CARINA SOLAR, LLC

CONDITIONAL USE PERMIT APPLICATION

CITY OF COLUMBUS, INDIANA

SAMSUNG C&T

FEBRUARY 2024 | VERSION 3

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Kimley»Horn

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Exhibits

1.0 INTRODUCTION

Carina Solar, LLC, a subsidiary of Samsung C&T (Applicant), hereby submits this application for a Conditional Use Permit (Application) to construct, operate, and maintain the Carina Solar project, a proposed 100 MW AC Power Generation Facility (Project) on approximately 1,886 acres in Bartholomew County:

- 1,605 acres in Columbus Township; approximately 183 acres in Sand Creek Township; and approximately 98 acres in Rock Creek Township.

As shown on the Zoning Site Plan in **Exhibit B**, the Project's site layout exceeds the required minimum road right-of-way setbacks and property line setbacks per City of Columbus lot standards.

The Project will be sited over approximately 1,886 acres (Project Area) of leased property north of E 400 S Road, west of S 525 E, east of S Gladstone Ave, and south of E 100 S. The Project's area can be characterized as cultivated agricultural fields The project will have frontage along county roads, INDOT roads, and a U.S. highway. Proposed entrances have been placed on county roads and will need a driveway permit from Bartholomew County Highway Department if approved**.** The Project will deliver power to the electrical grid through one point of interconnection at the proposed substation and switchyard location.

The applicant is applying for permits from both the City of Columbus and Bartholomew County and therefore the Applicant has considered recent updates to the Bartholomew County Zoning Ordinance (for Commercial Solar Energy Systems) adopted 11/09/2022 and updated on 02/23/2023 to ensure the Project meets the latest requirements and submits this Application to obtain a Conditional Use Permit (CUP) from the City of Columbus for a Power Generation Facility.

In preparation for filing the CUP application, Carina Solar, LLC will reach out to the public to provide Project awareness. Prior to the CUP public hearing, the Project team will reach out to neighboring parcels and stakeholders. The Project team will inform the public of the CUP public hearing through a meeting notice letter.

If the Application is approved and a Conditional Use Permit is secured, construction of the Project is scheduled to commence as early as 2nd quarter of 2025.

2.0 PROJECT DESCRIPTION

The Project Area is currently cultivated cropland. The participating parcel is zoned as AP Agriculture: Preferred District. Adjacent properties are also zoned AP and are used for agricultural purposes.

The Project, if approved, will be a ground mounted Power Generation Facility comprised of solar photovoltaic (PV) modules, a racking system, inverters, and underground electrical conduits connecting PV array blocks with inverters. Access roads, with gated entrances, are located throughout the site for access and maintenance of inverters as well as construction access.

Proposed site access to existing roads will be limited to the driveways shown on the Zoning Site Plan, provided on **Exhibit B**. In accordance with Chapter 6.10.A.2 of the Bartholomew County Zoning Ordinance, the first 50' of these driveways will be paved with asphalt or concrete. Security fencing will enclose the perimeter of the Project, with road access secured through locked metal gates. A series of internal access roads will be used to provide access to Project equipment for future maintenance. These roads are typically gravel and will be verified upon final design with the geotechnical engineer recommendations.

The following twenty-four (23) owners have signed agreements to participate in the Project.

