

APPLICATION TO THE OHIO POWER SITING BOARD

FOR AN AMENDMENT TO THE CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR

Powell Creek Solar

Putnam County, Ohio

Case No. 22-0915-EL-BGA

Prepared for:



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October 2022



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October 19, 2022

Via Electronic Filing

Ms. Tanowa Troupe
Administration/Docketing
Ohio Power Siting Board
180 East Broad Street, 11th Floor
Columbus, Ohio 43215-3793

**Re: Powell Creek Solar, LLC,
OPSB Case No. 22-915-EL-BGA**

Dear Ms. Troupe:

Enclosed for filing in the above-referenced case is a copy of the Application of Powell Creek Solar, LLC (“Powell Creek”) for an amendment to its Certificate of Environmental Compatibility and Public Need to develop, construct, and operate a 150 megawatt (“MW”) solar-powered electric facility in Liberty and Palmer Townships, Putnam County, Ohio issued in Case No. 20-1084-EL-BGN

Name of Applicant: Powell Creek Solar, LLC
whose authorized representative is:
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**Name/Location of
Proposed Facility:** Powell Creek Solar, LLC
150 MW Solar-Powered Electric Facility
Liberty and Palmer Townships, Putnam County, Ohio

Case No. 20-1084-EL-BGN

October 19, 2022

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Notarized Statement:

See Attached Affidavit of Jeffrey J. Reinkemeyer,
on behalf of Powell Creek Solar, LLC

Sincerely on behalf of
POWELL CREEK SOLAR, LLC



Dylan F. Borchers
Kara H. Herrnstein

Enclosure

**BEFORE
THE OHIO POWER SITING BOARD**

In the Matter of the Application of Powell)	
Creek Solar, LLC for an Amendment to its)	
Certificate of Environmental Compatibility and)	Case No. 22-0915-EL-BGA
Public Need for a Solar Facility Located in)	
Putnam County, Ohio.)	

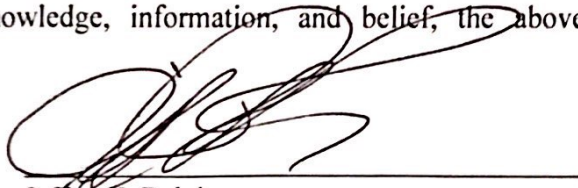
AFFIDAVIT OF JEFFREY J. REINKEMEYER OF AVANGRID RENEWABLES

STATE OF ILLINOIS :
 : ss.
COUNTY OF KNOW :

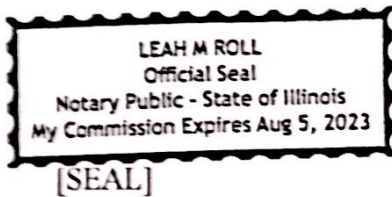
I, Jeffrey J. Reinkemeyer, being duly sworn and cautioned, state that I am over 18 years of age and competent to testify to the matters stated in this affidavit and further state the following based upon my personal knowledge:

1. I am the Director, Mid Continent Renewables Development of Avangrid Renewables, LLC a subsidiary of Avangrid, Inc. and part of IBERDROLA Group ("Avangrid").
2. Avangrid is the sole owner of Powell Creek Solar, LLC ("Powell Creek").
3. Powell Creek's Application to the Ohio Power Siting Board to amend its Certificate of Environmental Compatibility and Public Need to develop, construct, and operate a 150 megawatt ("MW") solar-powered electric facility was prepared and reviewed by Avangrid employees that are the primary individuals in charge of the development of Powell Creek on whom I reasonably rely as subject matter experts.
4. To the best of my knowledge, information, and belief, the information and materials contained in the above-referenced Application are true and accurate.

5. To the best of my knowledge, information, and belief, the above-referenced Application is complete.


Jeffrey J. Reinkemeyer
Director, Eastern Renewables Development
Avangrid Renewables, LLC

Sworn to before and signed in my presence this 19 day of October 2022.




Notary Public

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Exhibit C Tracker Equipment Specifications

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Exhibit H Landscape Mitigation Plan

ACRONYMS AND ABBREVIATIONS

AC	Alternating Current	O&M	Operations and Maintenance
dBA	Decibels (A-Weighted)	OAC	Ohio Administrative Code
EDR	Environmental Design and Research	OPSB	Ohio Power Siting Board
gen-tie	Generation Interconnection	ORAM	Ohio Rapid Assessment Method
GIS	Geographic Information System	PJM	PJM Interconnection, LLC
HDD	Horizontal Directional Drilling	POI	Point of Interconnection
kV	Kilovolt	PV	Photovoltaic
MW	Megawatt	SHPO	State Historic Preservation Office
MWh	Megawatt-hour		

INTRODUCTION

Powell Creek Solar, LLC (Applicant or Powell Creek), a wholly owned subsidiary of Avangrid Renewables, LLC (Avangrid), holds a Certificate of Environmental Compatibility and Public Need (Certificate) from the Ohio Power Siting Board (OPSB) to construct the Powell Creek Solar Facility (Facility). The Facility includes an up to 150 megawatt (MW) alternating current (AC) solar-powered electric generation plant, ancillary components, and associated 138 kilovolt (kV) transmission line. The Facility will be located in Palmer and Liberty Townships, Putnam County, Ohio.

The application for a Certificate was filed with the OPSB on October 7, 2020, in case number 20-1084-EL-BGN. The application submittal was subsequently modified, through a March 2, 2021 submittal, to remove one block of photovoltaic (PV) panels, approximately 29 acres in size, from the Project layout. The application, as revised by the subsequent modification, is referred to herein as the Initial Application. On April 5, 2021, the Applicant, the staff of the OPSB (OPSB Staff), and the Ohio Farm Bureau Federation filed a Joint Stipulation and Recommendation (Stipulation) in the Initial Application case. The OPSB issued a Certificate in the Initial Application case on July 15, 2021, authorizing the Applicant to construct, operate, and maintain a 150 MW solar-powered electric generation facility, and associated 138 kV transmission line, in Putnam County, subject to the conditions set forth in the Certificate.

Through this application for an amendment (Amendment Application), the Applicant is requesting to modify its Certificate to allow for two additional alternative preliminary Project layouts. The locations of panel arrays, inverters, access roads, fenceline, operations and maintenance (O&M) building, laydown yards, interconnection transmission (gen-tie) line, and point of interconnection (POI) switching station for the two additional alternative preliminary Project layouts differ slightly from the layout provided in the Initial Application. The Facility components of the proposed additional alternative preliminary Project layouts have been designed to assure that impacts do not differ substantially from those presented in the Facility layout presented in the Initial Application case and as approved in the Certificate issued by the OPSB. The Amendment alternatives provided herein do not change the documentation that was provided by the Applicant

in support of the Certificate issued by the OPSB, except as indicated in the following sections of this Amendment Application.

The Facility, with the inclusion of the adjustments to Facility component locations, has been designed to accommodate engineering considerations, avoid or minimize impacts, incorporate landowner considerations, and provide optionality in the final design. The total Project Area to be used for the Facility will not increase with the inclusion of the proposed adjustments.

This Amendment Application does not change the Applicant's commitment to comply with all Certificate conditions and commitments set forth by the OPSB in the Certificate issued in the Initial Application case.

