering into a Payment in Lieu of Taxes agreement with Pickaway County, whereby real property and tangible personal property taxes will be abated. The tax abatement structure is currently being discussed with the county and will be finalized after application submission. Payments will not fall below the state minimum annual payment of \$7,000/MW or equivalent NPV within the state guidelines per Ohio Revised Code Section 5727.75(G). The economic impact assessment of the Project and resulting report Exhibit T was prepared with these, more conservative, numbers to consider this payment as well as potential upfront payments negotiated with the county to achieve optimal implementation for both the county and the Applicant.

(4) Estimated Economic Impact of the Proposed Facility on Local Commercial and Industrial Activities

The Project will result in a positive overall economic impact on the local economy, including local commercial and industrial activities. There will be direct, indirect, and induced “multiplier effects” from the construction and operation of the Project. These effects can create indirect impacts, such as employment created in producing and transporting solar modules, and induced impacts resulting from the increase in the employees’ income and spending (i.e., local restaurants hiring additional staff to accommodate construction laborers spending their wages on meals). The total output (value of production) from the construction of the Project is anticipated to be nearly \$41.4 million in Pickaway County and over \$79.6 million in the state of Ohio. Annual operations of the Project are expected to result in almost \$2.6 million of output in Pickaway County and over \$5.3 million for the state of Ohio.

In addition, there will be a significant benefit to the local economy through lease payments to landowners.

Additional value to local economies will result from the increased diversification of the county and state economic bases. Economic diversification ensures greater stability of the economy by minimizing the effects of business cycles associated with specific industry.

(F) PUBLIC RESPONSIBILITY

(1) Public Interaction

Representatives of the Applicant have conducted meetings with the local government and the general public to gather support for the Project and assure that, to the extent possible, their comments and suggestions have been incorporated into the construction and design of the Project. The Project is located within Deer Creek and Perry townships in Pickaway County, and does not encompass any municipalities.

The Project has been under development since 2016. Since that time, Project representatives have met with multiple landowners and residents to discuss the Project. In addition, Project representatives have formed strong relationships with the following local organizations:

- Pickaway County Commissioners;
- Westfall Local School District;
- Deer Creek Township Trustees;
- Perry Township Trustees;
- Pickaway Progress Partnership;
- Pickaway County Fair Board;
- Pickaway County Community Foundation;
- Pickaway County Park District; and
- Pickaway County Chamber of Commerce.

The Applicant's involvement in the local community has included the following:

- Supporting the local 4H through the Pickaway County Junior Fair Livestock Auction;
- Sponsoring the Pickaway County Fair renovation;
- Joining the Pickaway County Chamber of Commerce; and
- Sponsoring the Pickaway Progress Partnership (P3), the economic development agent for Pickaway County and its municipalities.
 - P3 has three main objectives: promote and market the advantages of locating business in the County; promote a stronger business environment by facilitating retention and expansion efforts of local employers; and deliver a seamless network of economic development services and value-added programs to existing businesses, local government, and prospective companies throughout Pickaway County. P3 serves as an organization within the County designed to educate the community, increase community wealth and pride, and provide a network for a unified purpose.

The Applicant has also developed a relationship with the local news outlet, *Circleville Herald*, and stands ready to provide detail on topics identified locally, should the media request. *Circleville Herald* has published two articles on the Project to date. The Applicant has also talked with *The Columbus Dispatch*. All three articles are included in Exhibit R.

In preparation for the public meeting prior to the initial filing with OPSB, the Applicant posted a notice in the *Circleville Herald* to announce a public information meeting. The public information meeting gave local residents an opportunity to learn more about the proposed Project, ask questions, and provide written and spoken comments.

The Applicant also launched a Facebook page and created a Project website to engage the public, provide Project information, answer questions, and solicit feedback from the local community. Social media has proven to be an effective communication tool for the Project as the Facebook page has resulted in over 2,200 interaction and 266 comments; and, in addition, has been used to conduct opinion polls. These interactions have given the Applicant valuable insights into community interests and allowed Project representatives to respond to questions. The Project Facebook page is monitored and maintained by a third party; and a recent Facebook Page Metrics Report for the Project is included in Exhibit R.

During the construction period, the Applicant's contractor will establish a 24 hour a day, seven day a week "hot line" for emergency and complaint notices. During operations, site staff will be qualified to attend to requests and complaints with the necessary corporate support. Surrounding landowners will be provided with contact information for site staff. Additionally, emergency contact numbers will be on posted placards at project entrances that will allow anyone from the public to contact operations staff. The Applicant has also developed a Complaint Resolution Procedure Plan to address how complaints will be handled and potential mitigation techniques to be implemented for the Project.

No less than seven days prior to commencing construction, the Applicant will distribute this Complaint Resolution Plan to the affected property owner and tenants via first class mail. A copy of the Complaint Resolution Procedure Plan and the notification letter are included in Exhibit U.

(2) Insurance

Liability insurance will be maintained at all times during development, construction, and operation of the Project. The Applicant, a wholly owned subsidiary of Savion, has general liability and excess liability policies on the development phase of the Project.

All solar modules will be installed on property under lease or easement or owned by the Applicant. Terms of the leases or easements include requirements for the Applicant to pay annual rent; to pay for all tax-related payments resulting from the solar installation; to minimize impacts on the landowner's current use of the property; and to remove the solar modules upon termination of the land agreement. In addition, the terms of the leases require the Applicant to provide insurance for all Project components and to indemnify the landowner and other third parties from liability claims resulting from the construction and operation of the Project. The Applicant will carry insurance during development, construction, operation, and decommissioning that will ensure proper indemnification for third parties and for the interests of the Applicant.

A Certificate of Development Liability Insurance is provided as Exhibit V, a portion of which has been filed under seal.

(3) Road and Bridge Impacts

Burns & McDonnell (B&M) conducted a construction route study to identify roadway widths, oversized load limits, utility locations, bridge and culvert locations, and any other concerns as determined by the Pickaway County Engineer's Office. The findings of the B&M construction route study are summarized below and the complete report is contained in Exhibit F.

There are eight bridges, and one road culvert, located within the vicinity of the Project, all of which are in good condition and have no posted loading restrictions. Roadways within the vicinity of the Project are rural routes generally in good condition, except for Township Route 118 (Walston Road) that shows road failure in the vicinity of an existing granary. Township

Route 118 (Walston Road) is a small, rural route not constructed to carry the anticipated axle loads to be utilized during construction. Potential impacts to Township Route 118 (Walston Road) from construction will be addressed by the Road Use Maintenance Agreement (RUMA) between the Applicant and Pickaway County. The RUMA is to be executed upon the selection of the EPC contractor. No other significant concerns to the existing roads were identified by B&M.

A low volume of traffic will occur during Project operations and, therefore, future roadway or traffic impacts are not anticipated.

(4) Transportation Permits

The Pickaway County Engineer's Office is responsible for maintaining their roadway system, the local Township Trustees maintain jurisdictional authority on their roadway system, and SR 22 is maintained by the Ohio Department of Transportation (ODOT). A RUMA with Pickaway County, and permits from Pickaway County and ODOT for the proposed access roads and underground collection line road crossings, will be obtained prior to construction. In order to apply for transportation permits, the Applicant must have a definitive date upon which the associated work will commence as well as the timeline required for completing the work. Both of these can only be determined closer to construction. Any necessary traffic control will be implemented in accordance with ODOT standards and specifications. Road closures or restrictions are not anticipated. However, the Applicant will work with the Pickaway County Engineer to obtain written permission if road closures or restrictions become necessary. Routine Project operation should not require acquisition of transportation licenses or permits.

(5) Decommissioning

The Project will have only modest impacts to the land and will be relatively easy to decommission. Decommissioning the Project should not require any soil or groundwater remediation as operation of the Project will not generate hazardous waste or wastewater. The only materials that may be left in place on the Project are roads desired by landowners; buried collection greater than 36 inches (0.6 meters) below grade; and possibly portions of break off

more than 36 inches (0.6 meters) below grade. Project restoration efforts will return the land to substantially its original topography. Restoration shall include returning the soil to its pre-development state to allow any prior agricultural use to resume if the landowner so chooses.

Environmental Consulting & Technology, Inc., prepared the Decommissioning Plan for the Project included in Exhibit W. Decommissioning costs for the Project will be recalculated prior to commencing construction and will consider salvage of the solar components (Net Decommissioning Cost). If the decommissioning cost exceeds the salvage value of the solar components and therefore, the Net Decommissioning Cost is a positive value, then the Applicant will post decommissioning funds in the form of a surety bond, letter of credit, guaranty or other financial assurance. The Decommissioning Plan and financial assurance will be reviewed again in year 10 of Project operations and every five years thereafter to assess the value of the financial assurance per the current Net Decommissioning Cost estimate.

4906-4-07 COMPLIANCE WITH AIR, WATER, SOLID WASTE, AND AVIATION REGULATIONS

(A) REGULATION CONTEXT

The Project will be constructed and operated in compliance with all federal, state, and local regulations for air and water pollution, solid and hazardous wastes, and aviation.

(B) AIR QUALITY REGULATIONS

(1) Preconstruction Air Quality and Permits

(a) Ambient Air Quality of the Proposed Project Area

Pickaway County is in attainment for all criteria pollutants regulated by the U.S. Environmental Protection Agency (USEPA) using National Ambient Air Quality Standards (NAAQS) (USEPA 2019). There are no areas protected by the Regional Haze Program listed under 40 Code of Federal Regulations Part 81 in Ohio (USEPA 2017).

No monitoring data are available for Pickaway County. As such, ambient air quality for the Project Area has been characterized with data measured at the nearest monitoring stations to the Project Area for each pollutant. The most recent data available for the state of Ohio are from 2018 and are presented, along with the NAAQS standard for each pollutant, in Table 7-1.

Table 7-1 2018 Ambient Air Quality Monitoring near the Project Area

Pollutant	Closest Monitoring Site ID	City/County	Averaging Period	NAAQS Standard	Highest Reading
PM ₁₀	39-049-0024	Columbus/Franklin	24-hour (µg/m ³)	150	57
PM _{2.5}	39-049-0039	Columbus/Franklin	24-hour (µg/m ³)	35	24.8
Sulfur dioxide	39-049-0034	Columbus/Franklin	1-hour (ppb)	75	5.0
Carbon monoxide	39-049-0005	Columbus/Franklin	8-hour (ppm)	9	1.4
			1-hour (ppm)	35	1.7
Nitrogen dioxide	39-049-0034	Columbus/Franklin	1-hour (ppb)	100	53.0
Ozone	39-049-0081	Columbus/Franklin	8-hour (ppm)	0.070	0.084

Source: OEPA 2019a.

Key:

µg/m³ = micrograms per cubic meter

NAAQS = National Ambient Air Quality Standards

PM₁₀ = Particulate Matter ≤10µm

PM_{2.5} = Particulate Matter ≤2.5µm

ppb = Parts per billion

ppm = Parts per million.

(b) Air Pollution Control Equipment for the Proposed Facility

No air pollutants are associated with the operation of the Project. Therefore, no air pollution control equipment is needed.

(c) Applicable Federal and/or Ohio Air Quality Standards and Limitations

There are no federal or state regulations related to New Source Performance Standards, applicable air quality limitations, NAAQS, or Prevention of Significant Deterioration increments that are applicable to the Project as there are no emissions associated with the operation of the Project.

(d) Required Permits to Install and Operate Air Pollution Sources

No air pollutants are associated with the operation of the Project. Therefore, no air permits are required.

(e) Air Monitoring Station Locations and Major Pollution Point Sources

Because there are no emissions associated with the Project, the location of air monitoring location stations and other current or anticipated point source locations are not provided.

(f) Compliance with Permits and Standards

As described above, no air pollutants are associated with the operation of the Project. Therefore, no federal or state regulations apply, and no air permits are required.

(2) Plan for Emissions and Fugitive Dust Control During Construction

The operation of heavy construction equipment and vehicles will produce some particulate emissions from engine exhaust and fugitive dust generation during travel on unpaved roads and construction activities. These operations will be temporary and limited to active areas of construction and, therefore, will not result in significant impacts on air quality.

Best management practices (BMPs) will be followed during site preparation and construction to control fugitive dust emissions, including using water to wet down open soil surfaces to prevent dust emission. Water will be used only in periods of high heat and when the soil is deemed dry enough so as not to reach saturation during normal travel.

(3) Air Quality for the Operation of the Proposed Facility

(a) Ambient Air Quality Monitoring Plans

No air pollutants are associated with the operation of the Project. Therefore, no air quality monitoring plan is needed.

(b) Map of Estimated Concentrations in Excess of Significant Emission Rates

Because there are no air emissions from operation of the Project, a map of the estimated concentrations in excess of USEPA “Significant Emission Rates” is unnecessary.

(c) Air Pollution Control Equipment Failure

No air pollutants are associated with the operation of the Project. Therefore, no air pollution control equipment is needed and there is no potential for equipment failure.

(C) WATER QUALITY

(1) Preconstruction Water Quality and Permits

(a) List of Water Quality Permits

The following water quality permits will be obtained, if/as necessary based on the final Project layout, by the Applicant prior to Project construction:

- An Ohio National Pollutant Discharge Elimination System (NPDES) construction stormwater general permit, OEPA Permit No. OHC000005.
- A USACE permit under Section 404 of the Clean Water Act (CWA) for disturbances to waters of the United States (WOTUS; if/as necessary for stream and wetland crossings, although not required based on current design and construction methodologies).
- An OEPA Water Quality Certification under Section 401 of the CWA (if/as necessary for disturbance to streams and wetlands, although not required based on current design and construction methodologies).
- An OEPA Isolated Wetland Permit (if/as necessary for wetland crossings, although not required based on current design).

(b) Map of Water Monitoring and Gauging Stations

No water discharge will occur from the site; therefore, no water monitoring and gauging station information is provided.

(c) Monitoring and Gauging Station Information

No water discharge will occur from the site; therefore, no sampling and reporting is necessary.

(d) Existing Water Quality of the Receiving Stream

No water discharge will occur from the site; therefore, there will be no receiving stream.

(e) Water Discharge Permit Application Data

No water discharge will occur from the site; therefore, no data for a water discharge permit are provided.

(2) Water Quality During Construction

(a) Map of Water Monitoring and Gauging Stations

No water discharge will occur from the site; therefore, no water monitoring and gauging station information is provided.

(b) Estimated Quality and Quantity of Aquatic Discharges

As mentioned above, aquatic discharges are unlikely to occur during construction of the Project. However, if a spill should occur during construction, the Spill Prevention, Control, and Countermeasure (SPCC) Plan will address the proper methods to contain and mitigate the spill and the agencies to notify. The Applicant will follow all measures indicated in the SPCC Plan, and monitor for aquatic discharges to ensure that the water resources are not at risk during construction.

Much of the potable water supply within the Project Area is provided by private drinking wells. Ohio Department of Natural Resources (ODNR) data indicate there are no Ohio source water protection areas or residential water wells located within 1 mile of the Project Area (OEPA 2019b). As such, drinking water sources are located in sufficient enough distance away from the construction site that, in the event of a spill, the risk of impact to the drinking water sources is minimal. Hazardous materials stored on site during construction will be stored in accordance to the SPCC Plan to prevent a release. If a spill were to occur during construction and inadvertently

reaches a waterway, it is only expected to cause a minor increase in turbidity over a short timeframe. A minor increase in turbidity for a short duration is unlikely to cause a serious threat to the drinking water quality of the particular water body in which the aquatic discharge occurs.

Shallow groundwater was observed in 20 out of 29 of the geotechnical soil test borings conducted by Olsson & Associates (Olsson), with depth ranging from 5.0 to 19.5 feet (1.5 to 5.9 meters) during drilling and 4.4 to 19.7 feet (1.3 to 6.0 meters) immediately following drilling completion (see Exhibit I). These areas of shallow groundwater will be considered during foundation design and addressed in the final design plans. As a result, the Project is not expected to impact private water wells within or outside of the Project Area.

(c) Mitigation Plans

While aquatic discharges during construction of the Project is not expected to be significant, several measures will be implemented to ensure surface water quality protection, including a Stormwater Pollution Prevention Plan (SWPPP) and the previously mentioned SPCC Plan. The SPCC Plan, as required by the USEPA, will address methods to prevent the potential release of hazardous substances during construction of the Project. If any spills do occur during construction, the SPCC Plan will also address the proper methods to address the spill and agencies to notify.

The SWPPP, required by OEPA as part of the NPDES Construction Storm Water General Permit, will require the use of sediment and erosion control measures and BMPs during construction to implement stormwater pollution prevention measures. BMPs that will be used during construction to prevent excess stormwater runoff from the construction areas will be defined in the SWPPP, when developed. Any increase in stormwater discharges resulting directly from the construction of the Project will be documented in the SWPPP and permitted through the NPDES Construction Storm Water General Permit, OEPA Permit Number OHC000005. Furthermore, measures will be taken to maintain the site with BMPs for post-construction runoff control, as required, to ensure that all new facilities consistent with the operation of the Project do not create any additional stormwater runoff than was generated during preconstruction conditions.

Groundwater impacts will be minimized through SWPPP implementation. However, should shallow groundwater be encountered during excavation, it may be pumped out and discharged into a designated area (approved by the landowner) that will either direct the flow toward existing waterbodies or temporarily retain the water until it can infiltrate back into the ground. Specific details relating to the pumping of groundwater from an excavation area will be included in the SWPPP. Temporary sediment traps or the controlled release of water over vegetated areas will be utilized during construction to intercept and manage sediment-laden runoff from any dewatering activities that are necessary, allowing sediment to settle prior to discharge.

Direct impacts to streams and wetlands have been avoided in the Project design; however, if it becomes necessary to impact a stream to accommodate a fence or road crossing in the final design, the crossing(s) will be coordinated with USACE and the OEPA. In addition, the potential exists for erosion and sedimentation to occur. To mitigate any potential impacts that may occur to these aquatic resources, appropriate erosion and sediment control measures (e.g., silt fences or straw bale dikes or other stormwater control measures) will be used to limit the area of impact to surface waters. Further, the construction corridors and any clearing of vegetation in or near these features will be minimized to reduce potential impacts. These specific measures will be outlined in more detail once the SWPPP has been developed.

These mitigation measures will ensure that impacts to groundwater, surface waters, and wetlands are avoided or minimized to the maximum extent practicable during the construction of the Project.

(d) Changes in Flow Patterns and Erosion

Given the BMPs and mitigation measures that will be implemented during construction of the Project, it is not expected that the flow patterns in the Project Area will be significantly changed from preconstruction conditions. Impacts to wetlands and streams have also been avoided.

Steep slopes have been avoided that would exacerbate erosion. The majority of the Project has been sited on agricultural land and, therefore, only minimal clearing and grading will be

required. Additionally, the BMPs that will be implemented during construction will control erosion and sediment that may result from site clearing and grading.

(e) Equipment Proposed for Control of Effluents

There will be no effluent associated with construction of the Project. Therefore, no equipment is needed for control of effluent discharge and no impacts on water resources are expected.

(3) Water Quality During Operation of the Facility

(a) Map of Water Monitoring and Gauging Stations

No water discharge will occur from the site; therefore, no water monitoring and gauging station information is provided.

(b) Water Pollution Control Equipment and Treatment Processes

No pollutants will be associated with the operation of the Project that would be released into surface water. Furthermore, the proposed Project will have minimal staffing requirement. Therefore, the O&M building is not expected to consume significant water or generate large amounts of sanitary waste. The O&M building will have a wastewater source to be determined.

(c) Schedule for Receipt of NPDES Permit

There is no expected discharge of water related to the operation of the Project. As such, no NPDES permits will be necessary for operations.

(d) Flow Diagram for Water and Water-borne Wastes

No water discharge will occur from the site; therefore, a quantitative flow diagram is not provided.

(e) Water Conservation Practices

Minimal water may be required to clean solar modules if necessary. In addition, the O&M building will include a water source. Given the low volume of water anticipated for Project operations, water conservation practices will not be necessary.

(D) SOLID WASTE

(1) Preconstruction Solid Waste

(a) Nature and Amount of Debris and Solid Waste

Construction of the Project is expected to result in the removal of the following structures that are currently present in the Project Area (see Exhibit A):

1. Four grain silos on Kate's Place at Pickaway LLC parcel will be removed.

Limited amounts of woody vegetation debris may be generated during the preconstruction site clearing and grubbing activities described in 4906-4-03(B)(2).

(b) Plans to Deal with Waste

The solid waste generated from removal of the structures listed above will be hauled from the Project Area by a waste disposal service and properly disposed of at an appropriate landfill.

The woody debris will be chipped and either used or composted within the Project Area. However, if that is not feasible, then a private contractor will be hired to properly dispose of the debris at an authorized solid waste disposal facility.

(2) Solid Waste During Construction

(a) Nature and Amounts of Debris and Solid Waste Generated During Construction

Construction of the Project will generate minimal non-hazardous solid waste. This material will consist primarily of plastic, wood, cardboard, metal packing/packaging materials, construction scrap, and general refuse.

(b) Storage and Disposal of Wastes

The solid waste generated will be collected from construction sites and other work areas and disposed of in dumpsters located at the construction staging areas. On an as-needed basis, a

private contractor will empty the dumpsters and dispose of the refuse at an authorized solid waste disposal facility.

There are several laydown yards which will primarily be used for staging the equipment. However, out of the several areas, there will be one major laydown yard that will have the trailers for offices, restrooms, and parking for site personnel. During construction there will be multiple dumpsters to support these areas.

(3) Solid Waste During Operation

(a) Amount, nature, and composition of Solid Waste Generated During Operation

The Project will generate a small amount of non-hazardous waste from the O&M building that will be recycled or disposed of properly.

(b) Storage, Treatment, Transport, and Disposal of Solid Waste

Generation of solid waste by the O&M building is expected to be minimal and will be monitored by O&M staff members who will coordinate removal with local waste disposal services, as needed.

(4) Waste Permits

Operation of the Project will not require acquisition of licenses or permits for the generation, storage, treatment, transportation, and/or disposal of waste.

(E) AVIATION

(1) Aviation Facilities

No airports, helicopter pads, or landing strips are located within 5 miles of the Project Area.

(2) FAA Filing Status

The Applicant hired Capitol Airspace Group to conduct a glint and glare analysis to identify any potential Project impacts to roads and nearby residents. The findings of the analysis indicated

that no glare from the Project is predicted to impact roadways or residents adjacent to the Project, and show the Project is compliant with the interim policy for *FAA review of Solar Energy System Projects on Federally Obligated Airports* (78 Federal Register 63276 – 63279). The complete glint and glare analysis report is contained in Exhibit J.

4906-4-08 HEALTH AND SAFETY, LAND USE AND ECOLOGICAL INFORMATION

(A) HEALTH AND SAFETY

Consistent with OAC Rule 4906-4-08(A), the following details the Applicant's commitment to comply with health and safety regulations.

(1) Safety and Reliability of Equipment

(a) Major Public Safety Equipment

Measures to prevent unauthorized site entry and unsafe practices will be implemented during Project construction and operation. During the construction phase, temporary, highly visible, plastic mesh fencing will be erected around equipment and spare part storage yards, laydown areas, and other potential construction hazards. The temporary fencing will be supplemented by signs cautioning the public of potential dangers, and providing 24-hour emergency numbers, operator contact information, and instructions for emergency personnel.

During the construction phase, the Applicant will coordinate with local emergency responders to discuss proper rescue techniques and other items specific to on-site equipment safety. Training programs may be recommended to ensure that responders are prepared to address Project-specific emergencies should they arise. On-site construction workers will adhere to industrial safety standards to avoid injury. Regulations set forth by the national Occupational Safety and Health Administration cover safety issues associated with electricity, construction equipment operation, and other hazards that may be encountered at the Project during construction.

(b) Equipment Reliability

The proposed solar PV modules are designed to have a lifespan of 30 to 35 years and will conform to all Underwriters Laboratories (UL), Institute of Electrical and Engineers (IEEE), National Electrical Code (NEC), NESC, and American National Standards Institute (ANSI) listings. A licensed professional engineer will certify the electrical system design. The Applicant will ensure that inspections of all components are completed regularly to provide safe and reliable operation.

(c) Generation Equipment Manufacturer's Safety Standards

The *Health and Safety Impacts of Solar Photovoltaics* (May 2017) prepared by the North Carolina State University's Clean Energy Technology Center (Paper) is included in Exhibit B. The Paper addresses potential health and safety concerns related to PV development through a thorough review of the available scientific literature. Generation equipment manufacturer's safety standards will be provided after PV solar module technology has been selected for the Project. All Project equipment is expected to be compliant with applicable UL, IEEE, NEC, NESC, and ANSI listings.

(d) Measures to Restrict Public Access

The Project will be enclosed by a 7-foot (2.1-meter) chain link fence or agricultural fence around the perimeter of the Project. Access will be controlled by gates.

(e) Fire Protection, Safety, and Medical Emergency Plan(s)

An Emergency Response Plan will be prepared for the Project. Construction and maintenance personnel will be trained and will have the equipment to deal with emergency situations that could occur at the Facility. In addition, the Applicant will ensure all local emergency responders will be trained prior to commissioning of the Project on how to respond to any emergencies related to the Project.

(2) Impact of Air Pollution Control Equipment Failure

As described above, no air pollutants will be associated with the operation of the Project. Therefore, no on-site air pollution control equipment will be necessary.

(3) Sound from Construction and Operation of the Facility

(a) Construction Sound Levels at the Nearest Property Boundary

Epsilon Associates, Inc. (Epsilon) conducted a sound level assessment to establish existing sound levels in the Project Area and evaluate potential sound impacts from the construction of the Project on nearby residences and other sensitive receptors. Epsilon's Sound Level Assessment Report is included in Exhibit L and briefly summarized below.

Epsilon utilized Roadway Construction Noise Model software to predict the sound levels associated with construction of the Project. Construction of the Project is expected to last approximately 14 to 16 months.

(i) Blasting Activities

Blasting activities will not be necessary for the Project and, therefore, will not result in sound impacts.

(ii) Operation of Earth Moving Equipment

Earthmoving equipment anticipated to be used during construction include a dump truck, bulldozer, and backhoe. The operation of this equipment could range in sound level from 76 A-weighted decibels (dBA) to 78 dBA at a distance of 80 feet (24.4 meters) (closest property line), and 67 dBA to 68 dBA at a distance of 230 feet (70.1 meters) (closest monitoring receptor). The sound resulting from these operations will occur infrequently and over a short duration at each location. Such levels would not generally be considered acceptable on a permanent basis, but as a temporary, daytime occurrence, and with the setbacks implemented by the Applicant, operation of earth moving equipment should not pose undue quality of life concerns for residents near the Project Area.

(iii) Driving of Piles, Rock Breaking or Hammering, and Horizontal Directional Drilling

The solar modules are mounted on racks which are supported by piles. There are approximately 90,000 piles that will need to be driven to support the racks. The piles will be embedded at a depth between 6 and 8 feet (1.8 and 2.4 meters). A horizontal drilling mechanism will be used to bore the collection circuits under streams to avoid impacts to those features. The operation of an impact pile driver used to drive the piles could range in sound level from 90 dBA to 97 dBA at a distance of 80 feet (24.4 meters), and 81 dBA to 88 dBA at a distance of 230 feet (70.1 meters). Since the modules are set back at least 300 feet (91.4 meters) from the center of residences, the sound from pile driving activities will not be significant.

(iv) Erection of Structures

The erection of solar PV modules and inverters will require the use of a medium cranes and flatbed trucks. The predicted sounds levels for this equipment range from 71 dBA to 77 dBA at a distance of 80 feet (24.4 meters) and 61 to 67 dBA at 230 feet (70.1 meters). The sound resulting from these operations will occur infrequently and over a short duration at each location. Such levels would not generally be considered acceptable on a permanent basis, but as a temporary, daytime occurrence, and with the setbacks implemented by the Applicant, erection of structures should not pose undue quality of life concerns for residents near the Project Area.

(v) Truck Traffic

The use of a dump and flatbed truck will be necessary during construction of the Project in order to transport materials and equipment throughout the Project Area. Predicted sound levels for this equipment is included in construction activities detailed above. The sound resulting from these operations will occur infrequently and over a short duration at each location. Such levels would not generally be considered acceptable on a permanent basis, but as a temporary, daytime occurrence, and with the setbacks implemented by the Applicant, truck traffic should not pose undue quality of life concerns for residents near the Project Area.

(vi) Installation of Equipment

Installation of the equipment for the Project will primarily be related to the use of medium cranes. Predicted sound levels for crane equipment is included in construction activities detailed

above. The sound resulting from these operations will occur infrequently and over a short duration at each location. Such levels would not generally be considered acceptable on a permanent basis, but as a temporary, daytime occurrence, and with the setbacks implemented by the Applicant, installation of equipment should not pose undue quality of life concerns for residents near the Project Area.

(b) Operational Sound Levels at the Nearest Property Boundary

In order to assess the impact of sound that will result from operation of the Project, Epsilon conducted field surveys to establish the ambient sound levels in the Project Area and then utilized Cadna/A modeling software to predict the sound levels that will result from operation of the Project at nearby residences.

Epsilon conducted field sampling surveys at six different sound monitoring locations throughout the Project Area in order to establish the background (equivalent sound level [L_{eq}]) sound levels within the Project Area. Background sound monitoring in the Project Area indicated that the average daytime L_{eq} for the area is 50 dBA while the average nighttime L_{eq} is 44 dBA. While there are no existing federal, state, or local regulations applicable to the Project, operational sound predicted for the Project was evaluated against the 5 dBA increase over ambient sound level (L_{eq}) used by OPSB to evaluate wind energy facilities. Project sounds levels at all sound monitoring locations are below the 5 dBA increase over L_{eq} .

(i) Operational Sound from Generation Equipment

Epsilon modeled a total of 80 inverters conservatively operating at full load, and a collector substation with four transformers. Broadband L_{eq} sound levels produced by the inverters and substation range from 18 to 43 dBA and represent the worst-case sound levels associated with the Project.

(ii) Processing Equipment

Processing equipment is not associated with the Project and, therefore, will not result in sound impacts.

(iii) Associated Road Traffic

Vehicle traffic to access the Project will not significantly contribute to route road traffic sound. Road traffic associated with construction of the Project is addressed above in OAC Section 4906-4-08(A)(3) of this application.

(c) Sound-sensitive Areas within One Mile

The sensitive receptors identified in the Project Area or within a 1-mile buffer around the Project Area are depicted in Figure 8-1. There are 225 residences, 10 commercial buildings, and one church within a 1-mile radius of the Project Area. Of these, three residences are located within the Project Area. No schools are located within the Project Area or within 1 mile of the Project Area.

The Project does not anticipate major sound impacts at these locations as all but four sensitive receptors are outside the Project Area, and Project worst-case sound levels are below the 5 dBA increase over L_{eq} limit for wind energy projects applied to the sound evaluation for this Project.

(d) Mitigation of Sound Emissions During Construction and Operation

The Project is not expected to have significant sound impacts at any residences or other sensitive receptors during construction or operation of the Project as minimization and mitigation measures have been included in the Project design.

The Applicant maximized Project setbacks from property lines to the extent practical to minimize impact to adjacent residents. In addition, the following sound minimization and mitigation procedures will be implemented during construction:

- General construction activity shall be limited to the hours of 7 a.m. to 7 p.m., or until dusk when sunset occurs after 7 p.m. If noise-generating construction needs to occur at this time frame, then neighbors adjacent to the sound generating construction will be notified prior to conducting those construction activities.
- During the construction period, the Applicant's contractor will establish a 24 hour a day, seven day a week "hot line" for emergency and complaint notices. During operations, site

staff will be qualified to attend to requests and complaints with the necessary corporate support. Surrounding landowners will be provided with contact information for site staff. The Applicant has also developed a Complaint Resolution Procedure Plan to address how complaints will be handled and potential mitigation techniques to be implemented for the Project (Exhibit U).

(e) Preconstruction Background Sound Study

Epsilon conducted a sound level assessment to establish existing sound levels in the Project Area and evaluate potential sound impacts from the construction and operation of the Project on nearby residences and other sensitive receptors. Epsilon's Sound Level Assessment Report is included in Exhibit L.

(4) Water Impacts

(a) Impacts to Public and Private Water Supplies from Construction and Operation

Given the nature of the Project, the Applicant does not anticipate impact to the water supply. A desktop review of groundwater well information for the Project Area and surrounding vicinity was obtained from OEPA. There are no water wells within the Project Area or a 1-mile buffer.

No Surface Water Protection Areas or Surface Water Emergency Management Zones are located within 1 mile of the Project Area, and therefore, no impacts will occur to these areas.

To provide protection for the water resources within the Project Area and the surrounding area, a SWPPP and SPCC plans will be implemented during construction to minimize and prevent the potential for discharges to surface waters. The potential exists for aquatic discharges (e.g., sediment, oil, etc.) to occur during construction. If discharges do occur, they are anticipated to only cause minor increases in sedimentation and turbidity over a short-term to nearby surface waters. A minor increase in turbidity for a short duration is unlikely to cause a serious threat to the drinking water quality of the particular water body in which the aquatic discharge occurs.

(b) Impacts to Public and Private Water Supplies Due to Pollution Control Equipment Failures

As described above, no water pollutants will be associated with the operation of the Project. Therefore, no on-site water pollution control equipment will be necessary and no impact to public and private water supplies will occur.

(c) Aquifers, Water Wells, and Drinking Water Source Protection Areas Directly Affected by the Proposed Facility

No aquifers, water wells, or drinking water source protection areas are located within 1 mile of the Project Area and, therefore, no impacts will occur to these areas.

(d) Compliance with Drinking Water Source Protection Plans

No drinking water source protection areas are present within the Project Area or a 1-mile buffer; therefore, there are no concerns with compliance for these protection areas.

(e) Flood Potential and Mitigation

No designated 100-year floodplain is present with the Project Area. However, 1,169 acres of 100-year floodplain is present within 1-mile of the Project Area (FEMA 2010). Project infrastructure has been sited to avoid floodplains and, therefore, no impacts will occur.

(5) Geological Features, Topographic Contours, and Wells

Figure 8-2 depicts the proposed Project, geological features of the proposed Project Area, topographic contours, existing gas and oil wells, and injection wells.

(a) Site Geology Suitability

The Applicant hired Olsson to conduct a separate geotechnical investigation for the proposed Project. The findings of the Olsson geotechnical engineering study is contained in Exhibit I and briefly summarized below.

The geotechnical investigation consisted of 29 geotechnical borings, standard penetration tests, split-spoon soil sampling, bulk soil sampling, test pits, general soil laboratory testing, electrical resistivity testing, thermal resistivity testing, and axial and lateral pile load testing. This program of geotechnical investigation was selected to accurately and efficiently evaluate the strength, compressibility, stiffness, and density characteristics of the soil at the Project site, as well as to evaluate the general suitability of the solar array systems proposed.

In general, the geotechnical investigation results indicate that site soils are suitable for support of a driven pile solar array foundation system. Laboratory testing supported a low-swell potential that does not appear significant for either pile foundation or spread footing design. In addition, Olsson's investigation found a low risk of seismicity, faulting, liquefaction, flooding, slope instability features for the Project, subsidence risk due to oil and gas development, and development of karst area.

(b) Site Soil Suitability

The Project Area topsoil primarily consists of clayey soil types, with some sand present below six feet. In general, the results of Olsson's geotechnical engineering study indicates Project Area soils are suitable for support of a driven pile solar array foundation system. The majority of the soils exceed the recommended design undrained shear strength value. However, several investigated soil boring locations exhibited zones of lower strength and/or higher compressibility soils than the recommended design value. These soil conditions identified will inform Project final design.

(c) Test Borings

As indicated above, 29 test borings were conducted by Olsson around the Project Area, within one of the proposed Project gen-tie line ROWs, and within one of the four Project substation locations in November 2019. All test borings were completed in accordance with American Society for Testing and Materials standards and were analyzed at a qualified laboratory for moisture content, particle-size, Atterberg limits, unconfined and consolidation tests, and other tests, as required. Test boring logs are provided in Appendix C of Exhibit I.