Name	Parcel Tax Number
Arnholt Brothers, LLC	03-86-05-000-000.200-004 03-86-05-000-000.201-004 03-96-32-000-000.702-004
Arnholt, Ronald B.	03-86-03-000-002.300-004 03-86-04-000-000.200-004
Arnholt Ronald & Teresa (Easement)	03-96-35-000-001.502-004
Crider, Brent J.	03-86-10-000-000.500-018
Daily, Gregory W.	03-86-11-000-000.101-018 03-86-01-000-000.800-017 03-86-01-000-000.803-017 03-86-02-000-000.100-004 03-86-02-000-000.105-004 03-86-02-000-001.200-004 03-86-02-000-000.200-004 03-86-02-000-001.300-004
Eiler, Gayle L.	03-96-35-000-001.400-004 03-96-34-000-003.100-004
Forster, D. Lynn, (1/2%) & D. Lynn Forster, Trustee Of The Elizabeth S Forster Trust (1/4%) & Frank C Forster Trust (1/4%)	03-86-09-000-000.500-018 03-86-09-000-000.700-018
Staci J. Goodwin and Jarrod C. Whipker	03-86-10-000-000.400-018 03-86-03-000-002.600-004 03-86-04-000-001.500-004
Hackman, John & Barbara	03-86-04-000-000.100-004 03-96-33-000-003.400-004
Hackman's Farm Market & Greenhouse LLC (Easement)	03-96-34-000-001.704-004
Hoeltke, Larry & Mary Jane	03-86-05-000-000.300-004
Landmark Farms & Livestock LLC. Kristin A. Whittington, Manager	03-86-03-000-002.500-004
Mark & Jana Fischer Farms LLC Mark Fischer, GP	03-96-33-000-003.300-004
Niemoeller, John Dale & Cynthia Dawn	03-96-32-000-000.801-004 03-96-33-000-003.000-004
Niemoeller, Mark R.	03-86-04-000-000.700-004 03-86-05-000-000.100-004 03-96-32-000-000.800-004

Page Kerry W (Easement)	03-96-34-000-002.300-004
Robert C. Niemoeller, an Undivided ¼ Interest and Delores I. Niemoeler, an Undivided ¼ Interest and Susan J. Scales, an Undivided 1/8 Interest and Mark R. Niemoeller, an Undivided 1/8 Interest and Ross W. Niemoeller, an Undivided 1/8 Interest and John D. Niemoeller, an Undivided 1/8 Interest	03-86-05-000-000.700-004
Sefcik, Bryan S.	03-86-04-000-001.100-004
Shuff, Michael R.	03-86-04-000-000.402-004
The John William Steinker and Lucretia Anne Steinker Revocable Living Trust, dated August 14, 2020	03-86-04-000-000.800-004 03-86-04-000-000.801-004 03-86-05-000-000.202-004 03-86-05-000-000.203-004 03-86-05-000-000.500-004
The Loretta K. Vinson Revocable Trust Dated August 21, 2015 David Bonnell - Land Manager	03-86-04-000-000.400-004 03-86-04-000-000.500-004
Route 3, LLC	03-96-34-000-002.000-004
Dwight David Smith and Janet S. Smith, husband and wife	03-96-34-000-000.400-004

The parcels included in the project have frontage along the following roads, all parcels have their access roads connecting to one of the county roads to minimize traffic interference. This can be seen in the Zoning Site Plan which is included as **Exhibit B**.

Road Name	Jurisdiction
SR-46	State Road
SR-7	State Road
US-31	U.S. Route
S 525 E	County Road
S 450 E	County Road
S 300 E	County Road
S 250 E	County Road
E 400 S	County Road
E 300 S	County Road
E 250 S	County Road
E 200 S	County Road

2.1 CITY OF COLUMBUS CONDITIONAL USE CRITERIA FINDINGS OF FACTS

a) The approval of the conditional use will not be injurious to the public health, safety, and general welfare of the community. *For example: What harm could come from approving the conditional use? Would it create any public safety issues? Why or why not?*

The project will comply with all aspects of the City of Columbus Power Generation Facility zoning ordinance with the utmost emphasis during construction and operation on protection of public health and safety. The project will include perimeter security fencing with controlled points of ingress/egress and will have security monitoring during the construction period and remote

monitoring during the operations period. The petitioner has extensive experience with Power Generation Facilities and the project will meet all local, state, and federal environmental, health and safety regulations, as well as its own stringent safety protocols for site personnel. Solar is the most passive land use available for this area and is even less intrusive than farming and so will not be injurious to the public in any way. The project will enhance the general welfare based upon the significant property tax revenues generated from this development over numerous decades.

b) The development of the property will be consistent with the intent of the development standards established by the Zoning Ordinance for similar uses. *For example: Will the conditional use be able to meet minimum building setbacks, parking standards, and other requirements? If not, are variances being sought to address those items?*

