

**Conditional Use Permit
Application Supplement**

**Free State Solar Project, LLC
(Kansas Sky Energy Center)**

I. Summary of Project

Free State Solar Project, LLC, d/b/a Kansas Sky Energy Center (“Applicant”) is seeking Conditional Use Permit (“CUP”) approval from Douglas County for a Commercial/Utility Scale Solar Energy Conversion System (“CSECS”) for the Kansas Sky Energy Center (“Project”). As proposed, Evergy, through its regulated utility subsidiaries (“Evergy”), will build, own, and operate the Project, pending regulatory approvals.

The proposed Project is an up to 159-megawatt alternating current (“MWac”) photovoltaic (“PV”) CSECS located on approximately 1,105 acres within Grant Township in Douglas County, Kansas (the “Project Area”). Please refer to the Proposed Conditions Site Plan (Document 9) and maps at Exhibit AA for a more detailed view of the Project’s location.

The Applicant is requesting a CUP for the Project Area, which encompasses approximately 1,105 acres. Based on the current Project design, the CSECS Project Facilities (defined below) will be placed within fenced areas totaling approximately 734 acres of the Project Area. The “Site Area”, as defined in the County’s Solar Regulations (i.e., the footprint of the Solar Modules measured with the solar panels as horizontal as possible), encompasses 604 acres, more or less, within the broader Project Area. The Project proposes to interconnect to the transmission grid located at the Midland Junction substation (2024 E. 1400 Road).

The Project is comprised of PV solar panels that will be mounted on a single-axis tracking system, along with the associated infrastructure which includes electric inverters and transformers, underground electrical collection systems, electrical collector substation, a short overhead generation tie-line (“gen-tie”), operation and maintenance (“O&M”) office, supervisory control and data acquisition (“SCADA”) hardware, control house for protective relay panels and site controllers, private gravel access roads with gated ingress/egress points and security fencing, and associated facilities. Temporary facilities associated with construction will include construction laydown yards and a construction office. Collectively, the components listed in this paragraph comprise the “Project Facilities.” The Applicant has not finalized the manufacturers and specifications of the Project Facilities but will be similar to those depicted in the Application.

II. Property Owner Information

The Project will be located entirely on parcels privately owned by landowners who have chosen to enter into long-term leases or purchase options with the Applicant (“Participating Property Owners”). See Owner Authorization Forms and Setback Waivers (Document 2). The following Table 1 identifies the Participating Property Owners and properties included in this CUP application that comprise the Project Area, which are further identified by legal descriptions at Document 3.

Name	Property ID
	061-02-0-00-00-009.00-0
	061-01-0-00-00-008.00-0
	061-12-0-00-00-004.00-0
	073-07-0-00-00-009.00
	061-02-0-00-00-011.00-0
Daniel E. Strong Trust, dated March 11, 2008	
	061-12-0-00-00-003.00-0
	061-12-0-00-00-012.01-0
Evelyn M. Strong, Trustee, under the Evelyn M. Strong Trust dated March 11, 2008	061-12-0-00-00-009.00-0
	061-01-0-00-00-012.00-0
	061-11-0-00-00-009.02-0
Dorothy L. Congrove, Trustee of the Dorothy L. Congrove Trust Agreement dated May 17, 1996	073-07-0-00-00-003.00.0
	073-07-0-00-00-011.00-0
Webb Family Limited Partnership (aka H&W Farms, LLC)	061-02-0-00-00-002.00-0

Table 1: Participating Property Owners

III. Zoning Regulations Compliance

This application has been prepared in compliance with the requirements for application for a CUP for a CSECS in the Zoning Regulations, in particular the use specific standards of Section 12-306-49 (the “Solar Regulations”). The following pages set forth certain requirements of the Zoning Regulations pertaining to this application in bold italics followed by the Applicant's response in normal font.

12-307-3.10 Site Plan Contents

The Applicant has made considerable effort to depict the CSECS Project Facilities in detail to the extent possible at this stage of development. However, the exact placement of Project Facilities within the Site Area is conceptual at this stage, and subject to change prior to construction based on a number of factors outside of the Applicant’s control, such as the precise specifications of the models of equipment available at the time of construction. A final CSECS site plan design with any minor modifications will be submitted to the County for consistency with County requirements that there has been no increase in Site Area or the area of accessory equipment prior to construction.

A site plan shall:

- a. Be prepared by an architect, engineer, landscape architect, or other qualified individual, per the standards of these regulations at a scale of 1 inch equals 50 feet or larger;***
- b. Be arranged so that the top of the plan represents north or, if otherwise oriented, is clearly and distinctly marked;***
- c. Include a written and graphic scale and a north arrow;***

- d. Show boundaries and dimensions graphically, and contain a written legal description of the property;***
- e. Show the present and proposed topography of the area by contour lines at an interval of not more than 5 feet;***
- f. Show, by use of directional arrow, the proposed flow of storm drainage from the site;***
- g. Show the location of existing and proposed structures and indicate the number of stories, height, gross floor area, and entrances to all structures;***
- h. Show the location and dimensions of existing and proposed access points, drive aisles, off-street parking, loading zones and walkways;
Indicate location, height, and materials for screening walls and fences;***
- j. List the type of surfacing and base course proposed for all parking, loading and walkway areas;***

Response: The Proposed Conditions Site Plan (Document 9, Sheet C500) includes details of surfacing and base course materials proposed for surface improvements in accordance with the recommendations of the geotechnical engineer's report.

- k. Show the location and size, and provide a landscape schedule of all perimeter and interior landscaping including grass, ground cover, trees and shrubs. The schedule must show that landscape materials will be no smaller or less dense than the following standards:***

- 1) Ground cover: 2" Pots on 6 - 8" centers, or 6" pots on 10 - 12" centers***
- 2) Shrubs: 18 - 24", 2 gallon size (spreading evergreens - 5 gallon container size or Balled & Burlapped)***
- 3) Ornamental trees: 1 1/2 - 1 3/4" ca. (smaller ornamental trees are to be 5 - 6' in height)***
- 4) Shade trees: 2 - 2 1/2" ca.***
- 5) Coniferous trees: 6 - 8', (Balled & Burlapped)***

- l. Describe the proposed use of the site and list the number of required off-street parking spaces. If the exact use is not known at the time a site plan is submitted for review, off-street parking requirements shall be calculated by the general use group using the greatest off-street parking requirement of that use group;***

Response: Typical O&M facilities for a CSECS project of this size include an approximately 15-foot tall, single-story building with 1500 square feet or less of combined office and spare part storage space that is closed to the public and visited regularly but infrequently by small operations and maintenance crews. No off-street parking spaces are anticipated to be required as maintenance crews typically park in on the private access roads in areas where they are working and at the O&M facility.

- m. Show the proposed location, indicate the direction, and list the amount of illumination of proposed lighting together with information on screening proposed for the lighting and steps taken to prevent glare; a point by point illumination array may be required for parking lot lighting.***

Response: The design of the proposed CSECS does not include any exterior lighting within the Project Area with the exception of the Project Substation as required by applicable safety codes and industry standards and as indicated on Sheets EP100 and E0301 of the Proposed Conditions Site Plan (Document 9). Details of typical lighting appliances to be installed in these select areas with specifications for compliance with these regulations can be found on Sheet C504 of the Proposed Conditions Site Plan (Document 9).

- n. Show location and dimensions of each outdoor storage area, including trash storage; and***
- o. Provide a note indicating that the site plan for a public or governmental building(s) and facility(ies) has been designed to comply with the provisions of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) for buildings and facilities, appendix A to 28 CFR part 36.***

Response: See Existing Conditions Site Plan and the Proposed Conditions Site Plan (Documents 8 and 9, respectively) for the above site plan requirements.

12-307-3.11 Approval Criteria

Planning Staff shall make a report based on a review of the site plan with the following criteria:

- a. That the proposed use is a permitted use in the District in which the property is located or is an allowed nonconforming use;***

Response: All properties included in the Project are zoned AG-1, which allows for the proposed use with a CUP.