(6) Wind Velocity

Climate data from the Ohio Agricultural Research and Development Center were reviewed to develop an increased understanding of wind velocities in the vicinity of the Project. The Columbus Station in Franklin County, Ohio, is the closest weather station to the proposed Project and was utilized to provide an overview of local wind velocities (The Ohio State University 2019). Table 8-1 summarizes average wind speed data recorded at the Columbus Station in 2018.

The data contained in Table 8-1 show that the large majority of the time (78%) average wind speeds are 5 miles per hour (mph) or below, and below 3 mph roughly half the time (48%). As such, no plans to mitigate for likely adverse consequences are necessary.

Table 8-1 2018 Average Wind Speeds for Columbus Station, Franklin County, Ohio

Average Wind Speed (mph)	Number of Occurrences	Percent Total (%)
0 to 0.5	21	5.9%
0.6 to 1	26	7.3%
1.1 to 1.5	29	8.2%
1.6 to 2	38	10.7%
2 to 2.5	27	7.6%
2.6 to 3	29	8.2%
3.1 to 3.5	33	9.3%
3.6 to 4	25	7.1%
4.1 to 4.5	22	6.2%
4.6 to 5	25	7.1%
5.1 to 5.5	21	5.9%
5.6 to 6	14	4.0%
6.1 to 6.5	13	3.7%
6.6 to 7	13	3.7%
7.1 to 7.5	6	1.7%
7.6 to 8	4	1.1%

Table 8-1 2018 Average Wind Speeds for Columbus Station, Franklin County, Ohio

Average Wind Speed (mph)	Number of Occurrences	Percent Total (%)
8.1 to 8.5	4	1.1%
8.6 to 9	2	0.6%
9.1 to 9.5	0	0.0%
9.6 to 10	1	0.3%
10.1 to 10.5	0	0.0%
10.6 to 11	0	0.0%
11.1+	1	0.3%
Total	354	100%

Source: The Ohio State University 2019.

Key:

mph = miles per hour

(7) Blade Shear

The Project is not a wind facility; therefore, there are no potential impact from blade shear.

(8) Ice Throw

The Project is not a wind facility; therefore, there is no potential impact from ice throw.

(9) Shadow Flicker

The Project is not a wind facility; therefore, there is no potential impact from shadow flicker.

(10) Radio and TV Reception

The maximum height of solar modules will be 10 feet (3.0 meters) and, therefore, interference with radio and TV reception is not anticipated as the Project will lack tall structures, exposed moving parts, and will only generate very weak electromagnetic fields (EMFs) that dissipate rapidly over short distances. In addition, the Project will only be operational during daylight hours.

(11) Radar Interference

The maximum height of solar modules will be 10 feet (3.0 meters) and, therefore, interference with military or civilian radar systems is not anticipated as the Project will lack tall structures, exposed moving parts, and will only generate very weak EMFs that dissipate rapidly over short distances. In addition, the Project will only be operational during daylight hours.

(12) Navigable Airspace Interference

The maximum height of the solar modules will be 10 feet (3.0 meters) and, therefore, will not interfere with any navigable airspace. In addition, there are not public airports or heliports within 5 miles of the Project Area.

(13) Communication Interference

The maximum height of solar modules will be 10 feet (3.0 meters) and, therefore, interference with any microwave communication paths or systems is not anticipated as the Project will lack tall structures, exposed moving parts, and will only generate very weak EMFs that dissipate rapidly over short distances. In addition, the Project will only be operational during daylight hours.

(B) ECOLOGICAL RESOURCES

(1) Ecological Resources in the Project Area

(a) Ecological Resources Map

Figure 8-3 is a map at 1:24,000 scale of the Project Area and a 0.5-mile radius from the Project Area and contains the following information:

- (i) The proposed Facility and Project Area;
- (ii) Undeveloped or abandoned land such as wood lots or vacant fields;
- (iii) Wildlife areas, nature preserves, and other conservation areas;
- (iv) Surface bodies of water, including wetlands, ditches, streams, lakes, reservoirs, and ponds; and

- (v) Highly erodible soils and slopes of twelve percent or greater.

(b) Field Survey Map of Vegetation and Surface Waters

Figure 8-4 provides a map at a scale of 1:12,000 of the area within 100 feet (30.5 meters) of the potential construction impact area of the Facility and all field-delineated features, including vegetation, wetlands, and streams.

Ecology and Environment, Inc., member of WSP (hereafter referred to as E & E) conducted wetland delineation and T/E habitat field surveys to assess the vegetative communities as well as delineate and characterize surface water and wetland resources in the Project Area in order to inform Project design. E & E conducted field surveys on December 11 to 14, 2017; November 6 to 8, 2018; September 17 to 19, 2019; and October 9 to 10, 2019. Surveys were completed on over 3,000 acres of land as reflected in the Wetland and Waterbody Delineation Report included in Exhibit N. However, the numbers included in this section below are reflective of the current 2,276-acre Project Area.

Habitat within the Project Area is predominately composed of corn (*Zea mays*) and soybean (*Glycine max*) cropland (2,160 acres; approximately 94.9% of the Project Area). Limited areas of oak-hickory forest (50 acres, 2.2%) and developed habitat (27 acres; 1.2% of the Project Area) are also present in the Project Area. The remainder of the site (39 acres, 1.7% of the Project Area) is composed of streams/drains (16 acres), old field (14 acres), agricultural field buffer (6 acres), wetlands (2 acres), and ponds (1 acre). Below, Table 8-2 provides a summary of the acreages of vegetative communities delineated within the Project Area.

Table 8-2 Habitat Types Identified within the Atlanta Farms Solar Project Area

Habitat Category	Acres	Land Use (%)
Agricultural	2,159.5	94.9%
Oak-Hickory Forest	50.3	2.2%
Developed	27.3	1.2%
Stream/Drain	15.9	0.7%
Old Field	14.3	0.6%
Agricultural Field Buffer	6.2	0.3%

Table 8-2 Habitat Types Identified within the Atlanta Farms Solar Project Area

Habitat Category	Acres	Land Use (%)
Wetland	2.1	0.1%
Pond	0.7	<0.1%
Total	2,276	100%

A total of 13 delineated wetlands, 22 streams, 2 drains, and 1 pond are present within the Project Area. All delineated waters within the Project Area that are not hydrologically isolated flow into Deer Creek, located approximately 0.5 miles northeast of the Project Area at its nearest point. Approximately 11 miles southeast of the Project Area, Deer Creek drains into the Scioto River, a Section 10 navigable WOTUS. Delineated features draining to Deer Creek are assumed to be federal and state waters regulated by the USACE and OEPA. Figure 8-3 depicts the locations of all delineated wetland features within the Project Area.

Within the Project Area, 13 wetlands were delineated during the field surveys. Wetlands identified during the surveys included palustrine emergent (PEM) and palustrine forested (PFO) wetland types, and total approximately 2.15 acres. Each delineated wetland is summarized in Table 8-3.

The functions and values of these wetlands were assessed using Ohio Rapid Assessment Method (ORAM) for wetlands. The categorization of the wetlands was conducted in accordance with OAC Rule 3745-1-54, and also summarized in Table 8-3.

Table 8-3 Delineated Wetlands in the Project Area

Wetland ID	ORAM Score and Rating	Wetland Type	Total Acreage
W-T01-001	Score: 11 Category 1	PEM	0.19
W-T01-002	Score: 16 Category 1	PEM	0.12
W-T03-001	Score: 12 Category: 1	PEM	0.63
W-T04-001	Score: 12 Category 1	PEM	0.02
W-T04-002	Score: 11 Category 1	PEM	0.03

Table 8-3 Delineated Wetlands in the Project Area

Wetland ID	ORAM Score and Rating	Wetland Type	Total Acreage
W-T04-007	Score: 19 Category 1	PEM	0.01
W-T04-008	Score: 23 Category 1	PFO	0.68
W-T04-009	Score: 30 Modified Category 2	PEM	0.26
W-T05-001	Score: 9 Category 1	PEM	0.09
W-T05-002	Score: 9 Category 1	PEM	0.02
W-T05-003	Score: 9 Category 1	PEM	0.03
W-T05-004	Score: 9 Category 1	PEM	0.02
W-T05-005	Score: 9 Category 1	PEM	0.05
Total			2.15

Key:

ORAM = Ohio Rapid Assessment Method

PEM = Palustrine emergent

PFO = Palustrine forested

Table 8-4 summarizes the 22 delineated streams, totaling 37,693 linear feet, present within the Project Area. Ten streams are Relatively Permanent Waters (RPWs) with perennial flow; eight streams are RPWs with intermittent flow; four streams are Non-RPW with ephemeral flow. The 22 delineated streams are not unique, rather many represent different segments of the same stream. Continuous stream features could not be mapped during surveys as landowner access to all the land parcels was unavailable.

Table 8-4 Delineated Streams in the Project Area

Stream ID	Stream Class	Flow Type	Stream Name	QHEI or HHEI Rating	Total Length (linear feet)
SS-T01-001	RPW	Perennial	State Run	QHEI - 44	1,054
SS-T01-002	RPW	Perennial	UNT to State Run	HHEI - 65	3,928
SS-T01-003	RPW	Perennial	UNT to State Run	HHEI - 65	1,659
SS-T02-006	RPW	Intermittent	UNT	HHEI - 60	775
SS-T02-007	Non-RPW	Ephemeral	UNT	HHEI - 62	559
SS-T02-008	RPW	Perennial	UNT to Deer Creek	HHEI - 67	2,033
SS-T02-009	RPW	Intermittent	UNT	HHEI - 75	584
SS-T02-010	RPW	Perennial	UNT	HHEI - 72	319

Table 8-4 Delineated Streams in the Project Area

Stream ID	Stream Class	Flow Type	Stream Name	QHEI or HHEI Rating	Total Length (linear feet)
SS-T02-011	RPW	Perennial	UNT	HHEI - 72	544
SS-T02-012	RPW	Perennial	Hay Run	QHEI - 40	2,221
SS-T02-013	Non-RPW	Ephemeral	UNT	HHEI - 39	273
SS-T03-001	RPW	Perennial	UNT to Hay Run	HHEI - 75	5,939
SS-T03-002	RPW	Perennial	UNT to Hay Run	HHEI - 65	849
SS-T03-003	RPW	Perennial	UNT to Hay Run	HHEI - 65	5,433
SS-T04-001	RPW	Intermittent	UNT to Deer Creek	HHEI - 35	1,439
SS-T04-003	Non-RPW	Ephemeral	UNT to State Run	HHEI - 30	1,516
SS-T04-005	RPW	Intermittent	UNT	HHEI - 56	1,145
SS-T04-006	RPW	Intermittent	UNT	HHEI - 48	3,421
SS-T04-007	Non-RPW	Ephemeral	UNT	HHEI - 8	137
SS-T04-008	RPW	Intermittent	UNT to Hay Run	HHEI - 30	45
SS-T04-009	RPW	Intermittent	UNT to Hay Run	HHEI - 36	2,738
SS-T04-010	RPW	Intermittent	UNT to Hay Run	HHEI - 27	1,082
Total					37,693

Key:

HHEI = Headwater Habitat Evaluation Index

Non-RPW = Non-relatively permanent water

QHEI = Qualitative Habitat Evaluation Index

RPW = Relatively permanent water

UNT = Unnamed Tributary

Table 8-5 summarizes the two potentially jurisdictional drains, totaling 1,904 linear feet, delineated within the Project Area. These drainage features convey water but lack the characteristics to meet the USACE's definition of a stream – visible bed and banks and an ordinary high water mark. Both of the drains appear to be ephemeral and convey water between Hay Run (SS-T02-012), wetland W-T04-008, and an off-site wetland east of Hay Run.

Table 8-5 Delineated Drains in the Project Area

Drain ID	Flow Type	Total Length (linear feet)
DD-T04-040	Ephemeral	845
DD-T04-041	Ephemeral	1,059
Total		1,904

One pond, totaling 0.66 acres, was also delineated within the Project Area. Pond WB-T05-001 is a man-made feature located in a farmed area in the central portion of the Project.

(c) Literature Survey of Plant and Animal Life

E & E conducted a desktop literature review of federally and state-listed T/E species for Pickaway County to assess their potential occurrence within the Project Area (see Exhibit M). The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Construction (IPaC) screening tool was used to evaluate federal T/E species that might be potentially present within the Project Area (USFWS 2019). Seven federally listed endangered species and two federally listed threatened species were identified during the IPaC review to be potentially present in the Project Area. Additionally, the USFWS was consulted in July of 2017 regarding potential impacts to T/E species within a previous iteration of the Project Area (see Exhibit M). The USFWS consultation letter reported no additional federally listed T/E species, federal wilderness areas, or federal wildlife refuges within the vicinity of the Project Area, beyond those identified in the IPaC review. No designated critical T/E habitat for any of the federally listed T/E species overlaps with the Project Area.

The ODNR does not have a publicly available state-maintained screening tool for specific project sites; therefore, the list of potential state-listed T/E species within the Project Area was generated based on the comprehensive list for Pickaway County (OH-DOW 2016). The ODNR reports 28 state-listed endangered species and 15 state-listed threatened species that occur in Pickaway County. Additionally, the ODNR was consulted in October of 2017 regarding potential impacts to T/E species within a previous iteration of the Project Area (see Exhibit M). The ODNR consultation letter reported one additional state-listed endangered species, one additional state-listed endangered and federally listed endangered species, and one additional state-listed threatened and federally listed endangered species whose geographic ranges overlap with the Project Area.

ODNR and USFWS were contacted in December 2019 requesting an update to their 2017 response letters to incorporate any concerns regarding the updated Project Area, or updated occurrence information. The updated USFWS consultation letter, included as Exhibit X, reported no additional federally listed T/E species, federal wilderness areas, federal wildlife refuges, or designated critical habitat within the vicinity of the Project Area, beyond those identified in the

IPaC review. ODNR's response is pending and will be provided to OPSB as soon as it becomes available.

(d) Plant and Animal Field Survey Results

To supplement the desktop literature review, E & E assessed potential habitat availability for federally or state-listed T/E species in the Project Area during field surveys conducted on a larger, previous iteration of the Project Area as detailed in Exhibit M. During field surveys, the vast majority of the Project area was delineated as agricultural habitat (95%), with minimal areas of higher-quality habitat that could provide potentially suitable habitat for T/E species. Very few areas of undisturbed habitat were observed within the Project Area during surveys, and forested areas generally contained a thick understory of invasive species. The Project is currently designed to avoid impacts to stream and wetland habitat, and no unique habitat types, or T/E plant or animal species were observed during field surveys.

(e) Additional Ecological Studies

In August 2017, E & E conducted a preliminary desktop CIA for a previous iteration of the Project Area. The CIA did not identify significant development constraints that could potentially impact the proposed Project, including potential impacts to ecological resources. The desktop CIA report is provided as Exhibit G.

(2) Potential Impacts to Ecological Resources During Construction

(a) Construction Impacts on Ecological Resources

The development of the Project is not likely to result in significant impacts to ecological resources that may potentially occur within Pickaway County and the Project Area as a result of micro-siting efforts to avoid impacts to potentially suitable habitat or construction outside of critical periods.

The Applicant undertook an extensive siting process to minimize and avoid impacts to streams, wetlands, and other protected water resources. No wetlands or streams will be impacted by the Project as currently proposed. Therefore, the Applicant anticipates that no wetland permits will

be required from the OEPA or USACE. Avoidance of wetland and stream habitat during Project construction will avoid potential impacts to any aquatic species identified during the desktop or field-based T/E habitat review.

Less than one acre of forested land will be cleared during construction of the collection line system associated with the Project. The impact on wildlife as a result of clearing less than one acre of forested habitat is expected to be almost negligible due to its small size and the fact that it does not provide critical or limiting habitat for any wildlife species. Tree clearing activities will occur outside of the bat summer roosting season, to avoid potential impacts to any potential Indiana and northern long-eared bats. In addition, to further minimize removal of woody vegetation, whenever possible, trees and brush will be manually pruned or trimmed rather than removed.

The remainder of the Project will be constructed exclusively in agricultural or developed land, which provides minimal habitat for wildlife.

(b) Mitigation Procedures for Construction Impacts

In addition to the extensive micro-siting efforts mentioned above, the Applicant will work to avoid, minimize and, if necessary, mitigate ecological construction impacts. These include specific efforts to minimize disturbance to soils, frac-out contingency plans, delineation and marking of surface waters and wetlands, prepare procedures for inspection and repair of erosion control measures, and methods to protect vegetation in proximity to the Project.

(i) Restoration and Stabilization of Disturbed Soils

After construction, temporarily disturbed areas will be restored. The Facility will be graded to natural contours where possible and prepared for final seeding. Once construction is complete, the permanent access roads will be dressed as necessary to ensure their long-term function. Erosion control methods during and after construction will depend on the contours of the land, as well as requirements of relevant permits.

Permanent stabilization seeding will be completed immediately following the completion of construction. Areas disturbed during construction will be reseeded with a low-growth, native grass seed mix under the solar array and a pollinator-friendly seed mix in select open areas outside of the array and within the Project perimeter fence line.

The Project is considered to be permanently stabilized when all soil disturbed activities have been completed and a uniform perennial vegetative cover with a density of 70% has been achieved in all areas of the site not covered by other permanent ground covers. Any seed, straw, and/or matting used within the Project Area will meet Ohio stormwater standards (OH-DSWC 2006).

Agricultural areas will be seeded with a temporary cover crop as specified by the landowner after construction. Natural areas will be seeded with an appropriate seed mixture to control erosion and allow revegetation.

(ii) Frac Out Contingency Plan

The Project intends to employ HDD techniques to install cables underneath roads and streams. In locations where HDD activities will occur within 100 feet (30.5 meters) of a residence or private water well, the Applicant will notify those landowners before boring activities commence and monitor water well quality. Further, if HDD installation results in impact to a stream, the Applicant will notify the OEPA, Office of Emergency Response via the 24-Hour Emergency Spill Hotline and prepare a monitoring report documenting the leak location, estimated volume and cleanup efforts.

(iii) Demarcation of Surface Waters and Wetlands

Impacts to surface water and wetlands during construction will be minimized through the implementation of a SWPPP to prevent erosion and sedimentation into nearby waterbodies under OEPA's NPDES General Permit for Construction Activities. Silt fencing will be installed along the construction ROW in all areas adjacent to wetlands, in accordance with the SWPPP. Further, areas disturbed during construction will be restored to preconstruction conditions as soon as possible in order to further minimize the impact of construction.

(iv) Procedures for Inspection and Repair of Erosion Control Measures

A SWPPP will be prepared prior to construction as a condition of OEPA's NPDES General Permit that is required for the Project. The SWPPP will prescribe specific erosion and sediment control measures to be used and the location in which these measures will be implemented. Generally, structural erosion control devices such as straw bales, berms, and check dams will be implemented to divert flows from exposed soils, temporarily store flows, or otherwise limit runoff from exposed areas of the site. Silt fences will be installed immediately after completing each phase of work to effectively retain sediment where erosion would occur in the form of sheet and rill erosion (e.g., clearing and grubbing, excavation, embankment, and grading).

Timmons Group conducted a hydrology analysis and culvert assessment for the Project in December 2019. Reports for these studies are included in Exhibit K. The hydrology analysis determined that scour will not have a significant impact during operations due to the relatively flat terrain on the site and estimated low water flow velocities. Potential for ponding at depths greater than 2 feet (0.6 meters) was identified in three locations on site. This potential can be mitigated through minimal grading and ditch routing and will be detailed in the grading plan prepared for the Project. The culvert assessment determined that culverts on site are in relatively good condition and will not require upgrades for Project construction.

(v) Methods to Protect Vegetation

Tree clearing has been minimized with the site design and will result in less than one acre of tree clearing. Vegetation surveys conducted for the Project did not identify any sensitive vegetative communities or plant types, therefore, no specific vegetation protection methods are needed. Additional details regarding vegetative management during construction is presented in Exhibit P.

(vi) Disposing of Downed Trees, Brush, and Other Vegetation

Any vegetation removed during construction will be segregated, stockpiled, and hauled off site by a waste disposal service.

(vii) Avoidance Measures for State and Federally Listed and Protected Species and Habitat

To minimize impacts to federally and state-listed T/E species, the Project has been sited, to the extent practicable, within previously disturbed areas, such as agricultural fields and along existing farm roads and forest edges. The minimal tree clearing associated with Project construction will be conducted outside the bat summer roosting season to avoid potential impacts to Indiana and northern long-eared bats.

(3) Potential Impact to Ecological Resources During Operation and Maintenance

(a) Evaluation of the Impact of Operation and Maintenance on Undeveloped Areas and Animals

Adverse impacts to ecological resources during operation and maintenance of the Facility, including undeveloped areas, are not anticipated. O&M activities will include site visits for firmware updates, fixing faulty equipment, cleaning solar modules, standard test procedures and a security patrol. A light-duty vehicle will be used for the maintenance. Gravel roads will be installed to provide site and inter-row access with the Project.

(b) Procedures to Avoid, Minimize, and Mitigate Impacts of Operation and Maintenance

Once the Project is in operation and site restoration of the Project Area is complete, no impacts on water resources are expected. Operation of the Project will not involve the discharge of water or wastewater into streams or water bodies, nor will Project operation require the use of water for cooling or other activities. Therefore, no measurable impacts on the quality and quantity of surrounding water resources (including wetlands, surface waters, and groundwater) are anticipated. Grasses and other invasive plant species will be managed through mowing and spot applications of herbicides. Additional details regarding vegetative management during O&M is presented in Exhibit P.

(c) Post-construction Monitoring of Wildlife Impacts

Post-construction monitoring of wildlife is not anticipated as no adverse impacts to wildlife species are expected.

(C) LAND USE AND COMMUNITY DEVELOPMENT

(1) Land Use in the Region and Potential Impacts of the Facility

(a) Land Use Map

Figure 8-5 is a 1:24,000 scale map depicting the following features within 1 mile of the Project Area:

- (i) The proposed Facility
- (ii) Land use
- (iii) Structures
- (iv) Incorporated areas and population centers

(b) Structures Near the Facility

Table 8-7 provides additional detail related to the proximity of identified structures to Project facilities, specifically:

- (i) Structures within 1,500 feet (457.2 meters) of the generation equipment, the distance between the structure or property line and the equipment;
- (ii) Structures within 250 feet (76.2 meters) of a collection line, access road, or other associated components, the distance between both the structure and the property line and the associated facility; and
- (iii) Lease status of the property.

There are a total of 43 residences within 1,500 feet (457.2 meters) of generation equipment (e.g., solar modules, inverters, or substations) and 1 residence that is within 250 feet (76.2 meters) of a collection line.

Table 8-7 Structures Near Project Facilities

Structure Type	Facility Type	Distance (feet)	Lease Status
Residence	Collection Line	199	Not Leased
Residence	Solar Modules	1,321	Not Leased
Residence	Solar Modules	567	Not Leased
Residence	Solar Modules	534	Not Leased

Table 8-7 Structures Near Project Facilities

Structure Type	Facility Type	Distance (feet)	Lease Status
Residence	Solar Modules	566	Not Leased
Residence	Solar Modules	735	Not Leased
Residence	Solar Modules	534	Not Leased
Residence	Solar Modules	740	Not Leased
Residence	Solar Modules	1,353	Not Leased
Residence	Solar Modules	1,077	Not Leased
Residence	Solar Modules	674	Secured
Residence	Solar Modules	650	Not Leased
Residence	Solar Modules	1,346	Not Leased
Residence	Solar Modules	1,385	Not Leased
Residence	Solar Modules	1,242	Not Leased
Residence	Solar Modules	1,074	Not Leased
Residence	Solar Modules	637	Not Leased
Residence	Solar Modules	570	Not Leased
Residence	Solar Modules	699	Not Leased
Residence	Solar Modules	856	Not Leased
Residence	Solar Modules	567	Not Leased
Residence	Solar Modules	590	Not Leased
Residence	Solar Modules	684	Not Leased
Residence	Solar Modules	1,236	Not Leased
Residence	Solar Modules	799	Not Leased
Residence	Solar Modules	328	Not Leased
Residence	Solar Modules	1,330	Not Leased
Residence	Solar Modules	827	Not Leased
Residence	Solar Modules	1,398	Not Leased
Residence	Solar Modules	1,424	Not Leased
Residence	Solar Modules	1,458	Not Leased
Residence	Solar Modules	1,450	Not Leased
Residence	Solar Modules	1,396	Not Leased
Residence	Solar Modules	1,401	Not Leased
Residence	Solar Modules	1,394	Not Leased
Residence	Solar Modules	1,406	Not Leased
Residence	Solar Modules	1,389	Not Leased
Residence	Solar Modules	501	Not Leased
Residence	Solar Modules	486	Not Leased
Residence	Solar Modules	507	Not Leased
Residence	Solar Modules	367	Not Leased
Residence	Solar Modules	512	Not Leased
Residence	Solar Modules	1,316	Not Leased
Residence	Solar Modules	1,457	Not Leased

(c) Evaluation of the Land Use Impacts

The distribution of land use in the Project Area is similar to that of the overall land use in Pickaway County. The predominant land use within the Project Area is agriculture, with approximately 95% of land being used for agriculture. Approximately 4% of the Project Area is forest, wetlands, surface water, or old field. The remainder of the Project Area (1%) is used for residential and developed land uses (see Table 8-2).

The Applicant took a conservative approach to calculating land use impact by assuming that all impacts were permanent, with the exception of laydown yards outside of the Project fence line. Permanent impacts include the solar field (all areas inside the perimeter fence [solar array, collection systems, inverter pads, access roads, O&M building and all area between these features]); Project substations (overhead gen-tie lines and transformers); and collection system outside of the perimeter fence line. The Project collection system will be primarily underground, but will include some overhead segments. The Applicant conservatively assumed the entire collection system (outside of the perimeter fence) would be overhead.

Approximately 52.2 acres of agricultural land use will be temporarily impacted during construction to accommodate the installation of the laydown yards (outside the Project fence line) used during construction. Approximately 1,322.5 acres of agricultural land, and 0.1 acres of developed land will be permanently impacted by the Project. Table 8-8 presents permanent and temporary land use impacts anticipated for each Project component.

Table 8-8 Land Use Impacts

Project Component	Total Disturbance (acres)	Temporary Disturbance (acres)	Permanent Disturbance (acres)
Agricultural			
Solar Field ¹	1,268.5	0	1,268.5
Project Substation ²	10.4	0	10.4
Collection System ³	43.6	0	43.6
Laydown Yards ⁴	52.2	52.2	0

Table 8-8 Land Use Impacts

Project Component	Total Disturbance (acres)	Temporary Disturbance (acres)	Permanent Disturbance (acres)
Developed			
Solar Field ¹	0.1	0	0.1

Notes:

¹ All features with the perimeter fence including the solar array, collection system, inverter pads, access roads, operations and maintenance building, and all area between these features

² Overhead gen-tie lines and transformers

³ Collection System located outside the perimeter fence

⁴ Laydown Yards located outside the perimeter fence

The Project is generally compatible with land uses (both current and existing) within the Project Area. This conclusion is based on several considerations. The predominance of agricultural land use (95% of the acreage) in the Project Area and the fact that most of this acreage will remain as agricultural land was the primary consideration in determining compatibility. Construction and operation of the Project will permanently remove a negligible amount of the overall land in the area from its current agricultural use.

(d) Structures to be Removed or Relocated

The Applicant anticipates removing four grain silos on Kate's Place at Pickaway LLC parcel.

(2) Wind Farm Map

The Project is not a wind farm; therefore, this section is not applicable.

(3) Setback Waivers

No setback waivers are applicable to this Project as it is not a wind farm.

(4) Land Use Plans

(a) Formally Adopted Plans for Future Use of the Project Area and Surrounding Lands

There are no portions of the Project Area in Pickaway County with formally designated future uses other than the proposed Facility.

(b) Applicant's Plans for Concurrent or Secondary Uses of the Site

The Applicant has no plans for concurrent or secondary uses of the site.

(c) Impact on Regional Development

The Project is expected to aid regional development by increasing local tax revenues and contributing to the local economy, as shown in Exhibit T, the Economic Impact Report and discussed in OAC Section 4906-4-06(C) of this application. Aside from these benefits, including a significant increase in funding to schools, the Project is not expected to significantly impact housing, transportation system development, or other public services and facilities.

(d) Compatibility with Current Regional Plans

Pickaway County and Perry Township do not have comprehensive land use plans in place. The village of Williamsport and Deer Creek Township have developed a joint comprehensive plan (Burns, Bertsch, and Harris, Inc. 2004). As proposed, the Project is consistent with the overall goals of the Plan. In particular, the Project will support the Plan's goal to "preserve and enhance community character" and "improve the economic health of the community." Solar facilities are compatible with rural landscapes in that they will not significantly impact schools, housing, and transportation; and upon decommissioning of the Project, the land can return to agricultural use. In addition, solar facilities provide supplemental income to rural property owners and increase local tax revenues and contribute to the local economy. Construction and operation of the Project will not interfere with planned future uses identified in the Williamsport and Deer Creek Township local plan.

(e) Current Population Counts and 10-year Population Projections

The most recent population counts from the U.S. Census estimate that the population for Pickaway County in 2018 was 58,086. The village of Williamsport is the nearest populated place to the Project and had an estimated population of 1,067 in 2018. The 10-year population projection for Pickaway County is 60,560 people. The population growth rate over the last decade for Williamsport has been 0.4% and thus the 10-year population estimate using that continued growth rate is approximately 1,119 (Ohio Office of Research 2019).

(D) CULTURAL AND ARCHAEOLOGICAL RESOURCES

(1) Recreation Areas and Registered Landmarks

Figure 8-6 depicts all recreation areas and registered landmarks of historic, religious, archaeological, scenic, natural, or other cultural significance within a 10-mile radius of the Project Area.

(2) Impacts on Registered Landmarks

E & E reviewed registered landmarks of historic, religious, archaeological, scenic, natural, or other cultural significance within the Project Area and 10 miles of the proposed Project Area (collectively, the Cultural Study Area). To conduct the desktop cultural resources review for the Cultural Study Area, E & E examined digital, geospatial cultural resource data obtained from the National Park Service's website for National Register of Historic Places (NRHP) and National Historic Landmark listings, as well as archaeological site, historic aboveground structure, cemetery, and survey data information from the Ohio Online Mapping System, which is maintained by the State Historic Preservation Office (SHPO). This review resulted in a list of known resources within the Cultural Study Area.

Three known archaeological sites are located within the Project Area, but no aboveground historic resources or cemeteries. Two of the known archaeological sites within the Project Area are located outside the area where the Facility will be located. The third archaeological site (33PI494) has not been assessed for its NRHP eligibility; however, the authors of the site report (Duerksen and Bergman) indicate that site 33PI494 is not recommended eligible for the NRHP. An additional 704 archaeological sites are located within the 10-mile Cultural Study Area, along with 199 historic aboveground resources, 2 historic districts, and 149 cemeteries. The desktop cultural resources review is provided in Exhibit H and analyzed a larger, previous iteration of the Project Area.

Commonwealth Heritage Group, Inc. (Commonwealth) conducted an archaeology and architectural history field survey within the Project Area in December 2019. Commonwealth's

archaeological field survey report and architectural history field survey reports are included as Exhibits D and E, respectively.

Prior to the archaeological field investigation, Commonwealth developed a sensitivity model for land in the area where the Facility will be located and designed a sampling method to focus investigations in areas where there was the highest potential to identify NRHP-eligible resources. The sensitivity model categorized land in the area where the Facility will be located as high, medium, or low sensitivity for the presence of NRHP-eligible archaeological sites by considering factors, such as soil drainage and distance from water. A total of 165.6 acres was surveyed during the December 2019 field effort. At the time of the field survey this acreage accounted for 100% of the high sensitivity areas and 26% of the medium sensitivity areas. The Project design was modified after the sensitivity model was completed and field surveys were in progress. Based on updated design, 154 acres of the current 1,375 acre area where the Facility will be located was surveyed, including 27.6 acres (92%) of the high sensitivity area and 126.4 acres (30.5%) of the medium sensitivity area.

Nine previously unrecorded archaeological sites were documented as a result of the archaeological survey (33PI1585–33PI1593), eight of which at least partially overlap with the area where the Facility will be located. Three of the nine newly identified sites (33PI1587, 1588, and 1593) are prehistoric isolated finds, three sites are temporally unaffiliated prehistoric lithic scatters (33PI1585, 1586 and 1592), one site is a temporally unaffiliated prehistoric lithic scatter with a historic isolate (33PI1591), and two sites are historic scatters, one with an isolated Early Archaic prehistoric projectile point (33PI1589) and the other (33PI1590) with a temporally unaffiliated prehistoric component. Only three of the nine sites (33PI1585, 1590, and 1591) were found in areas categorized as high sensitivity, while the other six were located in surveyed areas of medium sensitivity. Because these sites lack information potential (Criterion D) and have impaired integrity, Commonwealth recommends sites 33PI1585 through 33PI1593 not eligible for listing in the NRHP. In addition, Commonwealth agrees with Duerksen and Bergman’s 1992 recommendation that the previously identified site 33PI494, also within the current area where the Facility will be located should be considered not eligible for listing in the NRHP.

For the aboveground architectural history survey, 66 new and three previously recorded resources over 50 years of age were surveyed within a 0.5-mile radius of the area where the Facility will be located. They consist of residential, agricultural, and commercial resources. One of the previously recorded resources has been demolished, and the other two are recommended for further research to determine NRHP eligibility. Fourteen new resources are recommended for further research to determine NRHP eligibility, four of which are recommended as contributing to a newly-identified proposed historic district, the Atlanta Downtown Historic District. Commonwealth recommends that the remaining 54 resources are not eligible for further research or listing in the NRHP because they are common examples of their form and lack historic integrity and significance under any evaluation criteria.

Since no historic aboveground resources, historic districts, or cemeteries are located in the Project Area, the Project should have no direct effect on these resources. None of the archaeological sites identified during the desktop literature review or subsequent field surveys are recommended eligible for the NRHP by the researchers. As such, impacts to archaeological resources eligible for listing in or listed in the NRHP from the Project are not anticipated. No impacts are expected to the architectural resources identified as potentially eligible or recommended for additional research by Commonwealth because their view of the Project will likely be minimal or non-existent due to the low profile of the PV solar modules, distance, terrain, and existing vegetation.

The archaeology and architectural history field reports were submitted to the SHPO in January 2020 for comment. Agency response is pending and will be submitted to the OPSB upon receipt.

(3) Impacts on Recreational Areas

E & E conducted a visual resources assessment within the Project Area, and within 2 miles (3.2 kilometers) and 10 miles (16.0 kilometers) of the proposed Project Area. The findings of the E & E visual resources assessment are summarized below and the complete report is contained in Exhibit O. While the results of the visual resources assessment indicate there are 41 recreational areas within 10 miles of the Project Area, only four recreational areas are located within 2 miles of the Project Area. These areas include a canoe launch, a golf course (Crown Hill Golf Club),

and two ODNR Wildlife Production Areas (Wildlife Production Area 34 and Wildlife Production Area 37). The Project will have no direct impact on these recreational areas.

(4) Visual Impact

(a) Visibility and Viewshed Analysis

A high-resolution viewshed analysis was conducted by E & E using ESRI ArcGIS 10.7 software to determine which locations in the broader landscape of the Project potentially could have views of the Project. The analysis assumed a maximum 10 feet (3.0 meters) aboveground level height for the solar modules and that the observer's eye level was 5.5 feet (1.7 meters). The analysis also relied on detailed light detection and ranging digital elevation model data to create a bare-earth surface raster in the vicinity of the Project; this resulted in a map, which identified areas at which the Project is visible, as well as areas where the Project is not visible. Figure 8-7 depicts the results of the viewshed analysis and area of visual effect within a 10-mile radius of the Project Area. LiDAR digital elevation data did not incorporate height of existing foliage or aboveground structures as viewing obstacles in accordance with OAC Rule 4906-4-08(D)(4)(a). Therefore, the viewshed presented in Figure 8-7 represents a "worst-case" scenario in which no, or very limited, visual screening measures are present within the vicinity of the Project Area. In addition, the viewshed model is unable to account for individual characteristics that affect actual visibility by an observer such as visual clarity, movement of the observer, and how closely an observer is looking for a particular object.