(A) REQUIREMENTS FOR FILING OF CERTIFICATE APPLICATIONS

Powell Creek Solar, LLC (Applicant or Powell Creek), a wholly owned subsidiary of Avangrid Renewables, LLC (Avangrid), holds a Certificate of Environmental Compatibility and Public Need (Certificate) from the Ohio Power Siting Board (OPSB) to construct the Powell Creek Solar Facility (Facility). The Facility includes an up to 150-megawatt (MW) alternating current (AC) solar-powered electric generation plant, ancillary components, and associated 138 kilovolt (kV) transmission line. The Facility will be located in Palmer and Liberty Townships, Putnam County, Ohio. Powell Creek's application for a Certificate was filed with the OPSB on October 7, 2020, in case number 20-1084-EL-BGN, and subsequently modified on March 2, 2021 (collectively the Initial Application). The OPSB issued the Certificate to Powell Creek on July 15, 2021.

Through this filing (Amendment Application), the Applicant is requesting to modify its Certificate to allow for two additional alternative preliminary Project layouts. The locations of panel arrays, inverters, access roads, fenceline, operations and maintenance (O&M) building, laydown yards, interconnection transmission (gen-tie) line, and point of interconnection (POI) switching station for the two additional alternative preliminary Project layouts differ slightly from the layout provided in the Initial Application. The Facility components of the proposed additional alternative preliminary Project layouts have been designed to assure that impacts do not differ substantially from those presented in the Facility layout presented in the Initial Application case and as approved in the Certificate issued by the OPSB. The Amendment alternatives provided herein do not change the documentation that was provided by the Applicant in support of the Certificate issued by the OPSB, except as indicated in the following sections of this Amendment Application.

The materials contained herein and attached hereto constitute the Applicant's submittal for an amendment to the Certificate, prepared in accordance with Section 4906.06 of the Ohio Revised Code (Revised Code). This Amendment Application was prepared in accordance with Chapter 4906-4 of the Ohio Administrative Code (OAC), "Certificate Applications for Electric Generation Facilities," and is filed pursuant to OAC Rule 4906-3-11, "Amendments of accepted, complete applications and of certificates."

This Amendment Application has been prepared by the Applicant, with support from Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services, DPC (EDR). EDR has over 20 years of experience with siting and permitting renewable electric generation facilities, including more than 10 years of experience with renewable energy facilities in Ohio.

(B) WAIVERS

This section remains the same as filed in the Initial Application.

4906-4-02 PROJECT SUMMARY AND APPLICANT INFORMATION

(A) PROJECT SUMMARY

As stated in the Initial Application, the Applicant is proposing to construct the Facility in a rural portion of Putnam County. The Facility will consist of photovoltaic (PV) panels, access roads, electric collection cables, a collection substation, an O&M building, laydown areas for construction staging, and inverters. The energy generated at the Facility will deliver power through a generation interconnection transmission line from the collection substation to the proposed point of interconnection (POI) switching station, located adjacent to the existing East Leipsic – Richland 138-kilovolt (kV) transmission line.

(1) General Purpose of the Facility

This section remains the same as filed in the Initial Application.

(2) Description of the Facility

Consistent with the Initial Application, the Facility will be located on approximately 2,013 acres of private land in Palmer and Liberty Townships, Putnam County, Ohio (Project Area). The area within the fenceline of the Facility, approximately 980 acres in the Initial Application layout, would reduce by approximately 150 to 160 acres in either of the alternative layouts presented in this Amendment Application. The nameplate capacity of the Facility will remain at 150 MW-AC. In Year 1, the Facility is anticipated to operate with an annual capacity factor of approximately 25.3%, generating a total of approximately 333,000 megawatt-hours (MWh) of electricity. Preliminary Facility alternative layouts are provided in Figure 03-2a and Figure 03-2b. Comparisons of the two additional alternative preliminary Facility layouts with the preliminary Facility layout from the Initial Application are provided in the Post-Application Project Modifications report, Exhibit A. Updates to descriptions of Facility components are provided in Section 4906-4-03(B) of this Application.

(3) Description of the Suitability of the Site for the Proposed Facility

This section remains the same as filed in the Initial Application.

(4) Project Schedule

As stated in the Initial Application, acquisition of land and land rights began in 2018 and continued through mid-2020. Due to the COVID pandemic at that time, public interactions were held virtually, including a virtual public information meeting open for public participation on July 29, 2020, and a conference call with residents living in the Project Area on July 30, 2020. These meetings and interactions were held to facilitate public interaction with the Applicant and expert consultants, and included information on Avangrid, visual/aesthetics, ecological studies, and solar technology. Since the issuance of the Certificate in the Initial Application case, the Applicant has met on multiple occasions with Liberty Township Trustees, Palmer Township Trustees, Miller City Council Members, Miller City Mayor, Miller City Schools, Putnam County Commissioners, Putnam County Engineer, the local state representative, the Ohio Department of Transportation, Project landowners, and local area residents. Additional information on public interaction is provided in the Public Interaction Update, Exhibit B.

Final Facility designs are anticipated to begin in the first quarter of 2023. Construction is anticipated to begin in the second half of 2023 and to be completed within approximately 16 months, at which point the Facility will be placed in service. Additional information about the Project schedule can be found in Section 4906-4-03(C)(1) of this Application.

(B) APPLICANT INFORMATION

This section remains the same as filed in the Initial Application.

4906-4-03 PROJECT DESCRIPTION AND SCHEDULE

(A) PROJECT AREA DESCRIPTION

The following sub-sections provide information on the Project Area's geography, topography, population centers, major industries, and landmarks.

(1) Geography and Topography Map

Because the Project Area remains the same in this Amendment Application as originally proposed in the Initial Application, the depiction of geography and topography within a 2-mile radius of the Project Area remains the same as presented in Figure 03-1 of the Initial Application.

(a) *The Proposed Facility*

The two additional alternative preliminary Facility layouts, presented in Figure 03-2a and Figure 03-2b, include the fenceline, PV panel area, below ground collection lines, inverters, access roads, collection substation, O&M building, laydown yards, transmission line, and POI switching station contained in the Project Area. While the Applicant expects that the final Facility layout will remain substantially similar to the preliminary Facility layout provided in the Initial Application or the two additional alternative preliminary Facility layouts provided herein, due to ongoing technological innovations in the solar industry, continuing detailed engineering and survey work, public feedback, and communications during the OPSB certification process, the precise locations of these features within the Project Area are subject to change. While the layout is subject to change, all Facility components will be located within the Project Area that has been studied for environmental, cultural, engineering, and visual impacts, and will be subject to the various conditions and constraints provided in this Amendment Application, as well as the requirements of the Certificate issued in the Initial Application case.

(b) *Population Centers and Administrative Boundaries*

This section, and sections (c) through (e), remain the same as filed in the Initial Application.

(2) Area of All Owned and Leased Properties

This section remains the same as filed in the Initial Application.

(B) DETAILED DESCRIPTION OF PROPOSED FACILITY

A detailed description of the Facility with the two additional alternative tracker layouts is provided in the subsections below. The equipment specifications presented in this Amendment Application are representative of the options that will be selected for the final procurement of Facility components and materials. Final equipment specifications, characteristics, and dimensions will be provided to OPSB Staff prior to construction. Any changes in equipment specifications from what is presented here or in the Initial Application are not expected to increase potential impacts.

(1) Description Details for the Project

(a) *Type and Characteristics of Generation Equipment*

Except as noted herein, generation equipment planned for the Facility remains the same as described in the Initial Application. With this Amendment Application, the Applicant is including two additional alternative layouts based on newly included tracker technologies. Although tracker technology is quite similar across tracker models, tracker designs are unique, and each type of tracker requires a specifically designed layout. In this Amendment Application, Powell Creek Solar is providing a panel layout design based on the use of Array Technologies, Inc., (ATI) DuraTrack HZ v3 trackers and a panel layout design based on a combination of STi *norland* H1250 and PVH Axone Duo trackers (collectively referred to as STI-PVH). Tracker equipment specifications are provided in Exhibit C.