- b. That the site plan contains only platted land, vested parcel (as defined in the Subdivision Regulations, Chapter 11 County Code), or nonconforming lot as defined in Section 12-308-4.***

Response: The Project meets this requirement.

- c. The site plan is compliant with these Zoning Regulations and other adopted policies or standards of County agencies;***

Response: The Project meets this requirement.

- d. That the proposed arrangement of buildings, off-street parking, access, lighting, landscaping, and drainage is compatible with adjacent land uses;***

Response: See CUP Application (Document 1) for description of compatibility with neighboring uses.

- e. That the vehicular ingress and egress to and from the site and circulation within the site provides for safe, efficient, and convenient movement of traffic, not only within the site but on adjacent roadways as well;*

Response: The Applicant conducted a Traffic Study (Exhibit J) to facilitate the evaluation of this requirement by the County.

- f. That the site plan provides for the safe movement of pedestrians within the site;*

Response: Not applicable as the Project Facilities will be secured from public access.

- g. That there is a sufficient mixture of grass, trees, and shrubs within the interior and perimeter (including public right-of-way) of the site so that the proposed development will be in harmony with adjacent land uses and will provide a pleasing appearance to the public. Any part of the site plan area not used for building, structures, parking or access ways shall be landscaped with a mixture of grass, trees, and shrubs; and*

Response: The Applicant has provided a Vegetation Management and Agrivoltaic Plan (Exhibit L) and Landscaping Plan (Exhibit K) that demonstrate compliance with this requirement. This is a unique use that is secured from public access so screening will be concentrated on the exterior perimeter in locations as identified in the Landscaping Plan. Vegetation will be re-established post-construction as identified on the Vegetation Management and Agrivoltaic Plan to minimize erosion and address stormwater requirements.

- h. That all outdoor storage areas, including trash areas, are adequately screened from adjacent right-of-way and properties.*

Response: Not applicable as the Project is not currently proposing any permanent outdoor storage areas, including trash areas, to be screened.

12-307-2.05 Review And Decision-Making Criteria

The following are requirements specific to CSECS.

12-306-49.04 Conditions Required for Approval

In addition to the findings of fact listed in Section 12-307-2.07, the following considerations shall be evaluated with the review of any application:

- a. The Operator shall demonstrate their ability to strictly conform to all applicable performance standards detailed in these Regulations as well as applicable Local, State, and Federal laws or regulations.*

Response: The CUP Application, Documents, and Exhibits, collectively referred to as the “Application Documents,” demonstrate comprehensive due diligence and conformity with applicable Local, State, and Federal laws and regulations.

b. *Key issues to be considered with the review of the application include, but are not limited to:*

1) *Visual impact;*

Response: The Applicant has created Visual Simulations (Exhibit S) from various locations around the Project representative of different viewpoint location types, CSECS equipment and facilities, and proposed landscape screening.

2) *Impact on Wildlife Habitat/ Native Flora and Fauna;*

Response: The existing land use is predominantly conventional agriculture within the Project Area and includes limited wildlife habitat or native flora and fauna. The Applicant has included a Habitat Assessment (Exhibit T) for species protected by the Endangered Species Act ("ESA"), Bald and Golden Eagle Protection Act ("BGEPA"), and the Migratory Bird Treaty Act ("MBTA"). The Habitat Assessment was provided to the Kansas Department of Wildlife and Parks ("KDWP") and the U.S. Fish and Wildlife Service ("USFWS") for their review. Response letters from both agencies are included in Exhibit U. KDWP determined there are no significant impacts to critical wildlife habitat, public recreational areas, or currently listed threatened or endangered species or species in need of conservation. USFWS recommended the Project officially submit into the USFWS Information for Planning and Consultation ("IPaC") system. The Applicant completed this request and has included a response letter in Exhibit V. The Applicant also met in person with representatives of both agencies to discuss recommendations from their respective response letters and consult about wildlife corridors.

3) *Impact on cultural, historical, or archeological features;*

Response: Applicant has included an Archaeological Survey Report (Exhibit W) detailing desktop and field studies of cultural, historical, and archeological features. There is one (1) National Register of Historic Places ("NRHP") structure, the Vermilya-Boener House, located outside of the Project Area. Field surveys for pre-historic and historic archeological features did not identify any significant features. The Archaeological Survey Report was submitted to the Kansas State Historic Preservation Office ("SHPO") for review. SHPO found the report to be acceptable and had no objection to the proposed Project and concurred that the Project will have no effect on NRHP-eligible historic properties (SHPO Response Letter, Exhibit X).

4) ***Impact on critical wildlife habitats, current state-listed threatened and endangered species, and species in need of conservation as defined by Kansas Department of Wildlife and Parks.***

Response: Applicant has included a Habitat Assessment (Exhibit T) for species protected by the ESA, BGEPA, and MBTA. The Habitat Assessment was provided to the KDWP for review. KDWP determined there are no significant impacts to critical wildlife habitat or currently listed threatened or endangered species or species in need of conservation per the Habitat Assessment Response Letter (Exhibit U).

5) ***Impact on environmentally sensitive lands;***

Response: Applicant has included GIS Maps (Exhibit AA) for each of the environmentally sensitive lands, as defined by Chapter 12 Section 12-314 of the Zoning Regulations. No significant impacts on environmentally sensitive lands are anticipated.

The Project Area is located outside of the Regulatory Floodways and Special Flood Hazard Areas designated on the FEMA Flood Insurance Rate Map for Douglas County (Exhibit AA, Figure 05-A and Figure 05-B). The Project was designed with a minimum 50-foot setback from delineated wetland features (Exhibit AA, Figure 05-C).

Stream corridors, as defined in the Zoning Regulations, were avoided by the Project (Exhibit AA, Figure 05-D). There is currently one proposed location where medium-voltage collection lines will need to cross these stream corridors. The lines would be located below grade and any impacts to the stream corridor would be temporary and subject to regulations under Section 404 of the Clean Water Act ("CWA"). Any permit required per the CWA would be obtained prior to the issuance of building permits.

There are no known native or restored prairies in the Project Area (Exhibit AA, Figure 05-E).

Approximately 595 acres (approximately 53.5%) of the Project Area is Prime Farmland (Exhibit AA, Figure 01-B). The Applicant has proposed various dual use vegetation management and agrivoltaic treatments that have been selected to preserve and enhance the soils within the Project Area to be suitable for agricultural use after the Project is decommissioned (See Vegetation Management and Agrivoltaic Plan, Exhibit L).

There is one (1) stand of mature trees within the Project Area, located northwest of the proposed project substation (Exhibit AA, Figure 05-G).

The Applicant does not propose removal or construction activity in the immediate vicinity of the stand of mature trees.

As noted above, the Project is not expected to have a negative impact on NRHP-eligible features.

6) *Impact on water quality and soil erosion;*

Response: The Applicant has included proposed erosion and sediment control measures in the Erosion and Sediment Control Plans within the Proposed Conditions Site Plan (Document 9, Sheets C400-C423). The Vegetation Management and Agrivoltaic Plan (Exhibit L) proposes reseeding the site with native and naturalized vegetation to reduce the amount of soil erosion and have a net positive impact on water quality.

7) *Impact on infrastructure, including roads and bridges for construction access;*

Response: The Applicant has included a Traffic Impact Study (Exhibit J) that estimates the amount of construction traffic and anticipated improvements to existing road surface conditions. There are no anticipated capacity improvements needed.

8) *Aviation/Federal Aviation Administration (FAA) impacts;*

Response: The Applicant filed the Project with FAA through the Obstruction Evaluation/Airport Airspace Analysis ("OEAAA"). The Project received favorable FAA Determinations of No Hazard, which are summarized in the Obstruction Evaluation/Airport Airspace Analysis Memorandum (Exhibit Y) and included for reference (Exhibit Z).

9) *Cumulative Impacts;*

Response: Based on the proposed Project design, location, supporting studies and extensive public outreach, the Applicant does not anticipate significant negative cumulative impacts.