The conditional use will meet the setback distances as outlined in section 3.5 Agriculture Preferred (AP) in Article 3 of the City of Columbus Zoning Districts. There are ten lot standards for AP which we are meeting or exceeding with this development. We are not requesting any variances for this project.

c) Granting the conditional use will not be contrary to the general purposes served by the Zoning Ordinance, and will not permanently injure other property or uses in the same zoning district and vicinity. *For example: The property is zoned AP. Are there risks that the conditional use will cause harm to the neighbors ability to use and enjoy their property? Is there reason to believe that the conditional use will cause harm to neighboring property values?*

The proposed conditional use is compatible with adjacent land uses, and the Project was specifically sited and designed with due consideration of adjacent land uses. Power Generation Facilities are quiet and passive neighbors. It has no similar factors to other industrial applications. There are no anticipated noise, odor, light, parking, or traffic impacts from this project in any vicinity around the project. There are several factors that influence property values and the housing market, we have credible studies that show no association between the presence of an operating solar field and negative long-term impact on the value of adjacent properties. Various reviews of solar fields and neighboring property values and home sales have confirmed there is no long-term impact by the project on neighboring properties.

d) The conditional use will be consistent with the character of the zoning district in which it is located and the recommendations of the Comprehensive Plan. *Will the conditional use change the character of the area? Will it involve a building, operation, or features that are significantly different than what is common to the zoning district? If the property is located in the jurisdiction of the City of Columbus visit https://www.columbus.in.gov/planning/comprehensive-plans/. If the property is in the jurisdiction of Bartholomew County visit https://www.columbus.in.gov/planning/comprehensiveplans/comprehensive-county-plans/. Include statements or concepts that support the request.*

The Columbus Indiana Comprehensive Plan Land Use Plan Element, adopted June 5, 2002, states that "The plan calls the most productive farmland to be preserved and protected." Unlike traditional development of commercial and residential real estate, this conditional use will not involve the construction of any buildings. Power Generation Facility projects built on agricultural

lands will allow the soil to rest for around 30 years or more. The U.S. Department of Energy (2022) states that “land can be reverted back to agricultural uses at the end of the operational life for solar installations.” A life of a solar installation is roughly 30 years and can provide a recovery period, increasing the value of the land for agriculture in the future. Giving soil rest can also maintain soil quality and contribute to the biodiversity of agricultural land. Power Generation Facilities are passive uses that require even less activity and handling than agriculture. Such use is commonly cited in agriculture areas as they are so passive like growing crops sitting idle for extended periods.

2.2 ECONOMIC BENEFITS

The Economic Impact & Land Use Analysis report by Strategic Economic Research, LLC is provided by the client and included in **Exhibit J**. Additionally, a Property Value Impact Study by Kirkland Appraisals, LLC is included in **Exhibit L**.

2.3 INTERCONNECTION FACILITIES

Interconnection details and all associated facilities including the switchyard and substation will be provided during final engineering.

2.4 PROJECT CONSTRUCTION

Construction of the Project, if approved, is intended to commence in the 2nd quarter of 2025. Dust and noise from construction will be mitigated with industry standard best management practices.

All equipment uses and operations will be conducted to avoid impeding the flow of traffic on adjacent roadways. Contractor shall maintain access to adjacent landowners for the duration of the project construction. The Contractor shall be fully responsible to provide signs, barricades, warning lights, guard rails, and employ flaggers as necessary when construction endangers either vehicular or pedestrian traffic. These devices shall remain in plan until the traffic may proceed normally again. Equipment will operate in the road right-of-way only to add gravel and make minor improvements to proposed site access driveways. Project construction shall ensure all equipment is properly maintained and equipped with manufacturer’s standard noise control devices.

2.5 HEALTH AND SAFETY

During the Conditional Use Permit process, the Project will coordinate with the appropriate fire safety personnel to ensure adequate plans and systems are in place in the unlikely event a safety issue emerges. Appropriate signage containing necessary contact and safety information for the Power Generation Facility will be displayed in accordance with local code and coordination with staff.

Upon request, a walk-through of the site with the local authorities and emergency agencies will be scheduled once construction is complete. Emergency personnel will also be given the key or code to access the facility.