Based on the total generating capacity of 150 MW, the Applicant currently anticipates using approximately 380,000 solar panels. The panels will operate continuously but will not produce electricity over night or during periods with overcast skies. Accounting for a total generating capacity of 150 MW and an annual capacity factor of 25.3% in the first year, the Facility will generate approximately 333,000 MWh of electricity in the first year of operation. Because no fuel will be burned by the generating equipment, heat rate is not applicable to solar energy facilities.

(b) *Turbine Dimensions*

This section, and sections (c) through (e), remain the same as filed in the Initial Application.

(2) Description of Major Equipment

The primary steps for Facility construction remain the same as filed in the Initial Application.

(a) *Electric Power Generation Equipment*

This section remains the same as filed in the Initial Application case, except for the addition of the two alternate tracker layout design options, as previously described in Section 4906-4-03(B)(1)(a) of this Amendment Application. Additionally, with this Amendment Application, the Applicant is committing to the use of agricultural-style fencing, rather than chain-link fencing, to provide security for the PV panel arrays. A representative example of a type of agricultural-style security fence that could be used for the Facility is provided in Exhibit D.

(b) *Fuel, Waste, Water, and Other Storage Facilities*

This section remains the same as filed in the Initial Application.

(c) *Fuel, Waste, Water, and Other Processing Facilities*

This section remains the same as filed in the Initial Application.

(d) *Water Supply, Effluent, and Sewage Lines*

This section remains the same as filed in the Initial Application.

(e) *Associated Electric Transmission and Distribution Lines and Gas Pipelines*

This section remains the same as filed in the Initial Application.

(f) *Electric Collection Lines*

The general description of collection lines, circuits, transformers, and installation methods remains the same as filed in the Initial Application. However, the lengths of buried collection cable for each of the additional tracker layouts presented in this Amendment Application are shorter than for the layout in the Initial Application. The ATI layout will require approximately 12.6 miles of buried collection cable, while the STI-PVH layout will require approximately 12.3 miles of buried collection cable. The preliminary design locations for buried collection cable with each tracker design option are shown in Figure 03-2a and Figure 03-2b.

(g) *Substations, Switching Substations, and Transformers*

The general description of the substation, the switching station, transformers, inverters, and installation methods remains the same as filed in the Initial Application. For this Amendment Application, the ATI tracker configuration includes 27 inverter locations and the STI-PVH tracker configuration includes 28 inverter locations, as shown in Figure 03-2a and Figure 03-2b.

(h) *Weather Stations*

This section remains the same as filed in the Initial Application.

(i) *Transportation Facilities, Access Roads, and Crane Paths*

The general description of Project Area access road size and construction methods, as well as the lack of crane paths, remains the same as filed in the Initial Application. For this Amendment Application, the ATI tracker configuration includes approximately 7.5 miles of access roads and the STI-PVH tracker configuration includes approximately 7.4 miles of access roads. Both measurements include approximately 0.3 mile of access roads that will be temporary, as they only serve to provide access to temporary laydown yards. Access roads are shown Figure 03-2a and Figure 03-2b.

(j) *Construction Laydown Areas*

Eight preliminary laydown yard locations are proposed for the Facility in this Amendment Application. Two of the currently proposed laydown yards are in the same locations as provided in the Initial Application, although the size of the laydown yard on the eastern side of Road 13, south of its intersection with Road F-12, has been slightly reduced from 4.0 acres to 2.9 acres. Preliminary locations for laydown yards in each tracker configuration presented in this Amendment Application are shown in Figure 03-2a and Figure 03-2b. The Applicant is also proposing to use this increased number of laydown yards in the layout presented in the Initial Application, in substantially similar locations to those shown in this Amendment Application. The eight laydown yards in total would comprise approximately 23 acres. Note that precise locations and sizes of laydown yards are subject to refinement as final Facility designs are completed.

The construction, uses, and reclamation of the laydown yards remain as described in the Initial Application.

(k) *Security, Operations, and Maintenance Facilities or Buildings*

This section remains the same as filed in the Initial Application, except that the Facility will be secured with an agricultural-style fence, instead of a chain-link fence. Chain-link fencing will only be used to secure the Facility substation and the POI switching station. Further, the Applicant anticipates that the O&M building may be either a metal building with a standing seam roof or a masonry block structure.

(l) *Other Pertinent Installations*

This section remains the same as filed in the Initial Application.

(3) Need for New Transmission Lines

This section remains the same as filed in the Initial Application.

(4) Project Area Map

Prepared at a 1:12,000 scale, Figure 03-2a and Figure 03-2b illustrate the following features for each of the proposed layouts in this Amendment Application:

(a) *Aerial Photograph*

Mapping includes the Ohio Statewide Imagery Program's 1-foot orthoimagery map service.

(b) *The Proposed Facility*

The preliminary Facility layouts include the components described in section 4906-4-03(B)(2).

(c) *Road Names*

Road name data was obtained from the Putnam County Auditor's Office website.

(d) *Property Lines*

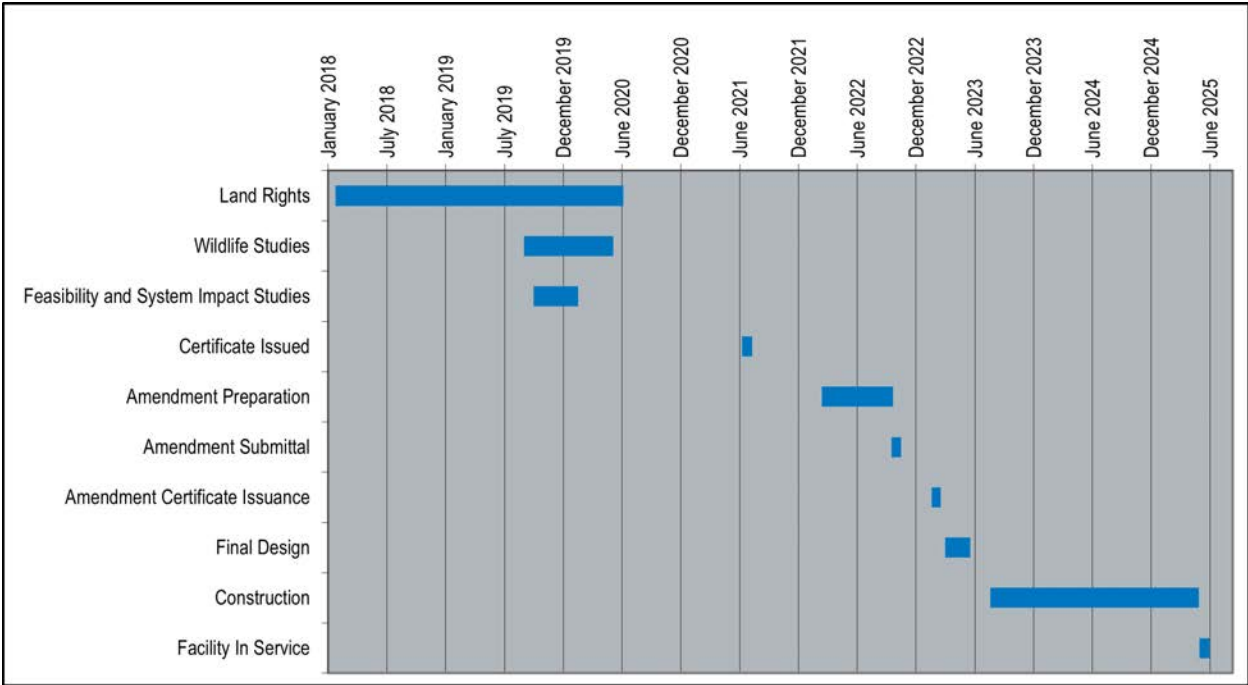
Property line data was obtained from the Putnam County Auditor's Office website.