Given the potential lack of visibility at greater distances, the viewshed analysis was also conducted within 2 miles of the Project boundary to provide a more realistic depiction of the Project's impact for those viewers most proximate in distance to the proposed Project Area. Due to the low-profile nature of solar facilities (i.e., solar modules will not exceed a maximum of 10 feet in height) and vegetation surrounding many of the parcels where the Facility will be located, it is unlikely that the proposed Project will be visible beyond 2 miles.

(b) Existing Landscape and Scenic Quality

The scenic quality of the Project Area is comprised of natural and man-made features, including agricultural land uses with some small areas of scattered vegetation, including deciduous trees,

and waterways. The terrain of the Project Area is primarily flat and includes the following man-made features: residential homes and farm outbuildings, as well as transmission towers and lines. Observers largely consist of residents, farmers, and travelers utilizing the public roads, which border the Project (e.g., U.S. Route 22).

E & E reviewed available comprehensive and land use plans within 10 miles of the Project Area to determine if any particular visual resources were noted within Pickaway, Fayette, Madison, and Ross counties for their scenic or visual qualities and characteristics.

Based on a review of publicly available information and conversations with the Pickaway County Planning and Development Department, Pickaway County does not have a comprehensive or land use plan. Pickaway County does have zoning regulations related to subdivisions and flood hazards. However, these documents do not address visual resources as they pertain to solar facilities. Perry Township also does not maintain a comprehensive or land use plan.

The Village of Williamsport and Deer Creek Township have a joint comprehensive plan. Among the goals of this plan is to “preserve and enhance community character.” One of the objectives to accomplish this is to protect scenic rural roadways from strip residential and commercial development. Scenic views are noted as part of the conservation subdivisions, which are emerging tools that the communities plan to utilize to help maintain open space. No specific visual resources locations were identified with these types of views within the Village of Williamsport and Deer Creek Township.

Fayette County’s 2006 plan addresses a comprehensive land use strategy for the county. One of the goals of the plan is to maintain the rural character of Fayette County by preserving scenic roadways and to ensure that transportation improvements do not impact scenic features. The plan does call out historic and cultural locations of importance; however, most are located within areas outside of the 10-mile study radius for this Project Area. Likewise, parks and other recreational facilities are addressed, but none are particularly noted for their scenic or visual qualities.

Deer Creek State Park is located within a 10-mile radius of the Project Area in Fayette County. This area, comprehensively, is noted for wildlife, scenic views, and active/passive recreational opportunities. No specific visual resource locations (e.g., scenic lookouts) within Deer Creek State Park were noted within the Fayette County plan. However, the plan indicates the presence of nature walk, bike, and hiking trails, including the Fayette/Pickaway county line, and the use of the area for fishing, boating, and water skiing, as well as golfing on the north side of the lake.

The Madison County comprehensive plan identifies the need to maintain the scenic qualities of the rural landscape. Among the objectives cited to accomplish this task is to consider development patterns to limit sprawl. No specific locations were identified within the plan as having particular scenic or visual qualities.

Ross County does not have a published comprehensive plan. They, however, do maintain subdivision regulations that note the need to ensure development appropriate to Ross County's natural features and land uses.

Based on a review of comprehensive and land use plans within 10 miles of the Project Area, no additional visual resources or other visual preferences of the community beyond Deer Creek State Park were identified within the plans for Pickaway, Fayette, Madison, or Ross counties.

(c) Landscape Alterations and Impacts

Although there are areas of visibility within 2 miles of the Project Area depicted on Figure 8-7, it should be noted that this is a conservative model as it did not account for potential visual obstructions that result from foliage and existing structures that are present in the area. Due to the low profile of the solar modules, in combination with the potential screening effects from foliage and existing structures, the solar modules are unlikely to be visible beyond 2 miles. Therefore, the overall impact to the scenic quality of the landscape is expected to be minimal.

(d) Visual Impacts to Cultural and Archaeological Resources

A visual resource inventory (VRI) is the documentation of the visual resources present in an area of interest. A desktop VRI analysis was conducted within 2 and 10 miles of the Project boundary to help locate potential areas and individual locations with views of the Project. The desktop VRI analysis completed as part of the visual resource assessment detailed in Exhibit O was conducted for a larger, previous iteration of the Project Area, and therefore the number of resources identified in Exhibit O are higher than those indicated in this section below which is reflective of the current 2,276-acre Project Area. The desktop VRI analysis identified 148 visual resources (i.e., NRHP-listed properties and districts, churches, schools, local parks, golf courses, hospitals, cemeteries, ODNR Points of Interest and ODNR land) within 10 miles of the current 2,276 acre Project Area. Based on the theoretical viewshed analysis depicted in Figure 8-7, 71 of the 148 resources identified within a 10-mile radius of the Project are anticipated to have visibility of the Project. Of the 148 total resources identified within 10 miles of the Project, 18 resources are located within 2 miles of the Project. Based on the theoretical viewshed analysis, 12 of the 18 resources identified within 2 miles of the Project are anticipated to have visibility of the Project. These 12 resources with potential visibility include eight cemeteries, two churches, a canoe launch, and an ODNR wildlife area. Due to the low profile of the solar modules, in combination with the potential screening effects from foliage and existing structures not accounted for in the viewshed model, the overall impact to visual resources within 2 miles of the Project Area is expected to be minimal.

As discussed in OAC Section 4606-4-08(D) of this application, the architectural history survey completed for the Project identified 14 structures that are potentially eligible and/or require additional research to determine eligibility within 0.5 miles of the Project Area. Since no historic aboveground resources, historic districts, or cemeteries are located in the Project Area, the Project should have no direct effect on these resources. Commonwealth determined no impacts are expected to architectural resources identified as potentially eligible or recommended for additional research by Commonwealth because their view of the Project will likely be minimal or non-existent due to the low profile of the solar modules, distance, terrain, and existing vegetation.

(e) Photographic Simulations

E & E conducted a site visit in October 2019 to capture high-quality photographs to be used in creating the photographic visual simulations. Single-frame photographs were taken at five viewpoint locations on public roads surrounding the Project Area. The viewpoints were chosen to provide a representative picture of the various types of views that observers may have of the proposed Project from all four cardinal directions. The simulations that are produced from these viewpoints allow for a comparison between the existing conditions and the conditions when the Project would be present.

The simulations completed for the Project show visual changes will be most apparent from locations proximate to the proposed Project (i.e., Viewpoints 1, 2, and 5 in Exhibit O). As distance is reduced between the viewer and the Project, individual components of the Project will be more discernable than those located more distant from the Project. In this manner, impacts are largely localized and will be most apparent to those living, working, or travelling in areas proximate to the proposed Project.

(f) Visual Impact Minimization

To the extent practical, the Applicant has maximized setbacks in order to minimize viewshed impacts to adjacent residents. The proposed Project does not include solar modules located within 300 feet (91.4 meters) of a residence. However, if it becomes necessary to site modules closer to residents, the Applicant will work the landowner to analyze the impact to their viewshed and determine the best mitigation options, if necessary.

(E) AGRICULTURAL DISTRICTS AND IMPACTS TO AGRICULTURAL LAND

(1) Mapping of Agricultural Land

Figure 8-7 depicts all agricultural land within the Project Area, including those parcels designated as agricultural district land. No Concentrated Animal Feeding Operations are located within the Project Area or Pickaway County (OEPA 2019c).

(2) Agricultural Information

(a) Acreage Impacted

Land use in the Project Area is primarily agricultural with approximately 2,160 acres, or 95% of the total Project Area, dedicated to corn and soybean cultivation. For the life of the Project, approximately 1,375 acres of agricultural land will be converted to accommodate solar modules, inverter pads, underground and overhead collection system; the Project substations and gen-tie lines; access roads; and the O&M building and perimeter fencing.

(b) Evaluation of the Impact of Construction, Operation, and Maintenance of the Proposed Facility

(i) Field Operations

The Project will occupy approximately 1,375 acres of land currently utilized primarily for agricultural production. Field operations will cease prior to commencing construction. However, following decommissioning of the Project, the land can be reverted to agricultural production.

(ii) Irrigation

The Project will occupy approximately 1,375 acres of land utilized primarily for agricultural production. Current irrigation activities will cease prior to commencing construction. However, following decommissioning of the Project, the land can be reverted to agricultural production and associated irrigation activities can resume.

(iii) Field drainage systems

The Applicant intends to maintain the existing drainage profile of the Project. Prior to construction, the Applicant will consult with participating landowners and other readily available public resources to ascertain, to the extent practicable, the type, size and location of all functioning drain tile where construction is planned. The Applicant will use this information during engineering and construction to avoid impact to the drain tile system. Known functioning drain tile locations will be marked in the field and avoided during construction.

To the extent practicable, any topsoil that will be disturbed or displaced will be used on-site to evenly grade the site or be available for the landowner's use. Relatively little topsoil will be significantly compacted during the laying of the substation foundation or racking posts. Additionally, areas below the solar arrays will be planted with low-growth native grass seed mix seed to promote precipitation infiltration and reduce stormwater run-off and soil erosion as discussed in the vegetation management plan included in Exhibit P.

The hydrology assessment included in Exhibit K identified certain hydrological conditions that can be mitigated during Project construction. Mitigation measures, including grading, drainage routing, etc. will be detailed in the grading plan, which will be prepared as part of final engineering plans for the Project.

(iv) Structures used for Agricultural Operations

Four unused grain silos located on site will be removed prior to commencing construction. With the exception of these structures, no agricultural-related structures will be impacted by Project construction, operation, or maintenance.

(v) Viability as Agricultural District Land

Figure 8-8 depicts Project parcels that are enrolled in the Agricultural District program. Once the Project is operational, these parcels will no longer be eligible for inclusion in the program. Once the Project is decommissioned, the parcels could be re-enrolled in the program.

(c) Avoidance and Mitigation Procedures During Construction, Operation, and Maintenance to Reduce Impacts to Agricultural Land, Structures, and Practices

The Project has been designed to minimize its impact and reduce its overall footprint to the extent practicable. However, agricultural production within the perimeter fence line will cease prior to construction activities commencing. The Applicant will compensate the landowner for destruction or loss of any crops caused by the Project.

(i) Avoidance or Minimization of Damage to Field Tile Drainage Systems and Soils

Prior to construction, the Applicant will consult with participating landowners and other readily available public resources to ascertain, to the extent practicable, the type, size and location of all functioning drain tile where construction is planned. The Applicant will use this information to map the expected locations of drain tile and physically mark the surface accordingly. To the extent the location of functioning drain tile is known, during engineering and construction the Applicant will endeavor to avoid impacts to drain tile.

(ii) Timely repair of Damaged Field Tile Systems

The Applicant will use commercially reasonable efforts during construction to promptly repair any drain tile that is noticeably damaged. Also, if the Applicant becomes aware during operation of circumstances indicating that the Project has damaged functioning drain tile that are adversely affecting adjacent landowners or public drains, then the Applicant will promptly investigate the matter and use commercially reasonable efforts to promptly repair any such damage.

(iii) Segregation of Excavated Topsoil Decompaction and Restoration of Topsoil

The Applicant will segregate excavated topsoil, and de-compact and restore all topsoil to original conditions unless otherwise agreed to by the landowner. Relatively little topsoil will be significantly compacted during the laying of the substation foundation or racking posts. Additionally, areas below the solar arrays will be planted with low-growth native grass seed mix seed to promote precipitation infiltration and reduce stormwater run-off and soil erosion

4906-4-09 REGULATIONS ASSOCIATED WITH WIND FARMS

The Project is not a wind farm; therefore, these regulations are not applicable.

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Figure 03-1 Project Two-Mile Radius Map

Respectfully submitted,

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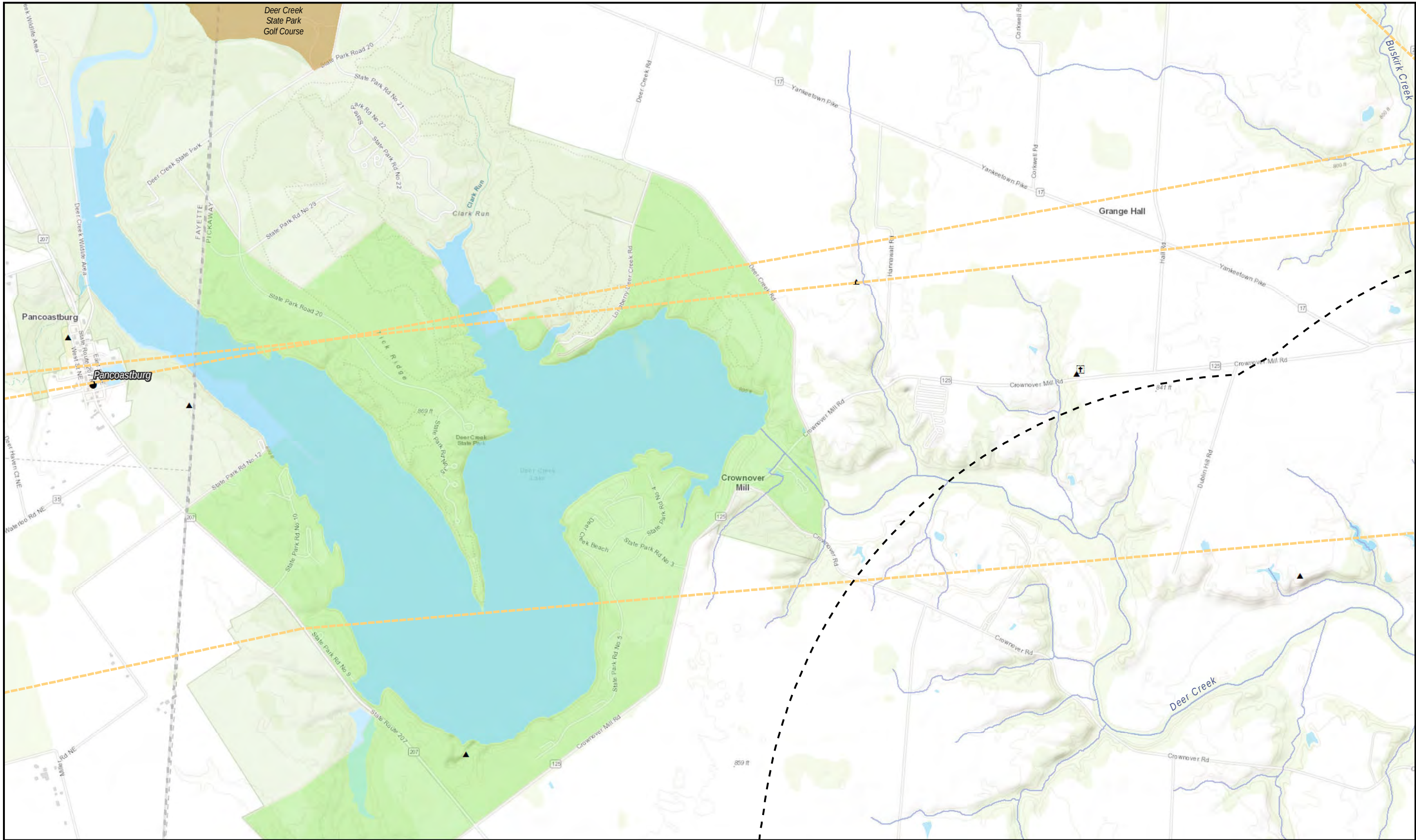
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Attorneys for Atlanta Farms Solar Project, LLC



Project Layout:

- | | | |
|--|------------------------------|-------------------------------------|
| Solar Array | Laydown Area | Project Area |
| Inverter | Overhead Generation Tie-Line | Two Mile Buffer |
| Access Road | Collection Line | Existing Electric Transmission Line |
| Substation | Gate | Existing Oil & Gas Pipeline |
| Existing Dayton Power and Light Company Atlanta Substation | Fence | County Boundary |
| O&M Building | | |

- | | |
|-----------------|------------------------|
| Cemetery | ODNR Point of Interest |
| Church | Golf Course |
| School | Deer Creek State Park |
| Hospital | ODNR Nature Preserve |
| Civic Building | ODNR Wildlife Area |
| Populated Place | Local Park |
| | Lake/Pond |
| | River/Stream |

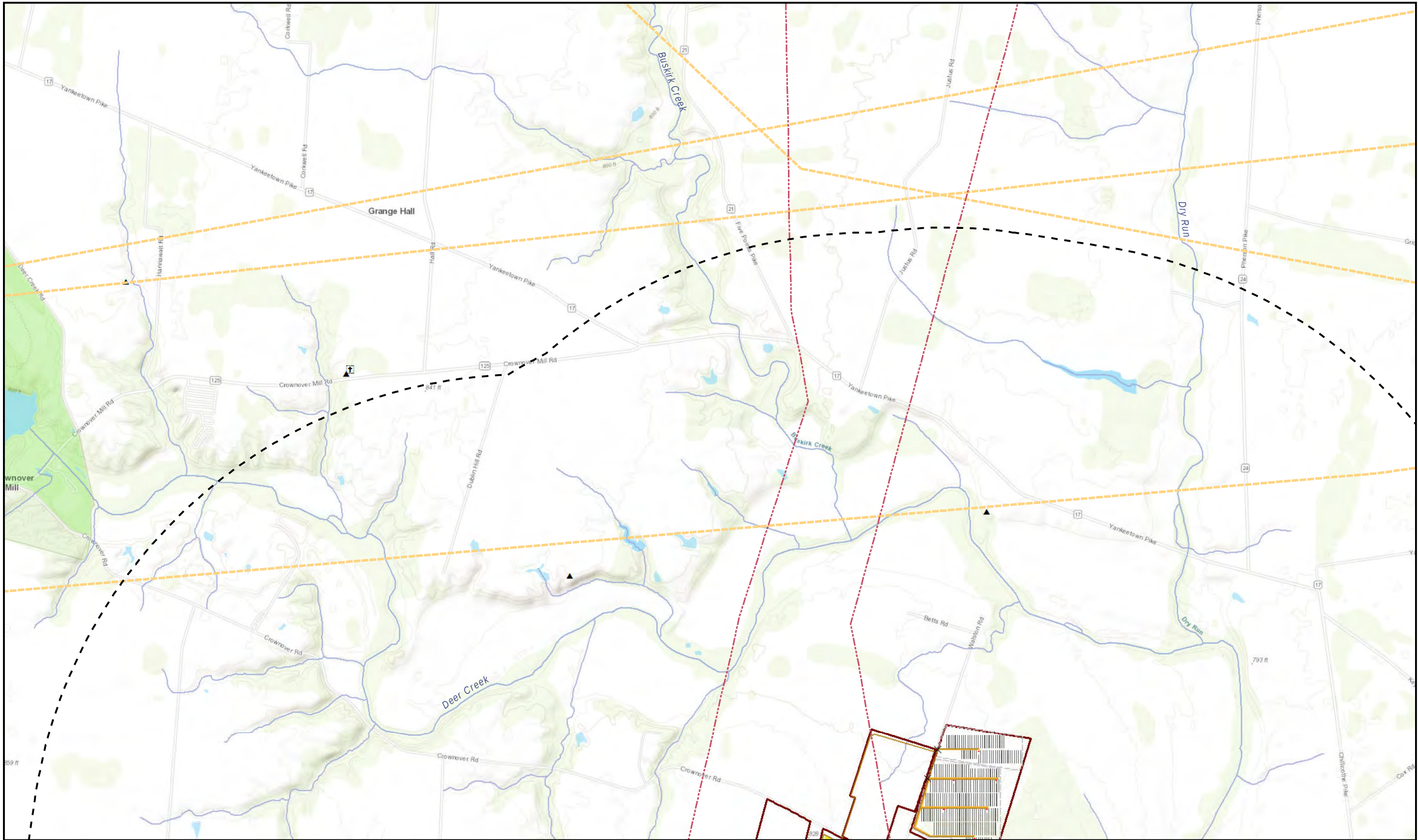
ODNR: Ohio Department of Natural Resources



Data Sources:
ESRI 2012, 2016; NHD 2019;
E&E 2019; Savion 2019;
Pickaway County 2019;
ODNR 2018; EIA and
HIFLD 2019.

Figure 3-1
Project Two Mile Radius Map
Atlanta Farms Solar Project
Page 1 of 9
Pickaway County, Ohio

0 0.1 0.2 0.4
Miles



Project Layout:

- Solar Array
- Inverter
- Access Road
- Substation
- Existing Dayton Power and Light Company Atlanta Substation
- O&M Building

- Laydown Area
- Overhead Generation Tie-Line
- Collection Line
- Gate
- Fence

- Project Area
- Two Mile Buffer
- Existing Electric Transmission Line
- Existing Oil & Gas Pipeline
- County Boundary

- Cemetery
- Church
- School
- Hospital
- Civic Building
- Populated Place

- ODNR Point of Interest
- Golf Course
- Deer Creek State Park
- ODNR Nature Preserve
- ODNR Wildlife Area
- Local Park
- Lake/Pond
- River/Stream

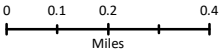
ODNR: Ohio Department of Natural Resources

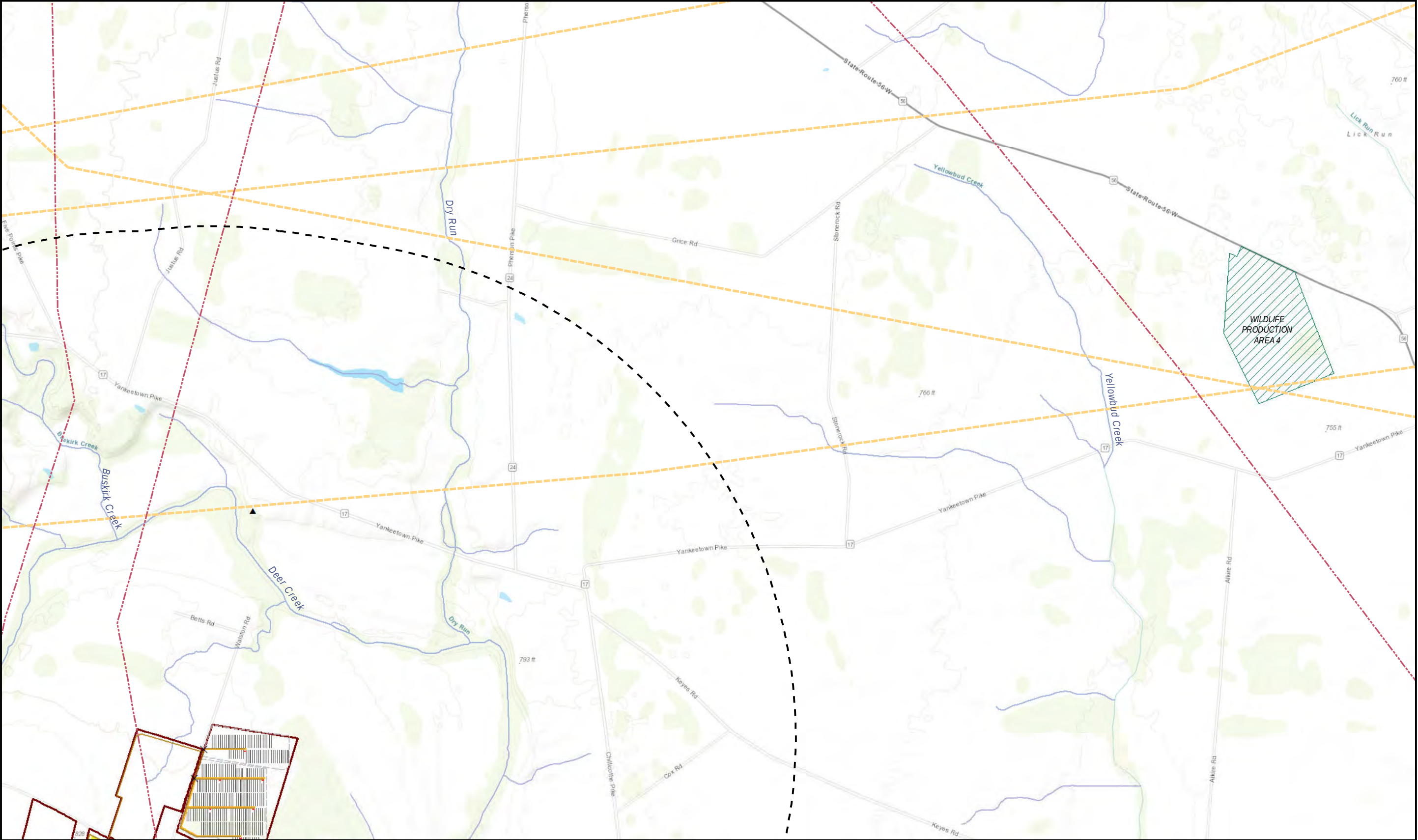


Data Sources:
ESRI 2012, 2016; NHD 2019;
E&E 2019; Savion 2019;
Pickaway County 2019;
ODNR 2018; EIA and
HIFLD 2019.

Figure 3-1
Project Two Mile Radius Map
Atlanta Farms Solar Project
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Pickaway County, Ohio





Project Layout:

- | | | |
|--|------------------------------|-------------------------------------|
| Solar Array | Laydown Area | Project Area |
| Inverter | Overhead Generation Tie-Line | Two Mile Buffer |
| Access Road | Collection Line | Existing Electric Transmission Line |
| Substation | Gate | Existing Oil & Gas Pipeline |
| Existing Dayton Power and Light Company Atlanta Substation | Fence | County Boundary |
| O&M Building | | |

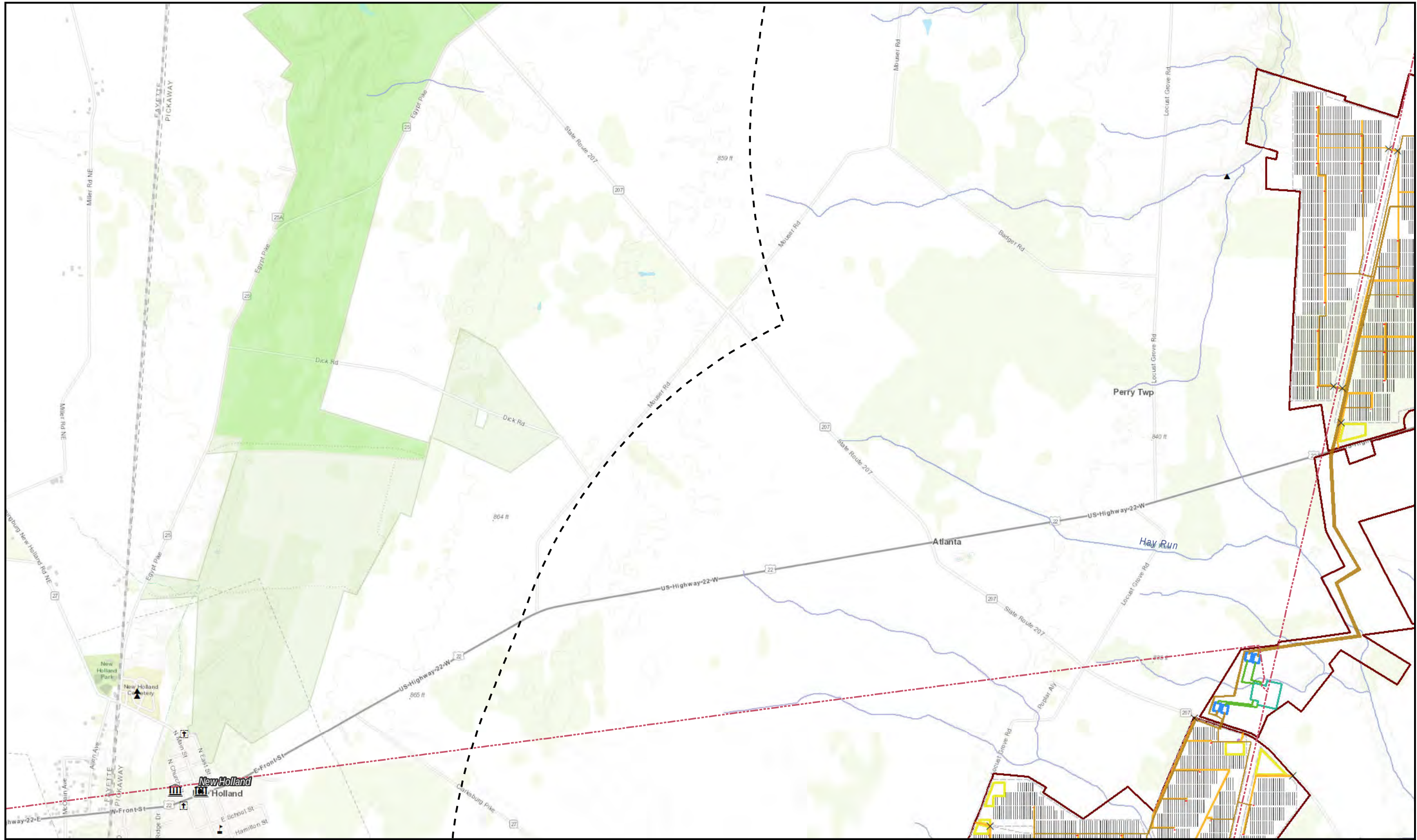
- | | |
|-----------------|------------------------|
| Cemetery | ODNR Point of Interest |
| Church | Golf Course |
| School | Deer Creek State Park |
| Hospital | ODNR Nature Preserve |
| Civic Building | ODNR Wildlife Area |
| Populated Place | Local Park |
| | Lake/Pond |
| | River/Stream |

ODNR: Ohio Department of Natural Resources



Data Sources:
ESRI 2012, 2016; NHD 2019;
E&E 2019; Savion 2019;
Pickaway County 2019;
ODNR 2018; EIA and
HIFLD 2019.

Figure 3-1
Project Two Mile Radius Map
Atlanta Farms Solar Project
Page 3 of 9
Pickaway County, Ohio



Project Layout:

Solar Array	Laydown Area	Project Area	Cemetery	ODNR Point of Interest
Inverter	Overhead Generation Tie-Line	Two Mile Buffer	Church	Golf Course
Access Road	Collection Line	Existing Electric Transmission Line	School	Deer Creek State Park
Substation	Gate	Existing Oil & Gas Pipeline	Hospital	ODNR Nature Preserve
Existing Dayton Power and Light Company Atlanta Substation	Fence	County Boundary	Civic Building	ODNR Wildlife Area
O&M Building			Populated Place	Local Park
				Lake/Pond
				River/Stream

ODNR: Ohio Department of Natural Resources

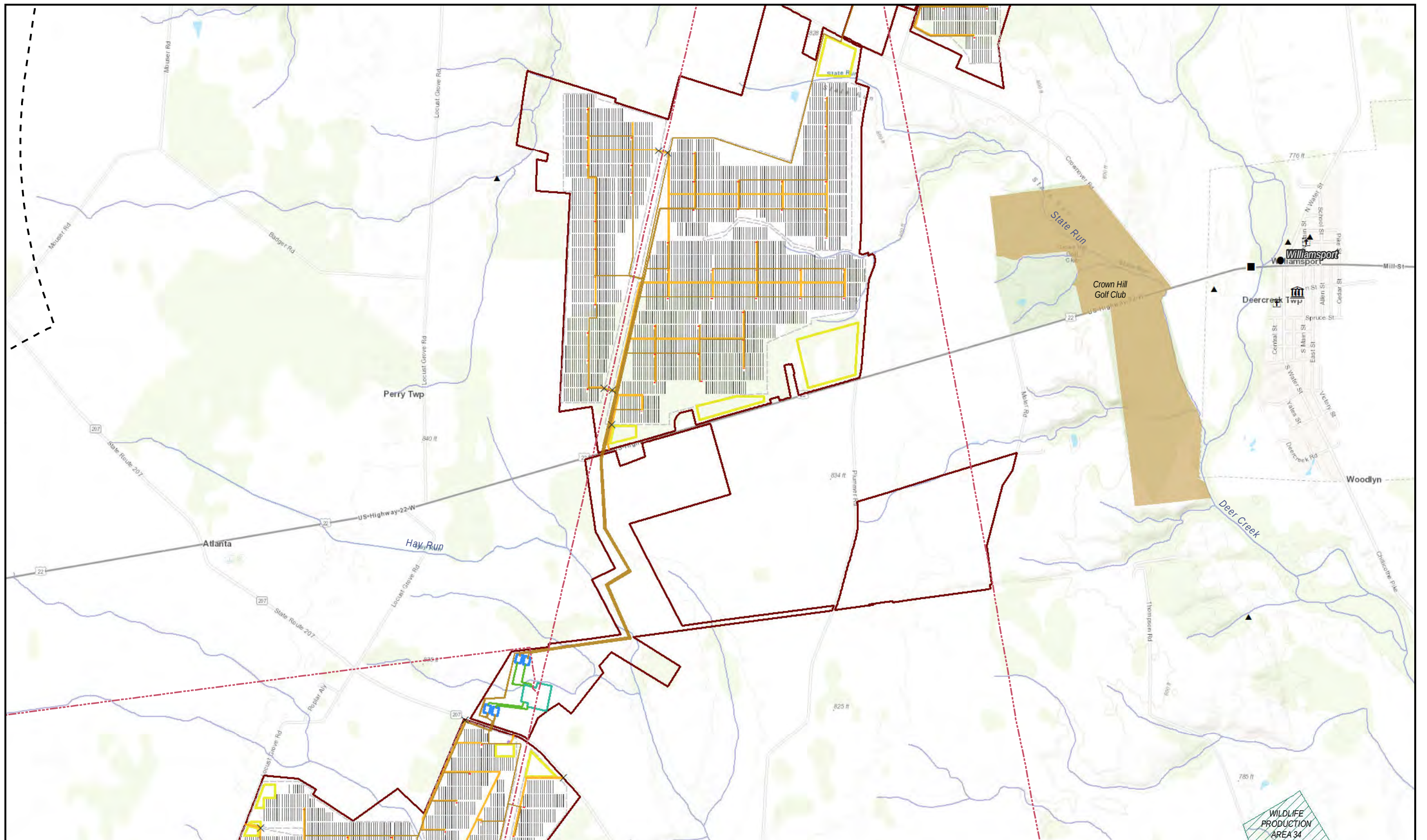
ODNR Point of Interest	Golf Course
Deer Creek State Park	ODNR Nature Preserve
ODNR Wildlife Area	Local Park
Lake/Pond	River/Stream

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Data Sources:
ESRI 2012, 2016; NHD 2019;
E&E 2019; Savion 2019;
Pickaway County 2019;
ODNR 2018; EIA and
HIFLD 2019.