Power Generation Facilities do not raise concern for fire and explosive hazards. The solar panels and racking, which comprise most of the Project’s equipment, are not flammable. Tempered glass offers

protection from heat and the elements, and the panels are designed to absorb heat as solar energy. From a study by North Carolina State University:

> …Concern over solar fire hazards should be limited because only a small portion of materials in the panels are flammable, and those components cannot self-support a significant fire. Flammable components of PV panels include the thin layers of polymer encapsulates surrounding the PV cells, polymer back sheets (framed panels only), plastic junction boxes on rear of panel, and insulation on wiring. The rest of the panel is composed of non-flammable components, notably including one or two layers of protective glass that make up over three quarters of the panel's weight.

There are no toxic substances in the panels. The project will incorporate Tier 1 silicon-based PV panels, which have been analyzed as follows by North Carolina State University:

> Well over 80% (by weight) of the content of a PV panel is tempered glass front and the aluminum frame, both of which are common building materials. Most of the remaining portion are common plastics, including polyethylene terephthalate in the back sheet, EVA encapsulation of the PV cells, polyphenol ether in the junction box, and polyethylene insulation on the wire leads. The active, working components of the system are the silicon photovoltaic cells, the small electrical leads connecting them together, and to the wires coming out of the back of the panel. The electricity generating and conducting components makeup less than 5% of the weight of most panels. The PV cell itself is nearly 100% silicon, and silicon is the second most common element in the Earth's crust. The silicon for PV cells is obtained by high-temperature processing of quartz sand (SiO2) that removes its oxygen molecules. The refined silicon is converted to a PV cell by adding extremely small amounts of boron and phosphorus, both of which are common and of very low toxicity.

The *Health and Safety Impacts of Solar Photovoltaics* paper from North Carolina State has been included in **Exhibit K**.

Stray voltage issues and remedies are detailed in the USDA's Agriculture Handbook Number 696. While the vast majority of stray voltage concerns are caused by the farm's electrical system and wiring, some may be caused by off-site utility issues, including the following, per the Iowa State Dairy Association's *Stray Voltage Guide:*

- Loose neutral wire connection
- Damaged neutral wires
- Poor grounding
- Undersized neutral wires
- Load imbalances on three phase lines
- Improperly functioning utility equipment
- Ground faults at nearby locations

While malfunction of utility equipment may cause stray voltage issues for local livestock, these threats are pre-existing as the new PV generation facility will tie into existing utility owned distribution lines. The addition of the PV facility has no bearing on these concerns. The utility is responsible for maintenance of these lines and any existing stray voltage concerns should be addressed directly with the utility provider. Note that the utility will install power quality meters and recloser devices at the new point of interconnection for the PV generation, which will assist in the identification of any issues on the local circuit, if they are present.

Undersized distribution neutral wires carrying electrical current may cause excessive neutral-to-earth voltage (NEV) which may be detectable on local premises. Unbalanced customer electrical load between the three voltage phases on a distribution circuit cause these currents to appear in the neutral wire, increasing NEV. It is the utility's responsibility to maximize the balance of customer loads across the three circuits and ensure a properly sized neutral wire. However, electrical generators, including PV and other inverter-based generation operate as balanced three-phase sources, meaning that all current is directed through the three phase conductors, not the neutral conductor. These PV sites in particular have no connection to the distribution neutral, as they are designed with a "delta" connection to only the three phase lines in the circuit. Thus, the addition of a PV generation facility on the circuit has no impact on NEV induced from existing circuit imbalances or an undersized neutral conductor.

PV generation is not designed to direct electric current to the earth during normal operations. Excess power produced by the PV array is managed by inverter controllers but is not directed into the ground. However, electrical line-to-ground faults may occasionally occur in the local electrical circuit including downed power lines or transformer internal faults. These fault conditions may cause temporary rises in NEV due to current flowing through the neutral and/or to ground. The electrical protection system and site grounding system at the PV generating facility is designed to isolate ground faults in the alternating-current, high-voltage and low-voltage power systems within seconds of initiation to prevent further equipment damage. The protection system has multiple layers including UL1741/IEEE1547 compliant inverters, fuses, circuit breakers, digital relays, and reclosers, which will isolate faults and/or disconnect the site from the grid. The utility will also provide a second recloser to trip the site offline in the event of abnormal behavior.