(C) DETAILED PROJECT SCHEDULE

(1) Schedule

An updated Project schedule in Gantt chart format is provided as Inset 03-1 below.

Inset 03-1. Project Schedule



(a) *Acquisition of Land and Land Rights*

Acquisition of land and land rights began in 2018 and continued through the second quarter of 2020.

(b) *Wildlife and Environmental Surveys/Studies*

This section remains the same as filed in the Initial Application, except that an additional archaeological survey was conducted in August 2022.

(c) *Receipt of Grid Interconnection Studies*

The Feasibility Study and System Impact Study have been issued by PJM Interconnection, LLC (PJM). The Facilities Study was in progress at the time of filing this Amendment Application.

(d) *Preparation of the Certificate Application*

Preparation of the Amendment Application began in the first quarter of 2022.

(e) *Submittal of the Application for Certificate*

This Amendment Application was submitted in the beginning of the fourth quarter of 2022.

(f) *Issuance of the Certificate*

It is anticipated that the Certificate for this Amendment Application will be issued in the first quarter of 2023.

(g) *Preparation of the Final Design*

It is expected that final designs and detailed construction drawings will begin in the first quarter of 2023.

(h) *Construction of the Facility*

Construction is anticipated to begin in the second half of 2023 and be completed in approximately 16 months.

(i) *Placement of the Facility in Service*

The Facility will be placed in service upon completion of construction, anticipated to be by the end of the second quarter of 2025.

(2) Construction Sequence

This section remains the same as filed in the Initial Application.

(3) Impact of Critical Delays

This section remains the same as filed in the Initial Application.

4906-4-04 PROJECT AREA SELECTION AND SITE DESIGN

(A) PROJECT AREA SELECTION

This section remains the same as filed in the Initial Application.

(B) FACILITY LAYOUT DESIGN PROCESS

As with the Initial Application, the Facility layout presented in this Amendment Application is considered preliminary. Changes to the current Facility layout may occur due to unexpected surface conditions, changes in equipment selection, landowner considerations, and general optimization as the design matures. These changes would primarily consist of changes to access roads, collection and transmission line routing, inverter sizing, placement of PV panels within the currently outlined Project Area, and other minor adjustments. Any changes are not expected to alter the boundaries of the Project Area or the properties on which Facility components will be located, will comply with the setbacks set forth in the Initial Application, and will not create any additional material adverse impact. The final layout design will be provided to the OPSB prior to commencement of construction.

(1) Constraint Map

The constraints remain the same as presented in Figure 04-1 of the Initial Application.

(2) Criteria Used to Determine Site Layout and Comparison of Alternative Site Layouts

This section remains the same as filed in the Initial Application.

(3) Description of Number and Type of Comments Received

This section remains the same as filed in the Initial Application. Since the issuance of the Certificate, only one comment, a solicitation for business, has been received through the Project website (avangridrenewables.com/powellcreek) or the Project email address (powellcreeksolar@avangrid.com).

4906-4-05 ELECTRIC GRID INTERCONNECTION

This section remains the same as filed in the Initial Application.

4906-4-06 ECONOMIC IMPACT AND PUBLIC INTERACTION

This section remains the same as filed in the Initial Application. However, in response to 4906-4-06(F)(1), the Applicant notes that a Public Interaction Update detailing the Applicant's recent community engagement is provided as Exhibit B to this application. The Applicant will continue to maintain and monitor the Project website during the review of the Amendment Application.

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

This section remains the same as filed in the Initial Application.

(A) HEALTH AND SAFETY

(1) Equipment Safety and Reliability

Parts (a) through (c) of this section remain the same as filed in the Initial Application.

(d) *Measures to Restrict Public Access*

As stated in the Initial Application, the public does not have access to the private land on which the Facility is located; hence, the public would only encounter the proposed Facility by trespassing. However, to further restrict public access during operation, security of the Facility will be maintained by a combination of an agricultural-style security fence, controlled access gates, and electronic security systems. A representative example of a type of agricultural-style security fence that could be used for the Facility is provided in Exhibit D. Additionally, "No Trespassing" and "High Voltage Equipment" signs will be placed at locations along the fence, warning the public of the hazards within the Facility fenceline.

(e) *Fire Protection, Safety, and Medical Emergency Plans*

As stated in the Initial Application, the Applicant plans to coordinate with Putnam County Emergency Management Services, including local fire and emergency management services officials, to discuss safety plans and training protocols prior to commencement of construction. A Preliminary Emergency Action Plan has been prepared and is included in this Amendment Application as Exhibit E. The Preliminary Emergency Action Plan will be finalized based on coordination with Putnam County Emergency Services and will be submitted to the OPSB prior to Facility construction.

(2) Probable Impacts due to Failures of Pollution Control Equipment

This section remains the same as filed in the Initial Application.

(3) Noise

For the Initial Application, Jacobs was retained by the Applicant to evaluate potential noise levels from the proposed Facility in accordance with OAC requirements. The analysis was overseen by

an acoustical engineer (Acoustical P.E. [OR]) who is also Board Certified by the Institute of Noise Control Engineering. The study presented in the Initial Application, hereafter referred to as the Initial Sound Assessment, consisted of three phases: (1) evaluation of potential sound levels during construction, (2) a background sound level survey, (3) modeling of future sound levels for the substation transformer and inverters. The Initial Sound Assessment was included as Exhibit X in the Initial Application.

For the purposes of evaluating potential noise impacts associated with the additional alternative Facility layouts presented in this Amendment Application, Jacobs modeled future sound levels for the inverters, the small transformers that are collocated with the inverters, and the primary substation transformer for each of the layouts. The results of this model are presented in Exhibit F and summarized in the following sections.

(a) *Construction Noise Levels at the Nearest Property Boundary*

This section remains the same as filed in the Initial Application.

(b) *Operational Noise Levels at the Nearest Property Boundary*

(i) Operational noise from generation equipment

Detailed operational sound models were developed based on the additional alternative Facility layouts presented in this Amendment Application. Sound sources in the models include inverters and transformers, the sound levels of which were developed from measurements of similar equipment or vendor specifications. The representative inverter and transformer sound levels were used to develop a three-dimensional sound model based on the ISO 9613-2 standard for propagation of sound outdoors.

Results from the sound models show that the highest sound level anticipated at a non-participating property boundary from noise emitting equipment during operation of the Facility is anticipated to be approximately 40 A-weighted decibels (dBA) for the ATI layout and approximately 38 dBA for the STI-PVH layout. All non-participating residences are anticipated to receive sound levels of approximately 39 dBA or less for the ATI layout and approximately 38 dBA or less for the STI-PVH layout. Figures 2-1 and 2-2 of the Amendment to Operational Sound

Assessment (Exhibit F) illustrate surrounding residences and anticipated sound levels to be produced by the Facility.

When the Facility is not operating at full load, the sound level would be less than the values provided above and in the Amendment to Operational Sound Assessment. During nighttime hours, the inverters are not at full capacity and emit substantially less noise. If reactive power from the inverters is required during nighttime hours, the sound levels from the inverters will be at least 10 dBA lower at night. Additionally, the cooling requirements for the transformers are expected to be diminished as the transformer is not loaded during nighttime hours, allowing the fans to operate at a lower speed or not at all, resulting in lower sound levels.

(ii) Processing equipment

This section remains the same as filed in the Initial Application.

(iii) Associated road traffic

This section remains the same as filed in the Initial Application.