10) *Company experience, reputation, and financial ability;*

Response: Free State Solar Project, LLC, d/b/a Kansas Sky Energy Center, is a wholly owned subsidiary of Savion, LLC ("Savion"). Savion is an affiliate of Shell Group, headquartered in downtown Kansas City, Missouri. Since its founding in 2019, Savion has become one of the most experienced and technologically advanced utility-scale solar and energy storage project development companies in the U.S., with a vision for the transformation of the country's electricity supply to renewable resources.

Savion's portfolio includes over 160 projects in various phases of development across 33 states, with over 35 gigawatts in operation, under construction, contracted, or in development. Savion is committed to helping decarbonize the energy grid by replacing electric power generation with renewable sources and delivering cost-competitive electricity to the marketplace.

11) *Decommissioning, removal, reclamation, and disposal;*

Response: The Applicant has included an Abandonment, Decommissioning and Reclamation Plan (Exhibit R) to address these criteria.

12) *Bond agreement or other means of ensuring reclamation, disposal, and decommissioning performance;*

Response: See Abandonment, Decommissioning and Reclamation Plan (Exhibit R) for more detail about decommissioning. The Applicant will coordinate with the County to comply with decommissioning financial performance requirements prior to construction.

13) *Specific requirements for building and construction;*

Response: See Proposed Conditions Site Plan (Document 9).

14) *Emergency services and training requirements; and*

Response: The Applicant has included an Emergency Services Plan (Exhibit M) to address these criteria.

15) *Degree to which agricultural uses and wildlife habitat are accommodated with the facility layout and design.*

Response: The Applicant has included a Vegetation Management and Agrivoltaic Plan (Exhibit L), wildlife corridors (GIS Maps at Exhibit AA, Figure 04-A), and a Grazing Management Plan (Exhibit H) to address these criteria.

12-306-49.05 Standards

The following standards apply to all Limited Scale and Commercial/Utility Scale Solar Energy Conversion Systems, except where specifically noted:

- a. Concentrating Solar Thermal Devices. Solar energy conversion systems shall not utilize concentrating solar thermal devices.***

Response: The Project will not utilize concentrating solar thermal devices.

b. Farmland. As food sustainability and preservation of prime agricultural land are goals of the comprehensive plan, and agricultural tourism and economic development are priorities within the Douglas County Food System Plan, and Limited Scale or Commercial/Utility Scale Solar Energy Conversion Systems (CSECS) commonly utilize land for multiple decades, the following standards shall apply:

1) Projects that further enhance climate and food system resilience and preserve agricultural character by enabling the integration of food production into their design are encouraged.

Response: The Applicant has identified potential food production opportunities in the Vegetation Management and Agrivoltaic Plan Decision Tree (Exhibit L, Appendix A) and Grazing Management Plan (Exhibit H).

2) Systems may be located on prime farmland and farmland of statewide importance when the natural topography is preserved with limits set on grading.

i. Grading of prime farmland and farmland of statewide importance shall be limited to maintain the natural topography.

Response: Proposed grading is detailed in the Proposed Conditions Site Plan (Document 9, Sheets C300-323).

2) Where approved, grading shall not exceed 5% of the site area unless a modification is granted by the Board of County Commissioners.

Response: Less than 1% of the Site Area is proposed to be graded.

c. Height. Solar panels shall not exceed fifteen (15) feet in height, measured when oriented at maximum tilt; with the following exceptions:

Response: The Project as proposed will meet this requirement. Typical detail provided in Proposed Conditions Site Plan (Document 9, Sheet C504, Figure TRK01).

1) Said height restrictions shall not apply to appurtenant enclosed structures. Structures shall comply with the height limit for the zoning district.

Response: All proposed appurtenant enclosed structures will be designed and constructed to comply with the 35-foot maximum height requirement for development in an AG-1 zoning district in Douglas County.

2) The Board of County Commissioners may approve a modification to allow panels of greater height, if found to be necessary to accommodate slopes without grading or to accommodate agrivoltaics, provided the height of the solar panels do not negatively impact nearby land uses or the character of the area.

Response: A modification to the maximum solar panel height limitation set in these regulations is not necessary for this Project as proposed.

d. Location. The system shall be located to:

- 1) ***Accommodate the future growth of incorporated cities;***

Response: The Project location and Abandonment, Decommissioning and Reclamation Plan (Exhibit R) will accommodate the planned future growth of Lawrence.

- 3) ***Utilize existing terrain, vegetation, and structures to screen the project from off-site view, to the extent possible. If this is not possible, additional screening may be required;***

Response: The Project Area has very little existing vegetation and terrain. Proposed landscaping buffers have been included in Project design to provide additional screening from adjacent existing residences. Details are included in the Landscaping Plan (Exhibit K) and Visual Simulations (Exhibit S).

- 4) ***Avoid steep slopes of 15% or greater;***

Response: There are no slopes of 15% or greater within the Project Area.

- 3) ***Make use of brownfield sites, or similar, where possible; and***

Response: There are no brownfield sites, or similar, within the Project Area.

- 5) ***Minimize impact to environmentally sensitive lands listed in Section 20-314.***

- i. ***Given that additional land area may be required to ensure adequate wildlife habitat and corridors and given that the area within the conditional use permit may include land that is not part of the Site Area or Project Area; the maximum protection limit of 40% of the property set in Section 12-314 is not applicable to the CSECS projects. Rather the area designated for protection shall be determined with the review of each conditional use permit.***

Response: See CUP Application (Document 1) for additional information on how the Project is designed to minimize impact to environmentally sensitive lands.

- ii. ***Temporary construction barriers shall be installed along the perimeter of the drip-line of a protected stand of mature trees, or 200 feet from the historic trail, or at the boundary of other protected environmentally sensitive lands. This fencing is to be signed with the following requirement: 'Grading, vehicles, equipment, or the storage of materials is not permitted beyond the construction fence-line.' This fencing must remain in place until construction is complete.***

Response: Applicant acknowledges and will comply with these requirements.

- 6) *Facilities shall be located a minimum of 200 feet from historic trails that are identified on the County GIS map.***

Response: The Project meets this requirement. The closest historic trail (California Trail) is located approximately three (3) miles south of the Project Area according to the Douglas County GIS map.

e. *Size.*

- 1) *In order to maintain the rural character and preserve agricultural land the CSECS Site Area shall be limited to no more than 1,000 acres total, unless the Board of County Commissioners approves a modification from this standard based on site specific characteristics which are determined to aid in the preservation of rural character or natural features or to promote the shared agricultural use of the property.***

Response: The Site Area is approximately 604 acres. The Site Area and Solar Modules are shown in GIS Maps (Exhibit AA, Figure 03-A).

- f. *Glare. All solar panels must be constructed to minimize glare or reflection onto adjacent properties and adjacent roadways and must not interfere with traffic, including air traffic, or create a safety hazard as per any Local, State, and Federal laws and regulations. Examples of measures that can be utilized to limit glare include, but are not limited to:***

- 1) *Textured glass;***
- 2) *Anti-reflective coatings;***
- 3) *Screening;***
- 4) *Distance; or***
- 5) *Positioning units in a manner that reduces glare.***

Response: The Applicant acknowledges and will comply this requirement. The Project has included a Solar Glare Hazard Analysis (Exhibit P), which evaluated potential glare onto adjacent residences, roadways, train tracks, and air space. PV solar panels are designed to absorb rather than reflect light and glare has been minimized through anti-reflective coating of solar panels. The Solar Glare Hazard Analysis did not recommend mitigation due to angle and position of glaring aligning with direct sunlight.

- g. *Vegetation. The system shall be designed to accommodate concurrent use of the land for livestock grazing, row crops, other agrivoltaic uses, or contain a diverse array of native grasses and forbs for native habitat under and between the rows of solar panels. Ground around and under solar panels/Arrays and in designated buffer areas shall be planted and maintained in perennial vegetated ground cover or agricultural plants that are managed to prevent erosion and runoff, and meet the following standards:***

Response: The Applicant has submitted a Vegetation Management and Agrivoltaic Plan (Exhibit L), which was developed with these requirements as the basis for design.