Ground faults at the direct-current PV modules themselves have no effect on other local properties as they are electrically isolated from the distribution circuit, in addition to the fact that the modules produce relatively low-voltage and that they are unable to generate short-circuit currents of any significance. The site grounding plan developed by qualified engineers and installed by qualified electricians prevents significant ground voltage rise during a ground fault.

Stray voltage is a concern that may affect livestock behavior and dairy production. While most stray voltage concerns are due to on-farm electrical and wiring issues, issues on the utility's distribution circuit causing high neutral-to-earth voltage (NEV) may contribute to stray voltage on local farms. However, the addition of local PV generation on the distribution circuit has no impact on the neutral-to-earth stray voltage seen by these facilities.

2.6 OPERATIONS AND MAINTENANCE

Once constructed, the Power Generation Facility will operate throughout the year, passively generating renewable energy. The site and equipment will be designed, approved, maintained, and inspected to ensure safety and security. Maintenance activities during operation are expected to be minimal with occasional service for inverters and transformers. Solar panels are monitored remotely. Traffic is not anticipated to increase during the operations of the Project.

Maintenance operations will likely be carried out rarely and with minimal traffic as only one vehicle will likely be needed to help carry out maintenance several times a year. To prevent shading of the panels for solar energy production, an on-going vegetation maintenance program will be implemented for all vegetated areas within the fenced boundary area. After construction is complete and stabilized vegetation has been established within the fenced Project Area, the Project will conduct vegetative management at appropriate frequency based on weather and moisture conditions. This management schedule would continue each year until implementation of the Decommissioning Plan.

3.0 FEDERAL AND STATE APPROVALS, PERMITS, AND AGREEMENTS

3.1 FEDERAL AVIATION ADMINISTRATION (FAA)

The FAA's policy for Power Generation Facility Projects on Federally Obligated Airports only requires glint and glare screening for solar projects located on federally obligated towered airports. The Bartholomew County Zoning Ordinance Chapter 6.10.G states that glare analysis is only needed if the proposed project is within 500 feet or an approach zone, since this project is 6 miles from the nearest airport the glare analysis isn't applicable.

3.2 LEVEL 2 WETLAND ANALYSIS AND FEMA ANALYSIS

A complete field wetland delineation investigation will be conducted prior to final design to verify waters and wetlands in the Project Area. A Level 2 Wetland Analysis was performed and can be provided if requested. Additional wetlands were identified on the site during the desktop review using historical data and aerials and are included in **Exhibit D**. During final engineering, the Project will be designed to avoid wetland impacts to the greatest extend possible. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) portal was consulted to determine if any FEMA 100-year floodplains are on the site. There are FEMA 100-year floodplain Zone A areas located throughout the site. The FEMA Firmette is included in **Exhibit D**.

3.3 U.S. FISH & WILDLIFE SERVICE (USFWS)

The Project will be designed such that federally listed species will not be significantly impacted. Solar projects typically impose only minimal impacts on wildlife species. Carina Solar, LLC evaluated the Project's potential to impact federally protected species. The assessment performed by Kimley-Horn identified 28 species of plants and animals that may be present within the project area. Prior to construction, consultation with the USFWS will occur to confirm a "No Effect" determination for these species.

3.4 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (IDEM) - SWPPP

IDEM's Bureau of Water is responsible for overseeing the issuance of permits within the National Pollutant Discharge Elimination System (NPDES) program that regulates construction stormwater discharges. Permits require a Storm Water Pollution Prevention Plan (SWPPP), which is a site-specific document that outlines the measures a project will take to reduce pollutants in the stormwater discharges from a construction site. Stormwater controls reduce silt transport and sedimentation during precipitation events.

Prior to construction, the Project will prepare a SWPPP as well as sediment and erosion control plans for submittal and approval for an NPDES Permit through IDEM. The SWPPP will ensure construction activity compliance with guidelines and regulations for controlling sediment and erosion runoff.