(c) *Location of Noise-Sensitive Areas within One-Mile of the Facility*

Noise-sensitive areas and receptors within the immediate vicinity of the Facility are mapped with sound level data in Figures 2-1 and 2-2 of the Amendment to Operational Sound Assessment (Exhibit F). Noise-sensitive areas within 1 mile were previously included in Figure 3-2 of the original Sound Assessment, Exhibit X, in the Initial Application. As noted above, the highest modeled sound levels from noise-generating equipment at a non-participating sensitive receptor were determined to be approximately 39 dBA for the ATI layout and approximately 38 dBA for the STI-PVH layout.

(d) *Mitigation of Noise Emissions during Construction and Operation*

This section remains the same as filed in the Initial Application.

(e) *Pre-construction Background Noise Study*

This section remains the same as filed in the Initial Application.

(4) Water Impacts

This section, as well as sections (5) through (13), remain the same as filed in the Initial Application.

(B) ECOLOGICAL IMPACT

(1) Ecological Resources in the Project Area

This section remains the same as filed in the Initial Application.

(2) Construction Impacts

(a) *Estimation of Impact of Construction on Undeveloped Areas, Plants, and Animals*

This section remains the same as filed in the Initial Application, except for the following part:

Impacts to Wetland and Surface Water Habitats

Wetland impacts anticipated for the Project layout presented in the Initial Application included access road temporary impacts of less than 0.01 acre of wetlands, and access road permanent impacts of less than 0.01 acre. Stream crossing impacts for the Project layout presented in the Initial Application were approximately 0.11 acre of temporary impacts and approximately 0.02 acre of permanent impacts.

Both layouts presented in this Amendment Application avoid all access road stream crossings, resulting in no impacts to delineated streams in either layout (see Post-Application Project Modifications, Exhibit A). Both alternative layouts presented in this Amendment Application include two access road crossings of delineated wetland W05, a Category 1 wetland with an Ohio Rapid Assessment Method (ORAM) score of 8 (see Appendix D [Wetland and Waterbody Delineation Report] of the Ecological Assessment, which was presented as Exhibit J of the Initial Application). Wetland W05 is located along Road 12. The two access road crossings of this wetland result in approximately 0.02 acre of permanent impacts.

Additionally, the number of collection line stream crossings has been reduced from six in the Initial Application layout to five in the ATI layout and four in the STI-PVH layout (see Figure 10 of Exhibit A). Collection lines will be installed by horizontal direction drilling (HDD) and will, therefore, result in no permanent impacts to the streams being crossed.

(b) *Description of Short-term and Long-term Mitigation Procedures*

This section remains the same as filed in the Initial Application, except that the additional alternative Facility layouts as well as the Initial Application layout may include both temporary retention ponds and approximately one-foot-high permanent berms for runoff and erosion control. Preliminary locations of these structures are shown in Figure 8 of Exhibit A.

(3) Operational Impacts

This section remains the same as filed in the Initial Application.

(C) LAND USE AND COMMUNITY DEVELOPMENT

(1) Land Use

(a) *Land Use Map*

This section remains the same as filed in the Initial Application.

(b) *Structures Table*

(i) Structures and Property Lines within 1,500 Feet of PV Panels

For the layout presented in the Initial Application, this section remains the same as filed in the Initial Application.

For the ATI layout, there are 112 structures within 1,500 feet of a solar array. The closest distance between a non-participating structure and a solar array is 295 feet. There are 379 parcels within 1,500 feet of a solar array. The closest distance between a non-participating parcel and a solar array is 49 feet.

For the STI-PVH layout, there are 109 structures within 1,500 feet of a solar array. The closest distance between a non-participating structure and a solar array is 295 feet. There are 371 parcels within 1,500 feet of a solar array. The closest distance between a non-participating parcel and a solar array is 54 feet.

Tables 6 through 9 of the Post-Application Project Modifications report (Exhibit A) provide distances from structures and property lines to the nearest PV panel and the participation status of each property.

(ii) Structures and Property Lines within 250 Feet of Facility Components

For the layout presented in the Initial Application, this section remains the same as filed in the Initial Application.

For the ATI layout, there are 14 residences and one commercial structure within 250 feet of Facility components. There are 110 parcels within 250 feet of a Facility component. This total includes 63 parcels that are within 250 feet of multiple Facility components.

For the STI-PVH layout, there are 11 residences within 250 feet of Facility components. There are 106 parcels within 250 feet of a Facility component. This total includes 65 parcels that are within 250 feet of multiple Facility components.

Tables 10 through 13 of Exhibit A provide distances from structures and property lines to the associated Facility components and the participation status of each property.

(iii) Lease Status of Each Structure

For the layout presented in the Initial Application, this section remains the same as filed in the Initial Application. For the ATI and the STI-PVH layouts presented in this Amendment Application, the lease status for each structure and property is included in the tables presented in Exhibit A.

(c) *Land Use Impacts*

For the layout presented in the Initial Application, this section remains the same as filed in the Initial Application, except for the addition of the temporary laydown yard areas.

Land use impacts were calculated for this Amendment Application using the same assumptions for access road, collection line, and inverter pad impacts as in the Initial Application. Facility-related impacts to land use were calculated based on the impact assumptions and the land use codes for each parcel, obtained from the Putman County Auditor's Office. Using geographic

information system (GIS) software, Facility components for each proposed alternative layout and their related impact areas were intersected with the parcel data, resulting in areas of impact to each land use associated with the respective Facility components. The impact areas for these Facility components were aggregated using GIS software and recorded in spreadsheets, which were used to calculate the total impact areas. In areas where features overlap, analyses using GIS were conducted to eliminate overlap in order to avoid overestimations of impacts.

The permanent land use impact associated with the ATI layout includes approximately 865 acres, which represents approximately 43% of the 2,013-acre Project Area. Compared to the Initial Application layout, the footprint of the Facility is reduced by approximately 120 acres. The permanent land use impact associated with the STI-PVH layout includes approximately 878 acres, which represents approximately 44% of the 2,013-acre Project Area. Compared to the Initial Application layout, the footprint of the Facility is reduced by approximately 108 acres. Impact reductions under each of the proposed layouts is largely due to a reduction in the impact area of the solar arrays. Tables 4 and 5 of Exhibit A present the total land use impacts associated with each layout, and a comparison with the impacts of the layout from the Initial Application.

(d) *Structures That Will Be Removed or Relocated*

This section remains the same as filed in the Initial Application.

(2) Parcel Status Map

This requirement is not applicable to this Facility because the Facility is not a wind farm.

(3) Setback Waiver

This requirement is not applicable to this Facility because the Facility is not a wind farm.

(4) Land Use Plans

This section remains the same as filed in the Initial Application.

(D) CULTURAL AND ARCHAEOLOGICAL RESOURCES

(1) Landmarks of Cultural Significance Map

This section remains the same as filed in the Initial Application.

(2) Impact to Landmarks and Mitigation Plans

This section remains the same as filed in the Initial Application, except for information about additional archaeological surveys that were completed since the filing of the Initial Application. After the filing of the Initial Application, the ongoing on-site surveys described in the Initial Application were completed, and the confidential results were provided to OPSB Staff.

In preparation for this Amendment Application, EDR conducted an additional Phase I archaeological survey on approximately 10.74 acres of the Project Area which had not previously been surveyed, in order to provide flexibility for the design of the two additional proposed layouts. The survey identified one archaeological site, consisting of nineteenth and twentieth century historic artifact scatter, which was recommended to be not eligible for listing on the National Register of Historic Places. The results of this survey were provided to Ohio's State Historic Preservation Office (SHPO) on September 9, 2022, and are included in Exhibit G, Archaeological Memorandum. SHPO concurrence with the findings was received on October 5, 2022, and is included in Exhibit G.