- 1) ***Clearing of natural vegetation shall be limited to that which is necessary for the construction, operation, and maintenance of the system, access roadways, and other approved site improvements.***

Response: The Project will meet this requirement. Almost the entirety of the land within the Project Area is in conventional agricultural production with the exception of a few isolated trees along drainage ways and road rights-of-way.

- 2) ***Removal of stands of mature trees (as defined in the Zoning Regulations), shall be limited and shall comply with the environmental protection standards in Section 12-314, with the area exception noted in Sub-section d.***

Response: A mature stand of trees is located north of the proposed Project substation, outside of the proposed disturbance limit of the Project (Document 9, Sheet C305 and C405; Exhibit AA, Figure 05-G). Note that the limit of disturbance for landscaping shows overlap with the mature trees in Document 9, Sheets C305 and C405. These trees will be preserved rather than removed and replaced with new trees.

- 3) ***The surface of the project site shall be prepared as shown on the approved Vegetation Management and Agrivoltaic Plan. For the remainder of the Project Area, disturbed soils shall be seeded to prevent erosion and manage runoff. Seed mixes for perennial plantings should include a diversity of grasses and wildflowers; Native plants, wildflowers, and agriculture are preferred.***

Response: The submitted Vegetation Management and Agrivoltaic Plan (Exhibit L) includes a decision tree to identify the various potential treatments across the Project Area specific to existing and proposed site conditions. Seed mixes were developed with a preference for perennial species that are native or naturalized and provide pollinator benefits. Seed mixes are included in the Vegetation Management and Agrivoltaic Plan.

- 4) ***Any pesticides used on the site shall be applied only by a pesticide applicator certified by the Kansas Department of Agriculture. If the vegetation plan has been designed to minimize the use of pesticides or herbicides, those practices should be clearly stated on the site plan and noted in the operation plan.***

Response: The Vegetation Management and Agrivoltaic Plan (Exhibit L) describes discrete and limited use of herbicides for invasive weed control with non-herbicidal alternatives proposed for certain circumstances during the construction and operational phases of the Project.

h. Soils. All grading and construction activities shall preserve existing topsoil.

- 1) ***Temporary Displacement or Removal of Soil***
 - i. ***Topsoil may be temporarily displaced where grading has been approved as part of an installation.***
 - (a) ***The amount of topsoil displaced shall be minimized.***
 - (b) ***Topsoil shall be stockpiled on the site***
 - (c) ***After rough grading, the topsoil shall be redistributed uniformly on the surface of all areas to be vegetated.***
 - (d) ***Displaced topsoil shall not be removed from the site except as required to remediate contamination per the standards in the following section.***
 - ii. ***Topsoil shall not be removed from the site except as required by Kansas Department of Health and Environment (KDHE) due to contamination, or other applicable Local, State, Or Federal Laws.***
 - (a) ***The amount of soil removed shall be reported to KDHE and the Zoning and Codes Director.***
 - (b) ***The Zoning and Codes Director may require topsoil to be brought to the site for reapplication and planting, depending on the amount that was removed.***
 - (c) ***Contaminated topsoil shall be disposed of in accordance with Local, State or Federal regulations.***

Response: Applicant acknowledges and will comply with these requirements and the Project will meet or exceed these requirements.

i. Setbacks.

- 1) ***All structures shall be located in compliance with the setbacks required for that zoning district.***

Response: An overall setbacks plan is included in the Existing Conditions Site Plan (Document 8, Sheet 200), which includes an Array Setbacks Table, which lists the applicable setbacks for CSECS in the AG-1 zoning district. All applicable structures comply with the setbacks listed in this table except for lot line setbacks waived by Participating Property Owners (Owner Authorization Forms and Setback Waivers, Document 2).

- 2) ***The solar panels/Array and appurtenant structures shall be located a minimum of 500 feet from any existing residence (building permit plans have been submitted or the residence is on-site at time of conditional use permit approval), as measured from the dwelling, unless a lesser setback is agreed to by the owner of the residence.***

Response: Setback lines are shown on the Proposed Conditions Site Plan (Document 9, Sheets C300-323; C400-423) and include a 500-foot setback from any existing residence. This setback is also shown in isolation as Exhibit AA, Figure 06-A.

- 3) ***Battery storage shall not be located within 500 feet of an existing residence (building permit plans have been submitted or the residence is on-site at time of conditional use permit approval).***

Response: The Applicant is not proposing battery storage for this CUP application.

- 4) ***No portion of a system may encroach upon the public right-of-way with the exception of distribution or transmission lines (overhead or underground) provided all applicable approvals from the authority having jurisdiction over that portion of the right-of-way have been obtained.***

Response: The Applicant acknowledges and will comply with this requirement by obtaining all necessary approvals prior to construction.

- 5) ***Additional setbacks may be required to mitigate site specific issues or to provide for frontage roads, cross-access easements, commercial corridors, or other means of egress/ingress.***

j. Fencing/Screening.

- 1) ***Properties containing CSECS may be enclosed by perimeter fencing to restrict unauthorized access. Wildlife friendly fencing, such as a barb-wire fence with smooth wires for the top and bottom strings, or woven wire or other permeable fencing, as illustrated in this section, shall be used where possible.***
i. Where wildlife friendly fencing is not utilized, additional wildlife corridors, including escape corridors, may be required in areas prone to grass fires or flooding.

Response: The Project Facilities will be enclosed by fencing and closed to public access. The Site Area will be enclosed by wildlife friendly fencing. Typical fencing details, including height and materials can be found on Sheet C305 in the Proposed Conditions Site Plan, Document 9.

- 2) ***As required by Local, State, and Federal regulations, critical electrical and communications equipment, may be fenced with chain-link fence topped with barbed wire when such measures are deemed necessary to ensure public safety and provide additional security for the equipment.***

Response: Access to the critical electrical and communications equipment within the Project Substation is required to be controlled, and the critical facilities enclosed with a fence not less than seven (7) feet in height, which may include one (1) foot or more of barbed-wire strands at the top, per the National Electrical Code (NEC) under Article 110.31, to deter unauthorized access. Details of the proposed Substation Security fencing and gates can be found on Sheet C503 in Document 9.

- 3) ***Specific standards for battery energy storage system fencing provided in the following section.***

Response: The Applicant is not proposing a battery energy storage system in this application.

- 4) ***Wildlife corridors shall be provided as determined necessary by wildlife biologists with the Kansas Department of Wildlife and Parks, or other specialists designated by the County to accommodate wildlife in the area.***

Response: The Applicant met with representatives of KDWP and USFWS on May 8, 2023. The Applicant presented the proposed wildlife corridors (as currently included in application materials) and discussed the general intention of utilizing seed mixes containing native and naturalized grasses and forbs for long-term vegetation management. The USFWS does not have official requirements for wildlife corridors and did not have any recommendations at the time of this application. KDWP also does not have official requirements for wildlife corridors, but a representative agreed that reseeding of the proposed wildlife corridors in a native and naturalized mix would provide sufficient corridors for large game movement and that the proposed wildlife friendly fencing would allow small mammal movement. The proposed wildlife corridors are shown on Exhibit AA, Figure 04-A. Seed mixes are included in the Vegetation Management and Agrivoltaic Plan (Exhibit L).