Figure 3-1
Project Two Mile Radius Map
Atlanta Farms Solar Project
Page 4 of 9
Pickaway County, Ohio

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Project Layout:

Solar Array	Laydown Area	Project Area	Cemetery	ODNR Point of Interest
Inverter	Overhead Generation Tie-Line	Two Mile Buffer	Church	Golf Course
Access Road	Collection Line	Existing Electric Transmission Line	School	Deer Creek State Park
Substation	Gate	Existing Oil & Gas Pipeline	Hospital	ODNR Nature Preserve
Existing Dayton Power and Light Company Atlanta Substation	Fence	County Boundary	Civic Building	ODNR Wildlife Area
O&M Building			Populated Place	Local Park
				Lake/Pond
				River/Stream

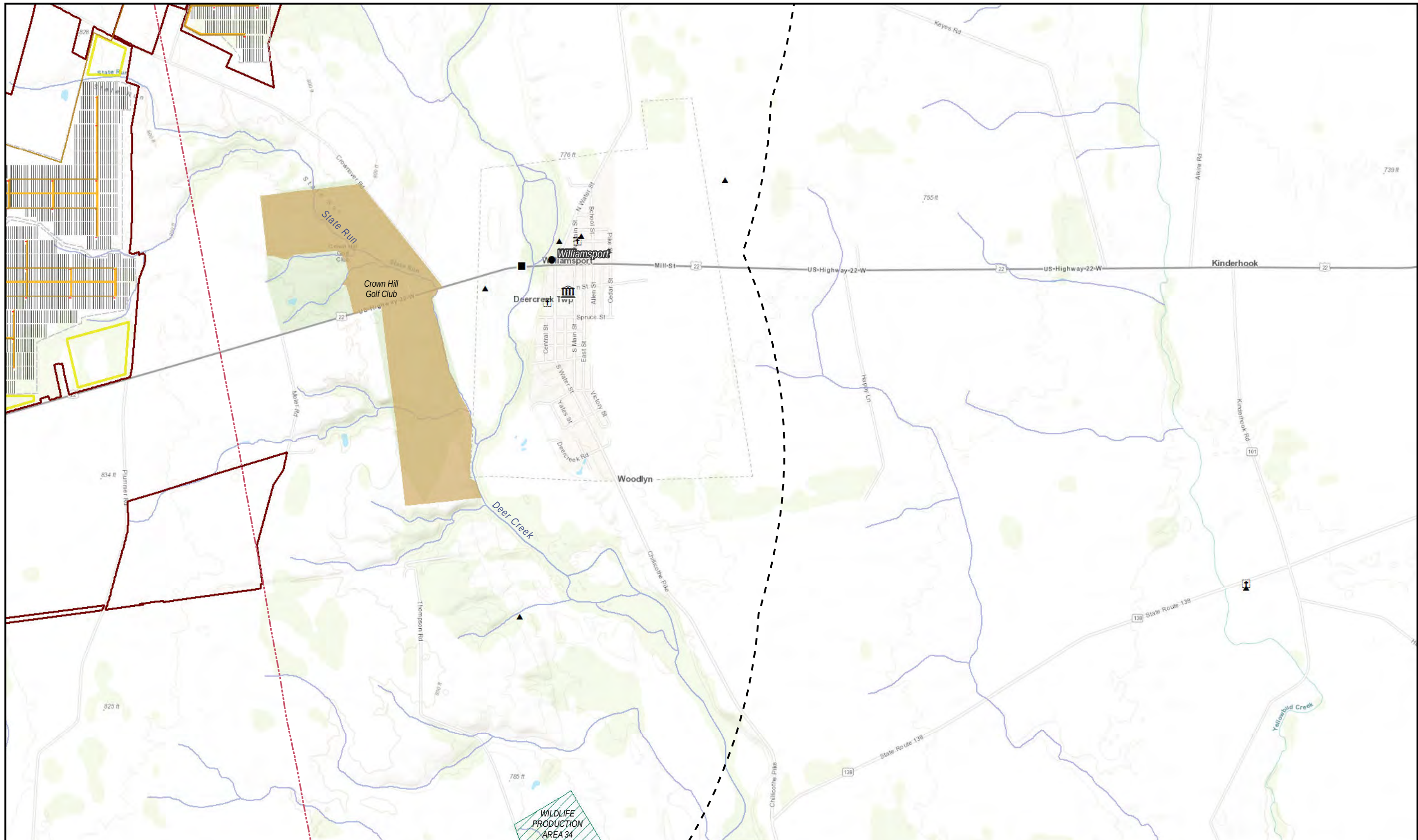
ODNR: Ohio Department of Natural Resources

WILDLIFE PRODUCTION AREA 34

Figure 3-1
Project Two Mile Radius Map
Atlanta Farms Solar Project
Page 5 of 9
Pickaway County, Ohio

Data Sources:
ESRI 2012, 2016; NHD 2019;
E&E 2019; Savion 2019;
Pickaway County 2019;
ODNR 2018; EIA and
HIFLD 2019.

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Miles



Project Layout:

Solar Array	Laydown Area	Project Area	Cemetery	ODNR Point of Interest
Inverter	Overhead Generation Tie-Line	Two Mile Buffer	Church	Golf Course
Access Road	Collection Line	Existing Electric Transmission Line	School	Deer Creek State Park
Substation	Gate	Existing Oil & Gas Pipeline	Hospital	ODNR Nature Preserve
Existing Dayton Power and Light Company Atlanta Substation	Fence	County Boundary	Civic Building	ODNR Wildlife Area
O&M Building			Populated Place	Local Park
				Lake/Pond
				River/Stream

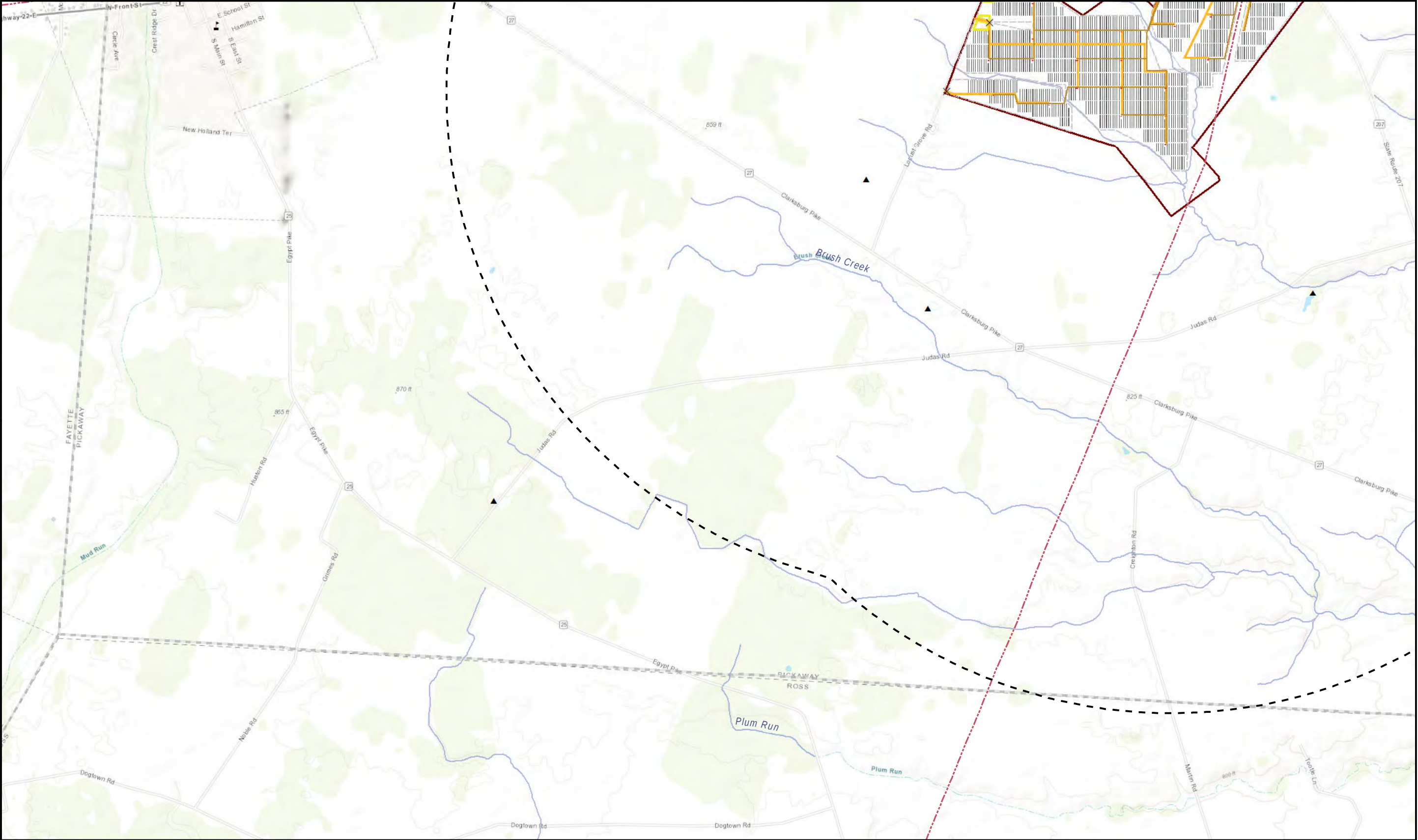
ODNR: Ohio Department of Natural Resources

Yellowold Creek

Figure 3-1
Project Two Mile Radius Map
Atlanta Farms Solar Project
Page 6 of 9
Pickaway County, Ohio

Data Sources:
ESRI 2012, 2016; NHD 2019;
E&E 2019; Savion 2019;
Pickaway County 2019;
ODNR 2018; EIA and
HIFLD 2019.

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Miles



Project Layout:

- | | | |
|--|------------------------------|-------------------------------------|
| Solar Array | Laydown Area | Project Area |
| Inverter | Overhead Generation Tie-Line | Two Mile Buffer |
| Access Road | Collection Line | Existing Electric Transmission Line |
| Substation | Gate | Existing Oil & Gas Pipeline |
| Existing Dayton Power and Light Company Atlanta Substation | Fence | County Boundary |
| O&M Building | | |

- | | |
|-----------------|------------------------|
| Cemetery | ODNR Point of Interest |
| Church | Golf Course |
| School | Deer Creek State Park |
| Hospital | ODNR Nature Preserve |
| Civic Building | ODNR Wildlife Area |
| Populated Place | Local Park |
| | Lake/Pond |
| | River/Stream |

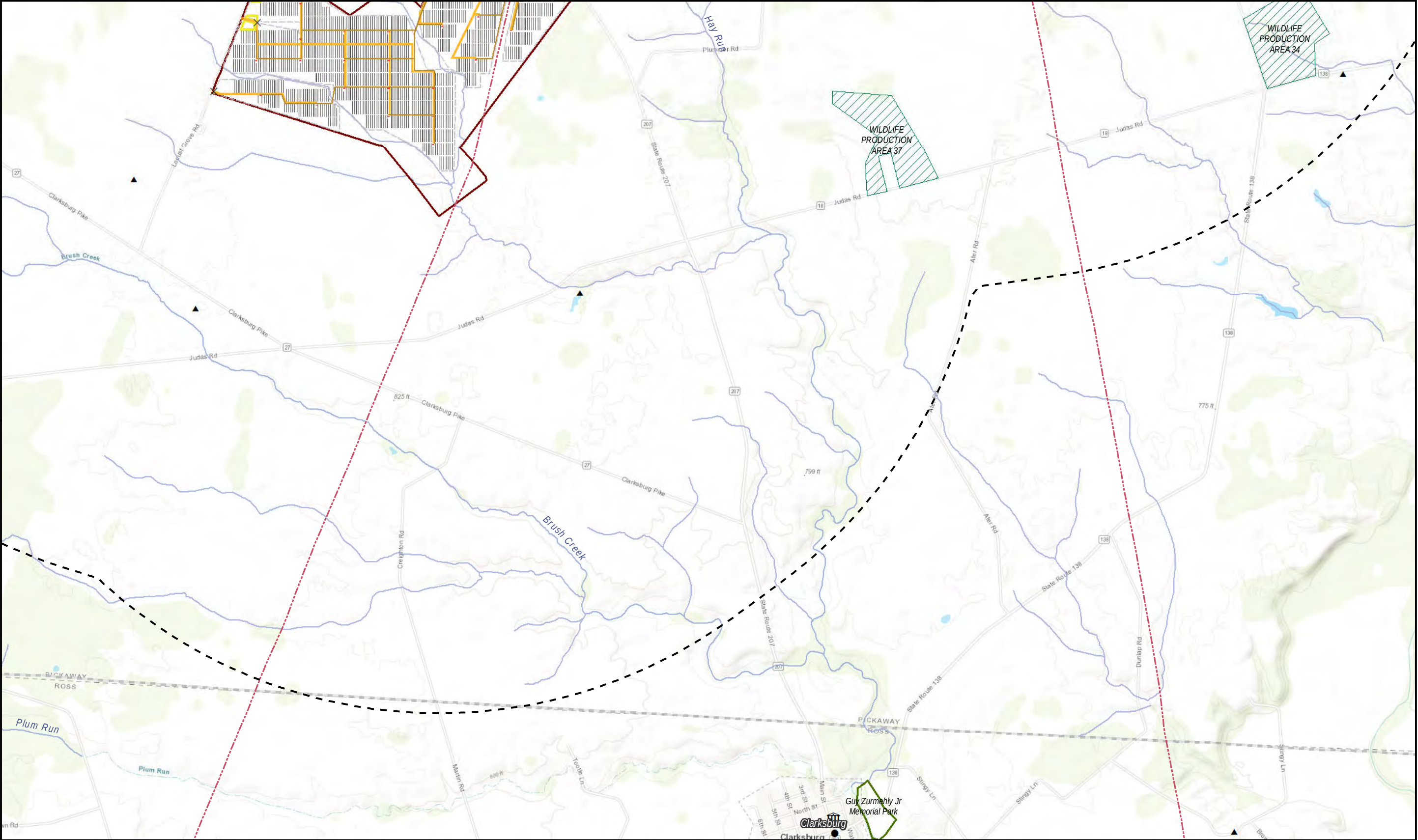
ODNR: Ohio Department
of Natural Resources



Data Sources:
ESRI 2012, 2016; NHD 2019;
E&E 2019; Savion 2019;
Pickaway County 2019;
ODNR 2018; EIA and
HIFLD 2019.

Figure 3-1
Project Two Mile Radius Map
Atlanta Farms Solar Project
Page 7 of 9
Pickaway County, Ohio

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Miles



Project Layout:

- | | | |
|--|------------------------------|-------------------------------------|
| Solar Array | Laydown Area | Project Area |
| Inverter | Overhead Generation Tie-Line | Two Mile Buffer |
| Access Road | Collection Line | Existing Electric Transmission Line |
| Substation | Gate | Existing Oil & Gas Pipeline |
| Existing Dayton Power and Light Company Atlanta Substation | Fence | County Boundary |
| O&M Building | | |

- | | |
|-----------------|------------------------|
| Cemetery | ODNR Point of Interest |
| Church | Golf Course |
| School | Deer Creek State Park |
| Hospital | ODNR Nature Preserve |
| Civic Building | ODNR Wildlife Area |
| Populated Place | Local Park |
| | Lake/Pond |
| | River/Stream |

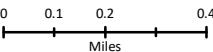
ODNR: Ohio Department of Natural Resources

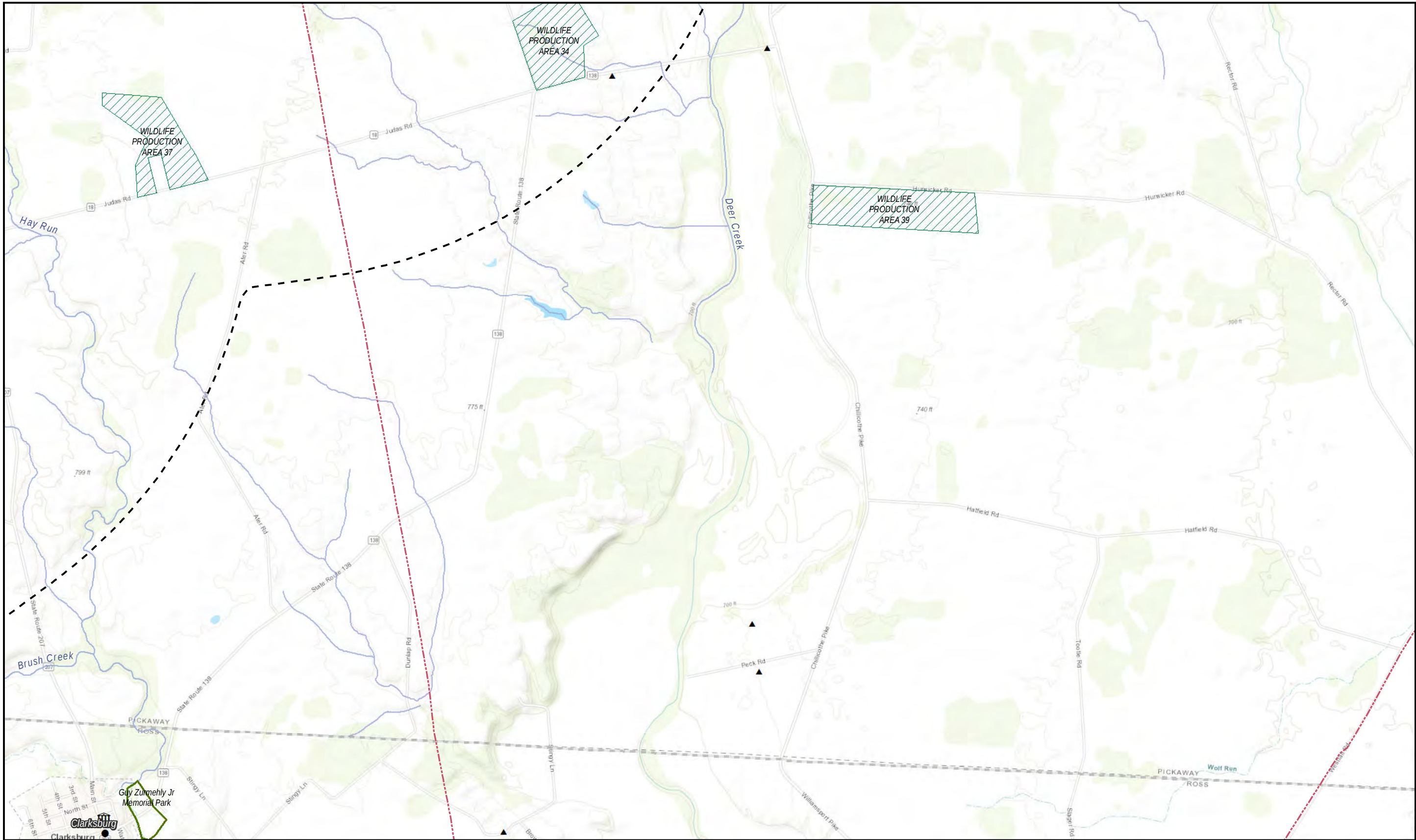


Data Sources:
ESRI 2012, 2016; NHD 2019;
E&E 2019; Savion 2019;
Pickaway County 2019;
ODNR 2018; EIA and
HIFLD 2019.

Figure 3-1
Project Two Mile Radius Map
Atlanta Farms Solar Project
Page 8 of 9

Pickaway County, Ohio





Project Layout:

- | | | |
|--|------------------------------|-------------------------------------|
| Solar Array | Laydown Area | Project Area |
| Inverter | Overhead Generation Tie-Line | Two Mile Buffer |
| Access Road | Collection Line | Existing Electric Transmission Line |
| Substation | Gate | Existing Oil & Gas Pipeline |
| Existing Dayton Power and Light Company Atlanta Substation | Fence | County Boundary |
| O&M Building | | |

- | | |
|-----------------|------------------------|
| Cemetery | ODNR Point of Interest |
| Church | Golf Course |
| School | Deer Creek State Park |
| Hospital | ODNR Nature Preserve |
| Civic Building | ODNR Wildlife Area |
| Populated Place | Local Park |
| | Lake/Pond |
| | River/Stream |

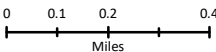
ODNR: Ohio Department of Natural Resources

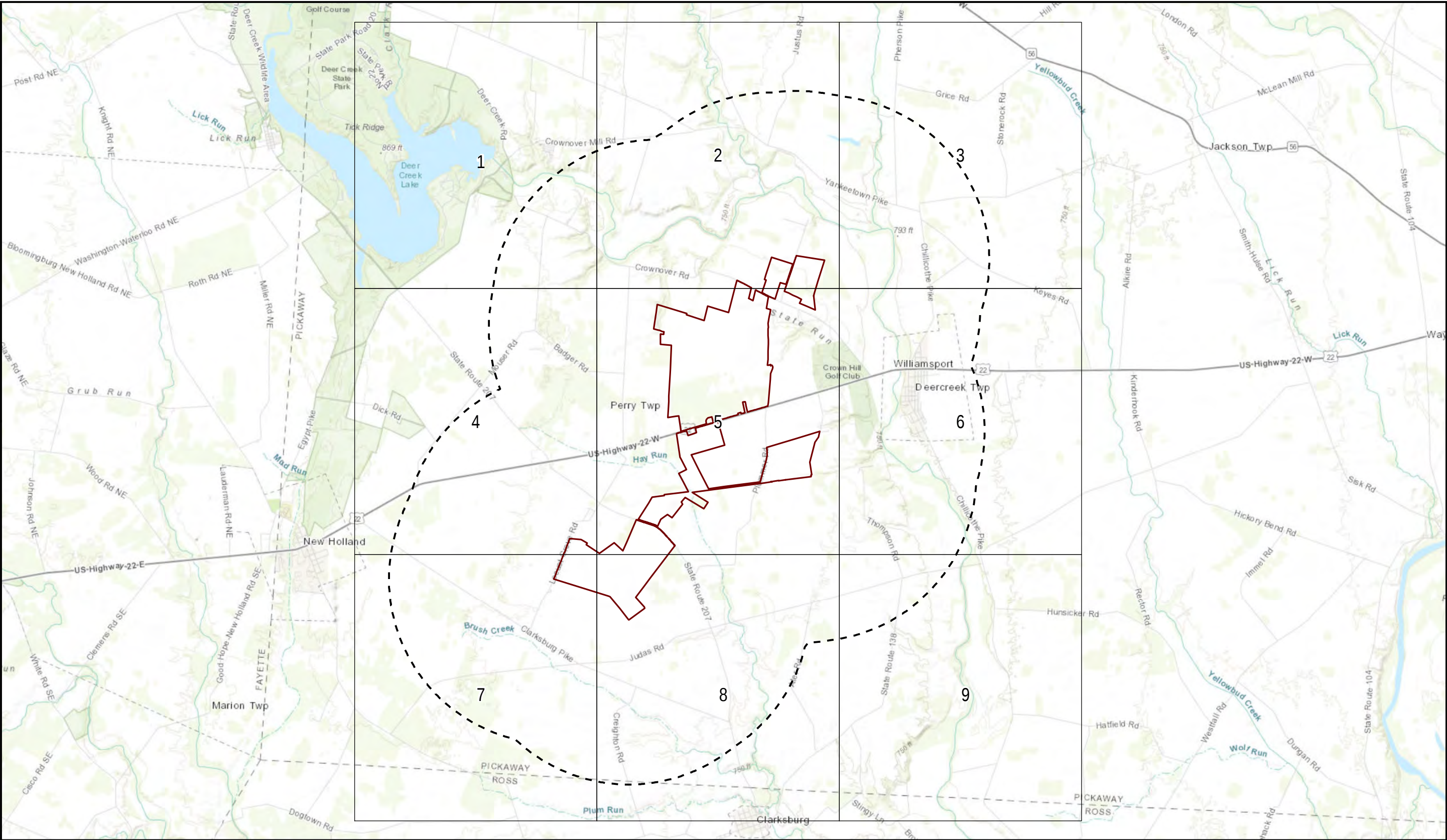


Data Sources:
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E&E 2019; Savion 2019;
Pickaway County 2019;
ODNR 2018; EIA and
HIFLD 2019.

Figure 3-1
Project Two Mile Radius Map
Atlanta Farms Solar Project
Page 9 of 9

Pickaway County, Ohio



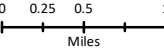


- Two Mile Buffer
- Project Area
- Map Index



Figure 3-1
Project Two Mile Radius Map
Atlanta Farms Solar Project
Index Map

Pickaway County, Ohio



Data Sources:
ESRI 2012, 2016;
E&E 2019; Savion 2019;
Pickaway County 2019.

Figure 03-2 Project Site Layout Map

Respectfully submitted,

/s/ Christine M.T. Pirik

Christine M.T. Pirik (0029759)

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Terrence O'Donnell (0074213)

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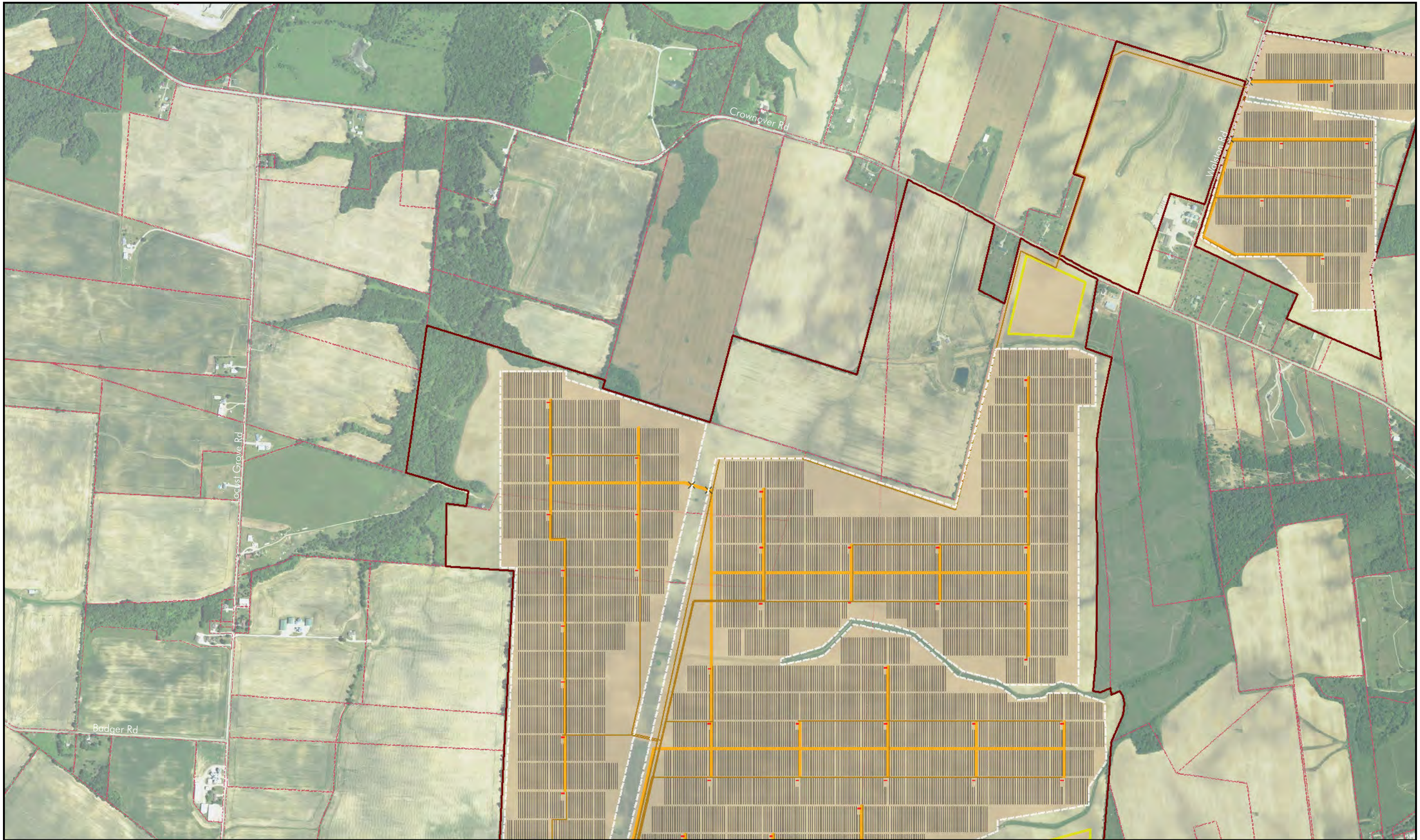
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todonnell@dickinsonwright.com

(Counsel agrees to receive service by email.)

Attorneys for Atlanta Farms Solar Project, LLC



Project Layout:

Solar Array	O&M Building	Project Area
Inverter	Laydown Area	Property Lines
Access Road	Overhead Generation Tie-Line	Construction Impact Area
Substation	Collection Line	Highway
Existing Dayton Power and Light Company Atlanta Substation	Fence	Other Major Road
	Gate	

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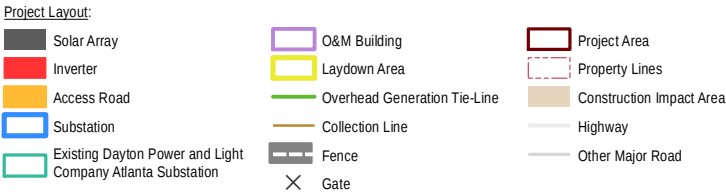
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Data Sources:
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E&E 2019; Savion 2019;
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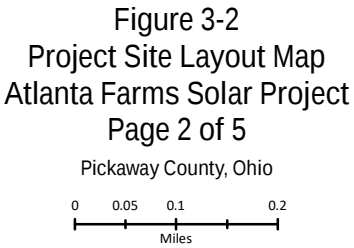
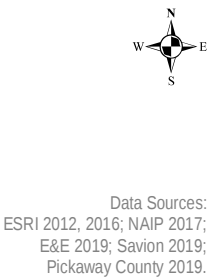
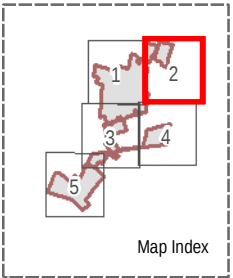
Figure 3-2
Project Site Layout Map
Atlanta Farms Solar Project
Page 1 of 5

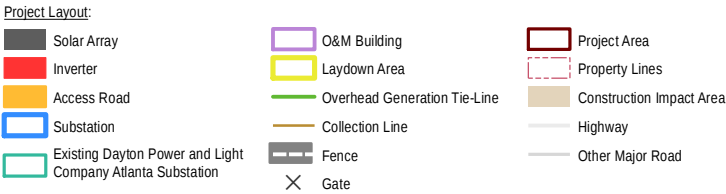
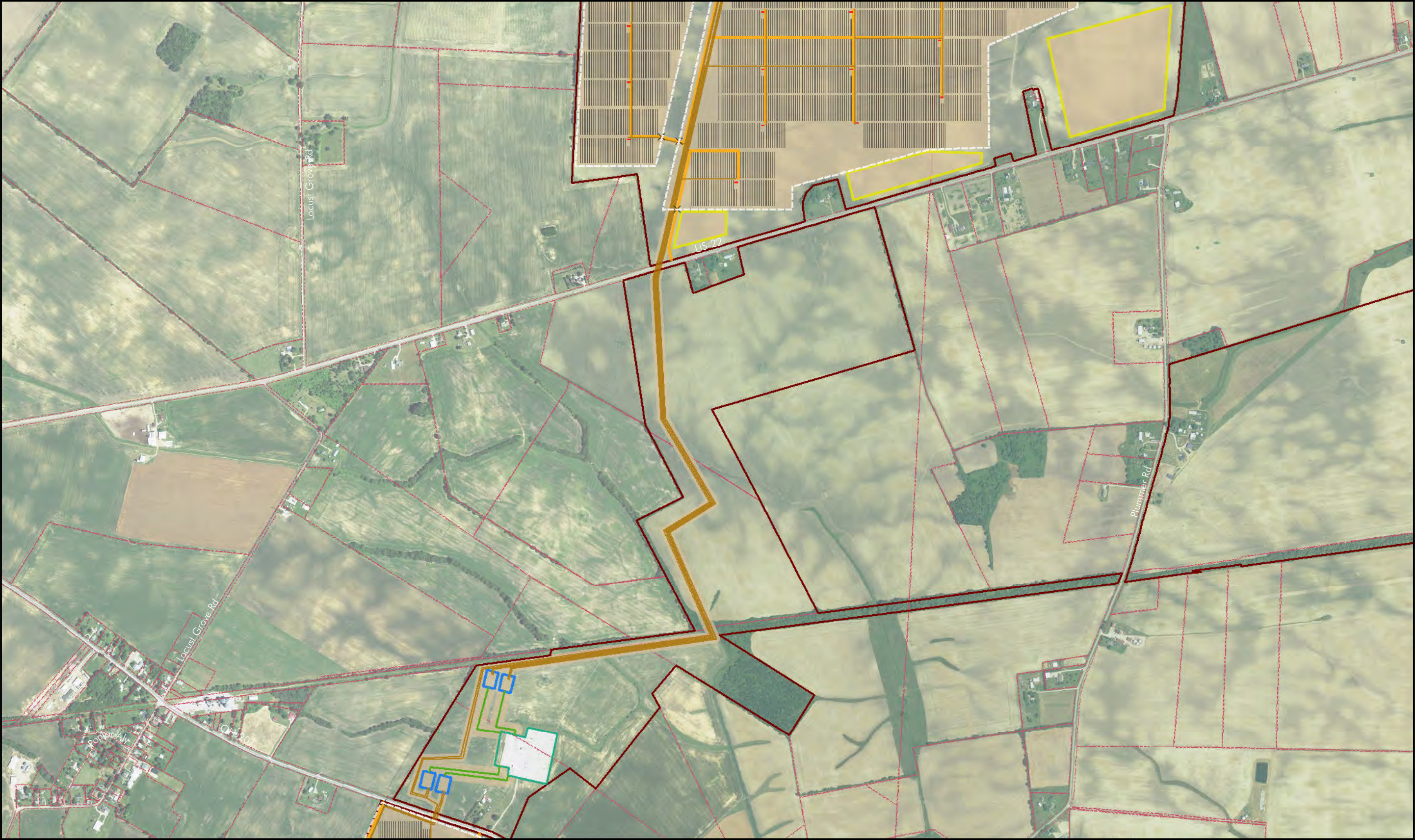
Pickaway County, Ohio

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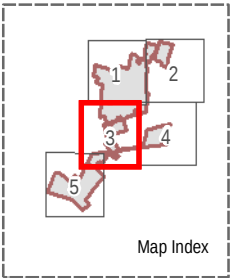


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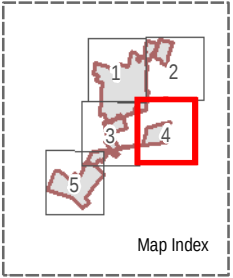
Figure 3-2
Project Site Layout Map
Atlanta Farms Solar Project
Page 3 of 5
Pickaway County, Ohio



Project Layout:

- | | | |
|--|------------------------------|--------------------------|
| Solar Array | O&M Building | Project Area |
| Inverter | Laydown Area | Property Lines |
| Access Road | Overhead Generation Tie-Line | Construction Impact Area |
| Substation | Collection Line | Highway |
| Existing Dayton Power and Light Company Atlanta Substation | Fence | Other Major Road |
| | Gate | |

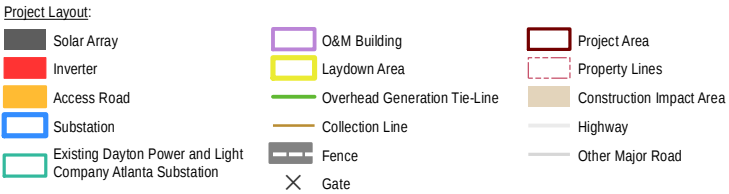
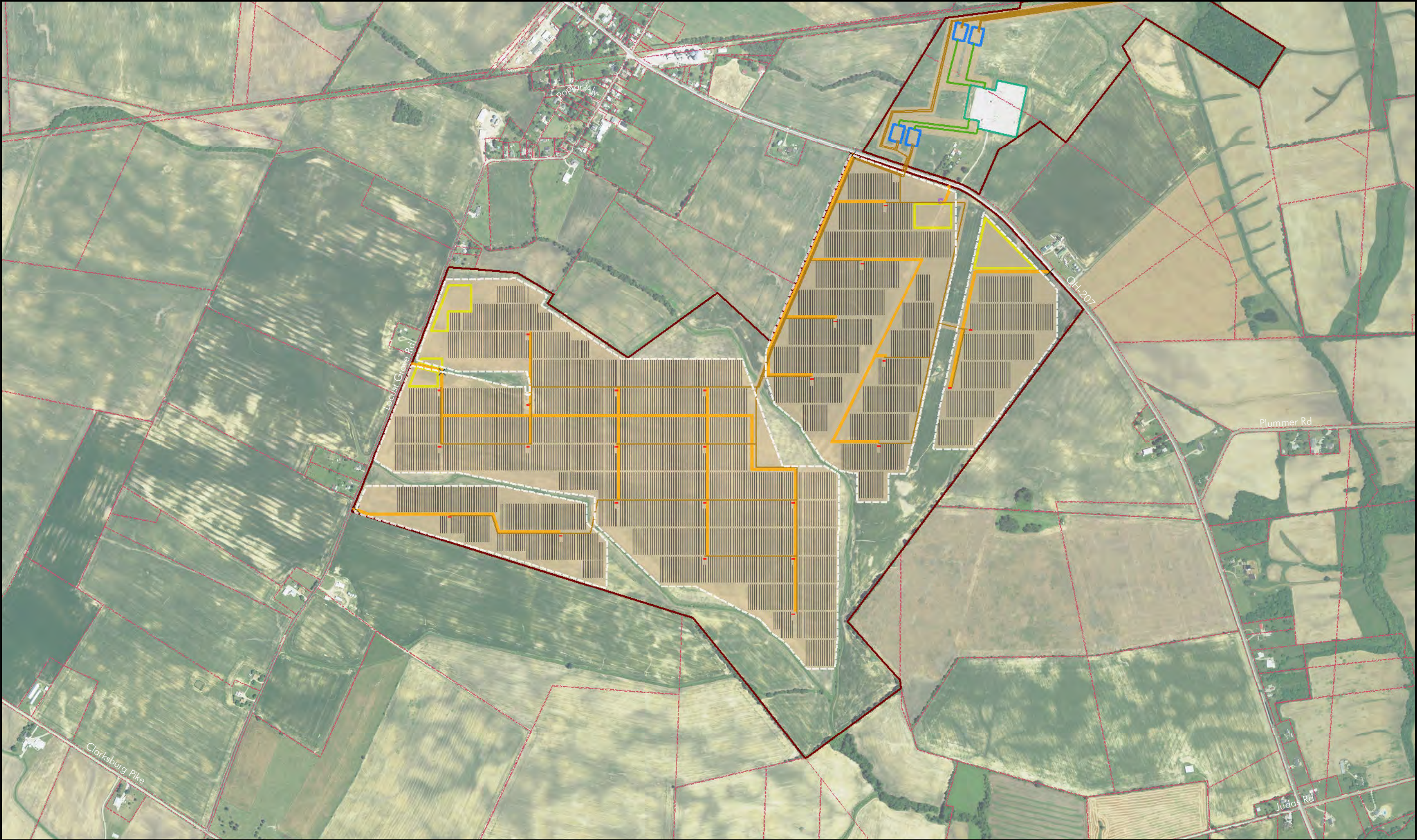
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Data Sources:
ESRI 2012, 2016; NAIP 2017;
E&E 2019; Savion 2019;
Pickaway County 2019.