4.0 CITY OF COLUMBUS ZONING CODE AND OTHER LOCAL APPROVALS

The Project will comply with the City of Columbus Zoning Ordinances as described below and as shown on the Zoning Site Plan, included as **Exhibit B**. The Project Area is located on agricultural land and is classified as AP, Agricultural: Preferred District. The Project will be a ground-mounted Power Generation Facility comprised of solar photovoltaic (PV) modules, racking system, inverters and medium voltage transformers, and underground electrical conduits connecting PV array blocks with inverters. Access roads with gated entrances shall be located for site maintenance, maintenance of inverters, as well as construction access.

4.1 HEIGHT REQUIREMENTS

According to Article 3, Zoning Districts, ground-mounted Power Generation Facilities are not mentioned. The project will conform to Bartholomew County's Zoning Ordinance 6.10.A.3 . All other structures in the Power Generation Facility shall conform with the maximum height standards detailed in Article 3. The project will be designed to meet the height requirements.

4.2 SETBACKS

Per Article 3 Zoning Districts section 3.5 C. Lot Standards, Power Generation Facilities are subject to the following setbacks:

- 30 feet minimum lot frontage
- 50 feet minimum front setback from arterial streets or roads
- 30 feet minimum front setback from collector roads
- 25 feet minimum front setback from collector streets

However, these setback standards are exceeded due to the project being subject to the Bartholomew County Zoning Ordinance 6.10.A.1:

- At least 50 feet from the nearest edge of public right-of-way.
- At least 200 feet from adjacent properties not included in the subject property as depicted in the site plan.
- At least 500 feet from the nearest point to the outside wall of a dwelling unit on any property not part of the subject property, *including fences,* unless there is a written statement of the waiver, specifying the property for which the waiver is to be granted by legal description and parcel number, signed by the property owner(s).
- At least ½ a mile from any municipal boundary line, *including fences*, unless a written statement of the waiver is signed by the Mayor or Town Council President.
- District requirements apply to existing structures of the subject property including homes, barns, sheds, or outbuildings.
- Zero feet for side and rear yards on all properties that are adjacent and within the subject property.

The Project demonstrates its compliance in the Zoning Site Plan, included as **Exhibit B**.

4.3 GLARE

Power Generation Facilities must be designed, constructed, and sited to minimize glare or reflections on adjacent properties and roadways and to not interfere with traffic, including air traffic, or otherwise create a safety hazard. A glare analysis is only required if the proposed project is within 500 feet; the buildable area of the project is at least 6 miles away from any air traffic interference. The Project is designed to meet the required setbacks and the proposed solar panels include an anti-reflective coating. Utilizing these measures, the Project will not adversely affect nearby properties or traffic.

4.4 SOILS AND GROUND COVER

Perennial vegetative ground cover must be maintained or established in all areas of the Power Generation Facility. The seed mix selections for both temporary and long-term mixes shall adhere to the details in Ordinance 6.10.A. During final engineering, a Landscape Plan will be developed by a licensed landscape architect to detail all proposed vegetation to comply with state and national requirements. A preliminary landscape plan is included in the Zoning Site Plan in **Exhibit B**.

Bartholomew Soil & Water Conservation District reserves the right to request access to the site to conduct visual inspections and assess the condition of the native planting areas and soil erosion and sediment controls. The Project shall be in compliance with the Zoning Ordinance.

Upon request from Bartholomew County Zoning Board**,** the facility owner shall complete an Operations and Maintenance Plan to include with the application for Conditional Use Permit, that will include all the required vegetation and soil maintenance measures and schedules of maintenance. The vegetation maintenance plan will include requirements for mowing, reseeding, and weed management practices. Mowing shall occur a minimum of five times between the months of May and October, or once ground cover exceeds 13 inches in height.

4.5 SECURITY BARRIER

Per City of Columbus Article 9 – 9.3 Fence & Wall Standards, Power Generation Facilities must be enclosed by perimeter security fencing or other county approved barrier with a maximum height of eight feet. Per the Ordinance, the use of barbed wire or razor wire that runs along the top of chain linked fences is not permitted. The Project will be secured by an 8-foot tall, steel fence. The Project fence shall comply with the requirements of Bartholomew County Zoning Ordinance 9.3 & 8.2, and the National Electric Code.