- 5) ***Unless waived by the property owner, a 25-foot deep buffer area shall be provided, and maintained, along property lines between the systems and adjoining non-participating residential properties, or along the Site Area fencing for participating residential properties, for the purpose of screening the residential portion of the property.***
- i. ***The buffer area shall include the minimal features necessary to provide an adequate buffer in order to minimize land disturbance.***
 - ii. ***The buffer may include a combination of berms, fences, and/or vegetation and may occur within the required setbacks on the facility property.***
 - iii. ***The buffer area shall be designed to buffer the view of the facility from the residence and the residential portion of the property.***
 - iv. ***Evidence of waivers shall be provided to the Planning Office and shall be filed with the Register of Deeds at the applicant's expense.***

Response: The Applicant has submitted a compliant Landscaping Plan (Exhibit K) detailing the location and species composition of the proposed buffer areas designed to meet the above requirements.

k. Battery energy storage system. All battery energy storage systems shall comply with requirements of the National Fire Protection Association (NFPA) 855 and all other local, state, and federal regulations. At a minimum, the following standards shall apply:,,

Response: The Applicant is not proposing a battery energy storage system in this application.

l. Signage.

- 1) ***Perimeter fencing shall incorporate appropriate safety signage, at a minimum spacing of every 500 feet.***
- 2) ***Signage, including addresses for each fenced area, shall be provided as required by the Emergency 911 dispatch.***

Response: The Applicant will comply with these requirements. Examples of typical labels and markings can be found on the Proposed Conditions Site Plan (Document 9, Sheet C504).

m. Lighting.

- 1) ***Security or safety lighting relating to the CSECS and appurtenant structures shall be limited to the minimum necessary to mitigate visual impacts.***

Response: Project lighting will be limited to the Project Substation and O&M building as required by applicable codes and standards and as indicated on Document 9, Sheet EP100. Details of typical lighting appliances to be installed in these select areas with specifications for compliance with these regulations can be found on Document 9, Sheet C504.

- 2) ***No exterior lighting fixture shall be installed that exceeds fifteen (15) feet in height unless proven necessary by the applicant and approved as part of the conditional use review process.***

Response: The exterior lighting fixtures are proposed with a maximum height of 15 feet as shown on the Proposed Conditions Site Plan (Document 9, Sheet C504).

- 3) ***No light source shall be directed off-site. All external lighting shall be shielded and downcast such that light does not encroach upon adjacent properties or the night sky.***
- 4) ***All exterior lighting, where used, shall be motion activated and on a timer, or switch-operated.***
- 5) ***If LED lights are used, the color temperature shall be no more than 3000K {Kelvin}.***

Response: The Applicant will comply with these requirements.

n. Noise.

- 1) ***The operational noise generated from the solar installation equipment, including inverters, battery energy storage systems, components, and associated ancillary equipment shall not exceed a noise level of 60 decibels (60 dBA) as***

measured at the property line or 500 feet from an existing residence, {building permit plans have been submitted or the residence is on-site at time of conditional use permit approval}.

Response: The Project will comply with this requirement. The Applicant has submitted an Environmental Sound Study (Exhibit D) to demonstrate compliance utilizing predictive noise modeling with proposed Project equipment based on equipment noise ratings.

- 2) *Applicants shall submit equipment and component manufacturer noise ratings at the time of application to demonstrate compliance with the maximum permitted noise level as noted above.*

Response: The noise emission ratings (in dB(A)) at a specified distance from the equipment) for the proposed solar equipment can be found on the manufacturers' equipment datasheets (Manufacturer's Specification, Exhibit E).

- 3) *Transformers, inverters, or other sound or vibration generating equipment must be placed so that low level recurring ambient noise does not exceed the limit noted above. Noise levels can be minimized with type of equipment or the placement of equipment interior to the site, shielded by proposed solar panels and/or by specifically placed noise- and vibration- deadening fence, landscape, or other efforts.*

Response: The proposed sound and vibration generating equipment was intentionally sited within the Project interior to ensure noise levels at the prescribed measurement boundaries were below the 60-decibel limit without the need for additional mitigations, as demonstrated in the Environmental Sound Study (Exhibit D).

- 4) *Construction noise shall be analyzed and mitigated as outlined in the Construction Impact Assessment, Section d 'Additional Materials'.*

Response: The Applicant has analyzed anticipated construction noise and outlined certain construction noise mitigation practices in the Environmental Sound Study (Exhibit D).

o. Electrical Interconnections.

- 1) *All electrical interconnection and distribution lines within the subject site shall be located underground, with the following exceptions:*

Response: All of the medium-voltage ("MV") collection cables that interconnect the CSECS power conversion units to the Project Substation will be installed underground as indicated in the Proposed Conditions Site Plan (Document 9), with cross sectional diagrams showing typical installation depths and configurations on Sheets E7610 and E7611.

The solar industry has moved away from burying the DC string, harness, and trunk cables which significantly minimizes disturbance to the soil in and around the panel arrays during construction. which reduces safety exposure to construction personnel through improved ground conditions, enables earlier seeding and vegetation growth improving infiltration rates and reducing stormwater runoff, and reduces cable and other material waste. In lieu of burying the DC cables between the solar panels and the disconnect box, industry standard practice now involves use of an NEC-compliant, above-ground cable management system (commonly referred to under the brand name, CAB) utilizing a messenger wire and cable hanger supports that routes the DC cables underneath the Solar Panels suspended above the ground along the panel rows to the nearby disconnect box located inside the array. See diagrams of this proposed cable management system on Sheets E7100-E7101, Document 9.

- i. When site conditions require. A modification may be granted by the Board of County Commissioners in instances where shallow bedrock, water courses, or other protected environmentally sensitive lands as currently defined in 12-314 of these regulations, make underground connections detrimental.*

Response: No modification is requested at this time.

- ii. Generation tie-lines from the project substation to a utility substation may be aboveground.*

Response: The Applicant anticipates the gen-tie lines of approximately 0.1 miles between the Project Substation to the Point of Interconnection ("POI") at the Midland Substation, will be installed above ground.

- 2) Underground cables shall be located at least 3 feet, vertically or horizontally, from existing underground utilities.*

Response: The Applicant will meet or exceed these requirements.

- 3) Off-site, above ground utility or power lines may only be used for generation tie-lines from the project substation to a utility substation and must be located in public right-of-ways, easements, or other legally dedicated tracts of land.*

Response: The Applicant acknowledges and will comply with these requirements.

- p. Maintenance. All structures shall be maintained and kept in good condition by the owner or operator.*

- 1) *Maintenance shall include, but not be limited to, painting, structural repairs, replacement of damaged or worn parts or cables, and integrity of security measures.*
- 2) *Site access shall be maintained to a level acceptable to local emergency personnel. The owner or operator shall be solely responsible for maintaining the subject site, all appurtenant structures and the installation and maintenance of any access road(s), unless accepted as public right-of-way.*

Response: The Applicant acknowledges and will comply with these requirements.

- q. *Ground Water Testing. With each approved CSECS conditional use permit application, an optional water analysis of active wells within one-quarter mile of the Site Area shall be offered by the operator prior to the installation of the equipment.*
- 1) *This offer shall be made to all owners of property within 1 /4 mile of the Site Area by certified mail, at least one-month prior to the installation.*
 - 2) *A copy of the certified letter and a list of property owners notified shall be provided to the Planning Office along with a list of all property owners who requested the testing and the results of that testing. This must occur prior to the installation of the facility.*
 - 3) *The test shall analyze the water in the nearby wells for substances such as lead and cadmium, as determined with the conditional use permit, and shall include a pesticide panel.*
 - 4) *The results of ground water testing shall be provided to the Director of Zoning and Codes and sent by certified mail to the landowner.*

Response: The Applicant acknowledges and will comply with these requirements.

- t. *Airspace Overlay or Airstrip. If a system is proposed to be placed within an Airspace Overlay (ASO) overlay district or within 5 miles of any airstrip, the applicant shall provide acknowledgement of location approval or acceptance from the Federal Aviation Administration with the conditional use permit.*

Response: The Project is located within 5 miles of the Lawrence Regional Airport ("LWC"). The Applicant filed the Project with FAA through the Obstruction Evaluation/Airport Airspace Analysis (OEAAA). The Project received favorable FAA Determinations of No Hazard (Exhibit Z), summarized in the Obstruction Evaluation/Airport Airspace Analysis Memorandum (Exhibit Y) provided by Capitol Airspace Group.