Figure 3-2
Project Site Layout Map
Atlanta Farms Solar Project
Page 4 of 5

Pickaway County, Ohio
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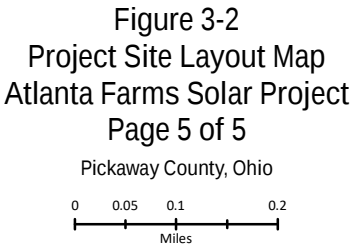
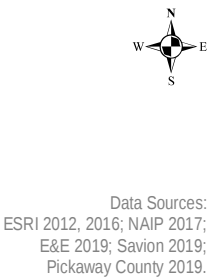
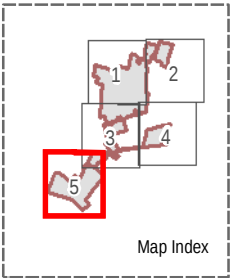


Figure 04-1 Project Constraints Map

Respectfully submitted,

/s/ Christine M.T. Pirik

Christine M.T. Pirik (0029759)

(Counsel of Record)

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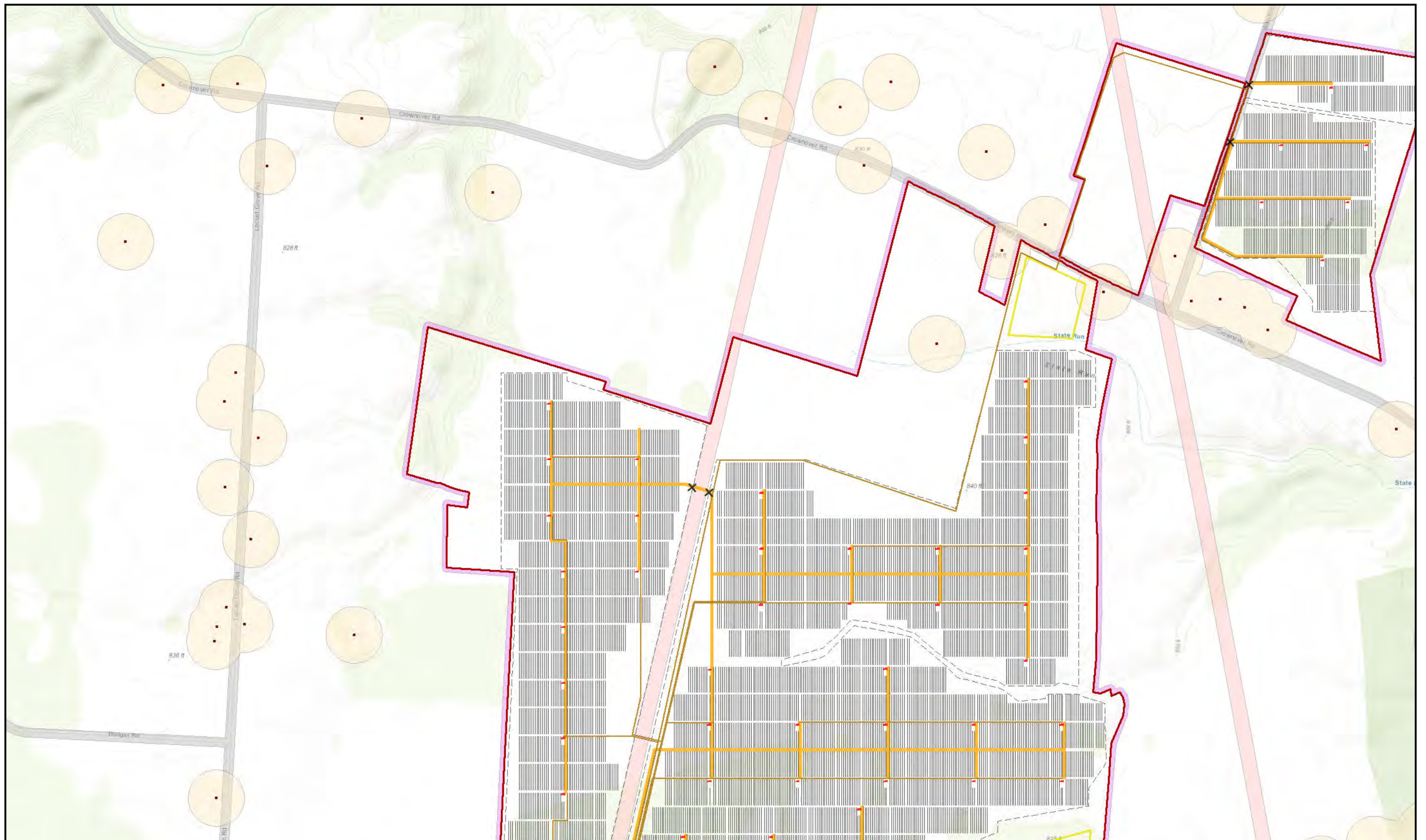
(614) 591-5461

cpirik@dickinsonwright.com

todonnell@dickinsonwright.com

(Counsel agrees to receive service by email.)

Attorneys for Atlanta Farms Solar Project, LLC

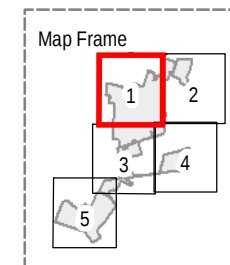


Project Area Features:

- | | | |
|--------------|--|--------------|
| Solar Array | Existing Dayton Power and Light Company Atlanta Substation | Fence |
| Inverter | Overhead Generation Tie-Line | Gate |
| Access Road | Collection Line | Project Area |
| Substation | | |
| O&M Building | | |
| Laydown Area | | |

Solar Module Setbacks:

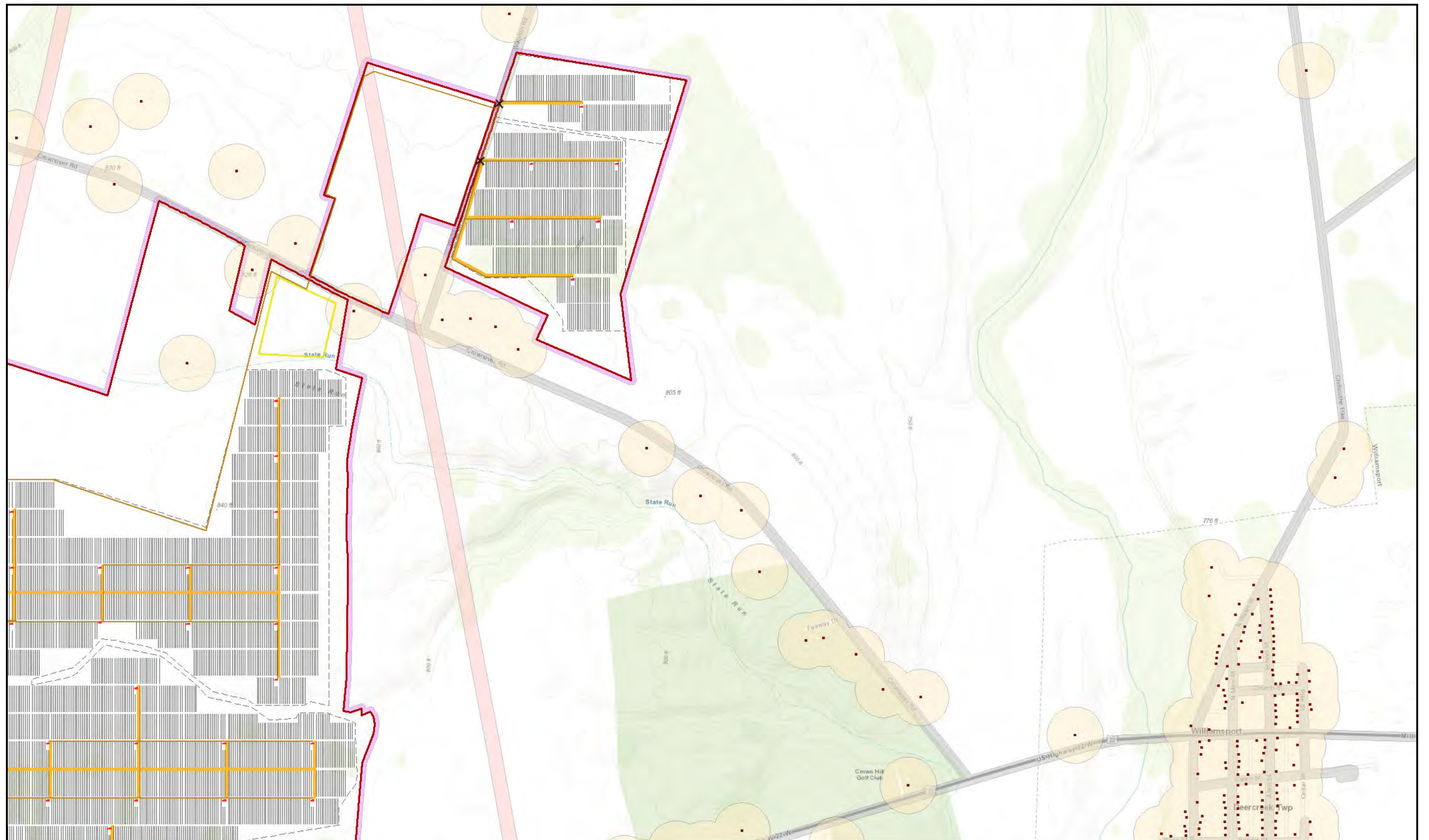
- | | |
|---|--|
| Residence | Residence Setback 300-feet |
| Public Road Setback 50-feet from centerline | Utility Corridor Setback 75-feet from centerline |
| Property Line Setback 50-feet | |



Data Sources:
ESRI 2012, 2016;
E&E 2019; Savion 2019;
EIA and HIFLD 2019.

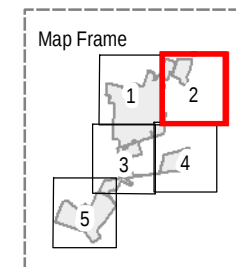
Figure 4-1
Project Constraints Map
Atlanta Farms Solar Project
Page 1 of 5
Pickaway County, Ohio

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- | | | |
|-------------------------------|--|--------------|
| Project Area Features: | | |
| Solar Array | Existing Dayton Power and Light Company Atlanta Substation | Fence |
| Inverter | Overhead Generation Tie-Line | Gate |
| Access Road | Collection Line | Project Area |
| Substation | | |
| O&M Building | | |
| Laydown Area | | |

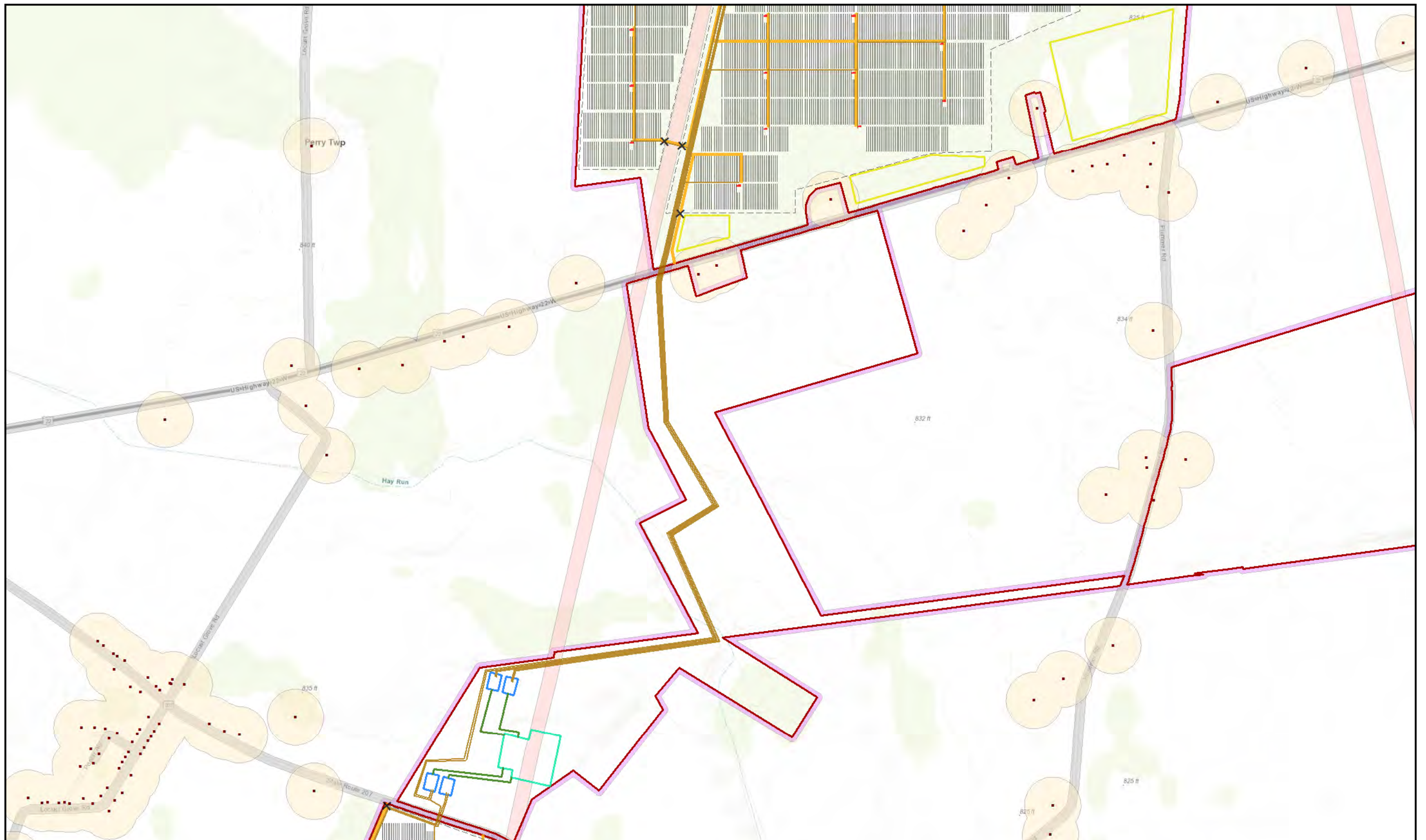
- | |
|--|
| Solar Module Setbacks: |
| Residence |
| Residence Setback 300-feet |
| Public Road Setback 50-feet from centerline |
| Utility Corridor Setback 75-feet from centerline |
| Property Line Setback 50-feet |



Data Sources:
ESRI 2012, 2016;
E&E 2019; Savion 2019;
EIA and HIFLD 2019.

Figure 4-1
Project Constraints Map
Atlanta Farms Solar Project
Page 2 of 5
Pickaway County, Ohio

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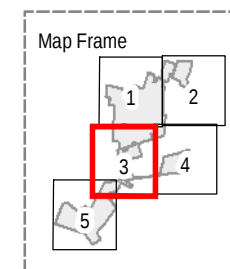
Project Area Features:

- Solar Array
- Inverter
- Access Road
- Substation
- O&M Building
- Laydown Area
- Existing Dayton Power and Light Company Atlanta Substation
- Overhead Generation Tie-Line
- Collection Line

- Fence
- Gate
- Project Area

Solar Module Setbacks:

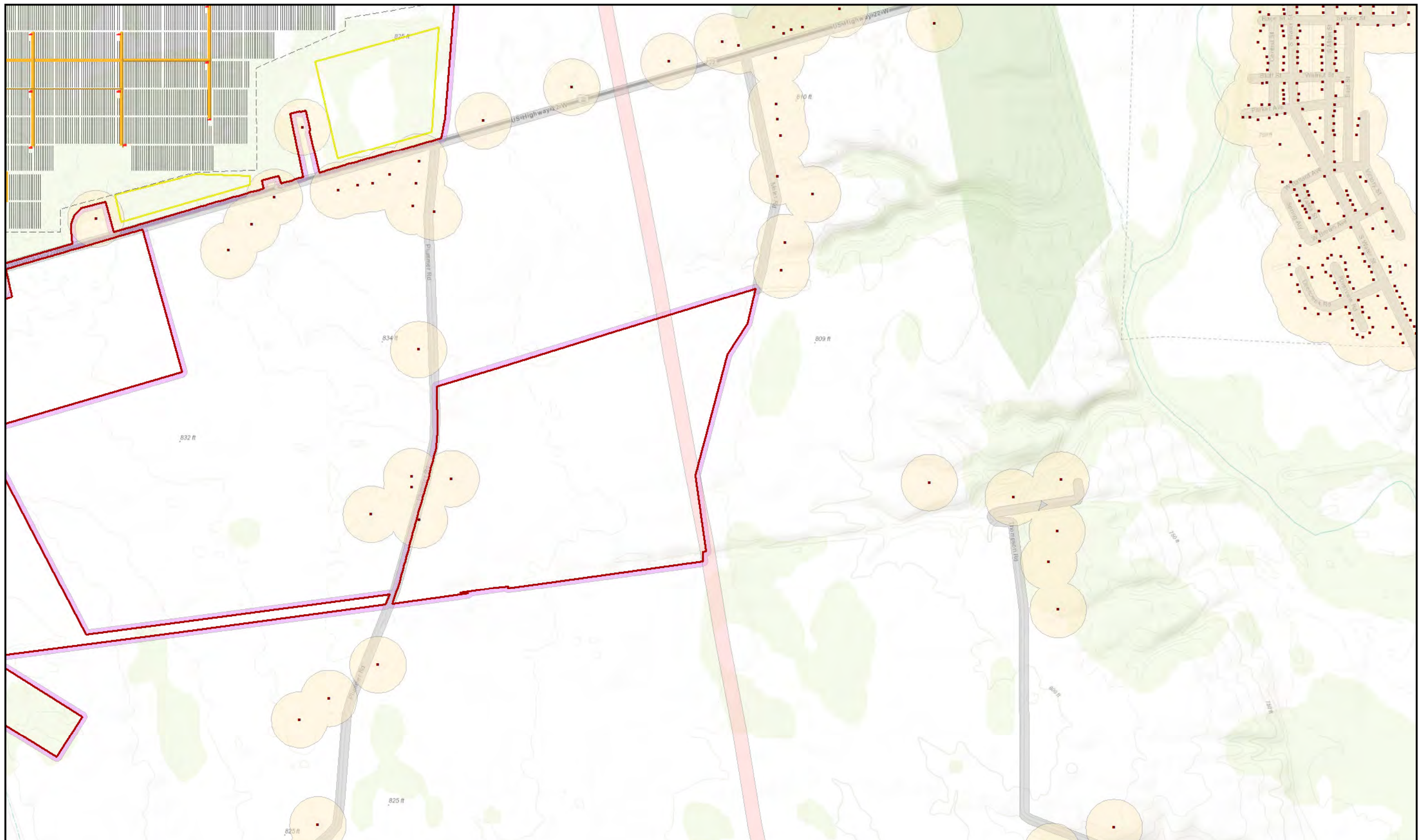
- Residence
- Residence Setback 300-feet
- Public Road Setback 50-feet from centerline
- Utility Corridor Setback 75-feet from centerline
- Property Line Setback 50-feet



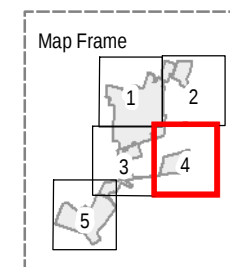
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E&E 2019; Savion 2019;
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Figure 4-1
Project Constraints Map
Atlanta Farms Solar Project
Page 3 of 5
Pickaway County, Ohio

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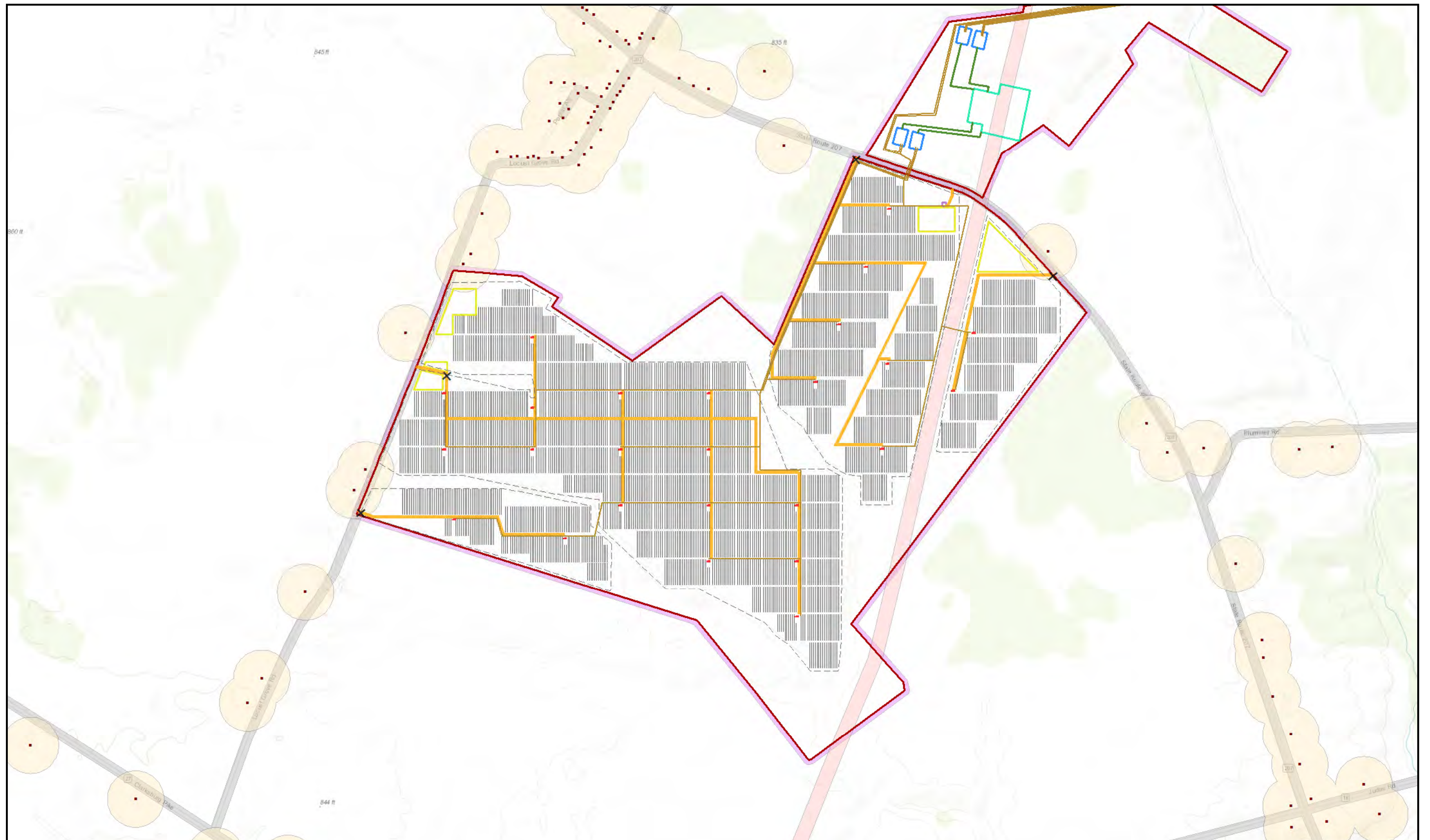
- Project Area Features:**
- Solar Array
 - Inverter
 - Access Road
 - Substation
 - O&M Building
 - Laydown Area
 - Existing Dayton Power and Light Company Atlanta Substation
 - Overhead Generation Tie-Line
 - Collection Line
 - Fence
 - Gate
 - Project Area
- Solar Module Setbacks:**
- Residence
 - Residence Setback 300-feet
 - Public Road Setback 50-feet from centerline
 - Utility Corridor Setback 75-feet from centerline
 - Property Line Setback 50-feet



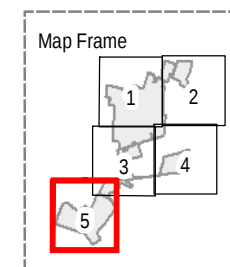
Data Sources:
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E&E 2019; Savion 2019;
EIA and HIFLD 2019.

Figure 4-1
Project Constraints Map
Atlanta Farms Solar Project
Page 4 of 5
Pickaway County, Ohio

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|-------------------------------|--|----------------|--|
| Project Area Features: | | | Solar Module Setbacks: |
| ■ Solar Array | Existing Dayton Power and Light Company Atlanta Substation | — Fence | ■ Residence |
| ■ Inverter | Overhead Generation Tie-Line | ✕ Gate | ■ Residence Setback 300-feet |
| ■ Access Road | Collection Line | ■ Project Area | ■ Public Road Setback 50-feet from centerline |
| ■ Substation | | | ■ Utility Corridor Setback 75-feet from centerline |
| ■ O&M Building | | | ■ Property Line Setback 50-feet |
| ■ Laydown Area | | | |



Data Sources:
ESRI 2012, 2016;
E&E 2019; Savion 2019;
EIA and HIFLD 2019.

Figure 4-1
Project Constraints Map
Atlanta Farms Solar Project
Page 5 of 5
Pickaway County, Ohio

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Miles

Figure 08-1 Sensitive Receptors

Respectfully submitted,

/s/ Christine M.T. Pirik

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(614) 591-5461

cpirik@dickinsonwright.com

todonnell@dickinsonwright.com

(Counsel agrees to receive service by email.)

Attorneys for Atlanta Farms Solar Project, LLC

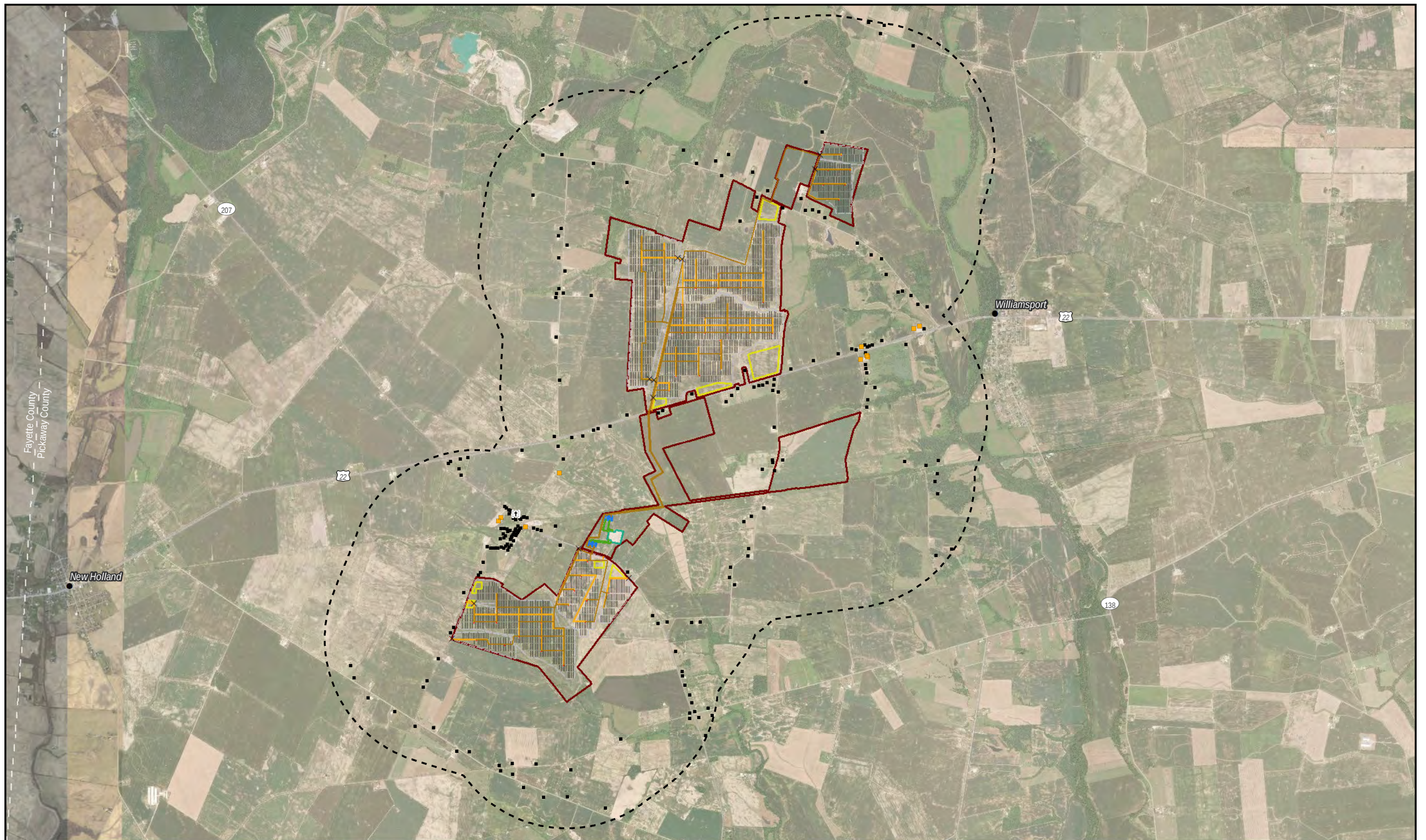
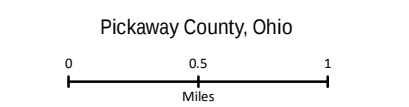


Figure 8-1
Sensitive Receptors
Atlanta Farms Solar Project



Data Sources:
ESRI 2012, 2016;
E&E 2019; Savion 2019.

- | | | | |
|--|------------------------------|-----------------|---------------------|
| Solar Array | Substation | Project Area | Church |
| Inverter | O&M Building | One Mile Buffer | Commercial Building |
| Access Road | Overhead Generation Tie-Line | Gate | Residence |
| Laydown Area | Collection Line | | |
| Existing Dayton Power and Light Company Atlanta Substation | Fence | | |
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Figure 08-2

Geological and Topographic Features

Respectfully submitted,

/s/ Christine M.T. Pirik

Christine M.T. Pirik (0029759)

(Counsel of Record)

Terrence O'Donnell (0074213)

Dickinson Wright PLLC

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Columbus, Ohio 43215

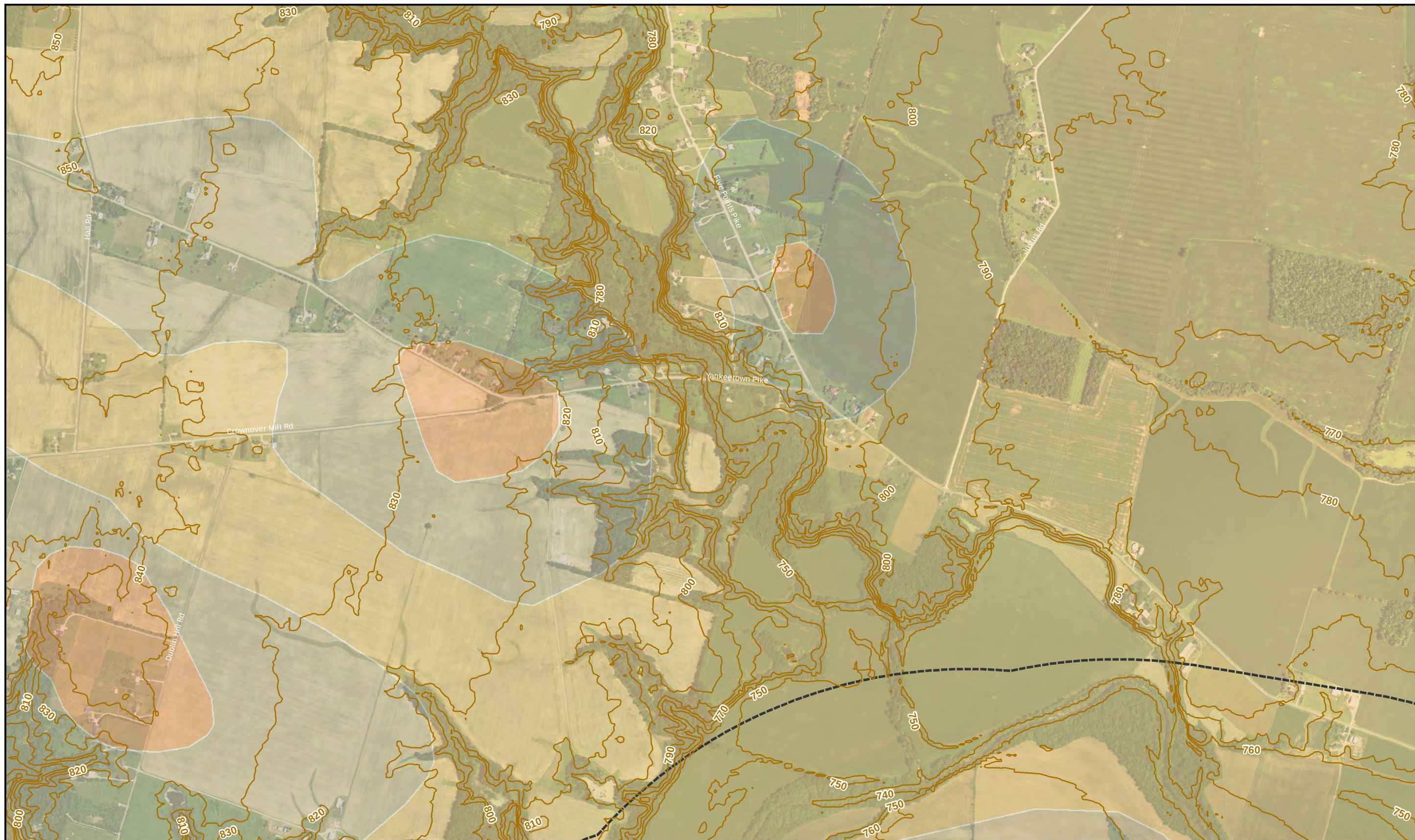
(614) 591-5461

cpirik@dickinsonwright.com

todonnell@dickinsonwright.com

(Counsel agrees to receive service by email.)