4.6 LIGHTING

Per Article 9, 9.4 Exterior Lighting Standards**,** Power Generation Facilities may not be permanently illuminated, unless required by the FAA or other applicable government agency or authority and if present shall be oriented as to not to project onto surrounding properties and have 90-degree cut-off fixtures. Due to the proposed security fence and the nature of the operations of a Power Generation Facility, additional lighting is not typically needed. The Project will have no permanent lighting systems on site, so the Project shall comply with this requirement.

4.7 DECOMMISSIONING PLAN

A Decommissioning Plan is included in **Exhibit E** and it will ensure the Power Generation Facility elements will be properly removed after the Power Generation Facility is inoperable for twelve (12) consecutive months. The Decommissioning Plan will be in accordance with both the Bartholomew County Zoning Ordinance 6.10.D. The Decommissioning Plan outlines a strategy for the removal of all surface and subsurface physical improvements including but not limited to all solar arrays, electric systems and components, buildings, cabling, security barriers, interior drives, gravel areas, foundations, pilings, and fences. The Decommissioning Plan also includes the restoration of the surface grade and soil to pre-construction conditions and implementation of groundcover for erosion control. The combination of the native grasses and pollinator friendly seed mix established during the Project life and temporary rest of the soils from agricultural planting will promote soil restoration and more productive farmland after decommissioning.

Prior to commercial operation, the Applicant shall provide the City of Columbus with a decommissioning bond to ensure proper decommissioning at the end of the Project life.

4.8 STORMWATER

A preliminary drainage plan was drafted to show the overall approach to stormwater runoff on the Project and includes pre and post construction run-off calculations. This analysis shows an overall decrease in runoff quantity in the post-condition, which adheres to this requirement. The industry assumes that a change in use from row crop to meadow in developing a Power Generation Facility will reduce runoff. The preliminary drainage report is included in **Exhibit H**.

4.9 STANDARDS AND CODES

All on-site power and communication cables must be placed underground to a depth of 36” below grade unless otherwise expressly approved as part of the Conditional Use Permit. Cables connecting the

electrical substation to the transmission line may be above or below ground. The Project will route all medium-voltage electrical lines underground within the Project security fence. The proposed interconnection to the switchyard and substation shall comply with the Interconnection Agreement with the utility provided.

4.10 AVOIDANCE AND MITIGATION OF DAMAGES TO PUBLIC INFRASTRUCTURE

The Project will enter into a road use agreement with the local government and the road use agreement shall require the facility owner be responsible for the reasonable cost of road repairs needed because of project related construction activity. To track road damage, a pre-construction existing survey will be taken of all the roads to be used in transporting the construction materials. The Project Owner will identify roads used to transport materials and supply road closure/road restriction plans to the Board of County Commissioners and County Engineer.

5.0 CONCLUSION

The Carina Solar project adheres to all requirements of the City of Columbus and State of Indiana and should qualify for a Conditional Use Permit to construct a Power Generation Facility in the City of Columbus.

EXHIBIT A: CITY OF COLUMBUS CONDITIONAL USE PERMIT APPLICATION

EXHIBIT B: ZONING SITE PLAN

EXHIBIT C: FEDERAL AVIATION AGENCY NOTICE OF CRITERIA

EXHIBIT D: LEVEL 2 WETLAND ANALYSIS

EXHIBIT E: DECOMMISSIONING NARRATIVE

EXHIBIT F: OWNER AUTHORIZATIONS

EXHIBIT G: LEGAL DESCRIPTIONS

EXHIBIT H: PRELIMINARY DRAINAGE REPORT

EXHIBIT I: RECORDED DEEDS

EXHIBIT J: ECONOMIC IMPACT ANALYSIS

EXHIBIT K: HEALTH AND SAFETY IMPACTS OF SOLAR PHOTOVOLTAICS (BY OTHERS)

EXHIBIT L: PROPERTY VALUE IMPACT STUDY (BY OTHERS)

EXHIBIT M: FARMER'S GUIDE TO GOING SOLAR (BY OTHERS)