- u. *Other Standards and Codes. All LSECS and CSECS shall be in compliance with all applicable local, state, and federal regulatory standards including, but not limited to, the Endangered Species Act, Clean Water Act, the International Building Code, National Fire Protection Association 855 Standards, and the National Electric Code, as amended.*

Response: The Applicant acknowledges this requirement and will comply with all applicable federal, state and local regulations.

- v. ***Modifications. Upon a written request by the applicant, the Board of County Commissioners may approve a modification from the standards upon a determination by the Board of County Commissioners that said modification is necessary and is consistent with the purpose and intent of these regulations. The Planning Commission shall make recommendations to the Board on requested modifications in conjunction with their recommendation on the conditional use permit.***
- 1) ***Items that are available for modification are the size of the Site Area, height of the solar panels, amount of grading possible, and the location (above- or below-ground} of electrical interconnections and distribution lines.***

Response: The Applicant is not seeking any modifications, as described above, as part of this CUP application.

- x. ***Time Frame. The conditional use permit may be approved with a time frame of up to 25 years from the date of the Board of County Commissioners approval. Continuation of the use beyond that time frame will require the submission and approval of a new conditional use permit.***

Response: The Applicant requests a 25-year term for the CUP.

- y. ***Transfer of Operator. If the Operator listed on the approved CUP plans to sell or otherwise transfer their responsibilities to an entity not listed on the CUP, the listed Operator shall notify the Zoning and Codes Director of this proposed change. Furthermore, the new Operator shall notify the Board of County Commissioners and the Zoning and Codes Director in writing, acknowledging their acceptance of responsibility and intent to comply with all conditions listed in the approved CUP.***
- 1) ***The Board of County Commissioners may approve the transfer of operator if they find the proposed Operator has demonstrated their ability to strictly conform to all applicable performance standards detailed in these Regulations as well as applicable Local, State, and Federal laws or regulations.***

Response: The Applicant acknowledges and will comply with these requirements.

12-306-49.06 Application and Required Documents

The following additional notice and materials are required as part of the application submittal:

- a. ***Additional Public Notice. Prior to submitting an application for a Conditional Use Permit for a Commercial/Utility Scale Solar Energy Conversion System (CSECS), the applicant shall mail notice of the potential development application to property owners within a one-mile radius of the property included in the application. (This is in addition to the Planning Office's mailed notification of the Planning***

Commission public hearing to property owners within ½ mile of the subject property).

- 1) *The applicant shall submit a certificate of mailing provided by the Planning Office for this notice, a sample letter, and a list of notified property owners at the time of the application.*

Response: The Applicant has complied with this requirement. See Certificate of Mailing; Mailing List (1-mile notice) (Document 6).

- b. *Existing Conditions. A physical and digital site plan of existing conditions showing the following (digital site plan must be formatted to toggle each layer off and on):*

The Existing Conditions listed below are included in the Existing Conditions Site Plan (Document 8).

- 1) *Existing property lines and property lines extending one hundred (100) feet from the exterior boundaries, including the names of the adjacent property owners and current use of those properties, as determined by site inspection or from the Douglas County Appraiser's Office Land Use map, which is available from the Planning Office;*
- 2) *All recorded easements on the property, with type and recording information, and the location and width of all public road right-of-way.*
- 3) *Existing points of ingress and egress to the property.*
- 4) *Location and size of any known wells (oil, water, geothermal, etc.);*
- 5) *Existing buildings and any paved or gravel surfaces, with dimensions;*
- 6) *Contour lines showing the existing topography of the site at one-foot intervals. The source of the topography must be stated. If the site contains any FEMA mapped floodplain, the topography must be tied to the FIRM datum.*
- 7) *Boundaries and designations of any Special Flood Hazard Areas identified on the Flood insurance Rate Map (FIRM) of Douglas County, Kansas;*
- 8) *Existing vegetation (list type and percentage of coverage; i.e. grassland, plowed field, wooded areas, etc.);*

Response: The existing ground cover for approximately 98% of the Project Area is disturbed agricultural row-crop fields. The remaining Project Area is covered by wetlands streams, and swales, and a single stand of trees at the very north-end of the Project Area.

- 9) *Existing swales, channels, ditches or streams, existing ponds and lakes, and existing culverts.*

Response: The Existing Conditions Site Plan (Document 8) shows the delineated wetlands, streams, swales, ditches, and culverts that have been identified within the Project Area. The Project Area does not contain any ponds or lakes.

- 10) ***Soil map showing location of soils classified as Class 1 and 2 soils, prime farmland, and farmland of statewide importance as identified in the Natural Resource Conservation Service (NRCS) soil survey;***

Response: The Applicant has submitted two maps (GIS Maps, Exhibit AA, Figure 01-A and Figure 01-B) to show the soil classifications listed above. The maps also include tables with percentages of soil types listed above in relation to the Project Area and Douglas County.

- 11) ***Environmentally sensitive lands as defined in Section 12-314 of the Douglas County Zoning Regulations.***

Response: See GIS Maps (Exhibit AA, Figure 05-A through Figure 05-H) for maps of the environmentally sensitive lands.

- 12) ***Map of residential uses and structures within 1000 feet of the facility boundary; and***

Response: The Applicant has submitted a map (Exhibit AA, Figure 06-A) identifying existing residences within 1,000 feet of the Project Area and a 500-foot setback from each residence.

- 13) ***Presence of any critical habitat for threatened or endangered species as determined by from Kansas Department of Wildlife and Parks.***

Response: As discussed above, the Applicant has included a Habitat Assessment (Exhibit T). KDWP reviewed and provided a response of its determination that there are no anticipated significant impacts to critical wildlife habitat, public recreational areas or currently listed threatened or endangered species or species in need of conservation from the Project (Habitat Assessment Response Letters, Exhibit U).

- 14) ***The location of any underground pipelines and all utility easements; including but not limited to railroad and drainage easements.***

Response: See Existing Conditions Site Plan (Document 8) for detail on these requirements.

- c. ***Proposed Conditions. A physical and digital site plan of proposed conditions showing the following:***

The Proposed Conditions listed below are included in the Proposed Conditions Site Plan (Document 9).

- 1) ***Number, location and spacing of solar panels and all appurtenant structures. Panel type, fixed or tracking, to be listed on the plan;***

Response: See Proposed Conditions Site Plan (Document 9). A table, titled Preliminary Electrical Data, indicating the number of solar panels and the solar panel and single-axis tracker racking type information can be found on Sheet C201. Location and spacing information for all solar panels is shown in Sheets C300-C323.

2) *Name and address of Operator;*

Response: The Owner and Operator name, contact, and address information provided in the table, titled Contact Information, on Sheet C001.

3) *Location and width of access drives;*

Response: The location and width of proposed access drives are shown in the Proposed Conditions Site Plan (Document 9, Sheets C300-C323 and Sheets C400-C423).

4) *Planned location of underground and overhead electric lines connecting the solar farm to any building, substation, or other electric load;*

Response: The proposed locations of underground medium-voltage collection lines are shown on Sheet E1000, and detailed on Sheets E1100-E1102.

5) *Proposed phasing schedule;*

Response: Project construction is anticipated to occur in a single phase.

6) *New electrical equipment other than at the existing building or substation that is the connection point for the solar farm;*

Response: The general arrangement showing the new electrical equipment for the connection point for the CSECS can be found on Sheet EP100.

7) *Planned wildlife corridors;*

Response: The Applicant has included planned wildlife corridors in Exhibit AA, Figure 04-A.

8) *Environmentally sensitive lands to be protected;*

Response: The Applicant has included GIS Maps (Exhibit AA, Figure 05-A through Figure 05-H) for each of the environmentally sensitive lands.

9) *Clearly delineated limits of proposed land disturbance or vegetation removal for all phases of construction and operation.*

Response: The proposed disturbance limits for all phases of construction and operation are shown on the Proposed Conditions Site Plan (Document 9, Sheets C300-C323).

10) *Location and height of any proposed lighting;*

Response: See Proposed Conditions Site Plan (Document 9, Sheets EP100 and E0301). Details of typical lighting appliances to be installed in these select areas with specifications for compliance with these regulations can be found on Sheet C504.