Attorneys for Atlanta Farms Solar Project, LLC



Solar Array

Inverter

Access Road

Substation

Existing Dayton Power and Light Company Atlanta Substation

O&M Building

Laydown Area

Overhead Generation Tie-Line

Collection Line

× Gate

— Fence

▭ Project Area

▭ One Mile Buffer

— Highway

— Other Major Road

⊕ Oil and Gas Well

— Elevation Contour - 10 feet interval

Bedrock Geology

▭ Columbus Limestone (Dc)

▭ Ohio Shale (Do)

▭ Salina Group (Ss)

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Data Sources:

ESRI 2012, 2016;

E&E 2019; NAIP 2017;

Pickaway County 2019.

Savion 2019; ODNR 2018; USGS 2015.

Figure 8-2

Geologic and

Topographic Features

Atlanta Farms Solar Project

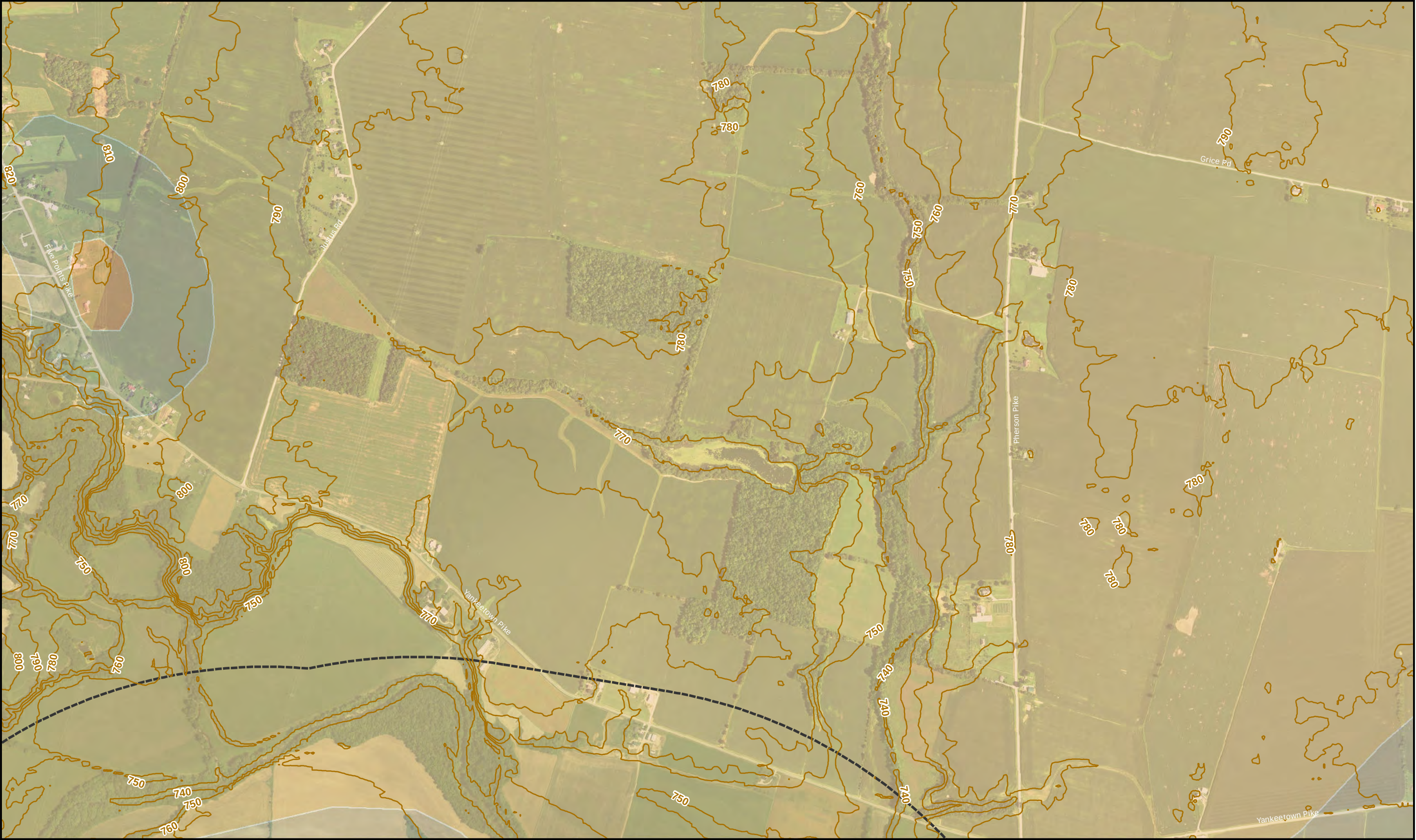
Page 1 of 15

Pickaway County, Ohio

0 0.05 0.1 0.2

Miles

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Solar Array

Inverter

Access Road

Substation

Existing Dayton Power and Light Company Atlanta Substation

O&M Building

Laydown Area

Overhead Generation Tie-Line

Collection Line

Gate

Fence

Project Area

One Mile Buffer

Highway

Other Major Road

Oil and Gas Well

Elevation Contour - 10 feet interval

Bedrock Geology

Columbus Limestone (Dc)

Ohio Shale (Do)

Salina Group (Ss)

N

E

S

W

Data Sources:
ESRI 2012, 2016;
E&E 2019; NAIP 2017;
Pickaway County 2019.
Savion 2019; ODNR 2018; USGS 2015.

Figure 8-2
Geologic and
Topographic Features
Atlanta Farms Solar Project
Page 2 of 15

Pickaway County, Ohio

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Miles

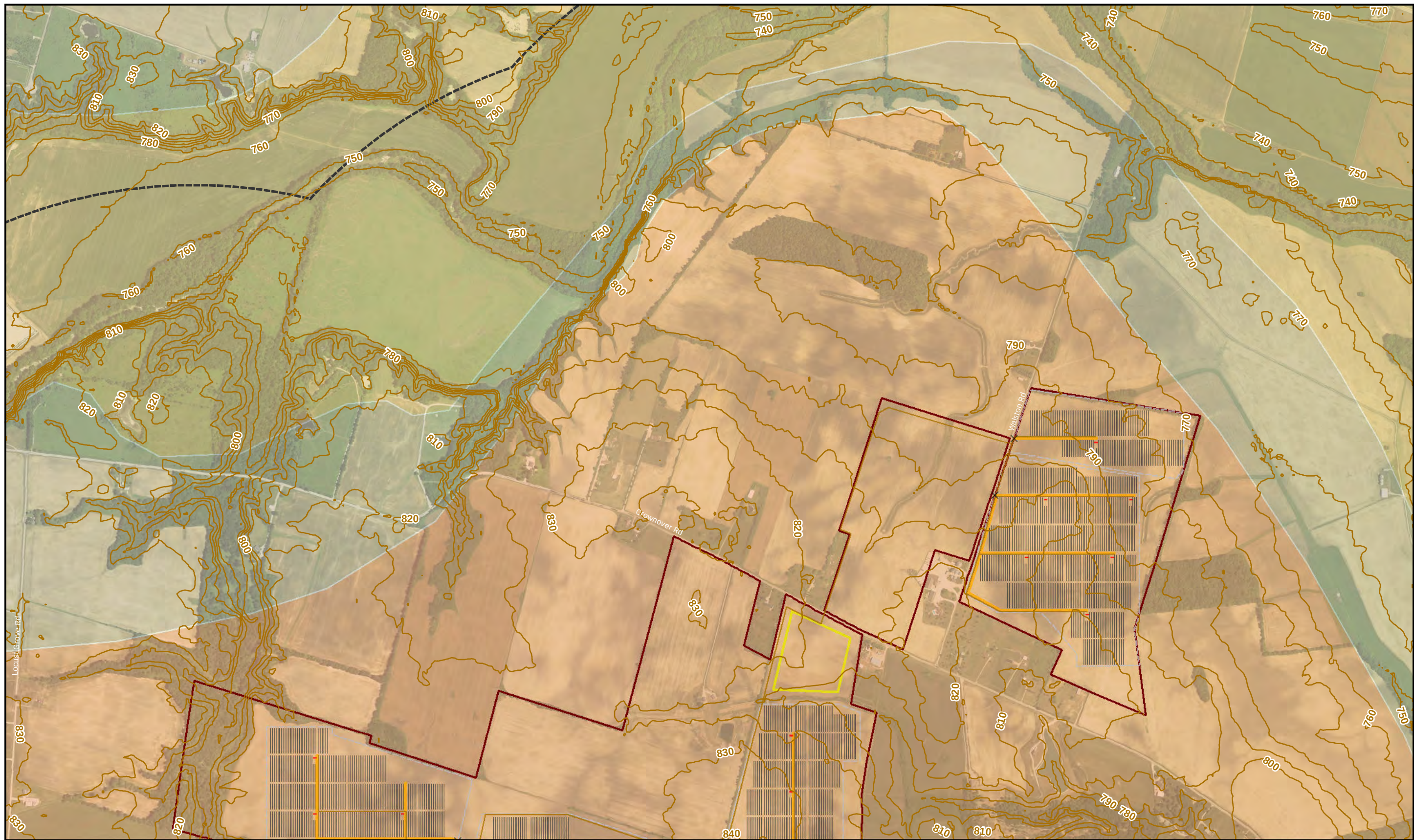
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Figure 8-2
Geologic and
Topographic Features
Atlanta Farms Solar Project
Page 3 of 15

Pickaway County, Ohio
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Miles

Data Sources:
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E&E 2019; NAIP 2017;
Pickaway County 2019.
Savion 2019; ODNR 2018; USGS 2015.

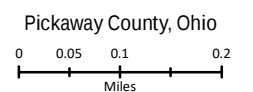


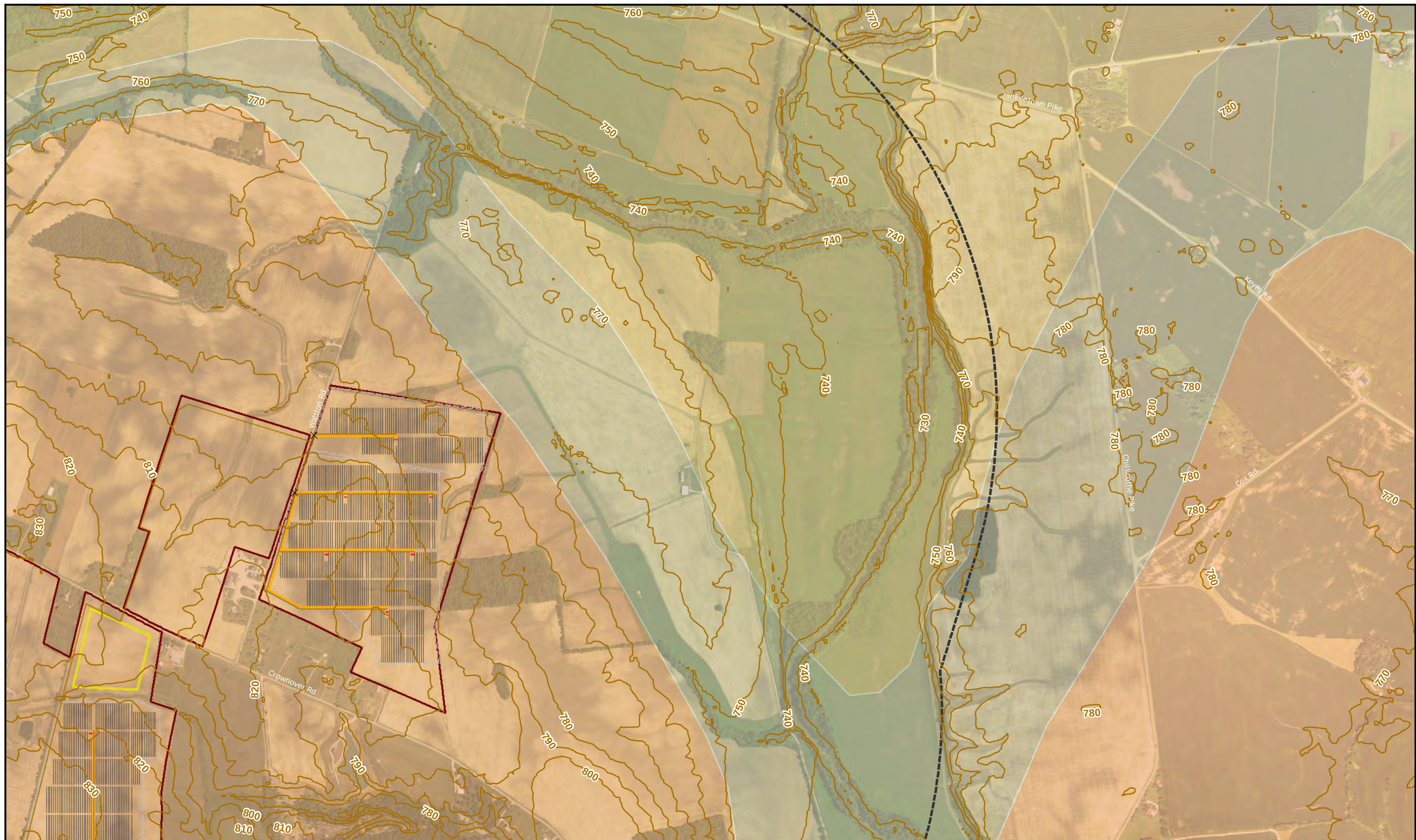
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|--|------------------------------|------------------|--------------------------------------|
| Solar Array | O&M Building | Gate | Oil and Gas Well |
| Inverter | Laydown Area | Fence | Elevation Contour - 10 feet interval |
| Access Road | Overhead Generation Tie-Line | Project Area | Bedrock Geology |
| Substation | Collection Line | One Mile Buffer | Columbus Limestone (Dc) |
| Existing Dayton Power and Light Company Atlanta Substation | | Highway | Ohio Shale (Do) |
| | | Other Major Road | Salina Group (Ss) |



Data Sources:
ESRI 2012, 2016;
E&E 2019; NAIP 2017;
Pickaway County 2019.
Savion 2019; ODNR 2018; USGS 2015.

Figure 8-2
Geologic and
Topographic Features
Atlanta Farms Solar Project
Page 4 of 15



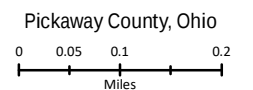


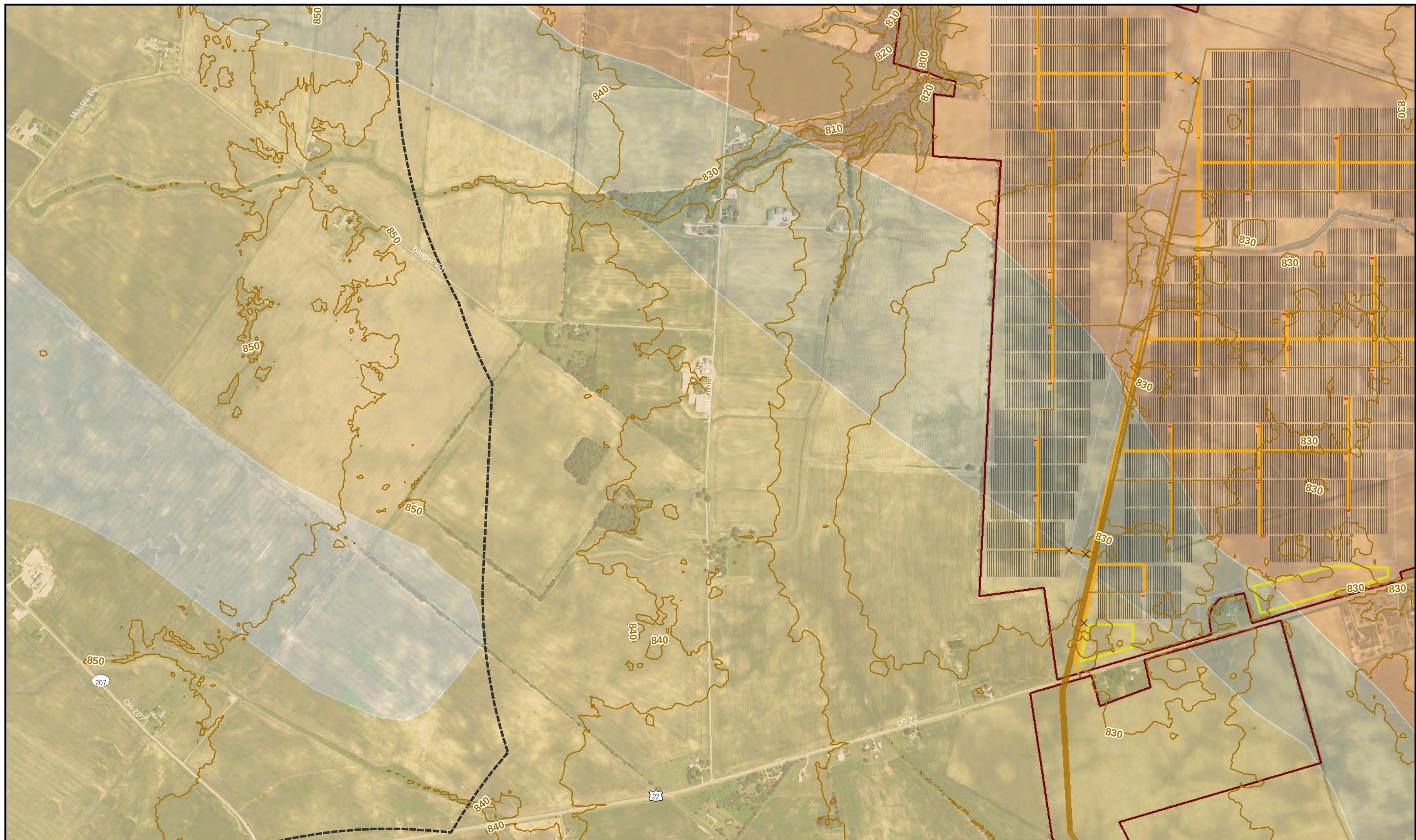
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| Solar Array | O&M Building | Gate | Oil and Gas Well |
| Inverter | Laydown Area | Fence | Elevation Contour - 10 feet interval |
| Access Road | Overhead Generation Tie-Line | Project Area | Bedrock Geology |
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| | | Other Major Road | Salina Group (Ss) |



Data Sources:
ESRI 2012, 2016;
E&E 2019; NAIP 2017;
Pickaway County 2019.
Savion 2019; ODNR 2018; USGS 2015.

Figure 8-2
Geologic and
Topographic Features
Atlanta Farms Solar Project
Page 5 of 15



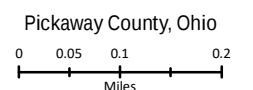


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| Inverter | Laydown Area | Fence | Elevation Contour - 10 feet interval |
| Access Road | Overhead Generation Tie-Line | Project Area | Bedrock Geology |
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| Existing Dayton Power and Light Company Atlanta Substation | | Highway | Ohio Shale (Do) |
| | | Other Major Road | Salina Group (Ss) |
| | | | Tymochtee and Greenfield Formations, Undivided (Stg) |



Data Sources:
ESRI 2012, 2016;
E&E 2019; NAIP 2017;
Pickaway County 2019.
Savion 2019; ODNR 2018; USGS 2015.

Figure 8-2
Geologic and
Topographic Features
Atlanta Farms Solar Project
Page 6 of 15



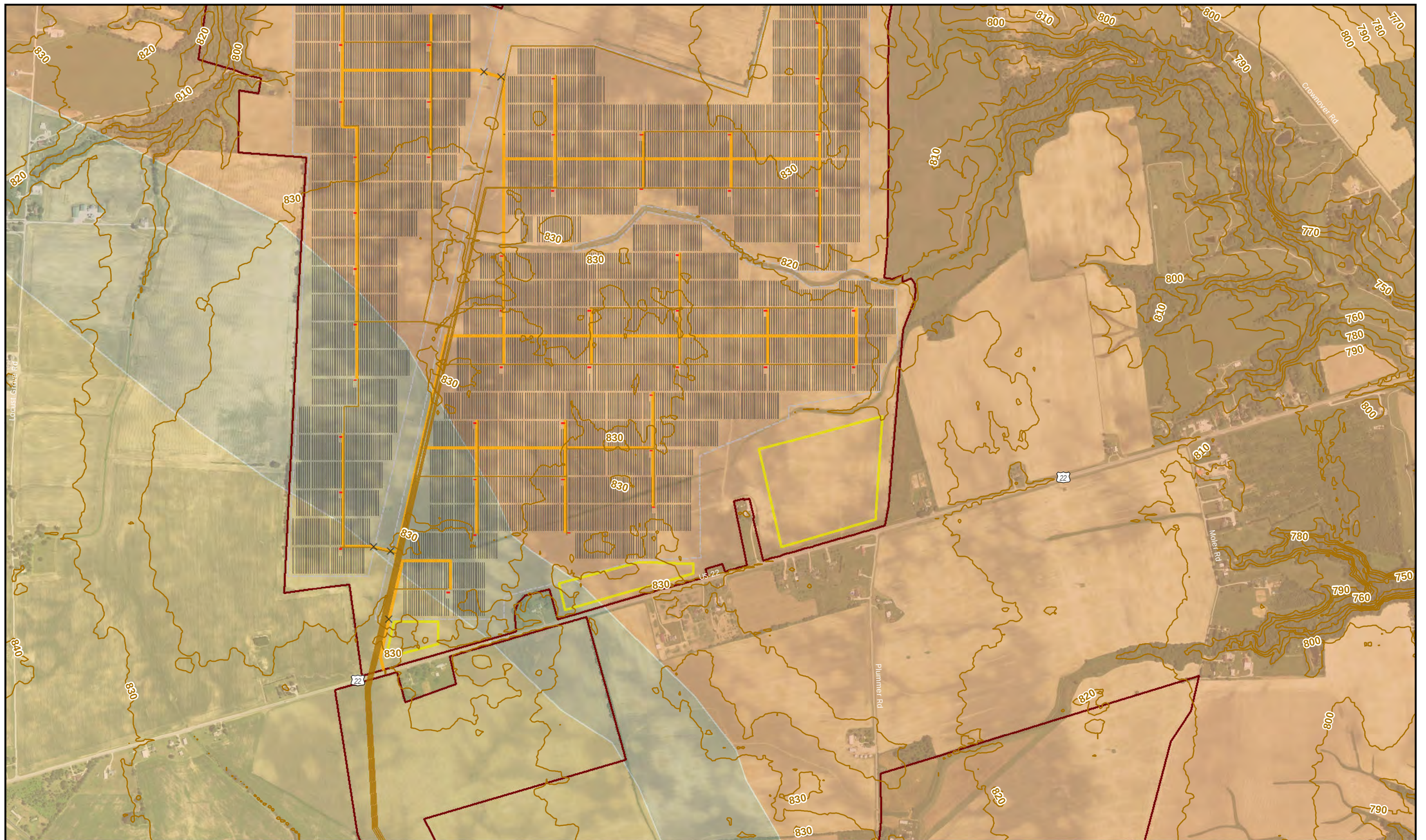


Figure 8-2
Geologic and
Topographic Features
Atlanta Farms Solar Project
Page 7 of 15



Data Sources:
ESRI 2012, 2016;
E&E 2019; NAIP 2017;
Pickaway County 2019.
Savion 2019; ODNR 2018; USGS 2015.

Pickaway County, Ohio
0 0.05 0.1 0.2
Miles



- Solar Array - Inverter - Access Road - Substation - Existing Dayton Power and Light Company Atlanta Substation	- O&M Building - Laydown Area - Overhead Generation Tie-Line - Collection Line	- Gate - Fence - Project Area - One Mile Buffer - Highway - Other Major Road	- Oil and Gas Well - Elevation Contour - 10 feet interval - Bedrock Geology - Columbus Limestone (Dc) - Ohio Shale (Do)
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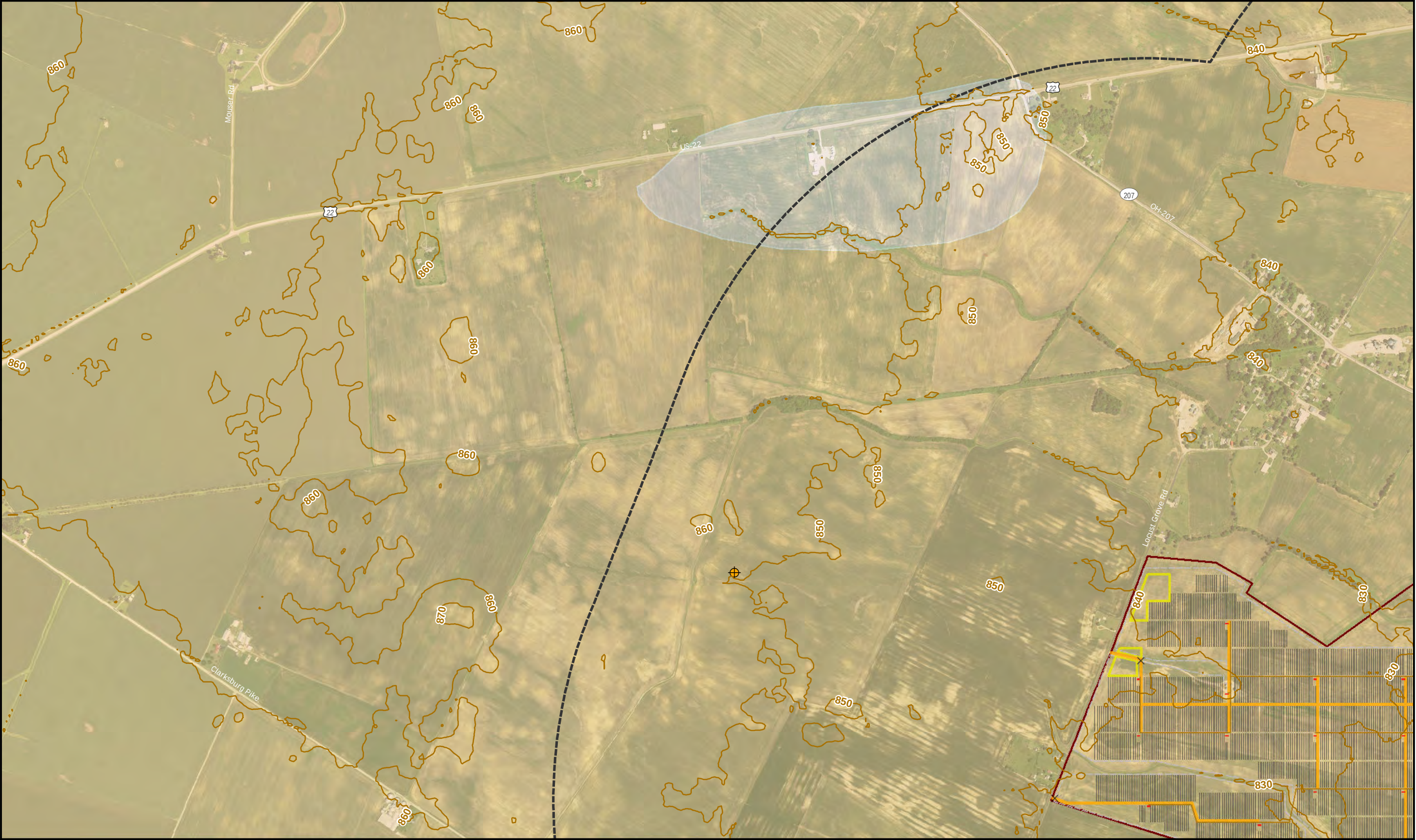
Figure 8-2
Geologic and
Topographic Features
Atlanta Farms Solar Project
Page 8 of 15

Pickaway County, Ohio

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Miles

Data Sources:
ESRI 2012, 2016;
E&E 2019; NAIP 2017;
Pickaway County 2019.
Savion 2019; ODNR 2018; USGS 2015.

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Solar Array

Inverter

Access Road

Substation

Existing Dayton Power and Light Company Atlanta Substation

O&M Building

Laydown Area

Overhead Generation Tie-Line

Collection Line

Gate

Fence

Project Area

One Mile Buffer

Highway

Other Major Road

Oil and Gas Well

Elevation Contour - 10 feet interval

Bedrock Geology

Salina Group (Ss)

Tymochtee and Greenfield Formations, Undivided (Stg)

N

E

S

W

Data Sources:

ESRI 2012, 2016;

E&E 2019; NAIP 2017;

Pickaway County 2019.

Savion 2019; ODNR 2018; USGS 2015.

Figure 8-2

Geologic and

Topographic Features

Atlanta Farms Solar Project

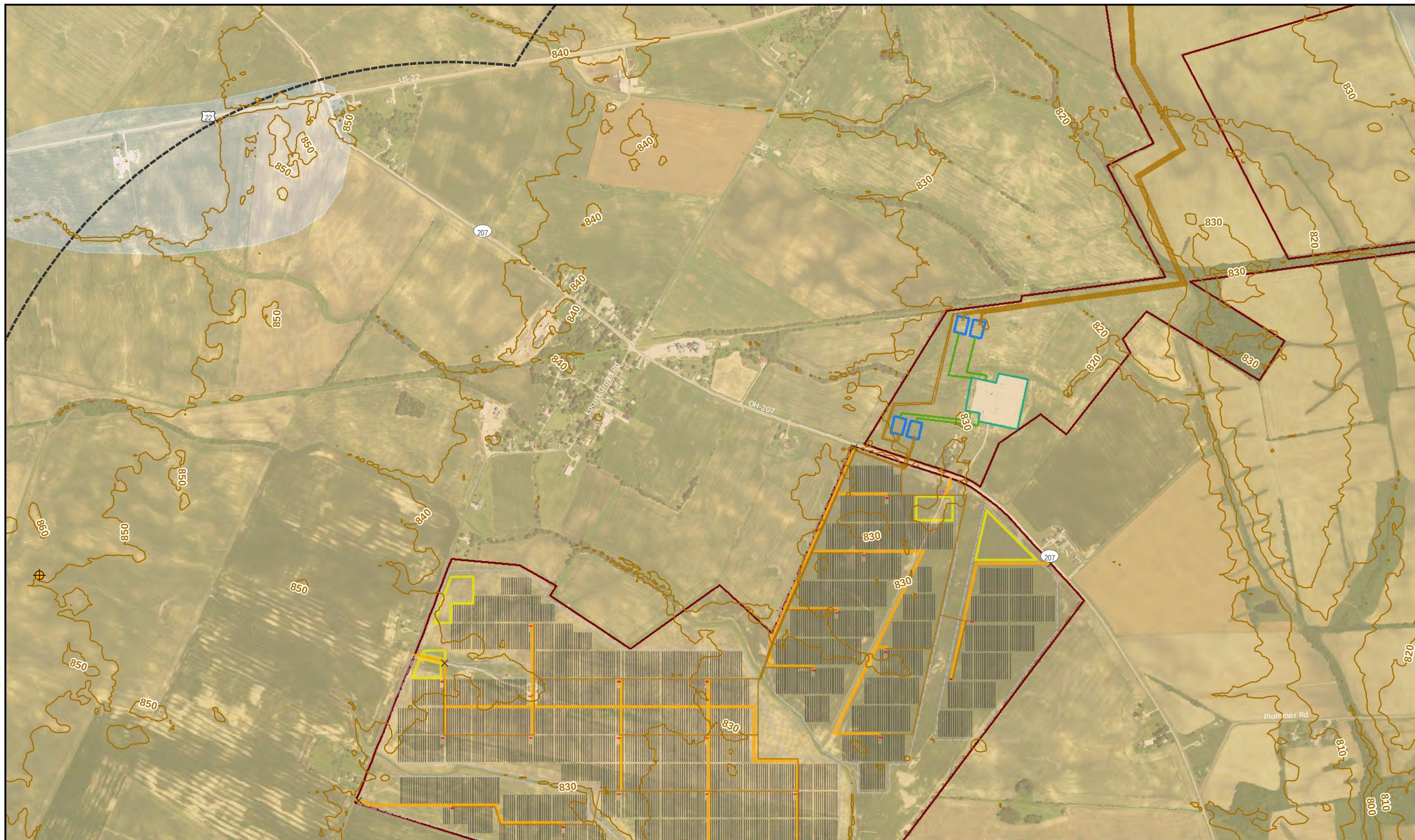
Page 9 of 15

Pickaway County, Ohio

0 0.05 0.1 0.2

Miles

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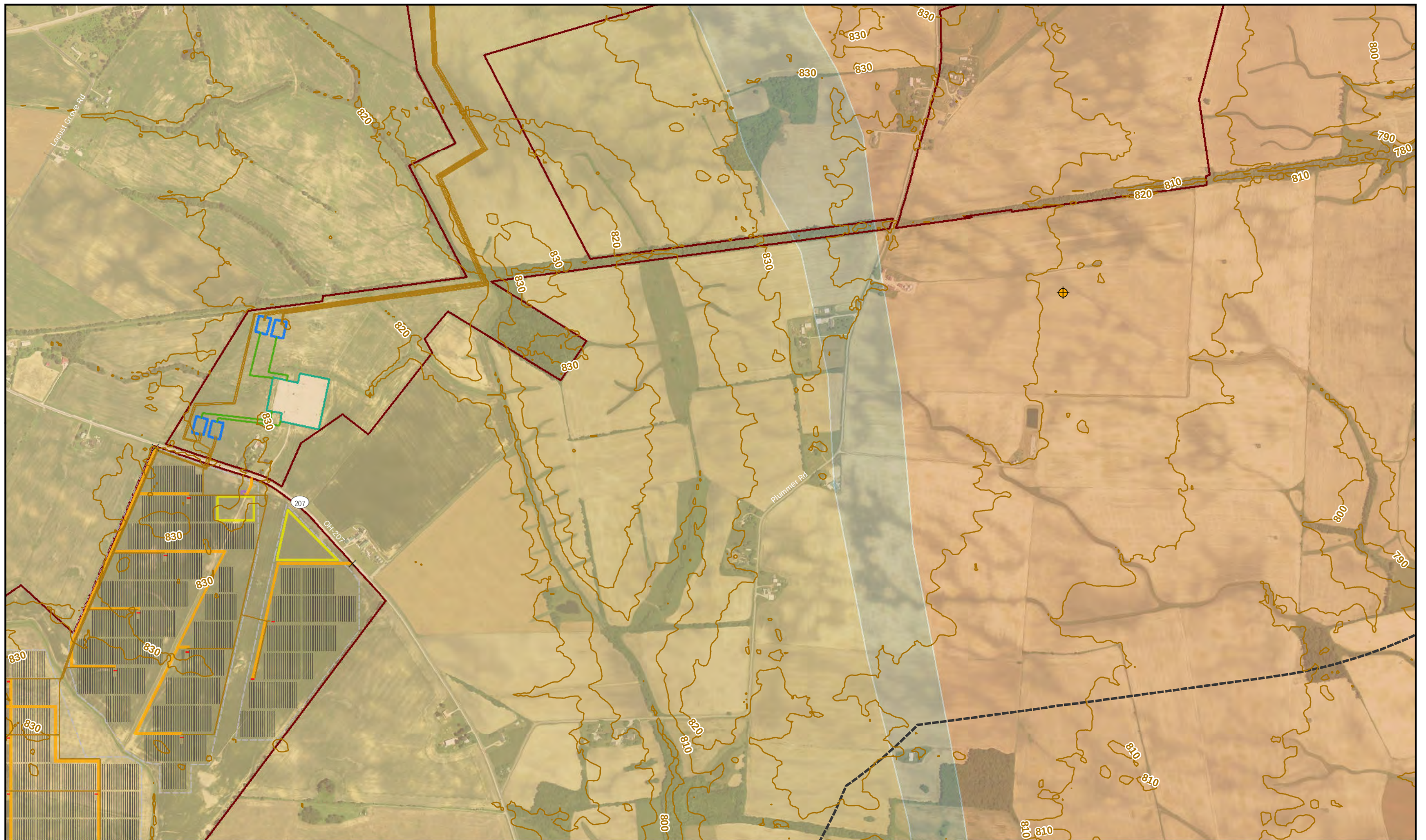
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| Inverter | Laydown Area | Fence | Elevation Contour - 10 feet interval |
| Access Road | Overhead Generation Tie-Line | Project Area | Bedrock Geology |
| Substation | Collection Line | One Mile Buffer | Columbus Limestone (Dc) |
| Existing Dayton Power and Light Company Atlanta Substation | | Highway | Salina Group (Ss) |
| | | Other Major Road | Tymochtee and Greenfield Formations, Undivided (Stg) |



Data Sources:
ESRI 2012, 2016;
E&E 2019; NAIP 2017;
Pickaway County 2019.
Savion 2019; ODNR 2018; USGS 2015.