(3) Impact to Recreational Areas and Mitigation Plans

This section remains the same as filed in the Initial Application.

(4) Visual Impact

Sections (a) through (e) remain the same as filed in the Initial Application.

(f) *Impact Minimization Measures*

This section remains the same as filed in the Initial Application, except that the Landscape Mitigation Plan has been updated with landscape screening for visual mitigation applicable to the newly proposed layouts. Descriptions and locations of potential vegetative mitigation are included in the updated Landscape Mitigation Plan (Exhibit H). Additionally, visual mitigation may be implemented in the form of direct payment or reimbursement to affected residents to install their own vegetation or other screening, as desired.

(E) AGRICULTURAL LAND

(1) Agricultural Land and Agricultural District Land Map

This section remains the same as filed in the Initial Application.

(2) Potential Impacts and Proposed Mitigation

(a) *Acreage Impacted*

For the layout presented in the Initial Application, this section remains the same as filed in the Initial Application, except for the addition of the temporary laydown yard areas. However, overall impacts to agricultural districts and agricultural land uses would be similar to those presented in the Initial Application. Impacts to agricultural land uses for the ATI and the STI-PVH layouts presented in this Amendment Application are presented in the Land Use section of Exhibit A.

(b) *Impacts on Agricultural Facilities and Practices*

This section remains the same as filed in the Initial Application.

(c) *Proposed Mitigation Procedures*

This section remains the same as filed in the Initial Application.

4906-6-05 ACCELERATED APPLICATION REQUIREMENTS FOR TRANSMISSION LINE

(A) FORM AND CONTENT REQUIREMENTS

As permitted by OAC 4906-3-04, a major utility facility and any associated Project that qualifies for accelerated review may be combined into a single standard certificate application. In the Initial Application, Powell Creek Solar provided information about the Facility's associated 138 kV transmission line of approximately 1.6 miles and POI switching station. As part of the combined application, this section of the Initial Application addressed the requirements of OAC 4906-6-05, accelerated application requirements, for the transmission line and POI switching station associated with the Powell Creek Solar Facility. This section complies with the form and content requirements of OAC 4906-2. To the extent that information for this Amendment Application differs from the information provided in the Initial Application, it is noted in the following sections.

(B) DATA AND INFORMATION REQUIREMENTS

(1) Applicant and Project Information

This section remains the same as filed in the Initial Application.

(2) Need for the Proposed Facility

This section remains the same as filed in the Initial Application.

(3) Location of the Project

The general route of the transmission line remains the same as in the Initial Application. However, as shown in Figure 8 of the Post-Application Project Modifications report (Exhibit A), the location where the transmission line crosses Road 613 has been shifted approximately 670 feet to the west. Additionally, the location of the POI switching station has shifted approximately 220 feet to the north and is slightly smaller in total area. Comparisons of the impacts of the transmission line and POI switching station are included in Tables 4 and 5 of Exhibit A.

(4) Route Alternatives

This section remains the same as filed in the Initial Application.

(5) Public Information Program

This section remains the same as filed in the Initial Application.

(6) Construction Schedule

Construction of the transmission line and POI switching station will follow the construction scheduled presented in Section 4906-4-03(C)(1) of this Amendment Application.

(7) Facility Map

The transmission line route is shown at 1:12,000 scale with roads and an aerial image on Figure 03-2a and Figure 03-2b.

(8) Easements

This section remains the same as filed in the Initial Application.

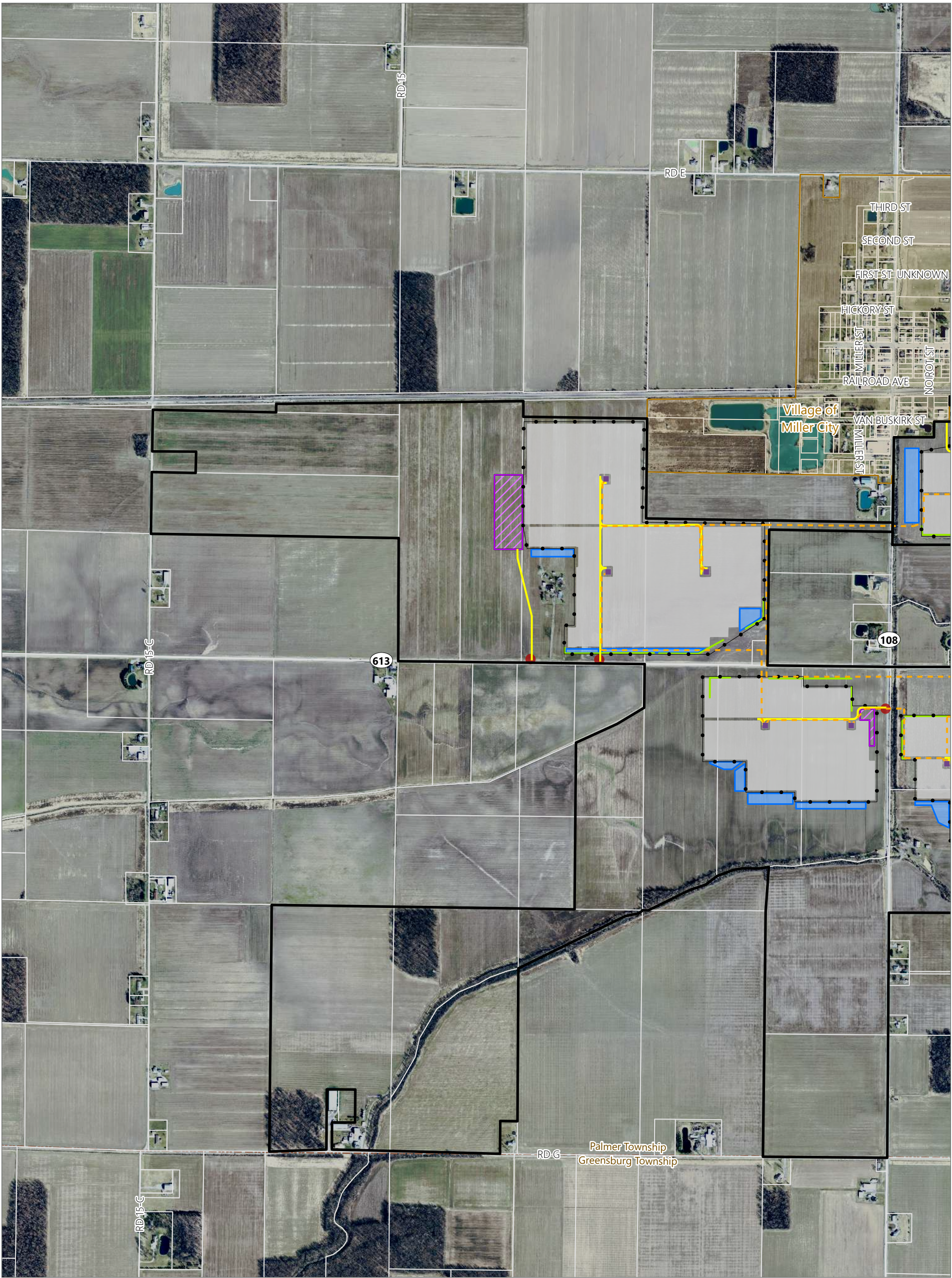
(9) Technical Features of the Project

This section remains the same as filed in the Initial Application.

(10) Social and Ecological Impacts

This section remains the same as filed in the Initial Application.