11) *A description of the method of connecting the Array to a building or substation;*

Response: The solar panels are supplied with short lead wires that are located on the back of the panel, creating a string of connected solar panels. These strings are then connected to a DC cable harness, which ties them together in parallel into a larger higher-rated DC trunk cable. The DC trunk cables then carry the DC power from the cable harnesses to a nearby DC disconnect box. See Proposed Conditions Site Plan (Document 9, Sheets E3300-E3302) showing this proposed typical string wiring described above.

From the DC disconnect box, a buried DC homerun cable carries the DC power, typically over a much longer distance, to a nearby inverter or power conversion unit or station ("PCU/PCS"). See Document 9, Sheet E2301 for a diagram of the DC homerun cables.

At the inverter station, the power is converted from low-voltage DC power produced by the solar panels into three-phase low-voltage AC power before the voltage is stepped up to medium-voltage by a transformer within the PCU/PCS skid. The MV AC power is then carried from the inverter and several other loop-fed inverters along the underground route back to the Substation by a set of buried MV cables in a radial circuit configuration, i.e. starting at the Project Substation and extending out radially to the last inverter on the particular circuit. See proposed location of underground medium-voltage collection lines are shown on Document 9, Sheet E1000, and detailed on Sheets E1100-E1102.

The MV AC cables from all of the eight (8) MV collection circuits enter the substation through a riser conduit that brings the cables above the MV circuit breaker where it will be terminated on one side of the breaker. The other side of each MV circuit breaker is connected to a common bus, which is connected to the main power transformer at the substation where the voltage is stepped up once more to the interconnection voltage before the power is transmitted onto the

utility grid via the gen-tie. See Document 9, Sheet EP100 showing these connections and configurations.

12) *Wiring diagram for the site;*

Response: The electrical single-line diagram ("SLD") for the Project is found on Document 9, Sheet EE100.

13) *Locations and size of planned temporary construction laydown yards; and*

Response: The location and size of the planned temporary construction laydown yard can be found on Document 9, Sheet C307.

14) *Approximate limits of disturbance for all temporary and permanent project components (panels, inverters, access drives, buried electric collection lines, temporary laydown yards, substation, etc.) (Project Area).*

Response: The proposed grading and disturbance limits for all temporary and permanent project components are shown on Document 9, Sheets C300-C323.

15) *Utility easements including, but not limited to, easements for transmission and interconnection.*

Response: Advanced engineering design, interconnection studies and regulatory approval is required before the Project can obtain final approval for right-of-way crossings and/or utility easements by and for distribution and transmission lines. However, this detail will be included in the final design submitted for applicable pre-construction approvals.

d. *Additional Materials. The following shall be submitted with the application:*

1) *Public outreach required for CSECS. Information regarding public outreach, such as how the applicant informed nearby property owners and interested stakeholders in the community, what meetings were held, and/or what information was provided;*

Response: See Public Outreach Information (Exhibit A).

2) *Manufacturer's specification and recommended installation methods for all major equipment, including solar panels, mounting systems, and foundations for poles or racks;*

Response: Manufacturer's datasheets with specifications for all proposed major equipment listed here can be found in Manufacturer's Specification (Exhibit B) and Preliminary Equipment Specification Sheet (Exhibit E). Proposed installation methods for major equipment are as follows:

Foundations – The solar panel arrays and inverters will be installed on structural steel pile foundations that will be driven vertically into the soil to a specified embedment depth with specialized pile driving equipment. See details of the proposed pile foundations on Installation Methods for Poles/Racks Foundations (Document 9, Sheets S100 and S200; Exhibit C).

Racking – The CSECS is proposed with a single-axis tracker system which includes the pile attachment hardware, torque tubes (drive train), motors and auxiliary power and control equipment, and structural members for solar panel mounting will be assembled and installed onto the pile foundations with swaged fasteners and bolted connections.

Solar Panels – The solar panels will be installed by field technicians onto the panel mounts of the tracker system, either through bolting or clamping in accordance with the panel installation manual included as Installation Methods for Poles/Racks Foundations (Exhibit C, C1) and described in section 6.4 of the manual. The details of the specific mounting method will be determined through further engineering and design by the Engineer of Record in collaboration with the tracker and module manufacturers to ensure compliance with these requirements, OEM specifications, applicable codes and standards, and site-specific climate and loading conditions.

Inverters – The proposed inverter skids, inclusive of the inverter, step-up transformer, and auxiliary power and control equipment will be hoisted with a small crane onto the pile foundations. Details of the installation method can be found in Section 4 within Installation Methods for Poles/Racks Foundations (Exhibit C) for the PV inverters.

Main Power Transformers – The main power transformers are typically offloaded from the delivery transport via jack-and-slide or hoisted by a crane onto the transformer foundation. The determination of which method is pending manufacturer selection and their requirements and/or preferences for offloading.

3) *Installation methods for foundations for poles or racks;*

Response: The structural steel pile foundations will be driven vertically into the soil to a specified embedment depth with specialized pile driving equipment.

4) *Assessment of construction impacts such as, but not limited to, noise, vibration, lights, waste-management, water supply, etc. and mitigation measures. Mitigation measures could include, but are not limited to, limited construction hours, reduced scope of work at one time, alternate construction methods, etc.;*

Response: The Applicant has submitted an Environmental Sound Study (Exhibit D), which includes sections on construction noise and construction noise mitigation. Other potential impacts and mitigation will not be known until

advanced engineering, equipment procurement, and contractor selections are complete. The Project will continue to coordinate with County staff as these milestones are reached to determine if any mitigation is needed.

- 5) ***A preliminary equipment specification sheet that documents the proposed battery energy storage system components, inverters, and associated electrical equipment be installed;***

Response: The Applicant is not proposing a battery energy storage system in this conditional use permit. The specifications sheets for other equipment listed here may be found at Preliminary Equipment Specification Sheet (Exhibit E).

- 6) ***A grading/vegetation removal plan which includes all proposed changes to the topography and vegetation on the site (clearing, grading, topographic changes, tree removal, etc.);***

Response: The Grading Plan can be found on Sheets C300-C323. The preliminary design of the CSECS requires minimal grading, totaling less than 1% of the Site Area, as shown in the Preliminary Grading Quantities table in the Grading Plan. Minor surface smoothing to remove undulations from row-crops may be required for worker safety prior to starting construction.

Tree removal is not anticipated for the proposed Project. The Site Area will be cleared of any existing vegetation up to the proposed limits of disturbance and seeded in accordance with the Vegetation Management and Agrivoltaic Plan (Exhibit L) to improve ground conditions and runoff rates in accordance with the Stormwater Management Plan (Exhibit G) prior to starting construction.

- 7) ***A stormwater management plan with supporting calculations, documenting how increased runoff will be conveyed throughout the site. The calculations must include the design of open channels and culverts on site. Based on recommendations from the County Engineer, storage and controlled release at points of discharge from the site may be required; if so, the stormwater management plan must be implemented on the final site plan prior to approval.***

Response: A preliminary Stormwater Management Plan (Exhibit G) was developed for the Project by Westwood, in consultation with the County Engineer, which includes supporting calculations for pre- and post-development conditions under 2-year, 10-year, and 100-year 24-hour storm events. The preliminary Stormwater Management Plan indicates an approximately 26% reduction in overall runoff rates for the 100-year 24-hour storm event post-development inclusive of recommendations for stormwater management features including basins and proposed changes to ground cover.

- 8) ***A copy of any Interconnection Facilities Studies;***

Response: The Interconnection Facilities Study is not yet available as the interconnection process can take many years. The Applicant submitted a 159 MW filing into the Southwest Power Pool ("SPP") Interconnection Queue on April 30, 2021. To date, SPP has completed Phase 1 of Definitive Interconnection System Impact Study ("DISIS"). DISIS Phase 1 consists of power flow and short-circuit ratio analysis. The Applicant elected to continue to DISIS Phase 2 on July 17, 2023, and results are due in June 2024. Documentation of interconnection studies status will be provided with applications for building permits.