Figure 8-2
Geologic and
Topographic Features
Atlanta Farms Solar Project
Page 10 of 15

Pickaway County, Ohio
0 0.05 0.1 0.2
Miles

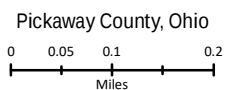


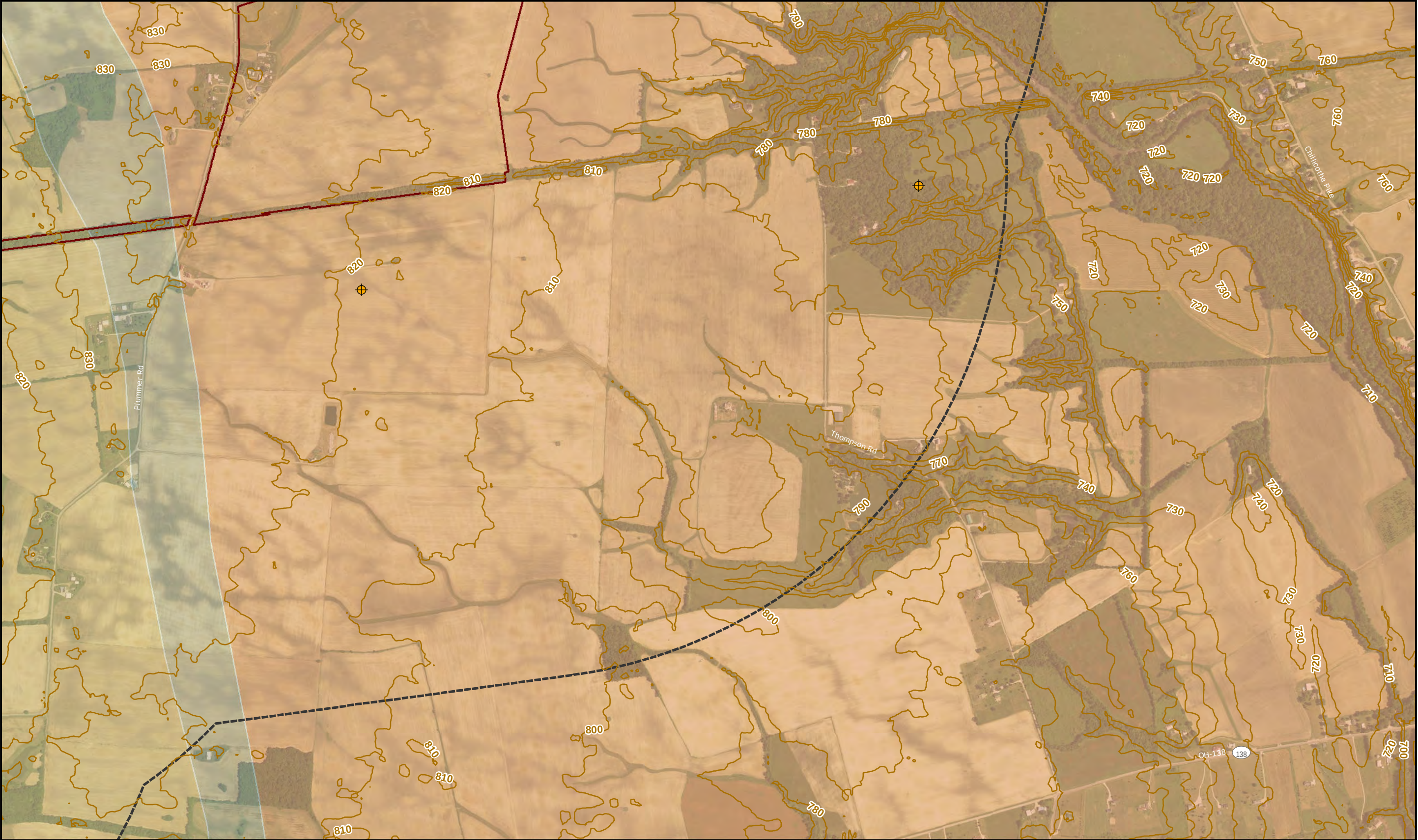
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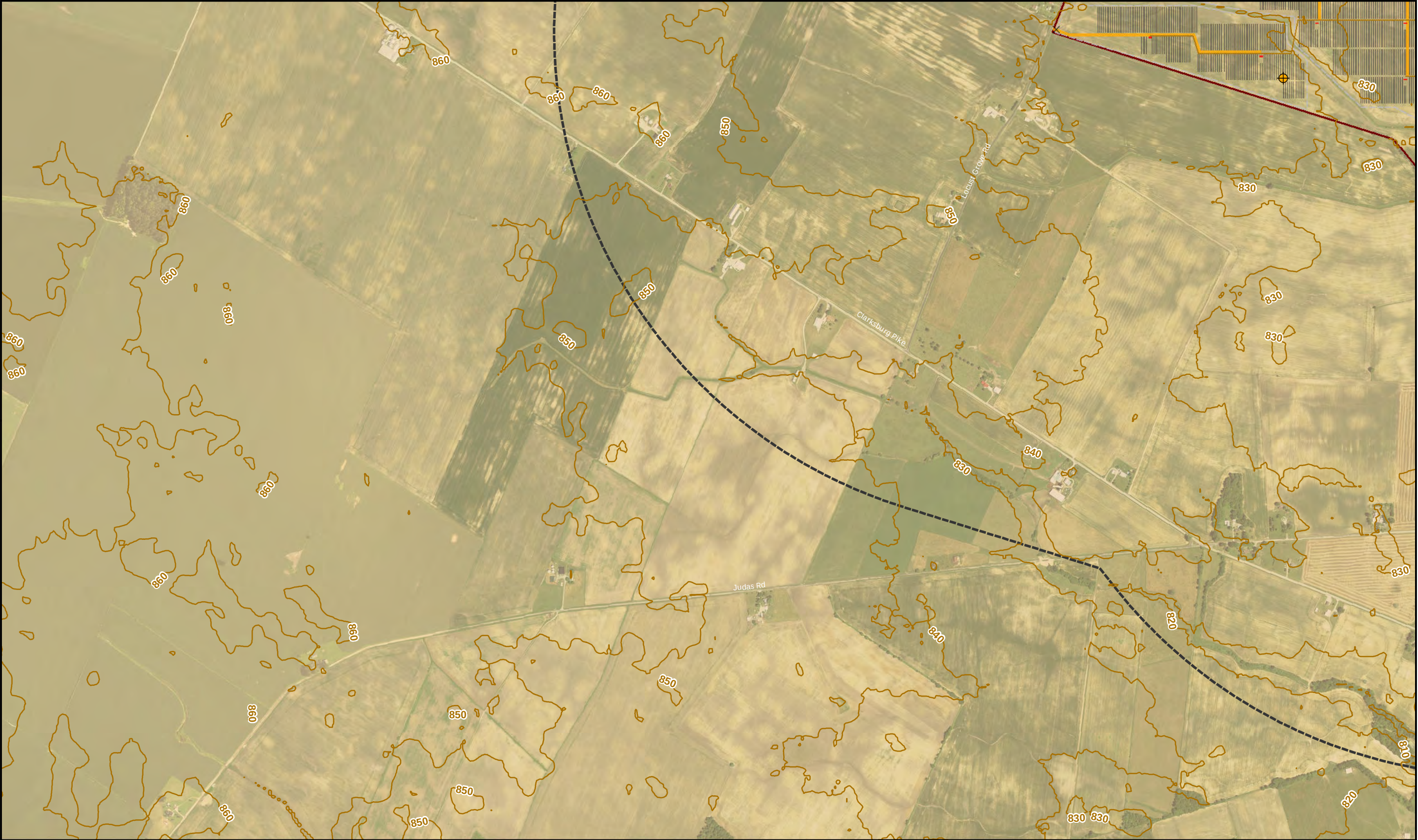


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E&E 2019; NAIP 2017;
Pickaway County 2019.
Savion 2019; ODNR 2018; USGS 2015.

Figure 8-2
Geologic and
Topographic Features
Atlanta Farms Solar Project
Page 11 of 15







Solar Array

Inverter

Access Road

Substation

Existing Dayton Power and Light Company Atlanta Substation

O&M Building

Laydown Area

Overhead Generation Tie-Line

Collection Line

Gate

Fence

Project Area

One Mile Buffer

Highway

Other Major Road

Oil and Gas Well

Elevation Contour - 10 feet interval

Bedrock Geology

Salina Group (Ss)

N

S

E

W

Data Sources:

ESRI 2012, 2016;

E&E 2019; NAIP 2017;

Pickaway County 2019.

Savion 2019; ODNR 2018; USGS 2015.

Figure 8-2

Geologic and

Topographic Features

Atlanta Farms Solar Project

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Pickaway County, Ohio

0

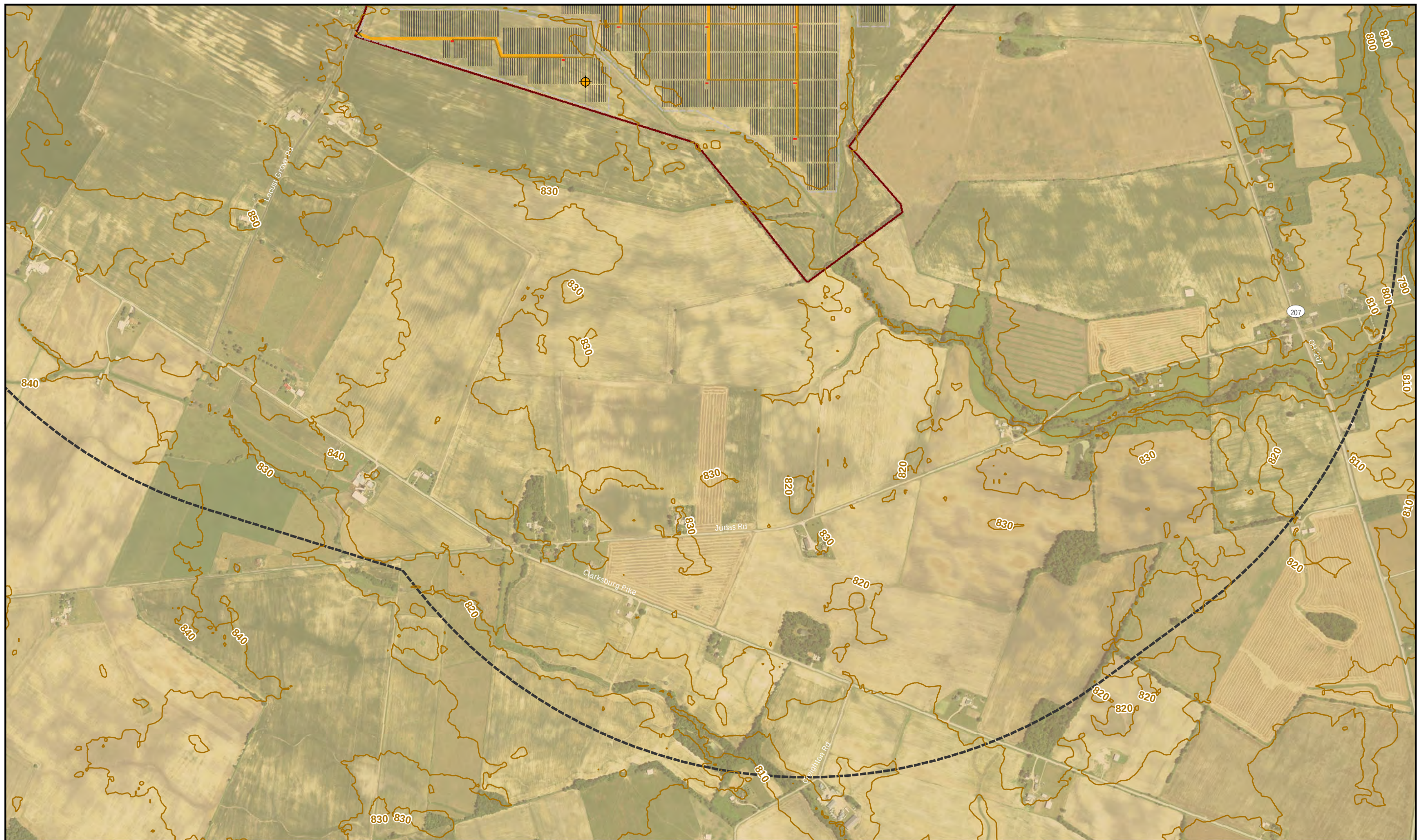
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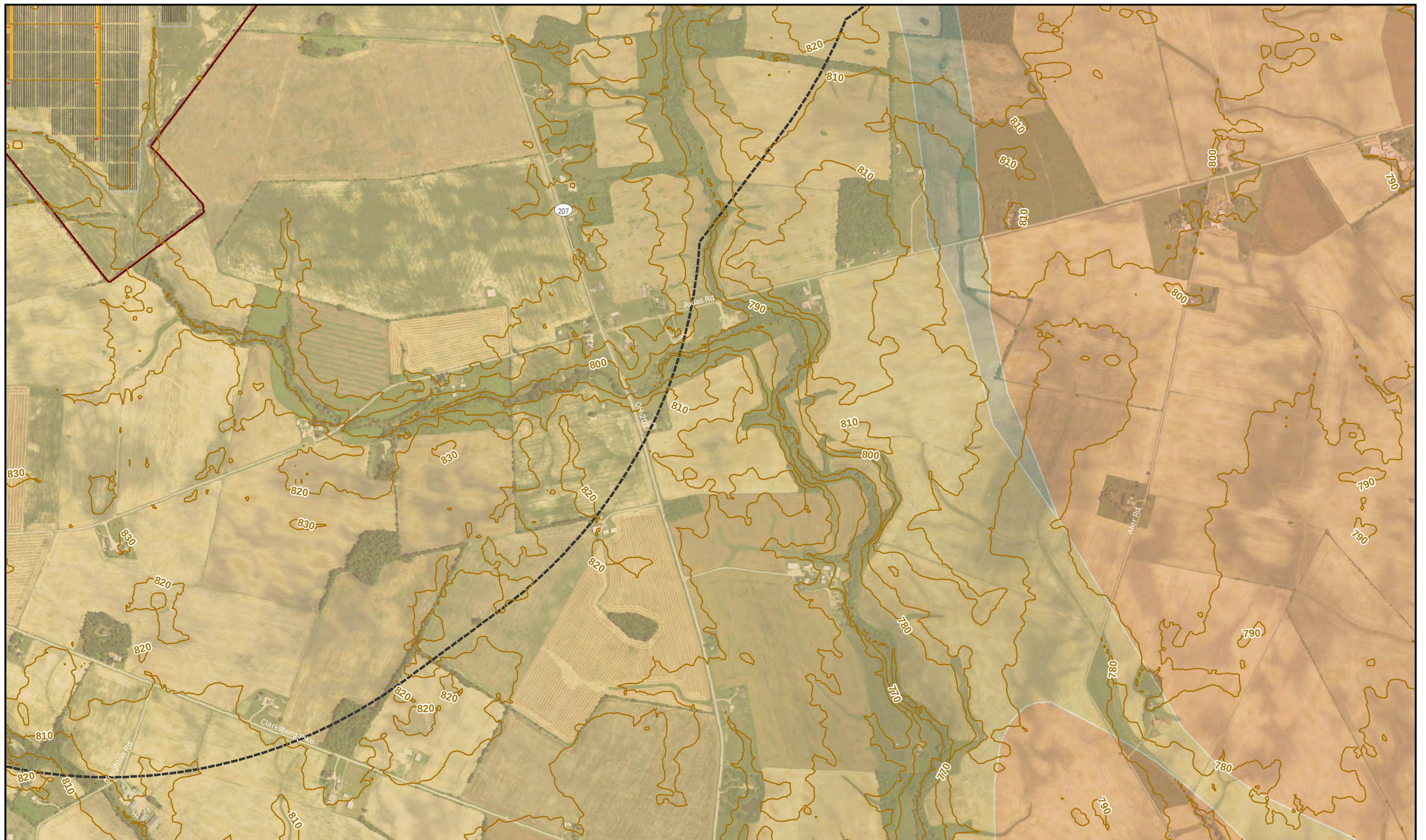
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| Inverter | Laydown Area | Fence | Elevation Contour - 10 feet interval |
| Access Road | Overhead Generation Tie-Line | Project Area | Bedrock Geology |
| Substation | Collection Line | One Mile Buffer | Salina Group (Ss) |
| Existing Dayton Power and Light Company Atlanta Substation | | Highway | |
| | | Other Major Road | |



Data Sources:
ESRI 2012, 2016;
E&E 2019; NAIP 2017;
Pickaway County 2019.
Savion 2019; ODNR 2018; USGS 2015.

Figure 8-2
Geologic and
Topographic Features
Atlanta Farms Solar Project
Page 14 of 15

Pickaway County, Ohio
0 0.05 0.1 0.2
Miles

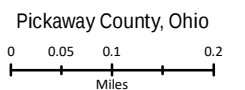


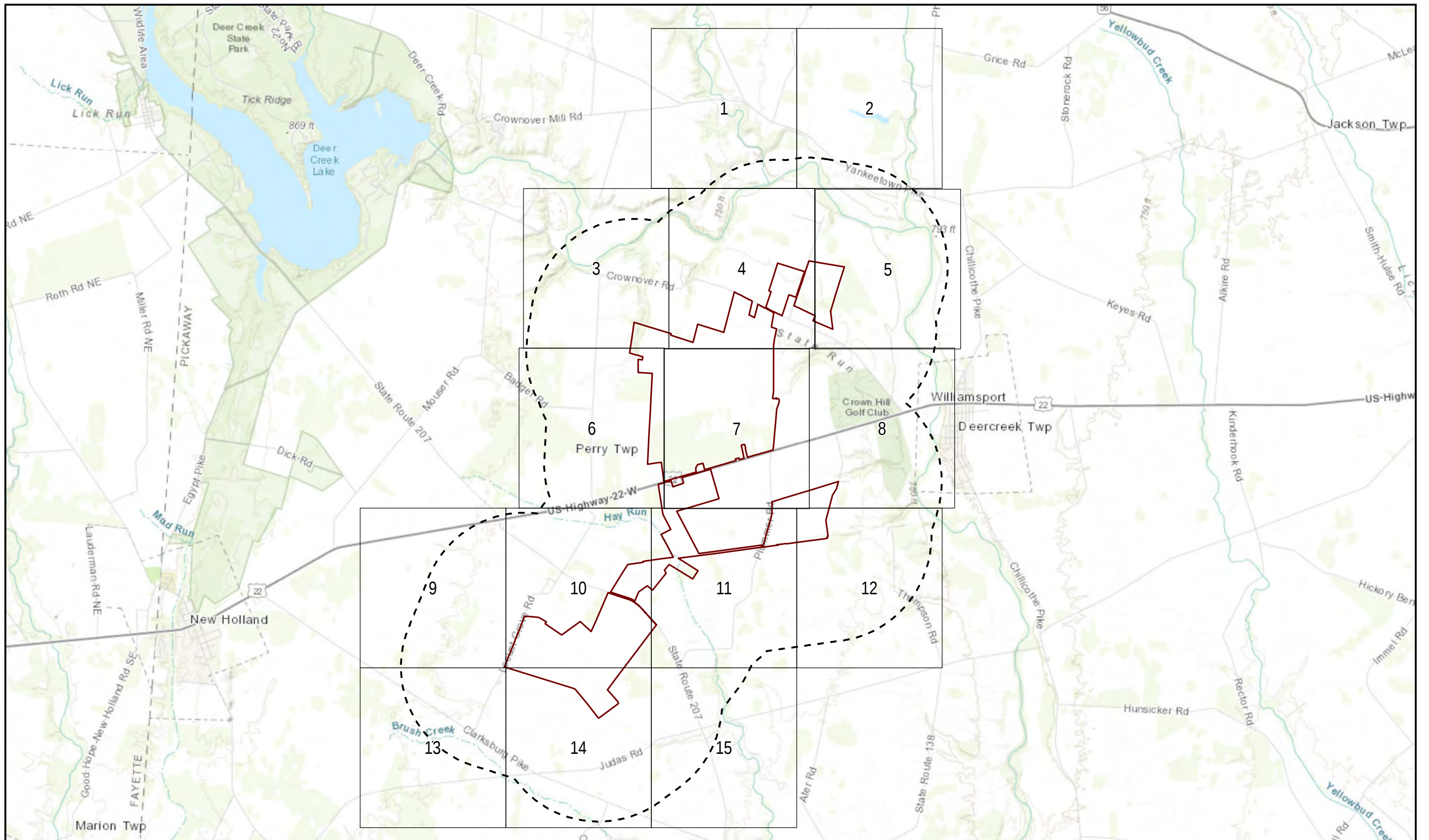
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|--|--|--|--|



Data Sources:
ESRI 2012, 2016;
E&E 2019; NAIP 2017;
Pickaway County 2019.
Savion 2019; ODNR 2018; USGS 2015.

Figure 8-2
Geologic and
Topographic Features
Atlanta Farms Solar Project
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One Mile Buffer
 Project Area
 Map Index

Figure 8-2
Geologic and
Topographic Features
Atlanta Farms Solar Project
Index Map

Pickaway County, Ohio

0 0.25 0.5 1
 Miles

Data Sources:
 ESRI 2012, 2016;
 E&E 2019; Savion 2019;
 Pickaway County 2019.

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Figure 08-3 Ecological Communities

Respectfully submitted,

/s/ Christine M.T. Pirik

Christine M.T. Pirik (0029759)

(Counsel of Record)

Terrence O'Donnell (0074213)

Dickinson Wright PLLC

150 East Gay Street, Suite 2400

Columbus, Ohio 43215

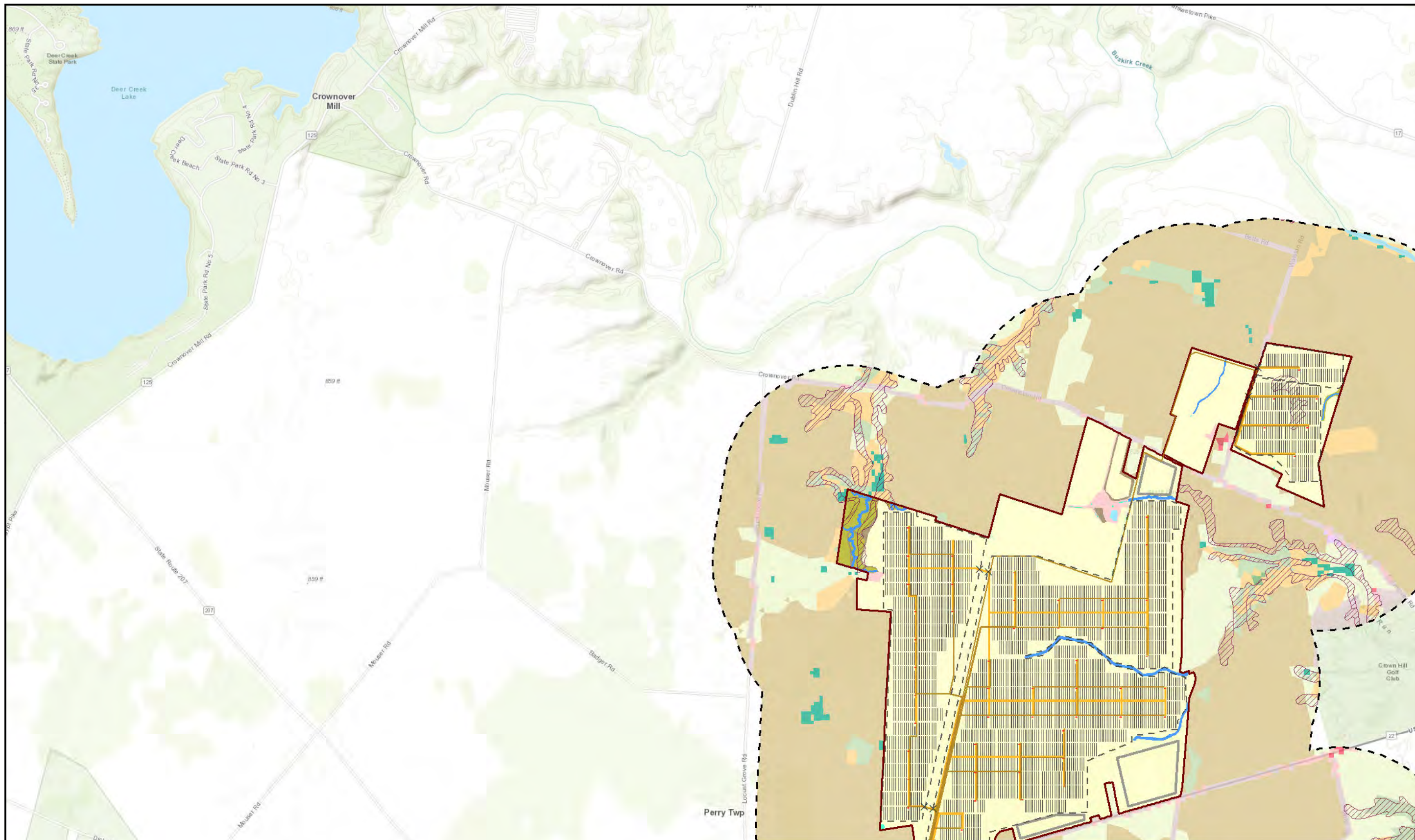
(614) 591-5461

cpirik@dickinsonwright.com

todonnell@dickinsonwright.com

(Counsel agrees to receive service by email.)

Attorneys for Atlanta Farms Solar Project, LLC



Solar Array

Inverter

Access Road

Substation

Existing Dayton Power and Light Company Atlanta Substation

O&M Building

Laydown Area

Overhead Generation Tie-Line

Collection Line

Fence

Gate

Soils with Representative Slope 12% or Greater

Half Mile Buffer

Project Area

E&E Field Delineated Features:

Agricultural

Agricultural Field Buffer

Developed

Oak-Hickory Forest

Old Field

Pond

Stream/Drain

Wetland

USGS NLCD Land Cover 2016 with ODNR Wetlands and NHD:

Cultivated Crops

Hay/Pasture

Herbaceous

Developed, Open Space

Developed, Low Intensity

Developed, Medium Intensity

Developed, High Intensity

Deciduous Forest

Evergreen Forest

Mixed Forest

NHD Stream/River

ODNR Wetland

Map Index

2

3

4

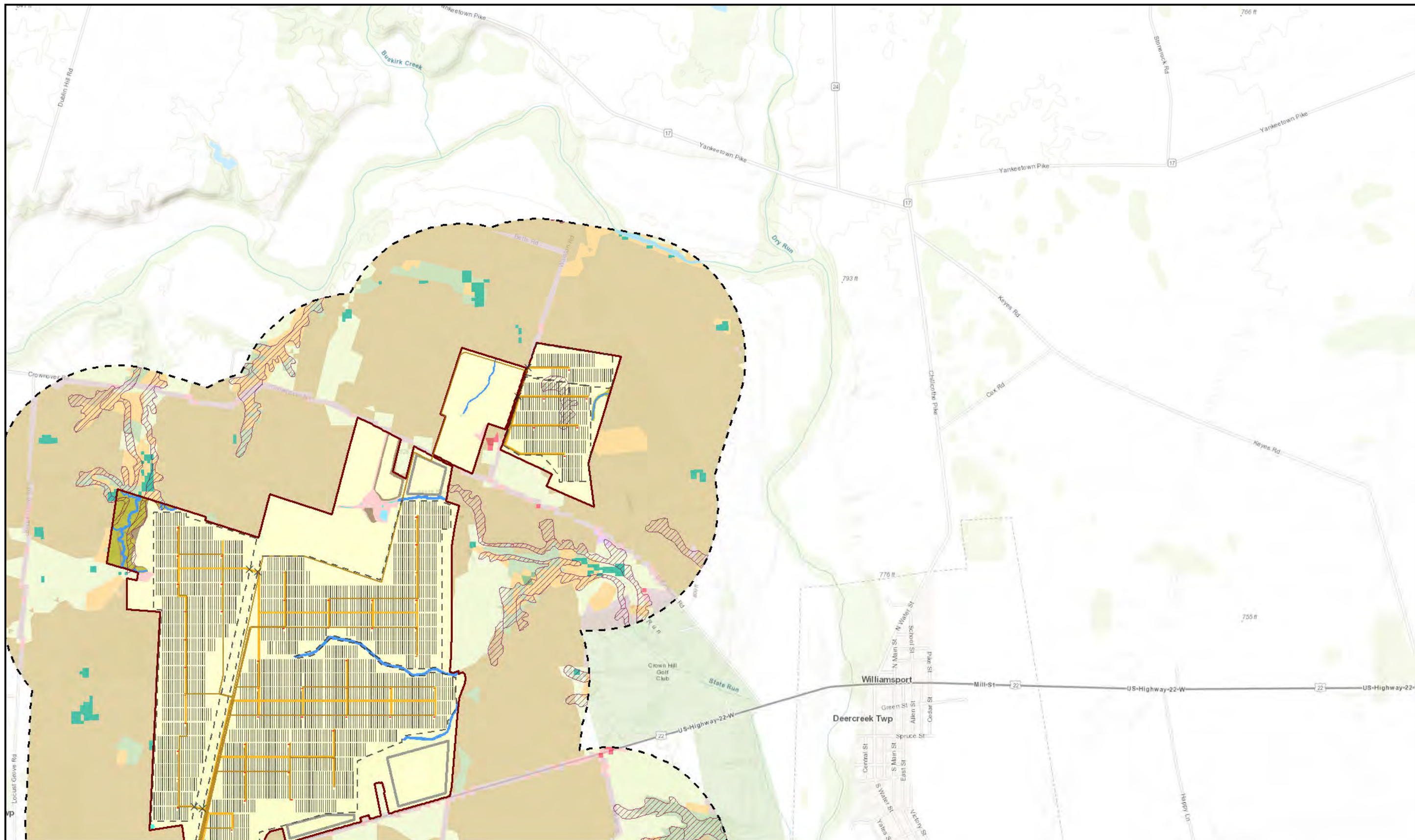
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Data Sources:
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E&E 2019; Savion 2019;
NHD 2019; ODNR 2012;
NLCD 2016; SSURGO 2018.

Figure 8-3
Ecological Communities
Atlanta Farms Solar Project
Page 1 of 4
Pickaway County, Ohio

0 0.1 0.2 0.4
Miles

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Solar Array

Inverter

Access Road

Substation

Existing Dayton Power and Light Company Atlanta Substation

O&M Building

Laydown Area

Overhead Generation Tie-Line

Collection Line

Fence

Gate

Soils with Representative Slope 12% or Greater

Half Mile Buffer

Project Area

E&E Field Delineated Features:

Agricultural

Agricultural Field Buffer

Developed

Oak-Hickory Forest

Old Field

Pond

Stream/Drain

Wetland

USGS NLCD Land Cover 2016 with ODNR Wetlands and NHD:

Cultivated Crops

Hay/Pasture

Herbaceous

Developed, Open Space

Developed, Low Intensity

Developed, Medium Intensity

Developed, High Intensity

Deciduous Forest

Evergreen Forest

Mixed Forest

NHD Stream/River

ODNR Wetland

Map Index

N

E

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Miles

Figure 8-3

Ecological Communities

Atlanta Farms Solar Project

Page 2 of 4

Pickaway County, Ohio

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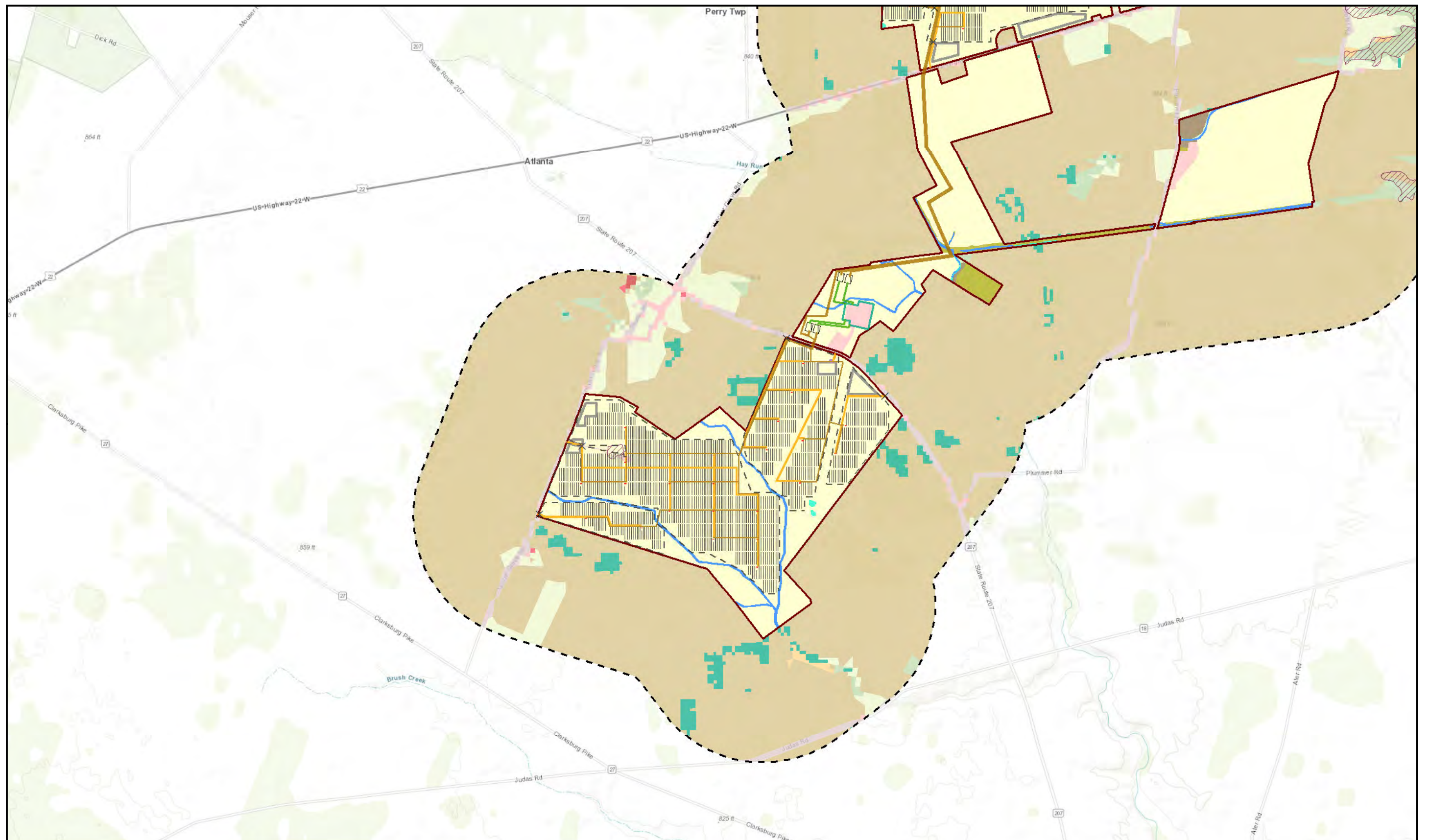
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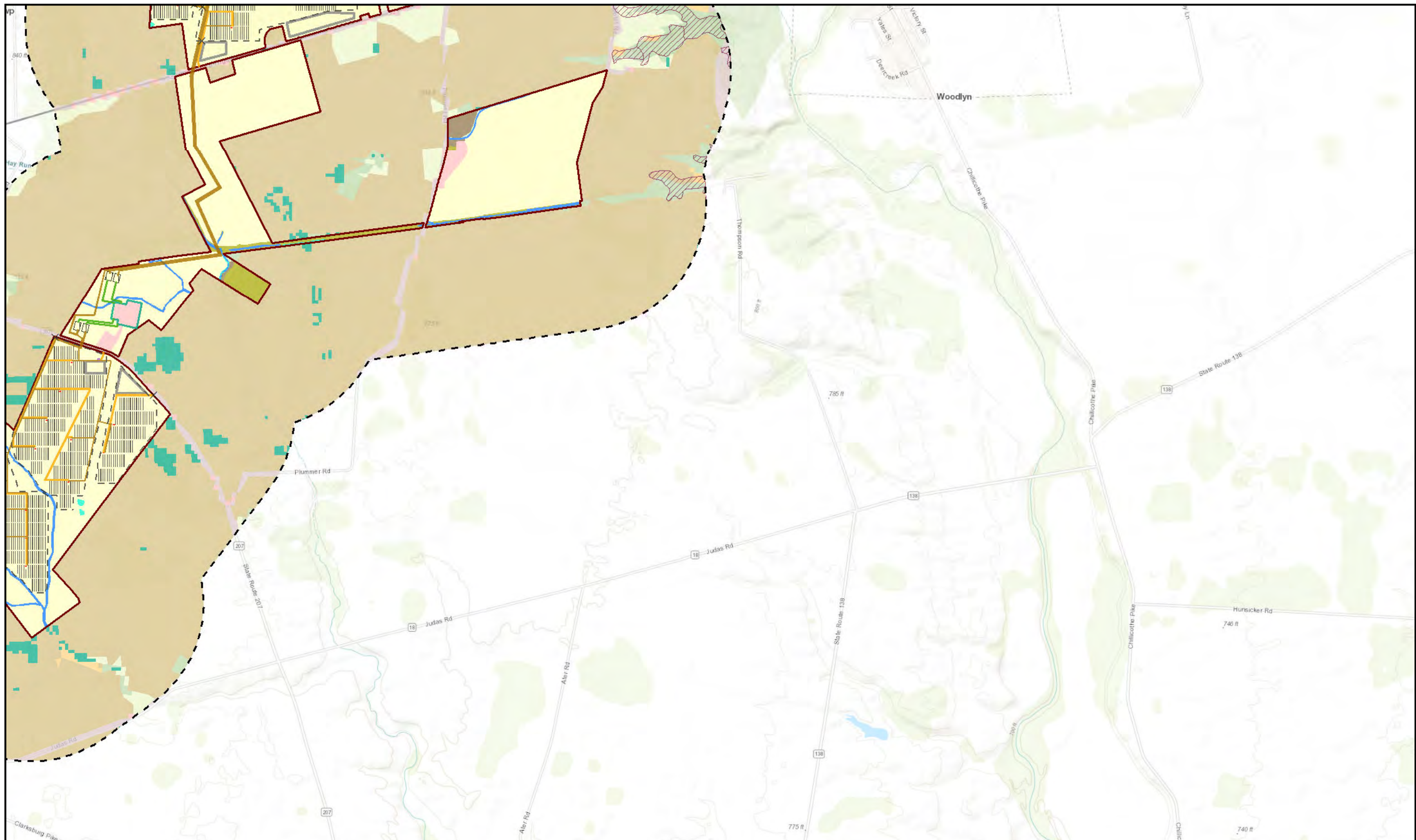
NLCD 2016; SSURGO 2018.