Figures



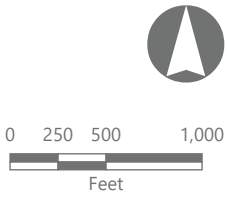
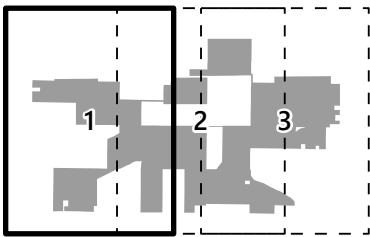
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Putnam County, Ohio

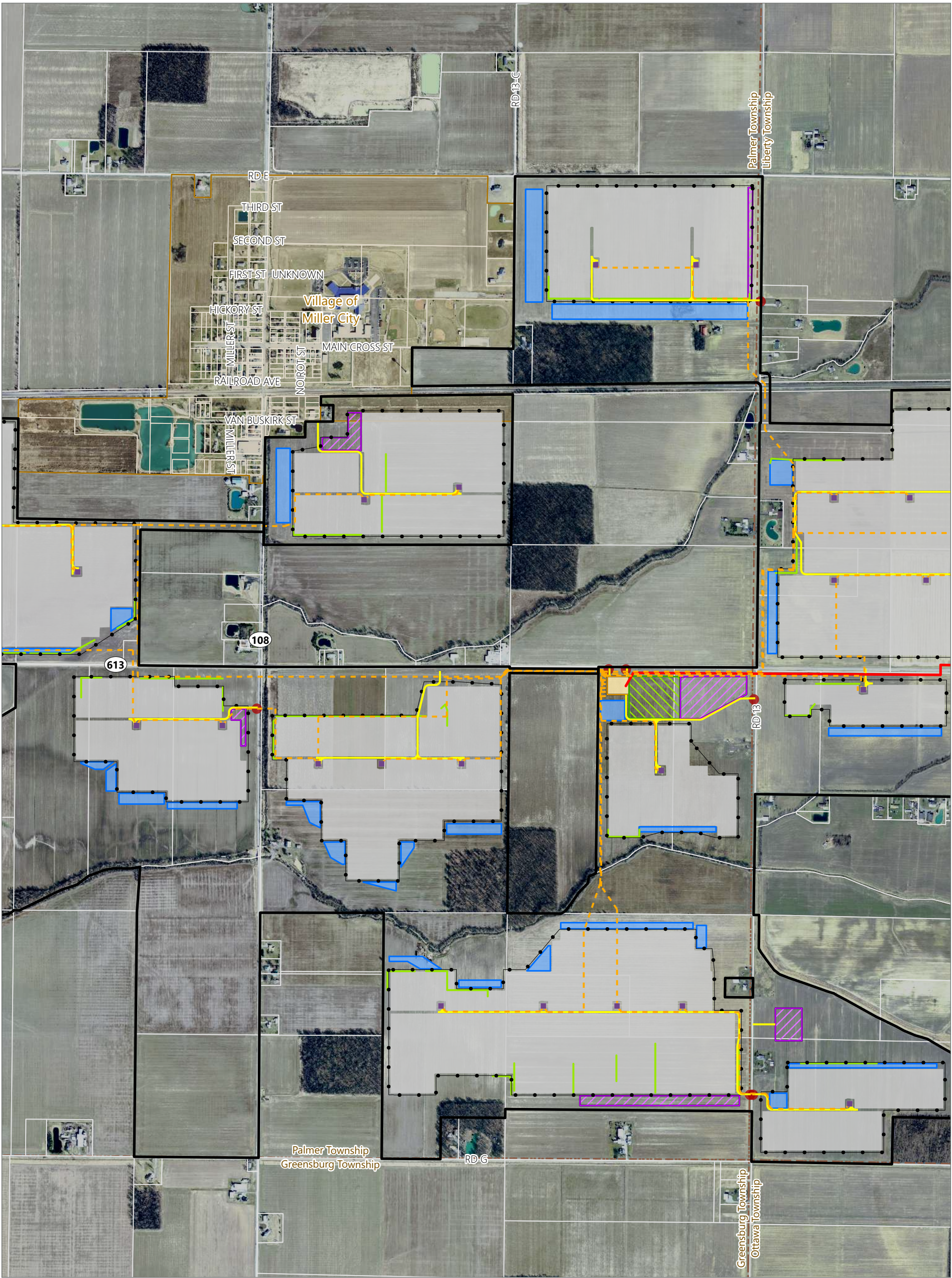
Amendment Application

Figure 03-2a



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|-----------------|--------------------|
| Inverter | Temporary BMP Pond |
| Collection Line | Laydown Yard |
| Access Road | PV Panel Area |
| Fenceline | Parcel Boundary |
| Culvert | Project Area |
| Permanent Berm | |



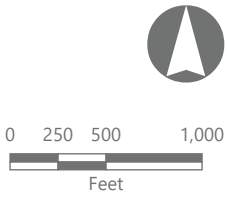
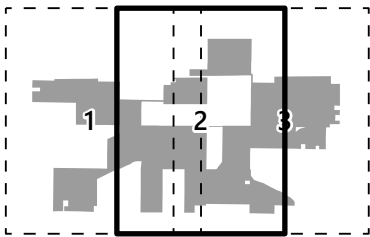


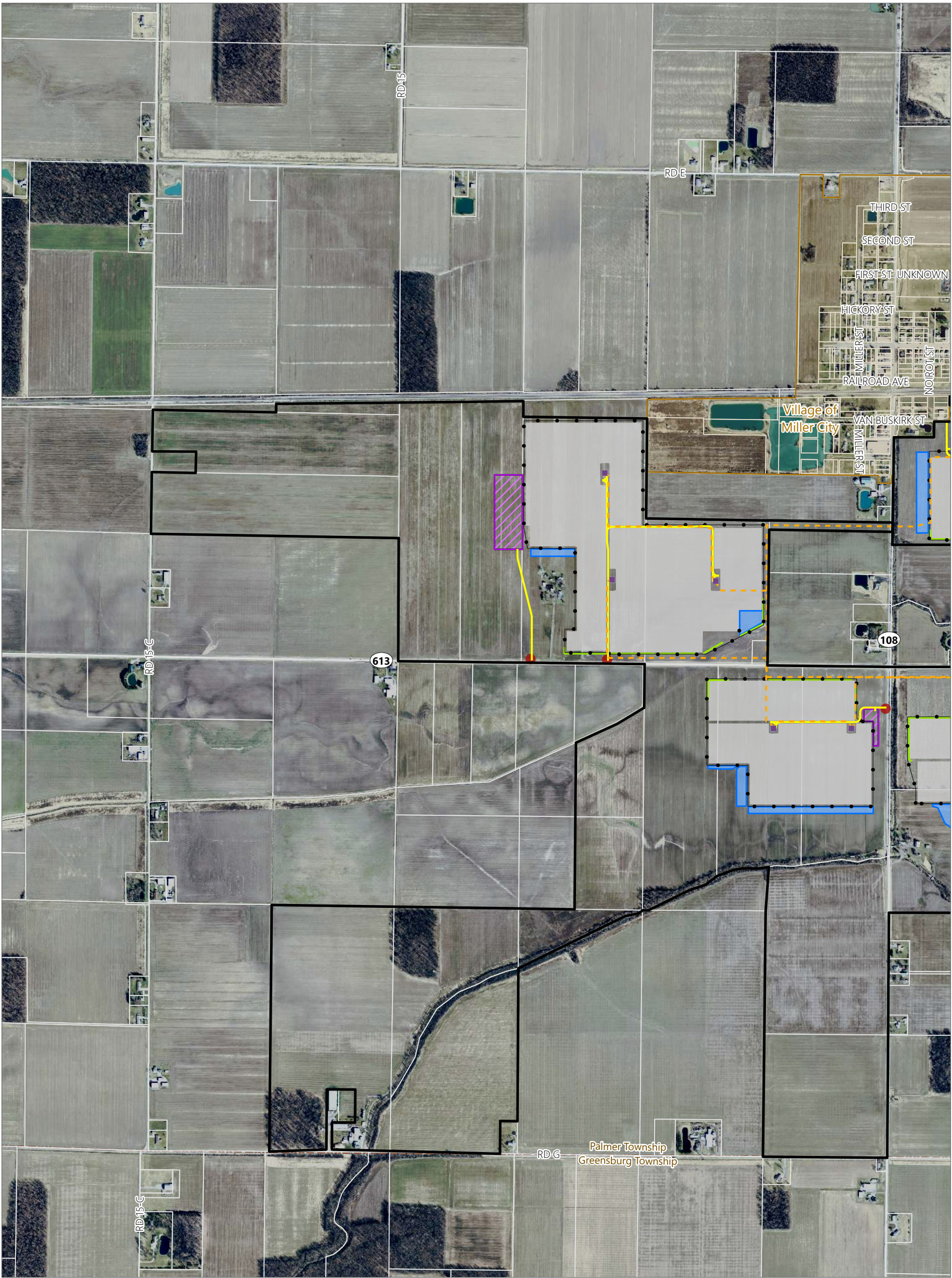
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Figure 03-2a