- 9) ***A copy of the interconnection agreement with the local electric utility shall be provided prior to the release of the conditional use permit plans for building permits;***
- 10) ***A copy of the KDHE approved SWPPP (Stormwater Pollution Prevention Plan) for the site.***

Response: The Applicant met with representatives from the Douglas County Public Works Department and Zoning & Codes on April 24, 2023, to discuss stormwater engineering design standards for the Project. During this meeting the applicant proposed a KDHE approved SWPPP be provided prior to building permit release as it is typical to submit a SWPPP for agency review closer to construction when engineering design is more advanced. Representatives from both departments were in agreement with this proposal. The Applicant requests that the requirement of a copy of the KDHE approved SWPPP for the site be a condition to be met prior to issuance of building permits.

- 11) ***An operation and maintenance plan which includes measures for maintaining access drives to provide access for emergency vehicles, as well as general procedures for operation and maintenance of the installation;***

Response: The Applicant has submitted an Operation and Maintenance Plan (Exhibit N) per this requirement.

- 12) ***Traffic and Road Maintenance Plan;
A traffic and haul route plan based on the recommendations of the County Engineer and Township Trustee, where applicable. The plan shall include, but is not limited to:***

- i. A general project schedule;***

An engineering procurement and construction (EPC) contractor will be selected prior to construction. Construction will begin after the necessary permits are received. Project construction will begin with workforce mobilization and the initial site preparation work including installation of stormwater management features and other erosion control measures, clearing (Project anticipates minimal clearing), grading (Project

anticipates minimal grading), installation of temporary power, and construction of temporary laydown yards and access roads, and any pre-seeding prescribed in the vegetation management plan. Minimal and localized site grading is expected to be required within the array to accommodate the racking system as indicated in the Grading Plans. Minimal grading may also be required for the Project substation, O&M and temporary construction facilities, and access roads in accordance with the final design and applicable permits.

The CSECS components (piles, racking system, 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. The Project substation will be constructed concurrently with the PV arrays. Commissioning of electrical equipment will be conducted prior to placement of the Project 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 and Agrivoltiacs Plan (Exhibit L). After construction, temporarily disturbed areas, including the construction facilities area, will be restored and permanent access roads will be dressed as necessary to ensure their long-term function. Erosion control methods during and after construction will depend on detailed design and engineering, as well as requirements of relevant permits. A graphical representation of the schedule described above is included as Preliminary Construction Schedule (Exhibit O).

- ii. ***A traffic study estimating the volume and type of traffic generated by the project, both during construction and during normal operations. The study must identify proposed haul routes for construction traffic, trucks, and oversize or overweight loads.***

Response: The Applicant has submitted a Traffic Impact Study (Exhibit J) which includes the required information.

- (a) ***Based on the traffic study and the County Engineer's recommendations, the following items may be required prior to approval of the conditional use permit:***
1. ***Notes on the plan designating haul routes from the site to a paved county or state highway.***
 2. ***Road maintenance agreement to be executed with the county or township, addressing compensation for road maintenance or dust control on public roadways.***
 3. ***Public improvement agreements to be executed with the county or township, addressing compensation for necessary road, bridge, or culvert improvements on public***

roadways.

Response: The Applicant met with Douglas County Zoning & Codes staff on August 3, 2023, for a conditional use permit pre-application meeting. During this meeting, the Applicant proposed that any road maintenance agreement or public improvement agreement be a condition to be met prior to building permits being released. Staff agreed with this proposal, and therefore, these agreements are not included in this conditional use permit application.

- 13) ***Landscaping Plan - A landscape plan detailing all proposed changes to the landscape of the site required to accommodate buffering or screening from adjacent properties.***
- i. ***The plan shall include the installation, establishment, and maintenance of buffering or screening landscaping as required.***
 - ii. ***A species list shall be provided for all buffering or screening landscaping. Sizes of landscaping shall comply with the landscape standards of Section 12-307 (Site Plan Contents).***
- 7) ***The landscaping plan shall include management methods and schedules noting how the vegetation will be managed on an annual basis, with particular attention given to the establishment period of approximately three (3) years.***

Response: The Applicant has submitted a Landscaping Plan (Exhibit K) that meets these requirements.

- 14) ***Vegetation Management and Agrivoltaic Plan;***
A vegetation management and agrivoltaic plan detailing all proposed changes to the vegetation of the site and outlining all proposed agrivoltaic uses, current or future.
- i. ***The plan shall show where existing vegetation is to be removed and what new vegetation will be planted.***
 - ii. ***The plan shall include the installation, establishment, and maintenance of ground cover and other vegetation to minimize erosion, maintain soil health, and accommodate the proposed agrivoltaic use.***
 - iii. ***The plan shall include management methods and schedules noting how the vegetation will be managed on an annual basis, with particular attention given to the establishment period of approximately three (3) years.***
 - iv. ***The plan shall identify the types and locations of intended agrivoltaic activities. If the facility is not designed to accommodate agrivoltaic, that should be stated in the plan.***
 - vi. ***Other elements that may be included in this plan include, but are not limited to:***

- (a) ***Collaborative research on cropping systems or ecosystems coexisting with solar facilities, or carbon sequestration; or***
- (b) ***Land access and/or training for beginning farmers or underrepresented groups in farming.***

Response: The Applicant has submitted a Vegetation Management and Agrivoltaic Plan (Exhibit L) and will be submitting a Grazing Management Plan (Exhibit H) that meet these requirements.

- 15) ***Emergency Services, Fire, and Safety Plan: A plan including all means of managing an Extraordinary Event at the solar installation shall include, but will not be limited to, the following information:...***

Response: The Applicant has submitted an Emergency Services Plan (Exhibit M) that meets these requirements based on information known and applicable at the time of application. Final equipment selection, engineering design, and subsequent coordination with Emergency Management is necessary to finalize the Emergency Services Plan. The updated and final Emergency Services Plan will be provided with the building permit application.

- 16) ***Solar Glare Hazard Analysis: The applicant shall provide a Solar Glare Hazard Analysis utilizing the latest version of the Solar Glare Hazard Analysis Tool (SGHAT), or its equivalent, to evaluate the solar glare aviation hazard and potential impact on neighbors.***

Response: The Applicant has submitted a Solar Glare Hazard Analysis (Exhibit P), which utilized the SGHAT to evaluate potential solar glare impacts on neighboring residences, aviation, roadways, and railways.

- 17) ***Soil Sampling Plan: The plan shall outline a procedure to characterize and document the soil health and any heavy metals present at the following phases: before construction begins; when construction is complete, prior to renewing a CUP, prior to beginning decommissioning and reclamation; and following decommissioning/reclamation of the site....***

Response: The Applicant has submitted a Soil Sampling Plan (Exhibit Q) per these regulations.

- 18) ***Abandonment. Decommissioning. and Reclamation Plan: A decommissioning/reclamation plan shall be required to ensure that facilities are properly removed after their useful life. Decommissioning of solar panels must occur in the event that they do not produce electricity and have no demonstrated plan to restore to operating condition and before the end of the life-span of the conditional use permit.
i....***

- x. ***The decommissioning/reclamation plan shall include estimated decommissioning costs in current dollars and the method for ensuring that will be available for decommissioning and reclamation. The applicant shall provide the basis for estimates of net costs for decommissioning the site (decommissioning costs less salvage value). The cost basis shall include a mechanism for calculating adjusted costs over the life of the project.***

Response: The Applicant has submitted an Abandonment, Decommissioning and Reclamation Plan (Exhibit R) per these regulations.

- 19) ***Bond Requirement: The applicant shall post a bond, with the Douglas County Clerk, establish an escrow account, or provide such other financial security deemed acceptable by the County, in an amount equal to the estimated decommissioning costs, to ensure proper decommission and reclamation of the site....***

Response: The Applicant acknowledges and will comply with these requirements.