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- Solar Array - Inverter - Access Road - Substation - Existing Dayton Power and Light Company Atlanta Substation - O&M Building - Laydown Area	- Overhead Generation Tie-Line - Collection Line - Fence - Gate - Soils with Representative Slope 12% or Greater - Half Mile Buffer - Project Area	E&E Field Delineated Features: - Agricultural - Agricultural Field Buffer - Developed - Oak-Hickory Forest - Old Field - Pond - Stream/Drain - Wetland	USGS NLCD Land Cover 2016 with ODNR Wetlands and NHD: - Cultivated Crops - Hay/Pasture - Herbaceous - Developed, Open Space - Developed, Low Intensity - Developed, Medium Intensity - Developed, High Intensity - Deciduous Forest - Evergreen Forest - Mixed Forest - NHD Stream/River - ODNR Wetland	Map Index	North Arrow Scale: 0 0.1 0.2 0.4 Miles Data Sources: ESRI 2012, 2016; E&E 2019; Savion 2019; NHD 2019; ODNR 2012; NLCD 2016; SSURGO 2018.	Figure 8-3 Ecological Communities Atlanta Farms Solar Project Page 3 of 4 Pickaway County, Ohio
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- Solar Array - Inverter - Access Road - Substation - Existing Dayton Power and Light Company Atlanta Substation - O&M Building - Laydown Area	- Overhead Generation Tie-Line - Collection Line - Fence - Gate - Soils with Representative Slope 12% or Greater - Half Mile Buffer - Project Area	E&E Field Delineated Features: - Agricultural - Agricultural Field Buffer - Developed - Oak-Hickory Forest - Old Field - Pond - Stream/Drain - Wetland	USGS NLCD Land Cover 2016 with ODNR Wetlands and NHD: - Cultivated Crops - Hay/Pasture - Herbaceous - Developed, Open Space - Developed, Low Intensity - Developed, Medium Intensity - Developed, High Intensity - Deciduous Forest - Evergreen Forest - Mixed Forest - NHD Stream/River - ODNR Wetland	Map Index	North Arrow Data Sources: ESRI 2012, 2016; E&E 2019; Savion 2019; NHD 2019; ODNR 2012; NLCD 2016; SSURGO 2018.	Figure 8-3 Ecological Communities Atlanta Farms Solar Project Page 4 of 4 Pickaway County, Ohio 0 0.1 0.2 0.4 Miles
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Figure 08-4 Field Survey

Respectfully submitted,

/s/ Christine M.T. Pirik

Christine M.T. Pirik (0029759)

(Counsel of Record)

Terrence O'Donnell (0074213)

Dickinson Wright PLLC

150 East Gay Street, Suite 2400

Columbus, Ohio 43215

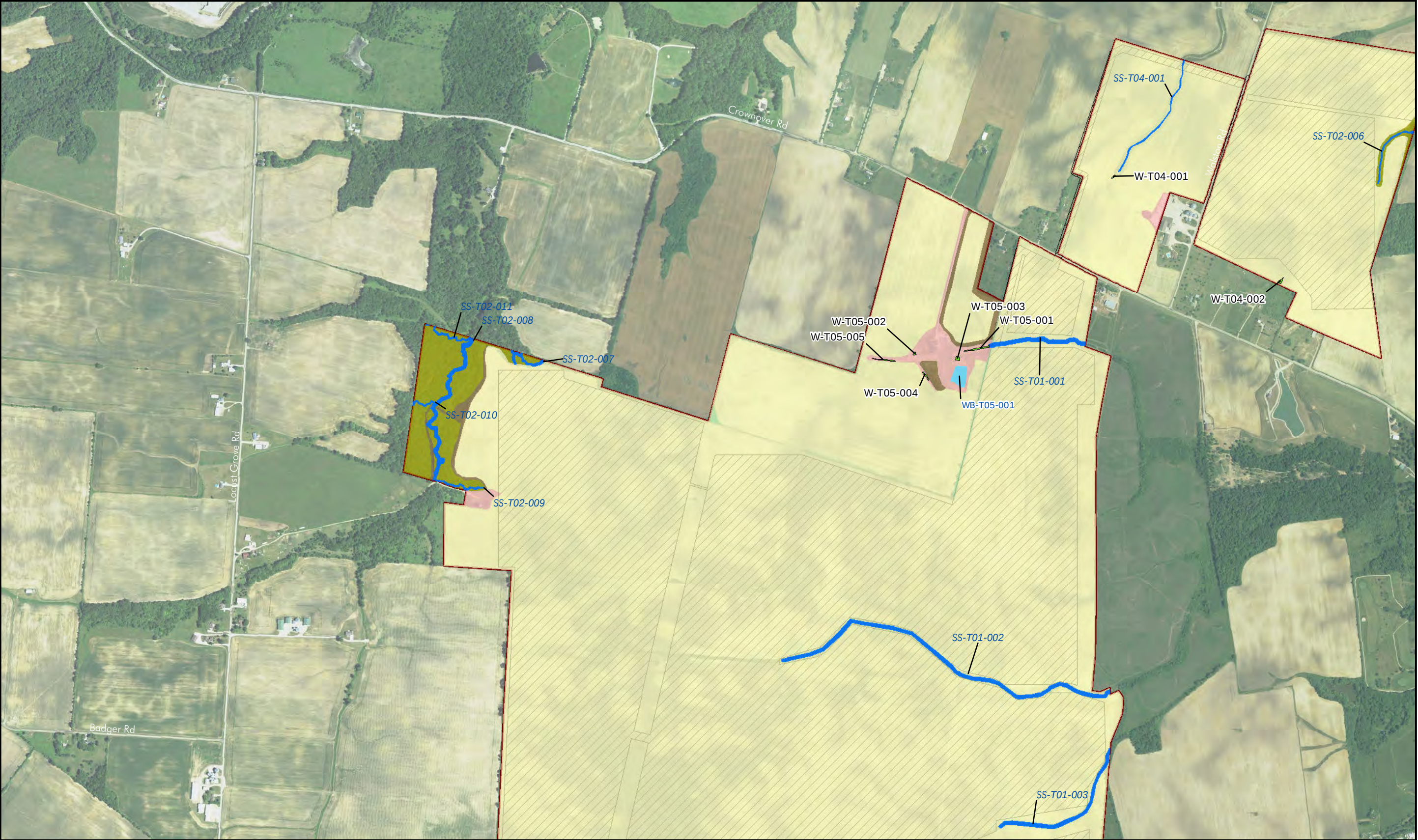
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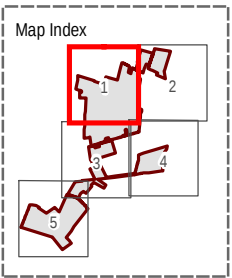
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Attorneys for Atlanta Farms Solar Project, LLC



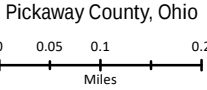
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| E&E Field Delineated Features: | E&E Field Delineated Habitat | Construction Impact Area |
| Stream | Agricultural | Project Area |
| Pond | Agricultural Field Buffer | Highway |
| Drain | Developed | Other Major Road |
| Wetland Class | Oak-Hickory Forest | |
| Palustrine Emergent (PEM) | Old Field | |
| Palustrine Forested (PFO) | | |
| Wetland Boundary Line | | |

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Data Sources:
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NAIP 2017; E&E 2019;
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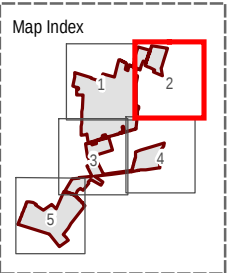
Figure 8-4
Field Survey
Atlanta Farms Solar Project
Page 1 of 5





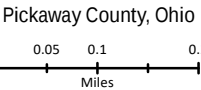
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| E&E Field Delineated Features: | E&E Field Delineated Habitat | Construction Impact Area |
| Stream | Agricultural | Project Area |
| Pond | Agricultural Field Buffer | Highway |
| Drain | Developed | Other Major Road |
| Wetland Class | Oak-Hickory Forest | |
| Palustrine Emergent (PEM) | Old Field | |
| Palustrine Forested (PFO) | | |
| Wetland Boundary Line | | |

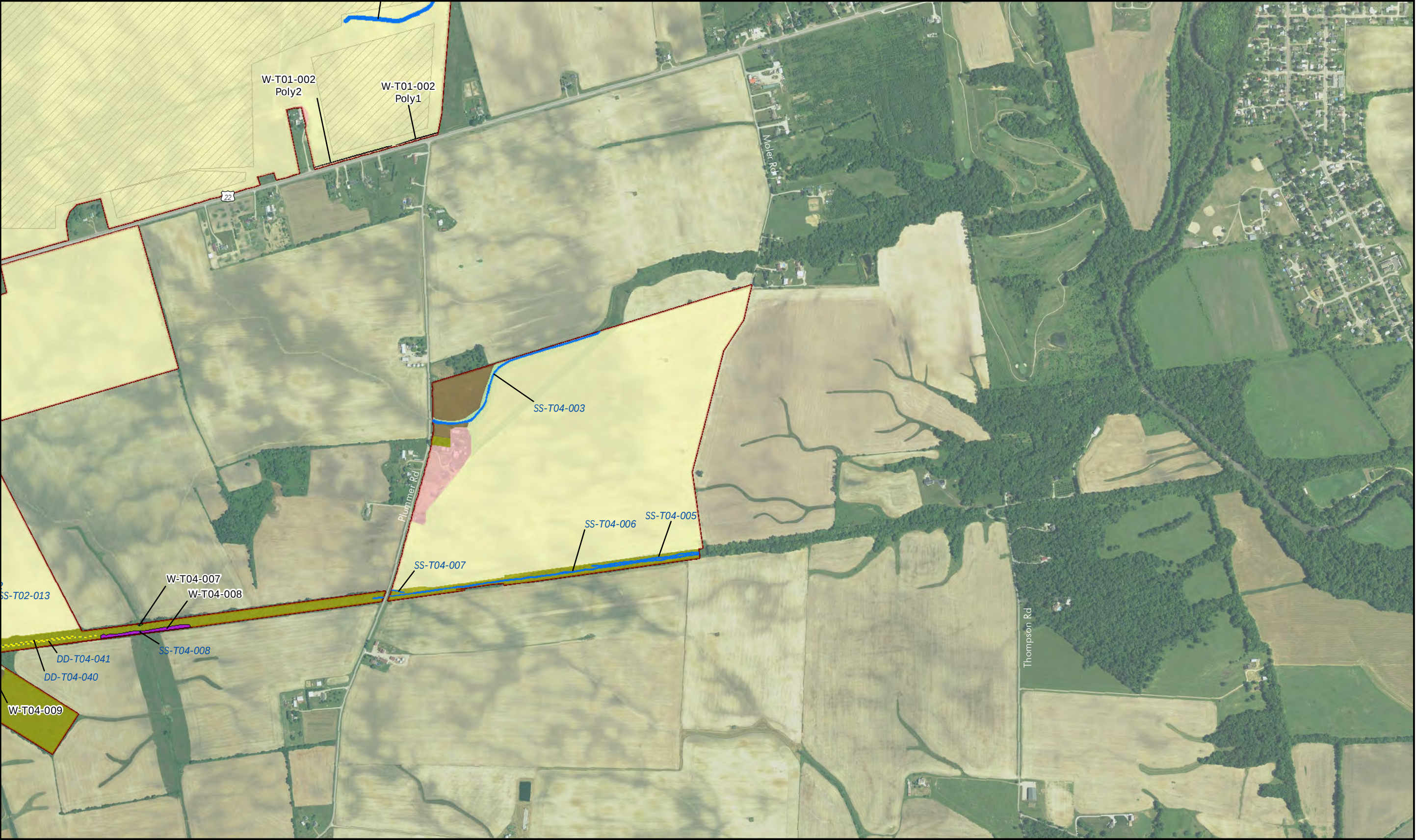
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Data Sources:
ESRI 2012, 2016;
NAIP 2017; E&E 2019;
Savion 2019; Pickaway County 2019.

Figure 8-4
Field Survey
Atlanta Farms Solar Project
Page 2 of 5





- E&E Field Delineated Features:

 - Stream
 - Pond
 - Drain

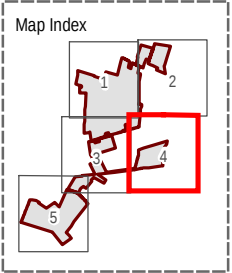
Wetland Class

 - Palustrine Emergent (PEM)
 - Palustrine Forested (PFO)
 - Wetland Boundary Line
- E&E Field Delineated Habitat

 - Agricultural
 - Agricultural Field Buffer
 - Developed
 - Oak-Hickory Forest
 - Old Field
- Construction Impact Area

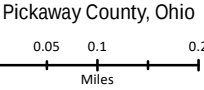
 - Project Area
 - Highway
 - Other Major Road

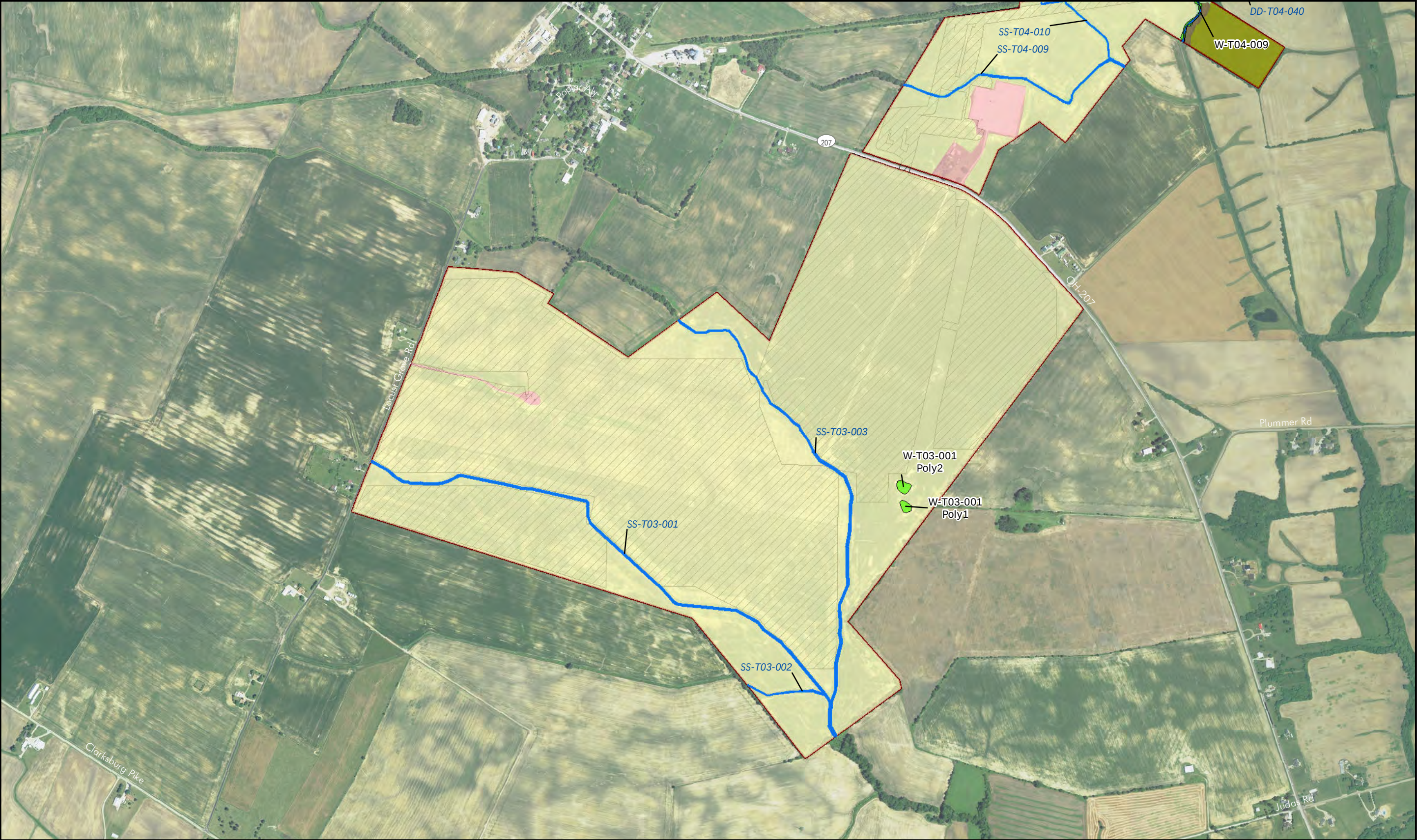
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NAIP 2017; E&E 2019;
Savion 2019; Pickaway County 2019.

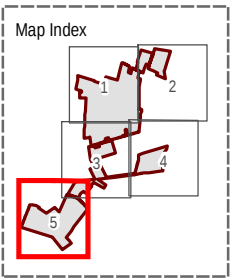
Figure 8-4
Field Survey
Atlanta Farms Solar Project
Page 4 of 5





E&E Field Delineated Features:		E&E Field Delineated Habitat	Construction Impact Area
Stream		Agricultural	Project Area
Pond		Agricultural Field Buffer	Highway
Drain		Developed	Other Major Road
Wetland Class		Oak-Hickory Forest	
Palustrine Emergent (PEM)		Old Field	
Palustrine Forested (PFO)			
Wetland Boundary Line			

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Data Sources:
ESRI 2012, 2016;
NAIP 2017; E&E 2019;
Savion 2019; Pickaway County 2019.

Figure 8-4
Field Survey
Atlanta Farms Solar Project
Page 5 of 5

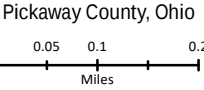


Figure 08-5

Land Use

Respectfully submitted,

/s/ Christine M.T. Pirik

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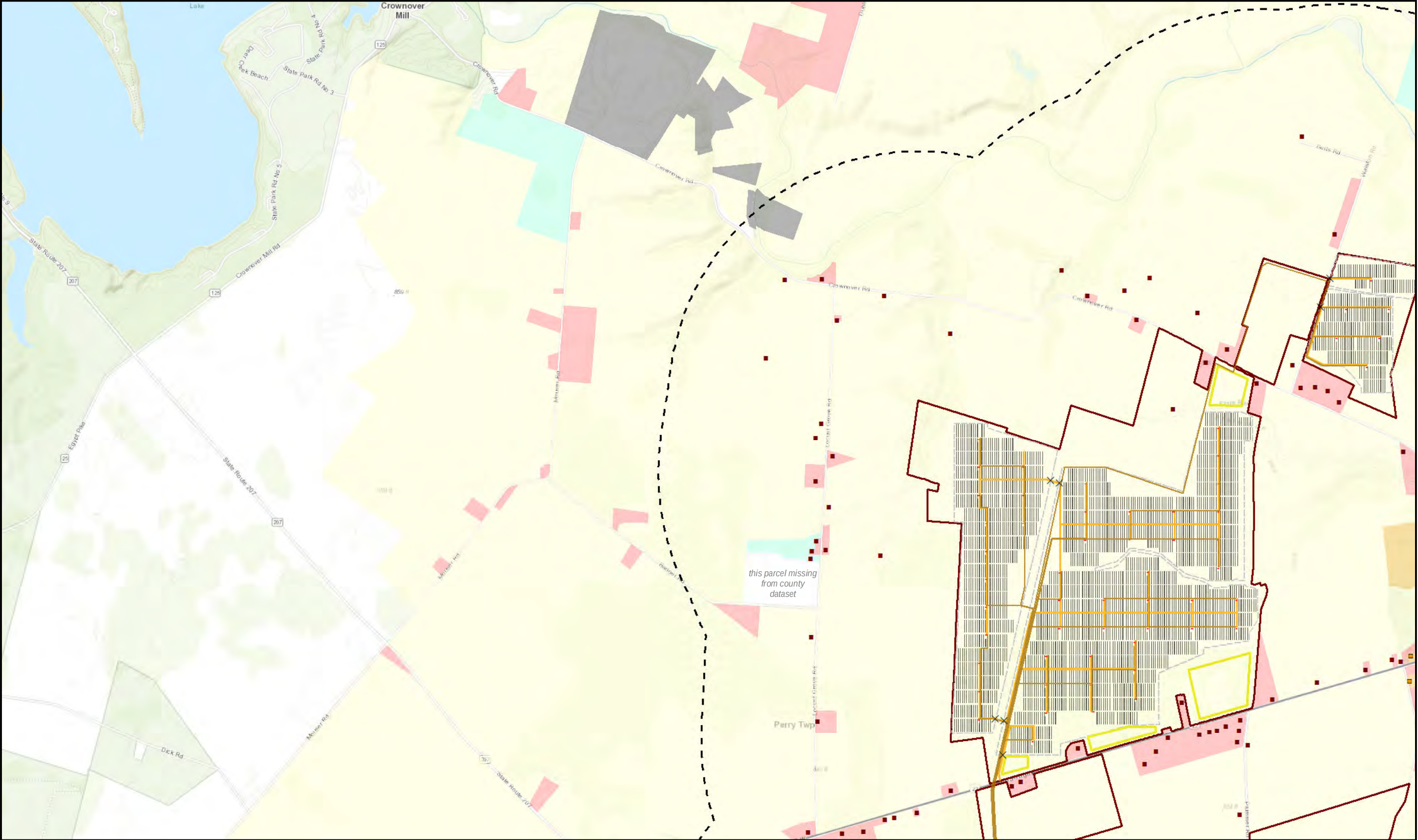
(614) 591-5461

cpirik@dickinsonwright.com

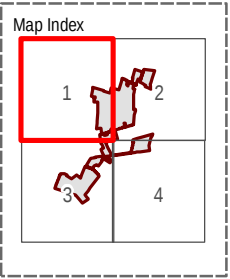
todonnell@dickinsonwright.com

(Counsel agrees to receive service by email.)

Attorneys for Atlanta Farms Solar Project, LLC



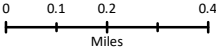
- | | | | | |
|--|------------------------------|-----------------|----------------------|---------------------|
| Solar Array | O&M Building | Project Area | Parcel Land Use Data | Church |
| Inverter | Laydown Area | One Mile Buffer | Agricultural | Commercial Building |
| Access Road | Overhead Generation Tie-Line | | Commercial | Residence |
| Substation | Collection Line | | Residential | Populated Place |
| Existing Dayton Power and Light Company Atlanta Substation | Fence | | Exempt | |
| | Gate | | Industrial | |
| | | | Unknown | |

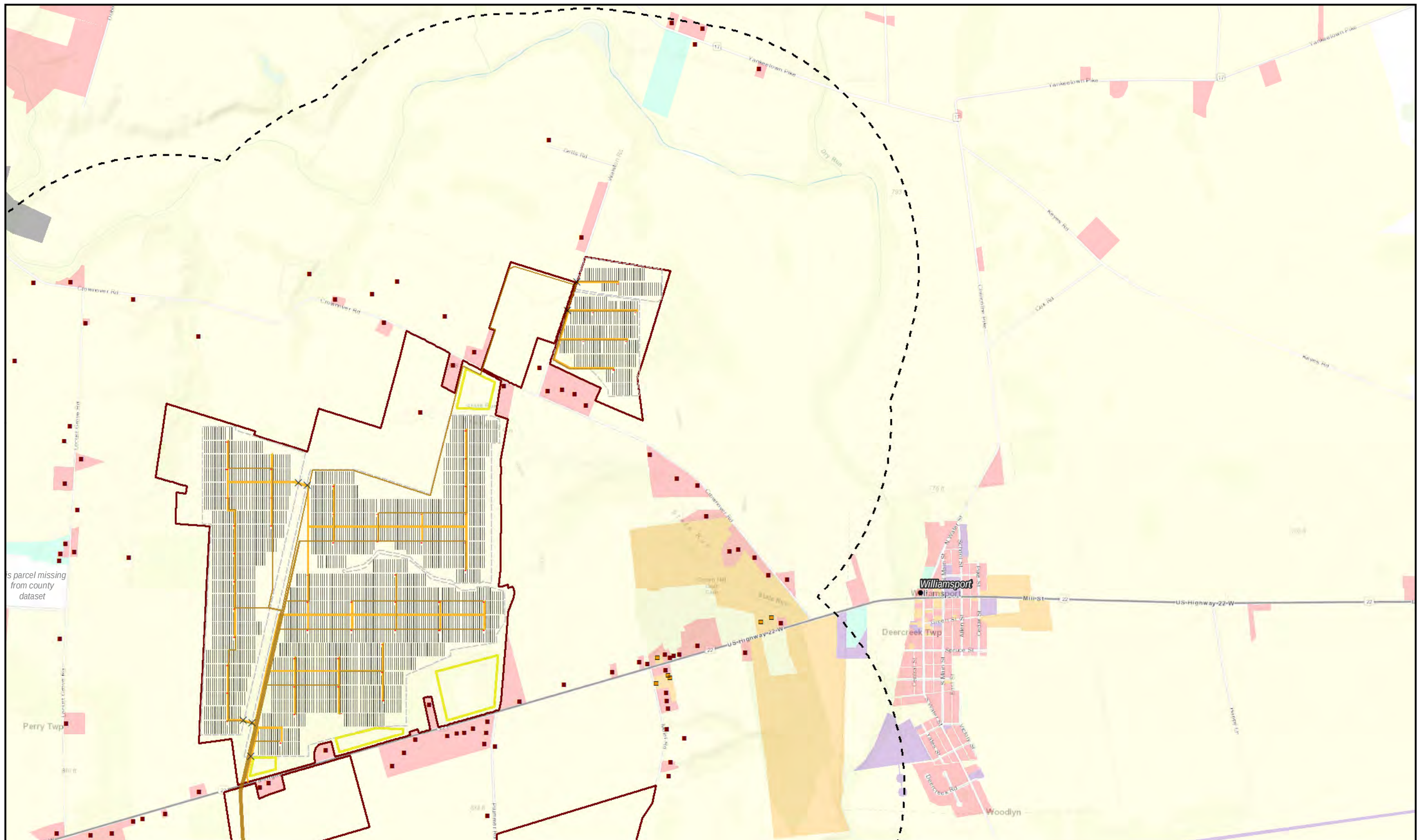


Data Sources:
ESRI 2012, 2016;
E&E 2019; Savion 2019;
Pickaway County 2019.

Figure 8-5
Land Use
Atlanta Farms Solar Project
Page 1 of 4

Pickaway County, Ohio

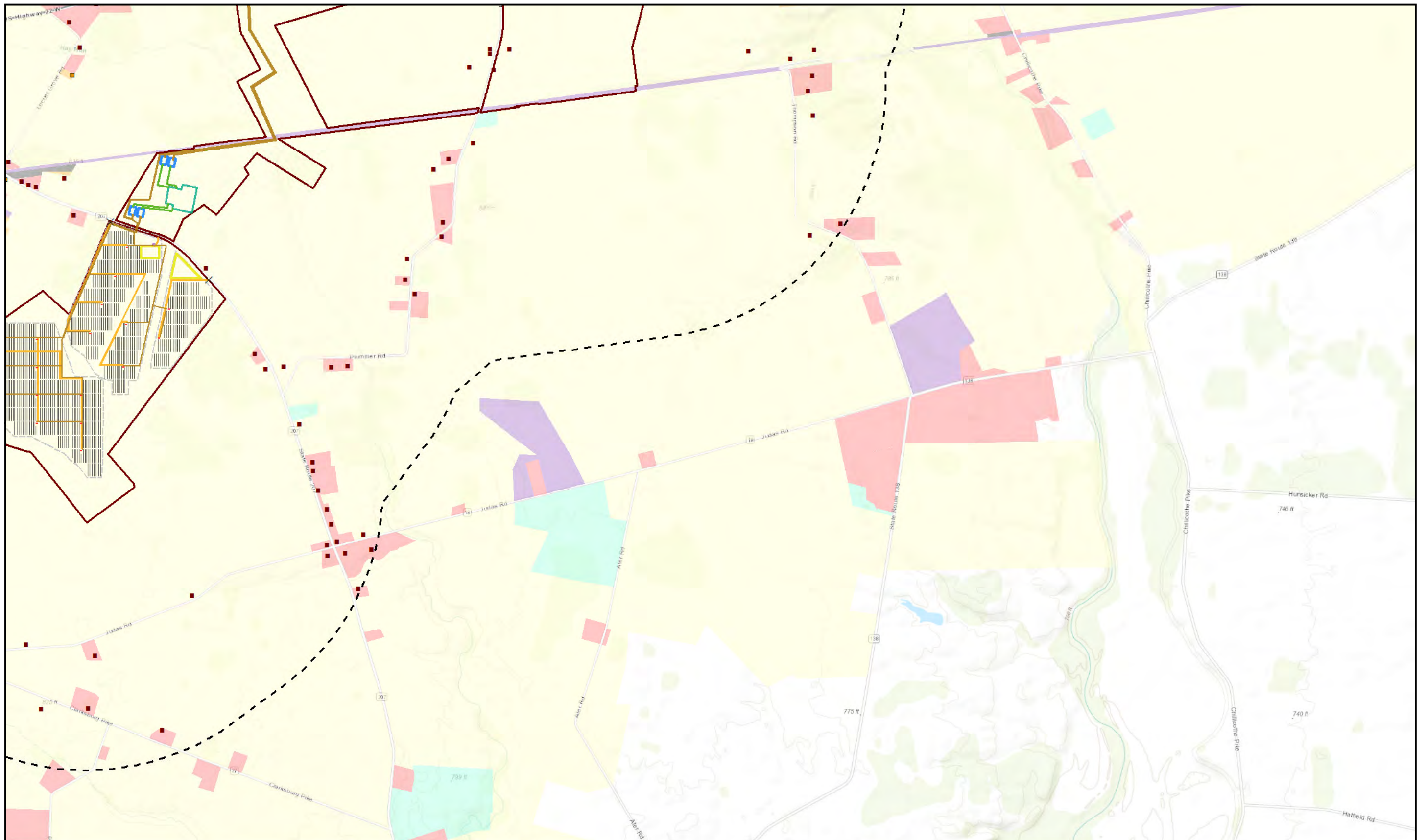




- Solar Array - Inverter - Access Road - Substation - Existing Dayton Power and Light Company Atlanta Substation	- O&M Building - Laydown Area - Overhead Generation Tie-Line - Collection Line - Fence - Gate	- Project Area - One Mile Buffer	Parcel Land Use Data - Agricultural - Commercial - Residential - Exempt - Industrial - Unknown	- Church - Commercial Building - Residence - Populated Place	Map Index 		Figure 8-5 Land Use Atlanta Farms Solar Project Page 2 of 4 Pickaway County, Ohio 0 0.1 0.2 0.4 Miles
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Data Sources:
 ESRI 2012, 2016;
 E&E 2019; Savion 2019;
 Pickaway County 2019.



Solar Array

Inverter

Access Road

Substation

Existing Dayton Power and Light Company Atlanta Substation

O&M Building

Laydown Area

Overhead Generation Tie-Line

Collection Line

Fence

Gate

Project Area

One Mile Buffer

Agricultural

Commercial

Residential

Exempt

Industrial

Unknown

Church

Commercial Building

Residence

Populated Place

Document Path: M:\Chicago\Savion\Atlanta_Farms\Maps\MXD\Report\OPSB_11x17\8_5_Landuse.mxd 1/22/2020

Map Index

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Data Sources:
ESRI 2012, 2016;
E&E 2019; Savion 2019;
Pickaway County 2019.

Figure 8-5
Land Use
Atlanta Farms Solar Project
Page 4 of 4

Pickaway County, Ohio

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Case No(s). 19-1880-EL-BGN

Summary: Application - Part 1 of 11 (Letter, Affidavit, Narrative and Figures 03-1 - 08-5)
electronically filed by Christine M.T. Pirik on behalf of Atlanta Farms Solar Project, LLC