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|-------------------|--------------------|-----------------------|
| Inverter | Culvert | Collection Substation |
| Collection Line | Permanent Berm | PV Panel Area |
| Transmission Line | Temporary BMP Pond | Parcel Boundary |
| Access Road | Laydown Yard | Project Area |
| Fenceline | O&M Building | |





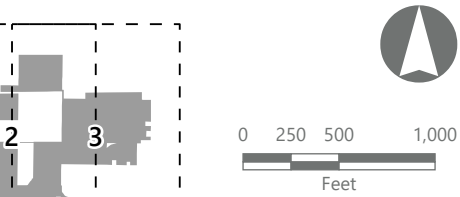
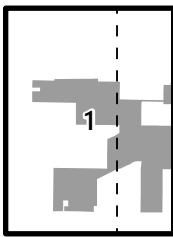
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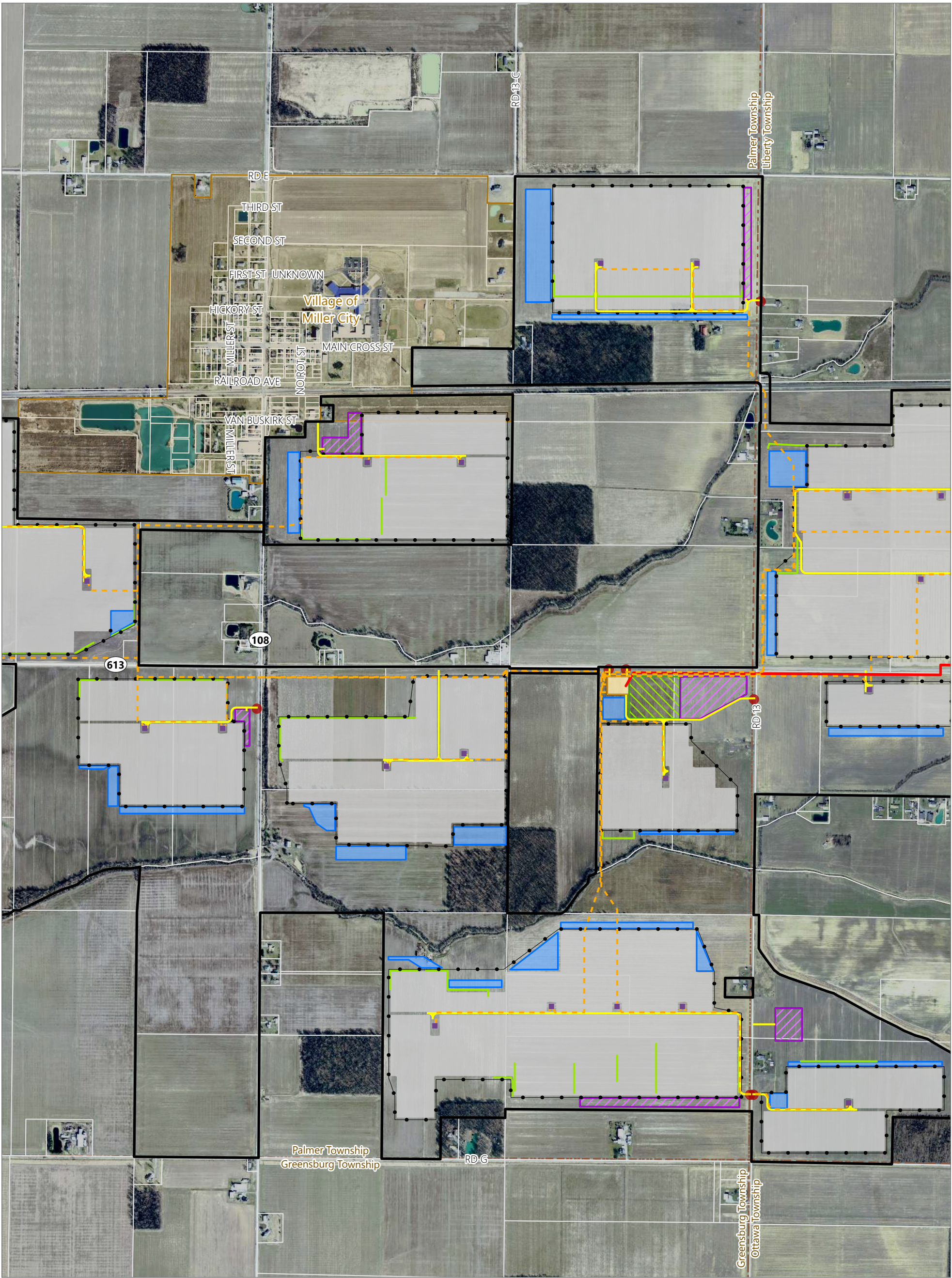
Amendment Application

Figure 03-2b



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|-----------------|--------------------|
| Inverter | Temporary BMP Pond |
| Collection Line | Laydown Yard |
| Access Road | PV Panel Area |
| Fenceline | Parcel Boundary |
| Culvert | Project Area |
| Permanent Berm | |





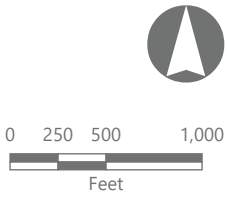
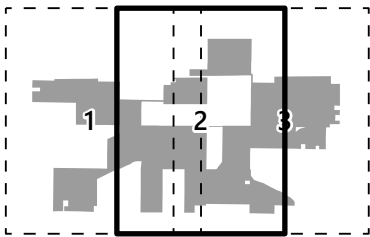
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Amendment Application

Figure 03-2b



- | | | |
|-------------------|--------------------|-----------------------|
| Inverter | Culvert | Collection Line |
| Permanent Berm | Temporary BMP Pond | Collection Substation |
| Transmission Line | Laydown Yard | PV Panel Area |
| Access Road | O&M Building | Parcel Boundary |
| Fenceline | | Project Area |



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Case No(s). 22-0915-EL-BGA

Summary: Application of Powell Creek Solar, LLC for an Amendment to its
Certificate for Environmental Compatibility and Need electronically filed by Teresa
Orahood on behalf of Herrnstein, Kara